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CHASING IMPACT

How Hybrid New Ventures Shape Markets for Sustainability

Mariia Syväri

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SARJA – SER. E OSA – TOM. 95 | OECONOMICA | TURKU 2022

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Marketing
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The originality of this publication has been checked in accordance with the University of Turku quality assurance system using the Turnitin OriginalityCheck service.

Cover Image: iStock.com

ISBN 978-951-29-9001-6 (PRINT)
ISBN 978-951-29-9002-3 (PDF)
ISSN 2343-3159 (Painettu/Print)
ISSN 2343-3167 (Verkkojulkaisu/Online)
Painosalama, Turku, Finland 2022

For Eemil and Aarno

UNIVERSITY OF TURKU
Turku School of Economics
TSE Pori
Marketing
MARIIA SYVÄRI: Chasing Impact - How Hybrid New Ventures Shape Markets for Sustainability
Doctoral Dissertation, 186 pp.
Doctoral Programme of Turku School of Economics
September 2022

ABSTRACT

This study contributes to the market-shaping research in the field of business-to-business marketing. Market shaping refers to the purposeful efforts of actors to change market characteristics or to construct new markets. Existing research has focused on incumbent firms or collectives striving to improve their commercial viability through market shaping. However, few studies focus on market shaping undertaken explicitly for the renewal of existing markets towards sustainability. Moreover, we have scant understanding of how market shaping is conducted by hybrid new ventures despite the unprecedented opportunities that digitalization is providing for small actors to exercise their agency. Hybrids refer to entrepreneurial ventures designed from start to equally pursue commercial and sustainability goals, and who seek to drive industrial and/or societal change.

This thesis thereby sets out to explore how the two processes of market shaping and hybrid new venture development are interrelated. To gain a holistic understanding, I draw from research on market shaping, hybrid entrepreneurship, and new venture development. The research process is abductive, iterating between theory and empirical data. Empirical knowledge is acquired through qualitative inquiry from a follow-up case study in the market for Guarantees of Origin (GO) for renewable electricity.

As the main theoretical contribution, this study presents a process model of the intertwinement of hybrid new venture development and market shaping. The model shows this intertwinement as driven by four continuous, interrelated, and reciprocal subprocesses: visioning, legitimizing, engaging, and equipping. The findings illustrate that market shaping extends to the early stages of hybrid new ventures, and that their initial market shaping actions are taken long before they become legal business entities. Furthermore, the study extends current knowledge on the content of market shaping (i.e., what it is exactly that market shapers strive to shape and how) and provides a more nuanced understanding of the market shaping activities taken by the focal actor. The study also produces important implications for entrepreneurs and managers, enabling them to make more informed decisions related to their market shaping and to better navigate complex institutional environments.

KEYWORDS: Market shaping process, market work, sustainable market, hybrid new venture, new venture development, Guarantees of Origin for renewable electricity

TURUN YLIOPISTO
Turun kauppakorkeakoulu
Porin yksikkö
Markkinointi
MARIIA SYVÄRI: Chasing Impact – How Hybrid New Ventures Shape Markets for Sustainability
Väitöskirja, 186 s.
Turun kauppakorkeakoulun tohtoriohjelma
Syyskuu 2022

TIIVISTELMÄ

Markkinoiden muokkaamisella tarkoitetaan toimijoiden määrätietoista pyrkimystä muuttaa markkinoiden ominaisuuksia tai rakentaa uusia markkinoita. Nykytutkimus yritysten välisen markkinoinnin alalla on keskittynyt vakiintuneiden yritysten pyrkimyksiin parantaa kilpailullista asemaansa, jättäen huomiotta markkinoiden muokkauksen, jonka päämääränä on olemassa olevien markkinoiden uudistaminen kestävämpään suuntaan. Lisäksi ymmärrämme vain vähän siitä, kuinka uudet hybridiyritykset muokkaavat markkinoita, vaikka digitalisaatio luo ennennäkemättömiä mahdollisuuksia pienten yritysten muutostoimijuudelle. Hybrideillä tarkoitetaan uusia yrityksiä, jotka tavoittelevat sekä kaupallisia, että kestävään kehitykseen liittyviä päämääriä ja jotka myös pyrkivät ajamaan teollista ja/tai yhteiskunnallista muutosta.

Tämän tutkimuksen tarkoituksena onkin ymmärtää, kuinka markkinoiden muokkausprosessi ja hybridiyrityksen kehitysprosessi ovat sidoksissa toisiinsa. Kokonaisvaltaisen ymmärryksen saamiseksi työssä hyödynnettiin markkinoiden muokkaamista, hybridiorganisaatioita ja uusien yritysten kehittämistä koskevaa tutkimusta. Tutkimusprosessi oli abduktiivinen, liikkuen iteratiivisesti teorian ja empiirisen aineiston välillä. Empiirinen aineisto kerättiin osana laadullista tapaustutkimusta, jossa seurattiin reaaliajassa uusiutuvan sähkön alkuperätakuiden markkinoita muokkaamaan pyrkivää hybridiyritystä.

Tärkeimpänä teoreettisena kontribuutiona tutkimus esittää prosessimallin uuden hybridiyrityksen kehittämisen ja markkinamuokkauksen yhteen nivoutumisesta, jota edistää neljä jatkuvaa ja vastavuoroista osaprosessia: visiointi, legitimointi, sitouttaminen ja varustaminen. Tulokset osoittavat, että markkinoiden muokkaaminen alkaa jo uuden yrityksen alkuvaiheista. Lisäksi tutkimus laajentaa nykyistä ymmärrystä markkinamuokkauksen sisällöstä (eli mitä toimijat tarkalleen ottaen pyrkivät muokkaamaan ja miten), sekä tarjoaa monimuotoisemman käsityksen päätoimijan toteuttamista markkinoiden muokkaustoimista sekä niihin vaikuttavista kontekstuaalisista tekijöistä. Tutkimuksen tulokset auttavat myös yrittäjiä ja yritysjohtajia tekemään tietoisempia päätöksiä pyrkiessään muokkaamaan markkinoita ja luovimaan monimutkaisissa institutionaalisissa ympäristöissä.

ASIASANAT: Markkinamuokkausprosessi, markkinatyö, kestävä markkina, hybridi uusi yritys, uuden yrityksen kehittäminen, uusiutuvan sähkön alkuperätakuut

Acknowledgments

The Road goes ever on and on,
Down from the door where it began.
Now far ahead the Road has gone,
And I must follow, if I can,
Pursuing it with eager feet,
Until it joins some larger way
Where many paths and errands meet.
And whither then? I cannot say.
-J.R.R. Tolkien-

Perhaps a cliché, yet becoming a PhD is best described as a journey. For me, it started already in my teens, when my dream was to one day write a doctoral thesis. Forks in the road, however, took me first to the corporate world, where I was able to learn how marketing is done in practice. During the parental leave with our firstborn, I found myself at another crossroad, took a turn, and started advancing toward my old dream. Now, almost having reached the milepost of my PhD defense, I can say: what a passage it has been! There are so many people to thank, with all my heart, without whom this endeavor would not have been possible.

I could not have been more fortunate than having such excellent supervisors on my journey as Professor Jaana Tähtinen and Professor Ulla Hytti. You are brilliant academics and I have learned so much from you. Beyond that, I want to thank you both for your wholehearted support, encouragement, and endless patience. Ulla, your wise words always helped me focus on what is relevant and your perfect calm in moments of stress helped me cool down and get back to work. Jaana, your ability and willingness to provide helpful and considered guidance kept me on course all these years. I am forever grateful for your relentless belief in me - even at times when I lost mine.

I want to express my gratitude to my wonderful and knowledgeable pre-examiners Professor Luis Araujo and Postdoctoral researcher Anne Quarshie. I feel privileged to have received your insightful and encouraging comments, which helped me immensely in improving my dissertation. Anne, your research and devotion to

sustainability issues is inspiring; thank you for carrying the torch. Luis, you are one of the greatest thinkers in our field and it is truly an honor to have you as my opponent at my public defense. I am looking forward to our discussions both on and off stage.

This thesis was inspired by people who strive not only to change the world for the better but who actually get up and do something about it. The case company I followed, Becour, is founded by people like that. HP, I cannot thank you enough for letting me in, for being so open, and for all our wonderful discussions on business, sustainability, and life. You have become a mentor and a friend, and I look up to you in so many ways. Synnøve, your brilliance might only be outshined by your kindness. You know what a PhD journey is like and helped me in getting through mine. Special thanks to all the members of Becour, both past and present, for willingly answering all my questions, and for being so welcoming and kind. Tusen takk!

Writing this thesis would not have been possible without financial support. I am particularly grateful for the Satakunta Regional Fund of the Finnish Cultural Foundation for its generous support over the years. I also kindly thank the Turku University Foundation, Satakunnan korkeakoulusäätiö, and Marcus Wallenberg Foundation for supporting my doctoral studies. Important trips for data collection and academic conferences were enabled by the grants provided by Turun kauppaseuran säätiö, Ekonomi Rauno Virtasen Rahasto, Erkki Paasikivi Foundation, and the Foundation for Economic Education.

Thank you to all the members of the NetCod research Group and Director, D.Sc. Kirsi Liikamaa in Pori for your kind support. Also, to all the people participating in the marketing seminars in Turku for your feedback and high-level academic discussion. In particular, I am grateful to Dr. Pekka Stenholm, Professor Elina Jaakkola, and Dr. Harri Terho for your insightful comments; they meant more than you know. Thank you, Jenni Heervä, for all the practical help especially towards the end. Phone calls with you always ended with a relieved smile. I want to thank the most kindhearted Professor Aino Halinen-Kaila for sharing your wisdom and experience. What a privilege it is to work with you. Also, a special thanks to Associate Professor Tiina Ritvala from Aalto University for mentoring me. In your warm and positive manner, you helped me formulate future paths in the crazy present that we were living in during the pandemic spring of 2020.

Doing PhD research self-funded and long distance can make one feel disconnected at times. Therefore, the intellectual insights, practical advice, and TLC from my intelligent, dashing, and fun fellow doctoral candidates was beyond priceless. Thank you, a million times, especially Sini Nordberg-Davies, Ekaterina Panina, and Kaisa Aro from Turku School of Economics, and Rumy Narayan from University of Vaasa. Sini, what would I have done without you! I am also grateful

to the wonderful doctoral candidates from all over the world that I was fortunate enough to meet during conferences and PhD courses. I treasure all the interesting discussions, teamwork, and laughter-filled dinners.

Whenever I doubt myself, I just think of my closest friends, and I know I have done something right. I have the most amazing friends in the world! Thank you all for being there for me in countless ways, helping with the kids, asking how the research is going (and also knowing when not to), sharing my joys, tears, fears, and ideas during dinners, walks, jogs, sauna evenings, soccer games, and phone calls, over glasses of wine, cups of coffee, or caquelons of fondue.

Finally, I want to express my gratitude to my family. My big brother Markus, a huge thank you for all the silliness that keeps my feet on the ground, and for always being on my side. To my loving and supporting parents I owe my desire to learn and to see the world. You truly have given me both roots and wings, and I can never thank you enough for all you have done for me. My dear husband Rami, you are my lifesaver and support system. It must not have been always easy with an increasingly absentminded wife. And yet you never doubted me, never got tired of listening to my rants and revelations. You always knew when I needed to talk, and when I just needed to be sent out for a run. Your love and support is what keeps me going. My boys Eemil and Aarno, my bright shining stars, thank you for giving me the greatest purpose in life.

September 2022
Mariia Syväri

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1 Introduction

1.1 Background and motivation

As we are rapidly crossing the planetary boundaries[1] (Rockström et al. 2009) and the climate crisis exacerbates, the defining question of our time becomes how to accelerate sustainability transitions (IPCC 2021; 2022; Markard et al. 2020). Sustainability transitions require the core systems of our societies such as energy, food, mobility, and construction to change rapidly and fundamentally (EEA 2020; Markard et al. 2020). These socio-technical system transformations (Markard et al. 2012) normally unfold over many decades, but the current sustainability problems are so wicked that they require imminent action from a wide variety of actors in multiple sectors and markets (Farla et al. 2012; Köhler et al. 2019).

The field of transition research has created important insights that help outline the big picture of sustainability transitions (Farla et al. 2012). Although these studies acknowledge the role of businesses, they have largely focused on macro- and meso-level issues, leaving us with less understanding of the micro-level dynamics and efforts of single firms in transition contexts (Bidmon & Knab 2018; Farla et al. 2012; Köhler et al. 2019; Markard et al. 2012). To gain a more holistic understanding of sustainability transitions, researchers are calling for studies considering the agency of different actors (Farla et al. 2012; Garud & Gehman 2012; Koistinen & Teerikangas 2021; Markard et al. 2012). Agency refers to the human capacity to make free choices, take action, and influence one's environment (Giddens 1984). In the context of sustainability transitions, Waddock et al. (2015, 994) define change agents "as actors who can be found anywhere within the large system undergoing change, who are attempting to move an organization or institution in a different

[1] A group of scientists led by Johan Rockström introduced the planetary boundaries concept, referring to the nine processes that regulate the stability and resilience of the Earth system (Rockström et al. 2009). Crossing the boundaries risks generating abrupt or irreversible environmental changes, and already upon the study's publication, three boundaries had been crossed (Rockström et al. 2009). In 2022, scientists claim that six out of the nine boundaries have been crossed (Persson et al. 2022).

direction than it is currently moving, whether through policy, personnel, resource, technological, financial, or other means".

Concurrently, there is a growing interest in various business research streams in agent-driven efforts to shape markets (Phillips & Lawrence 2012; Slimane et al. 2019). According to Phillips and Lawrence (2012, 223) this advance represents "a widespread scholarly engagement with new forms of work that involve individuals and organizations purposefully and strategically expending effort to affect their social-symbolic context". The authors suggest that the recent academic interest in agency reflects wider ongoing societal changes. The empowerment of small organizational actors and even individuals is fueled by the digital transformation, including the power of social media (Jones et al. 2015) and the growing reflexivity of actors to societal change (Greenwood et al. 2015; Phillips & Lawrence 2012). Examining the agential efforts of versatile actors is also relevant and timely because market power and wealth is increasingly concentrated in a handful of technology giants (e.g., Alphabet, Amazon, Apple, Meta, and Microsoft). This hampers competition and locks in customers by taking advantage of network effects.

In marketing research, the agential view is prominent in the market-shaping literature, which has uncovered valuable insights related to the emergence and change of markets (Sprong et al. 2021). Underpinning market-shaping research is the notion of the systemic nature of markets (Baker & Nenonen 2020; Harrison & Kjellberg 2016; Kjellberg et al. 2015; Nenonen et al. 2019b; Mele et al. 2015), which requires moving away from dyadic thinking to seeing firms as nested in larger ecosystems governed by institutional arrangements (Möller et al. 2020; Nenonen et al. 2019a). Moreover, markets are seen as highly complex, consisting of multiple dynamically interacting elements (Möller 2020). As these interactions are nonlinear, even small changes can "induce disproportionate consequences" (Möller 2020, 381), motivating actors previously considered to have very little power to engage in market shaping. Markets are treated as socially constructed and thus malleable (Araujo 2007; Callon 1998). Actors, their actions, and business models, as well as the theories behind them, are seen as performative, that is, as having the potential to influence the actions of others (Kjellberg et al. 2012; Mason & Spring 2011; Storbacka & Nenonen 2011a).

However, a remark by Kjellberg et al. (2012, 220) illuminates a significant omission by market-shaping scholars: "if markets are malleable and subject to multiple change efforts, there is scope for discussions about what kinds of markets we want. If marketing theories contribute to their production, there is also scope for discussing what kinds of markets marketing currently contributes to realize". Market shaping, like business-to-business marketing research in general, has mostly overlooked the urgent and pervasive need to foster sustainability transitions (Sharma 2020; Voola et al. 2022). This is surprising (if not shocking), for while sustainability

has become a global megatrend affecting most markets, predictions by climate scientists have become graver, and calls to action by multiple stakeholders have become more alarmed. These insights have driven the research effort in this thesis and led me to wonder: if we expand the underlying assumption that firms shape markets to gain competitive advantage and market share to include a mission to make extant markets more sustainable - how is market shaping carried out?

In addition to omitting the sustainability discussion, market-shaping research has overlooked new ventures - an important group spurring innovation and industry sector renewal (see Doganova & Karnøe 2015 as an exception) - while largely focusing on the efforts of incumbent actors (e.g., Kindström et al. 2018; Storbacka & Nenonen 2015; Ottosson et al. 2020; Ulkuniemi et al. 2015; Werner et al. 2022). In contrast, the various research streams examining sustainability-oriented entrepreneurship have increasingly recognized the role of new ventures in driving sustainable development (Dean & McMullen 2007; O'Neill & Gibbs 2016; Schaltegger et al. 2018; Shepherd & Patzelt 2011). Of particular interest are so-called hybrid organizations, which develop innovative ways to align objectives related to economic profit and sustainability impact (Battilana et al. 2012; Haigh & Hoffman 2012; Santos et al. 2015). Hybrids refer to firms that "aim to provide appealing offers to the market at competitive prices and pursue profits, but they also adopt a mission-driven, explicit sustainability orientation and seek to drive industrial and societal change" (Vallaster et al. 2019, 2).

While most companies today have started establishing social and environmental goals in addition to their primary economic goals, hybrids "explicitly design and implement their organizational activities" from the start to equally pursue social and/or environmental and economic goals (Vallaster et al. 2019, 1). Hybridity builds on the assumption that institutional logics shape ideas and behavior at the organizational level (DiMaggio & Powell 1983), yet actors have agency to influence these structures (Battilana & D'aunno 2009). When competing logics are present (such as market vs. sustainable logics), both tensions and new business ideas may result. Hybrid entrepreneurship and market shaping seem to resonate, as both focus on agents' efforts to intentionally transform the market structure (McMullen & Warnick 2016). Moreover, both research streams consider challenges and opportunities on multiple levels, ranging from technological regimes on the macro level to market failures on the meso level and to resource mobilization on the micro level, for example (Johnson & Schaltegger 2020; see also Möller et al. 2020).

This thesis sets out to address the omissions discussed above and aims to contribute to a more holistic understanding of market shaping by focusing on market shaping for sustainability by hybrid new ventures in the making. A better understanding of hybrid new ventures' market shaping may also improve the output

of their efforts and thereby their impact on society and the environment. In the next section, I will discuss the research problem in more detail.

1.2 Research problem

Although market-shaping literature has significantly grown over the past three decades (Nenonen & Storbacka 2021; Sprong et al. 2021), there are still only few studies that address sustainability (Doganova & Karnøe 2015; Onyas & Ryan 2015; Onyas et al. 2018; Ottosson et al. 2020; Werner et al. 2022) and none were found focusing on market shaping undertaken explicitly for making existing markets more sustainable.

This scant attention to sustainability, notable in business-to-business marketing in general (Sharma 2020; Voola 2022), is a significant challenge as concerns have been raised regarding the relevance of the discipline (e.g., Clark et al. 2014; Hunt 2020; Kotler 2011; Webster & Lusch 2013). Webster and Lusch (2013, 389) argue that: "due to the fundamental changes occurring in the economy, society, and politics, the marketing discipline faces an urgent need for a rethinking of its fundamental purpose, premises, and implicit models that have defined marketing for at least the past 50 years." Kotler (2011) posits that, like business in general, marketers have also based their thinking on an infinite supply of natural resources while largely ignoring the externality costs to society and the environment. According to Clark et al. (2014), marketing appears to take the shareholder value model[2] as a given instead of questioning its normative stance. As Teerikangas et al. (2018, 2) state, this model has locked us into "a trajectory of overconsumption of natural resources coupled with increasing emissions and pollution."

This study addresses the challenge described above by focusing on market-shaping efforts explicitly intended to make extant markets more sustainable. I emphasize environmental sustainability while recognizing that sustainability is built on the four pillars of economic, social, environmental, and cultural sustainability, which are all intertwined (Soini & Birkeland 2014). I also acknowledge that what is

[2] O'Connell and Ward (2020, 1) provide a helpful description of shareholder theory, where "the primary objective of management is to maximize shareholder value. This objective ranks in front of the interests of other corporate stakeholders, such as employees, suppliers, customers, and society. Shareholder theory argues that shareholders are the ultimate owners of a corporate's assets, and thus, the priority for managers and boards is to protect and grow these assets for the benefit of shareholders. Shareholder theory assumes that shareholders value corporate assets with two measurable metrics, dividends and share price. Therefore, management should make decisions that maximize the combined value of dividends and share price increases".

considered sustainable is neither unanimously interpreted nor unchangeable over time (Garud & Gehman 2012; Markard et al. 2012; Whiteman & Kennedy 2016).

As extant research on market shaping for sustainability is scarce, I heed the advice of Nenonen and Storbacka (2021, 3), who state that "determining the essence of market shaping requires an understanding" of the who, how, and what questions of the phenomenon. To address the who in market shaping for sustainability, this study extends the narrow focus on incumbents as market shapers observable thus far. Doing so is important because, echoing the dominant shareholder value thinking, sustainability efforts in marketing studies are still largely seen as companies' responses to growing stakeholder demands or as a source of competitive advantage (Sharma 2020) rather than as something inborn, the *raison d'être* of the firm. Incumbent corporations play an important role in sustainability transitions by financing, marketing and scaling technological innovations (Geels 2014; Köhler et al. 2019), and many are striving to move toward more sustainable business models. Nevertheless, large businesses are typically structured as public limited companies whose main purpose is to maximize shareholder value (Bocken et al. 2016). Sustainability tends to be retroactively added to their operations through corporate social responsibility (CSR) practices (Alberti & Garrido 2017; Bocken et al. 2016). Incumbents also tend to prefer incremental rather than radical change for reasons such as sunk investments in existing technologies and resources, risk of jeopardizing short-term value creation for shareholders, and risk of disrupting existing competencies (Geels 2014; Unruh 2000). Furthermore, resonating with the *tragedy of the commons* described by Hardin (1968), sustainability is a collective good that provides limited direct incentives for corporations to radically address sustainability challenges (Geels 2011; 2014).

Market-shaping literature has ignored the various emerging business forms that integrate environmental and social goals into the core of their business from the outset (Schaltegger & Wagner 2011) while commercializing new ideas and spurring sustainable innovation (Parrish 2010; Ribeiro-Soriano & Piñeiro-Chousa 2021). These hybrid ventures are founded by entrepreneurs with a personal commitment to a cause and who use their business models to simultaneously advance a sustainability mission and create economic profit (Grassl 2012). Given their potential to accelerate sustainable market transitions, it is important to understand how hybrid new ventures' market-shaping efforts come into being and how they evolve over time. As hybrid entrepreneurship literature emphasizes the process of opportunity recognition and creation, adopting its lens can enhance the scant understanding of the antecedents of actors' involvement in market shaping, or in other words: how a market-shaping idea emerges in the first place (Nenonen & Storbacka 2021, 9). Moreover, the lens may also shed light on another issue: the why of market shaping, that is, a more nuanced view on what motivates market shaping.

Obviously, an idea alone is not enough to exert change. According to Nenonen and Storbacka (2021), what market-shaping literature specifically lacks is a more detailed analysis of the concrete actions that it entails, including the specific forms and phases of market-shaping efforts, and their targeted market properties (that is, the how and what of market shaping). Prior market-shaping research suggests that the performative power of a market-shaping actor depends on its network position, the strength of its business model, and its ability convince other actors of its market-shaping proposition (Kjellberg et al. 2012; Storbacka & Nenonen 2011b). However, the hybrid new venture context brings specific challenges. The hybrid new venture, like all new ventures, has no predetermined position in a business network but needs to acquire one to develop its business (Ribeiro-Soriano & Piñeiro-Chousa 2021). Also, the business model of a new venture merely reflects the founders' assumptions about operationalizing a business idea, the strength of which cannot be determined until subjected to market tests (Teece 2010). Moreover, the new venture needs to establish legitimacy in order to evoke support from other actors for its market-shaping proposition (Fisher et al. 2016; Gasbarro et al. 2018; O'Neill & Ucbasaran 2011).

1.3 Purpose and research questions

Based on the discussion above, this study engages with a relevant real-world problem as well as gaps in the literature (Corley & Gioia 2012; Van Maanen et al. 2007). The purpose of this thesis is to offer a processual and contextual explanation of how market shaping for sustainability and early hybrid new venture development are interrelated. The study extends the market shaping perspective to efforts taken explicitly for driving the change in existing markets towards sustainability and to phases before a new venture has established itself in the market. To achieve the purpose of this study, I strive to answer the following research questions:

1. Which activities enable a hybrid new venture to shape a market toward sustainability?
2. Which contextual factors influence the market shaping of a hybrid new venture in the making?
3. How does market shaping evolve over time as the hybrid new venture evolves?

Market shaping is a complex, contextually embedded process, and therefore I adopt a research approach that is both processual and contextual (Pettigrew 1987). A process refers to a sequence of events, actions, and activities that unfold in context over time (Pettigrew 1987; van de Ven 1992). New ventures provide fertile ground for studying evolutionary processes because their vulnerability to changing internal

and external conditions forces them to adapt rapidly, potentially providing multiple change events over a relatively short time span (Nailer & Buttriss 2020). A contextual approach means I adopt a situated action perspective, which emphasizes the contextual circumstances of action while endowing distributed agency to various actors (Araujo & Easton 2012; Garud & Karnøe 2003). A contextual approach recognizes that while the market shaping process is constrained by its context, it simultaneously helps produce that context by altering or preserving it (Pettigrew 1987).

To address the first research question, I identify and analyze the specific market-shaping activities performed by a hybrid new venture as it develops from an idea into a scaling business. Moreover, by analyzing the activities, I expect to increase understanding on the content of the focal change process (Pettigrew 1987), in this case the market properties that are targeted by the market-shaping efforts. Prior research has recognized market elements that actors may strive to shape, offering a helpful starting point. However, we know less about the reasons for targeting a particular combination of market elements.

I strive to answer the second research question by identifying and analyzing the contextual factors an events that influence the evolving hybrid new venture's market-shaping activity. Both internal and external contexts must be considered. The internal context refers to such elements as the structure and corporate culture of the venture, and the external context refers to the social, economic, political, and competitive operating environment of the firm (Pettigrew 1987). Action is seen as situated as the interpretations of past events and projections of the future influence what happens in the present and how the focal actor tries to realize its own vision of the future (Araujo & Easton 2012; Cloutier & Langley 2020).

By answering the third research question, I address market shaping as a temporally evolving phenomenon in an organizational entity's existence (Araujo & Easton 2012). Thereby, I strive not only to identify the actions and activities through which market shaping is progressed at one point in a new venture's life cycle, but how those efforts evolve over time as the hybrid new venture evolves. The term evolution is used to describe change and dynamics in the focal phenomenon because it emphasizes the processual and contextual nature of change (Halinen & Törnroos 1998).

Addressing the three research questions requires closely examining how market shaping to advance sustainability in existing markets is initiated and implemented in practice. As Bansal et al. (2018) argue, qualitative methods are well suited for confronting the complex challenges related to sustainable development. This study presents a follow-up case study of a hybrid new venture's development in real time, and thereby an account that is quite rare in business marketing research. Overall,

market shaping still comprises limited empirical work, especially longitudinal approaches (Kindström et al. 2018; Nenonen et al. 2019b; Ulkuniemi et al. 2015).

Hybrid entrepreneurship as used here refers to the discovery, creation, and exploitation of entrepreneurial opportunities with social and technological innovations aiming at economic viability and sustainable market transformations (Dean & McMullen 2007; Johnson & Schaltegger 2020). Hybrid entrepreneurship does not imply that new ventures in this category are already inherently sustainable. Sustainability is a moving target for any entity, not a precondition or a fixed end state (Whiteman & Kennedy 2016). Hybrid entrepreneurship instead denotes the ventures' fundamental premise, which is to contribute to a recognized sustainability challenge and to become commercially viable. According to Stubbs and Cocklin (2008, 122-123), "organizations can make significant progress toward achieving sustainability through their own internal capabilities, but ultimately organizations can only be sustainable when the whole system of which they are part is sustainable." A new venture thus develops internal capabilities and processes to achieve firm-level sustainability while collaborating with other actors to foster sustainability in the system it is embedded in (ibid.).

The empirical context of the study, the market for Guarantees of Origin (GOs) for renewable electricity, is relevant for studying agential change efforts toward sustainability, as the global energy supply is currently undergoing a fundamental transformation from a fossil-fuel-based system to one based on renewable energy sources. Energy transition is addressed in the United Nations' Sustainable Development Goals (SDGs), which constitute an urgent call for action and a blueprint for sustainable development for all nations. Goal 7 urges nations to "ensure access to affordable, reliable, sustainable and modern energy for all" (United Nations 2015). Access to sustainably produced energy is a crucial element in achieving almost all the SDGs, as it effectively eradicates poverty and advances the development of health and education centers and access to a water supply, for example.

According to IEA (2022), "electricity is the fastest-growing source of final energy demand and over the next 25 years it is set to outpace energy consumption as a whole". The electricity sector's exponential growth in, for example, solar and wind technologies places electricity at the forefront of the energy transition. That advance has been enabled by significant cost reductions in production and a favorable policy landscape (IRENA 2018). Although electrification helps reach climate goals by providing a pathway to reduce pollution and decarbonize end consumption, overall carbon emissions from the energy sector continue growing unless electricity generation is paired with the widespread deployment of sources of renewable energy (IEA 2019).

Companies in the commercial and industrial sectors are responsible for around two-thirds of global electricity end consumption, making their electricity sourcing decisions key to accelerating the energy transition (IRENA 2018). Forerunner companies' commitment to renewable electricity creates important spillover effects among partners, competitors, customers, and supply chains (IRENA 2018). Increasingly, corporations source renewable electricity by procuring unbundled energy attribute certificates (EACs). One of the most widely used EAC systems is the GO established by the EU. Almost six billion GOs have been issued and the market is growing at around 10 percent per year (AIB 2020). However, critical voices argue that the GO market has failed to spur additional renewable energy production and has thus not achieved the desired environmental impact (Jansen 2017; Mulder & Zomer 2016). The GO market and its challenges are discussed in more detail in Chapter 4.

1.4 Research positioning

This research contributes primarily to the area of market shaping within business-to-business marketing literature. Prior market-shaping studies in this area build on the idea of a layered and systemic business environment, where market shaping is performed by actors at the micro level, but whose aim is to influence the meso and macro levels of the system (Nenonen & Storbacka 2021). As Möller et al. (2020, 384) explain, "the upper layers influence and condition the activities, choices, and contents of the lower ones; and correspondingly, the actors, ecosystems, and institutions of the lower layers construct and constitute the upper ones" (Möller et al. 2020, 384). However, the various layers are subjective, relating to a specific actor's viewpoint (Fehrer et al. 2020).

The layered business environment is constantly changing despite periods of relative stability, and its form is thus processual rather than structural (Möller et al. 2020). An approach embracing multiple layers, multiple actors, and temporal dynamics is also central in sustainability research. As Bansal states (2019), only through a systemic view is it possible to reveal firm-level effects that could aggregate into significant impacts on the upper layers.

Systems thinking highlights how the constituent parts of a system interrelate (Velu 2017). It can thus address how the interweaved global megatrends of digitalization, electrification, and sustainability, as well as crisis such as COVID-19 pandemic, both render companies' business environments increasingly complex and volatile, while simultaneously generating unprecedented business opportunities (Fehrer 2020; Möller et al. 2020; Pedersen & Ritter 2022). Different actors utilize the megatrends to trigger change. However, Storbacka (2019) underlines that studying market shaping requires the researcher to not only consider the focal actor's

efforts but also how these activities interplay with those of other market actors (see also Fehrer et al. 2020). Collaborative actors' support is vital in reinforcing, driving, and diffusing market change (Kleinaltenkamp et al. 2021; Ottosson et al. 2020).

In market-shaping research, market configurations are seen as constantly evolving as a result of the market actors' interactions (Kjellberg & Helgesson 2006; Storbacka & Nenonen 2011a), defined as market practices, the "routine, micro-level interactions between multiple actors seeking to create value for themselves and others" (Kjellberg et al. 2012, 220). Besides routinely performing markets through market practices, actors also make conscious choices intended to shape market structures and behaviors (Kindström et al. 2018). Nenonen et al. (2019a, 251) define market shaping as a purposive process by an actor "to change market characteristics by redesigning the content of exchange, and/or re-configuring the network of stakeholders involved, and/or re-forming the institutions that govern all stakeholders' behaviors in the market." Market shaping focuses more on the agents' efforts and the change process itself than the outcome of those efforts. In contrast, another commonly used term, *market innovation* puts more weight on the outcome of agent-induced market change (Nenonen et al. 2021). Although market shaping is generally described as a process (e.g., Doganova & Karnøe 2015; Fehrer et al. 2020; Kindström et al. 2018), research holistically covering the market-shaping process at the level of an individual actor is scarce (Jaworski et al. 2020).

To examine the specific characteristics and challenges of market shaping for hybrid new ventures, I utilize research on hybrid entrepreneurship (e.g., Choi & Gray 2008; Muñoz & Dimov 2015; Parrish 2010; Schick et al. 2002). As this body of research is relatively new and therefore limited, I will also draw from the larger body of work on new venture development. Hybrid new ventures, like any new ventures, have shared challenges, such as a high level of uncertainty, limited resources, a narrow relationship base, requirements for variable and unplanned effort, and an over-reliance on the owner-manager (Phua & Jones 2010; Stokes 2000). Because hybrid new ventures' goals are oriented toward both market and mission, they actively blend sustainability logic and market logic in one organization (Battilana et al. 2012; Davies & Chambers 2018; Haigh & Hoffman 2012). Market logic is in the foreground of firms' competitive advantage, profit maximization, efficiency, and shareholder value orientation (Stubbs 2017; Thornton et al. 2012). In contrast, inherent in the sustainability logic are concerns for social issues (e.g., poverty reduction) and/or environmental challenges (e.g., carbon emissions) (De Clercq & Voronov 2011; Stubbs 2017).

Both hybrid entrepreneurship and market-shaping research adopt a nuanced view on agency, where the institutional environment influences actors and vice versa. Market shaping agents engage in institutional work (e.g., Arenas et al. 2020; Baker et al. 2019; Fehrer et al. 2020; Nenonen & Storbacka 2021), defined as "the

purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions" (Lawrence & Suddaby 2006, 215). The institutional work perspective "views actors as neither cultural puppets nor superhuman agents" (Suddaby et al. 2013, 333) but as reflexive actors negotiating their institutional environment through "intelligent situated action" (Lawrence & Suddaby 2006, 219). The same perspective explores not only the obvious and dramatic intentional actions toward institutions but also the mundane, everyday adjustments and compromises the actors make (Lawrence et al. 2009). Arenas et al. (2020, 3) argue that the institutional work approach is well suited for studying the efforts of sustainability-oriented entrepreneurs, "because it is based on the understanding that actors are embedded in institutional arrangements, which they sustain through their actions, but are also aware, skillful, and reflexive, and can try to modify these arrangements."

1.5 Research approach

As the aim in this study is to extend theory on market shaping, I adopt an abductive research process, which places equal emphasis on theory and empirical data (Kovács & Spens 2005; Ryan et al. 2012; Welch et al. 2011). Unlike induction, abduction accepts the significance of using existing research as a background for connecting an empirically observed phenomenon with theoretical ideas (Gehman et al. 2018). The abductive research process of this thesis is depicted in Figure 1. As is typical in abductive studies, the chronological research process, and the structure of the written report of my study differ. Although I try to describe the iterative character of the research journey when possible, the report follows a more or less linear structure to help the reader grasp the complexity of the process.

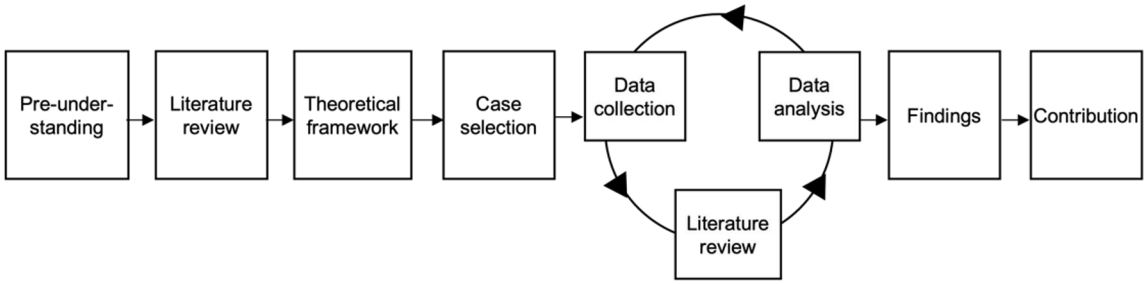

Figure 1. The research process.

Before starting this research endeavor I, like any researcher, had pre-existing theoretical assumptions (Ryan et al. 2012) and some level of pre-understanding about the focal phenomenon, which influenced my choices and assumptions on the research topic, research questions, and ways of finding answers to those questions

(Gummesson 2005). My pre-understanding stems from my background of working for several years in the energy industry as a marketing professional. I was familiar with the Guarantee of Origin (GO) system for renewable electricity, although I was never involved in trading GOs.

When I worked in the industry, the climate change discussion was finally gaining ground on a global scale. Simultaneously, technological advances seemed exponential, and energy corporations continually announced change agendas, invested in CSR, and entered novel fields within environmental innovation. However, as welcome as these efforts were, I felt that the pace of this development was too slow and constrained by the boundaries of "business as usual" (Bansal & Song 2017). Meanwhile, I also noticed that a new breed of mission-driven ventures was entering the field, armed with a whole new mindset and innovative ideas to fend off climate change. My interest in the role of hybrid entrepreneurship in the energy transition was piqued, as was my concern over the effects of climate change. Eventually, I decided to step out of the practitioner world and began my journey as a researcher.

Alvesson and Sandberg (2013, 16) state that drawing from personal experience and/or timely societal issues helps generate "research questions that matter". However, the authors warn that a researcher must proceed with caution as broad societal issues are so complex that the expectations for generating reliable and useful knowledge often prove unrealistic. Personal experiences, on the other hand, may have created preformulated convictions and hindered the researcher from being open to unexpected answers to questions posed. It is therefore vital to engage with existing literature to nurture a tentative idea into an investigable and novel research question (Alvesson & Sandberg 2013, 16-17).

Staying open to and borrowing from multiple theories and schools of thought helps the researcher to view the focal phenomenon in new and unexpected ways (Lukka & Modell 2010). I have utilized knowledge from multiple disciplines and combined it with my pre-understanding of the focal phenomenon to build a theoretical framework for this research. The framework was used to guide the empirical case selection and data collection, yet during the research process it evolved simultaneously with the empirical data collection and the case analysis, as is characteristic of abductive research (Dubois & Gadde 2002, 2014; Kovács & Spens 2005). According to Dubois and Gadde (2002, 555), "this stems from the fact that theory cannot be understood without empirical observation and vice versa."

The empirical part of the thesis is a single case study, which helps understand and explain the relationship between market shaping for sustainability and hybrid new venture development. The empirical unit of observation is a Norwegian hybrid new venture operating in the market for Guarantees of Origin for renewable electricity. Purposeful sampling was utilized to identify and select an information-

rich case, where the individuals involved were willing and able to participate and had specific experience and knowledge that supported achieving an in-depth understanding of the focal phenomenon (Patton 2002). My excellent access to the case company provided a rare opportunity to conduct a follow-up study unfolding in real time.

This study consists of seven chapters. In Chapter 2, previous research is reviewed and analyzed, and a theoretical framework is developed to guide the empirical study. Chapter 3 introduces my methodological choices. It entails a more detailed description of the case selection, methods of data collection, and data analysis. In Chapter 4, I detail the empirical context of the study. Chapter 5 presents the longitudinal follow-up case study. I narrate the story of the focal hybrid new venture as it develops and analyze the empirical data with help of the theoretical framework created. Chapter 6 summarizes the main empirical findings. Finally, in Chapter 7, the theoretical and managerial conclusions are discussed, along with considerations regarding the quality of the study. Suggestions for future research avenues are also provided.

2 Theoretical Framework

This chapter describes how I started looking for answers to my research questions from prior literature. I first introduce the existing process models of a focal actor's market shaping. As they focus on incumbent actors with no explicit sustainability aim, in the following sections I draw from the new venture development and hybrid new venture research, connecting what we already know about a focal actor's market-shaping process to the hybrid new venture development process.

2.1 Process models of market shaping

Market shaping is generally described as a process that unfolds incrementally and can be catalyzed by a single actor, the success of which nevertheless requires the efforts and engagement of multiple and versatile actors (e.g., Doganova & Karnøe 2015; Fehrer et al. 2020; Kleinaltenkamp et al. 2021). Baker et al. (2019, 301) describe market shaping as occurring "through an interdependent process involving institutionalized practices, beliefs and expectations, and the intentional activities of market actors at any institutional level".

Prior research has attempted to conceptualize the overarching phases of a process through which markets become shaped on the macro level. Storbacka and Nenonen (2011b) argue that this process consists of three sequential phases: origination, mobilization, and stabilization of new market elements. Flaig et al. (2021b) also divide the shaping of markets into three phases: infusion, formation, and retention. Focusing on the actor level, in the context of a collaboration between actors, Baker and Nenonen (2020) suggest that the actors' collective market shaping occurs through three stages: coalescing, legitimizing the collective, and using market clout.

Nevertheless, very little research attention has been directed to the market shaping of individual actors, which Jaworski et al. (2020, 142) call "the structured set of steps" a single firm may take. Only two such stepwise models were found in the existing literature. First, Nenonen and Storbacka (2020) synthesize current findings in the market-shaping literature into the eight-step market-shaping process in Figure 2. The first two steps are decisions that the focal actor must make: whether to take market-shaping action or wait; and whether to adopt the role of a leader or a supporter in market shaping. After these decisions, six more steps follow, entailing

various activities depending on whether the actor decides to take a leading (shaper) or a supporting (supporter) role. For the purpose of this study, I will focus on the activities of an actor taking a leading role, while acknowledging the crucial role of supporting actors.

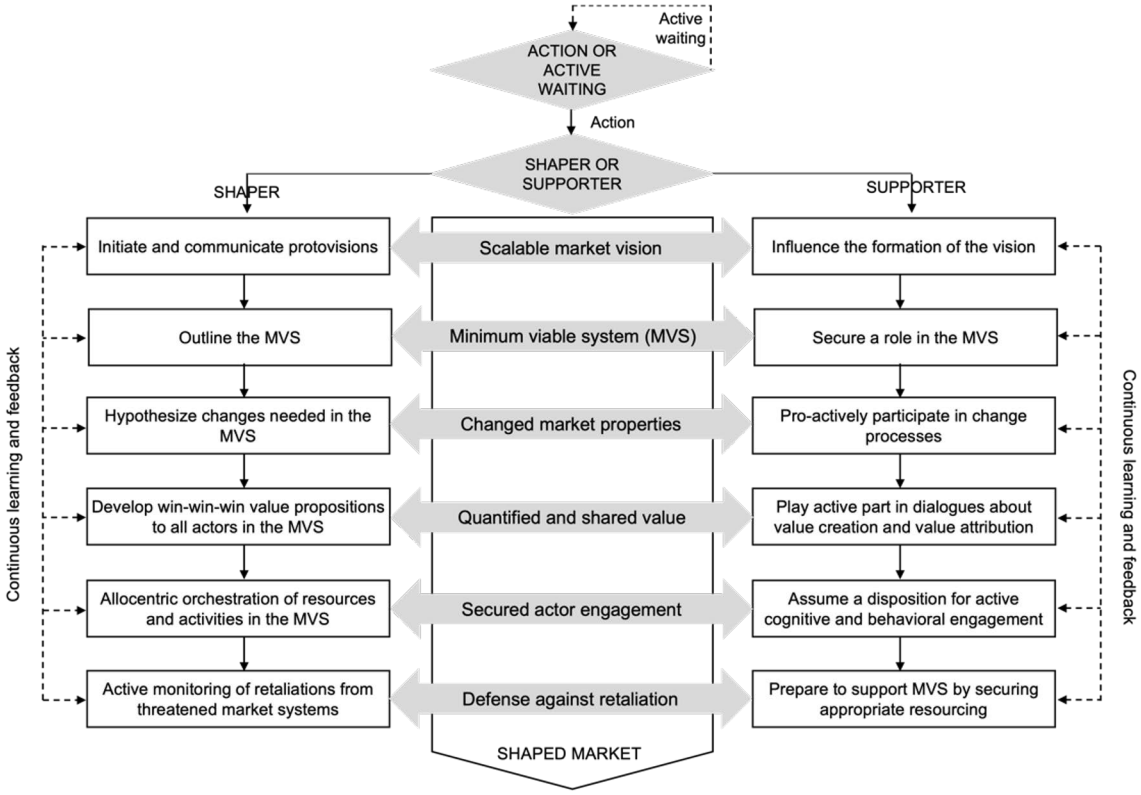

Figure 2. Market shaping process (adapted from Nenonen & Storbacka 2020, 267).

Steps 3–8 of the market-shaping process outlined by Nenonen and Storbacka (2020) are scalable market vision; minimum viable system (MVS); changed market properties; quantified and shared value; secured actor engagement; and defense against retaliation. These steps and the activities entailed will be discussed in more detail as this chapter progresses. In the process model, the shaper and other joining actors engage in continuous "higher-level learning", which "requires proactive unlearning of key organizational processes and the questioning of an organization's assumptions about itself and its environment" (Nenonen & Storbacka 2020, 266). Although not empirically tested, the process model provides a convenient and broad conceptualization of the steps of a market-shaping process by an incumbent actor that is transferable to many markets. However, the model assumes an actor with an

established business model and position in the market, as well as an existing resource base and network of relationships, meaning it cannot be directly transferred into the hybrid new venture development context.

In the other process model found in prior literature, Jaworski et al. (2020) delineate a seven-step process for implementing market shaping by a single firm in the consumer market context (see Table 1). The process concerns a distinct market-shaping process, 'the Pied Piper', based on a typology of four market-shaping processes suggested by the authors. The Pied Piper represents an individual firm driving "a market to adopt a technological innovation that offers superior functional benefits to customers" (Jaworski et al. 2020, 143).

Table 1. Summary of the seven-step market-shaping process by Jaworski et al. (2020).

STEP	KEY ISSUES
Step 1: Articulate a value proposition for a fairly well-defined set of customers.	Designing compelling value propositions. Requires deep understanding of vexing problems a set of potential customers face and the superior value the innovation could provide.
Step 2: Develop a vision of the ecosystem for delivering the proposed value to target customers.	Recognizing the linkages among various types of actors, their activities, and the roles they would play in realizing the value proposition. Requires overcoming inertia and developing a motivating vision of the proposed ecosystem.
Step 3: Stress test the value proposition, the target customers, and the ecosystem vision against macro trends and industry forces.	If macro trends or industry forces do not favor the value proposition, the target customers, or the ecosystem, one or more of these needs to be revised.
Step 4: Identify "wave 1" customers, ecosystem actors, and potential obstructers.	Identifying customers with highest probability of adoption, most relevant complimentary actors, as well as entities likely to stand against the innovation, such as incumbents. May require targeting opinion leaders.
Step 5: Develop a give-get matrix for "wave 1" customers and ecosystem actors, and a go-to-market plan that also addresses potential obstructers.	Planning how to persuade Wave 1 customers and ecosystem actors to adopt and/or support the innovation, as well as how to prevent obstruction. Requires deep understanding of what each ecosystem actor must give and what it can gain from joining.
Step 6: Implement the "wave 1" plan with agility.	Executing the plan from the previous step. After launch the firm may have to pivot, based on continual experimentation, adjustment, and innovation.
Step 7: Cascade to subsequent waves of customers, ecosystem actors, and potential obstructers.	Rolling out the value proposition to the next wave, followed by subsequent waves, and so on. Requires adjustment of rollout plan.

The process by Jaworski et al. (2020) provides a more detailed description of a focal actor's market-shaping activities in each step and seems transferable to many

incumbent companies and markets. However, the model also has several restrictive underlying assumptions: the market-shaping firm has a "zero-sum game" mindset, is self-oriented, has adequate resources to drive markets, accords a limited role to "supra-firm entities such as trade associations", and appeals to customers through economic (rather than values-based) arguments to change (Jaworski et al. 2020, 143). Moreover, this model does not consider the market shaper's vision of the future market. Hence, neither of the existing process models described can be directly applied to hybrid new ventures in the making. In addition to the underlying market logic, both models assume that the market shaper starts from a position of plentiful resources and existing business relationships. I thereby draw on the literatures on new venture development and hybrid entrepreneurship to build a theoretical framework for this study. The new venture development process is well researched and (although wide semantic variation exists regarding terminology) is generally considered to comprise phases such as ideation (including visioning and business model formation), planning (including acquiring initial resources and building a network), market entry (including testing the business model and pivoting), and scaling (e.g., Bocken & Snihur 2020; Bortolini et al. 2018; Fisher et al. 2016; Perks & Medway 2012).

2.2 Initial decisions

When incumbent firms face challenges such as saturated markets or declining growth, or opportunities such as those arising from new regulation or technological breakthroughs (Doganova & Karnøe 2015; Kindström et al. 2018), they must consider whether it is in the best interest of the company and its shareholders to undertake market shaping (Nenonen & Storbacka 2020). In Nenonen and Storbacka's model (2020), the first two steps in the market-shaping process are: deciding whether to take market-shaping action or to wait; and deciding whether to become a leading or a supporting actor.

Such decisions entail careful considerations such as evaluating risks of jeopardizing extant revenue flows and market position, and the potential benefits to be gained from a shaped market form. Moreover, managers must evaluate the firm's power in shaping other actors' thoughts and behavior. Prior research suggests that this power is based on the actor's network position, the relative strength of its business model, and the level of its "clout", that is, the ability to compel other actors with its subjective market view (Baker & Nenonen 2020; Storbacka & Nenonen 2011b). The characteristics of a particular market also play a role: the more level the playing field in terms of distributed power between market actors and external enablers like technological development (Davidsson et al. 2020), the easier it is for versatile actors to become a market shaper (Nenonen & Storbacka 2020).

For an aspiring hybrid entrepreneur, the initial considerations seem fundamentally different. The first key decision concerns whether to act on a new venture idea, often referred to as an entrepreneurial opportunity (Davidsson 2015). Extant research emphasizes that both external conditions and the creative agency of entrepreneurs influence the new venture development process (Davidsson et al. 2020; Shane & Venkataraman 2000). Davidsson (2015) suggests that the often-used notion of entrepreneurial opportunity actually entails three interlinked constructs: external enablers, the new venture idea, and opportunity confidence. External enablers refer to the external circumstances which may trigger new venture creation, such as technological development, regulatory or demographic shifts, and changes to the sociocultural, economic, political, or natural environments (Davidsson et al. 2020). A new venture idea refers to an imagined product/service offering and the means of bringing that offering into existence (Davidsson 2015). Opportunity confidence means a person's subjective evaluation of how attractive the external enablers and the new venture idea are in terms of starting up a new business (Davidsson 2015).

Along with the recognition of entrepreneurs' central role in sustainable development, there has been increased academic interest in examining the antecedents of hybrid entrepreneurship (Dean & McMullen 2007; Hanohov & Baldacchino 2018; Hörisch et al. 2017; Muñoz & Dimov 2015; Patzelt & Shepherd 2011; Vuorio et al. 2018). A macro-level perspective suggests that market imperfections and failures contribute to environmental degradation and social problems and that they also provide external enablers for hybrid entrepreneurship (Belz & Binder 2017; Cohen & Winn 2007; Dean & McMullen 2007). Dean and McMullen (2007, 57-58) state that "environmentally relevant market failures represent opportunities for simultaneously achieving profitability while reducing environmentally degrading economic behaviors."

A new venture idea reflects an actor's interpretation of the external enablers, such as market failures (Davidsson 2015). This idea will be proved to be either a successful opportunity or "mistaken beliefs" by the following entrepreneurial action (Kier & McMullen 2018, 2265). A specific new venture idea is not tied to a particular actor, as a similar idea can be created separately by different individuals, and be shared within a team and communicated to other actors (e.g., investors and potential partners) (Davidsson 2015). The idea enables a new venture development process, but alone is not sufficient. The individual actor's evaluation and subjective confidence that the new venture idea and the external enablers present a favorable opportunity will drive the decision of whether to take entrepreneurial action to alleviate the recognized market failure; that is, whether to engage in market shaping to secure a more sustainable market form than currently exists.

Various studies have stressed how certain individuals have characteristics and personal values that make them more likely to exploit entrepreneurial opportunities to alleviate sustainability-related market failures (e.g., Patzelt & Shepherd 2011; Vuorio et al. 2018). Research suggests that individuals with prior knowledge of natural and communal environments notice changes in these areas more easily and are thus more likely to engage in hybrid entrepreneurship (Hanohov & Baldacchino 2018; Patzelt & Shepherd 2011). Hybrid entrepreneurship has also been connected to altruistic values and empathy, although the creation of economic, environmental, and social value is also important (Gibbs 2009; Patzelt & Shepherd 2011; Vuorio et al. 2018). Patzelt and Shepherd (2011) argue that the perception of threat to a person's wellbeing posed by sustainability problems (e.g., pollution) increases their motivation for hybrid entrepreneurship. The underlying attitude toward environmental protection and social responsibility (i.e., the sustainability orientation) is also frequently suggested to contribute to hybrid entrepreneurship emergence (e.g., Kuckertz & Wagner 2010; Parrish 2010).

According to Greenwood et al. (2015, 327), research on institutional change is fundamentally about examining why and how some actors are able to exercise reflexivity, that is, "getting 'outside' prevailing ideas and considering alternatives." Reflexivity is implicit in market-shaping literature as it stresses that actors' willingness to engage in market shaping often stems from a deep dissatisfaction with the current market form, leading them to question the status quo (Baker & Nenonen 2020; Nenonen & Storbacka 2020). Greenwood et al. (2015) suggest that hybrid actors actively combining competing institutional logics are especially likely to detect opportunities for change.

2.3 Forming a market vision and a venture idea

In the market-shaping process model outlined by Nenonen and Storbacka (2020), the third step that follows a market shaper's initial decisions is a *scalable market vision,* which entails developing and communicating a vision of the future market where the recognized market failure is resolved. In other words, a market vision refers to the market shaper's "view on how the market should be configured" (Storbacka & Nenonen 2011a, 253). Nenonen and Storbacka (2020) argue that market shapers should strive for a scalable market vision to ensure the market shaping attains durability through achieving critical mass. Flaig et al. (2021a) suggest that the market vision guides the change agent's ongoing market-shaping activities. In contrast, the market-shaping process model by Jaworski et al. (2020) does not consider the shaper's vision of the future market but starts from the articulation of a firm-centric and fairly well-defined value proposition.

For an aspiring hybrid entrepreneur, developing a sustainable market vision is likely to be aligned with the creative process of ideating, that is, generating and selecting ideas for the development of a new commercial venture (Bocken & Snihur 2020; Kier & McMullen 2018). Ideating is based on the entrepreneur's or entrepreneurial team's reflexivity, creativity, capabilities, knowledge, and social networks (Kier & McMullen 2018; Sarasvathy 2001). Startup literature indicates that a central task during ideation is forming an initial business model idea (Ries 2011; Bocken & Snihur 2020). A business model describes the organizational architecture that connects the company's strategy with its activities (Osterwalder et al. 2005; Teece 2010). Research suggests that the initial business model of a company is typically a prospective idea, envisaging "a future venture and the value creation logic that it will entail" (Doganova & Eyquem-Renault 2009, 1560; see also Chesbrough & Rosenbloom 2002; Teece 2010).

A hybrid entrepreneur's commitment to a particular combination of market and sustainability logics, that is, his or her cultural embeddedness, influences how these logics are integrated into the business model idea (Gregori et al. 2019; Ocasio & Radoynovska 2016; O'Neil & Ucbasaran 2016; York et al. 2016). Business model design is also influenced by its designer's mental models, which form the boundaries of that person's market perception (Storbacka & Nenonen 2011b). The cultural embeddedness and mental models of the entrepreneur or a founding team take "visible form as they are translated into business models" (Storbacka & Nenonen 2011b, 258). The business model becomes the main means through which to simultaneously advance a sustainability mission and create economic profit (Grassl 2012). It is also the interface through which a venture's interactions with other market actors are conducted (Storbacka & Nenonen 2011b; Möller et al. 2020). The link between different institutional logics, the entrepreneur, and the hybrid business model idea is depicted in Figure 3.

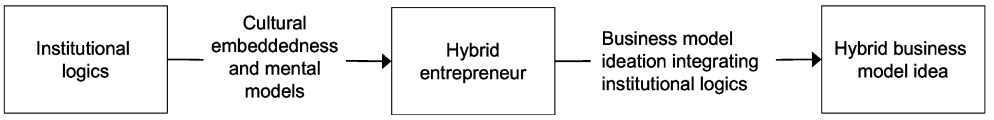

Figure 3. Forming a hybrid business model idea.

Extant research distinguishes two ideal types of hybridity: integrated hybridity, where the same activities serve economic and environmental/social value creation; and differentiated hybridity, where the different types of value creation require separate organizational activities (Battilana et al. 2012; Ebrahim et al. 2014; Davies & Doherty 2019). The integrated model focused on in this study is found to hold many advantages: the various activities do not have to compete for the scarce

resources of a new venture, and managers do not face a choice between mission and profit: a dilemma that often leads to mission drift (Best et al. 2021). Moreover, the integration of environmental/social and economic value creation "enables a virtuous cycle of profit and reinvestment" to build scalable solutions related to the sustainability mission (Battilana et al. 2012, 52).

2.4 Developing assumptions

The step Nenonen and Storbacka (2020, 269) suggest follows forming a market vision in the market-shaping process is to construct the *minimum viable system* (MVS). That entails outlining the various market actors in the market shaper's immediate operating environment necessary to realize the simplest version of the market vision. These actors are typically found on the meso layer of the market shaper's business environment (Möller et al. 2020). The notion aligns with Jaworski et al. (2020), whose process model indicates that the market shaper must early in the process develop a vision of an ecosystem of the supporting actors who could help deliver proposed value to target customers.

Nenonen and Storbacka (2020) suggest that outlining the MVS is followed by *changed market properties* first within the MVS and later in the broader market system. The authors suggest that the main activity for this step is hypothesizing market changes. It seems likely, however, that for a hybrid entrepreneur, the two activities mentioned above (outlining supporting actors and hypothesizing changes) are combined into an activity of developing assumptions, as the changes required in the market and the actors needed to help realize those changes are tightly interconnected. The more experience in and understanding of the market the entrepreneur has, the easier it is to identify the actors who could support or oppose market shaping and the existing linkages between them. This idea also aligns with Jaworski et al. (2020), who suggest that the market shaper continuously adjusts its vision of the supporting ecosystem, key customers, and actors who might take retaliatory action.

Prior studies identify several elements (or properties) of the market that market shapers might strive to influence (e.g., Kjellberg et al. 2015; Nenonen & Storbacka 2020; Ulkuniemi et al. 2015). That involves developing assumptions about how and why those elements should be shaped. These market elements can be divided into three broad categories: the exchange process, the market actors, and the institutions related to the market. The elements consist of various facets on which the focal actor's market-shaping activities could focus (Nenonen et al. 2019a).

The first element, the *exchange process*, entails the market offering (product or service) and the modes of exchange. Changes to the market offering may relate to its tangible properties, the pricing logic, the ways of probing and using it, and the

perceptions of quality and desirable attributes afforded to it by market actors (Harrison & Kjellberg 2016; Nenonen et al. 2019a; Ulkuniemi et al. 2015). Changes to the market offering tend to alter the market actors' competitive positioning, causing both contestation and new forms of collaboration (Finch & Geiger 2011; Geiger & Kjellberg 2021). Callon (1998) talks about framing, a process of delimiting what to include and exclude in a particular market. Framing depends on how value is assigned to the market offering and other market elements (Callon 1998; Geiger & Gross 2018). Framing is never perfect or complete, as some objects, actors, or values may sometimes be excluded but at other times make their way back in. That which is excluded, Callon (1998) calls overflows, a reconceptualization of the economic concept of externalities, that is, costs (such as carbon emissions) or benefits created by a producer which affect other parties without being reflected in the market price of the produced offerings (OECD 2003). Overflows are often brought to the attention of the public by scientists, regulators, or groups affected by them (Doganova & Karnøe 2015; Geiger & Gross 2018).

Modes of exchange enable market actors to meet and conduct exchanges through a transactional infrastructure (material devices) and established interaction routines (behavioral patterns) (Geiger & Kjellberg 2021; Harrison & Kjellberg 2016; Kjellberg et al. 2015; Ottosson et al. 2020). Shaping modes of exchange may include envisioned changes to such market facets as the exchange infrastructure, channels, and the transaction mechanism matching providers and customers (Nenonen & Storbacka 2020). These changes are often linked to the introduction and use of novel technological solutions, such as digital ones (Kjellberg et al. 2015).

Market actors create supply and demand and realize economic exchanges, thus forming the second market element (Ulkuniemi et al. 2015). Changes envisioned to this category include the number of customers, customers' capabilities to use the exchange object, the value/utility sought by customers, the number of suppliers, the types of participants in a supply network, the number of competing providers, and the interaction between competing providers (Nenonen & Storbacka 2020). Kjellberg et al. (2015) argue that changing the way market actors value and assess the market offering can spur dramatic changes in the market.

Market shaping requires changes not only to existing material arrangements in a market but also to its institutions (Koskela-Huotari et al. 2016; Nenonen et al. 2019b), the humanly devised "rules of the game" that govern markets (North 1990, 3). The third market element is then *institutions*, a term including both norms and representations. Norms refer to what is currently seen as acceptable and desirable in a particular market (North 1990). Prevailing norms thus influence the opportunity for new sustainable alternatives to succeed. At the same time, market shaping tends to require altering some of the formal rules and regulations and also the informal norms and shared understandings of a market (Harrison & Kjellberg 2016).

Representations include images of markets, the terminology used, descriptions used in the media, market research and statistics, industry associations, and symbols of legitimate markets (Nenonen et al. 2019a; Nenonen & Storbacka 2020). As markets are abstract entities, images provide standardized information about the properties of a specific market (Geiger & Kjellberg 2021).

For the hybrid entrepreneur planning a market-shaping new venture, building assumptions about required market changes and supporting actors seems inherently tied to generating more specific assumptions that elaborate the initial business model idea (Bortolini et al. 2018). These latter assumptions, often referred to as business model hypotheses, relate to the core elements of a business model, typically distinguished into value proposition, value creation and delivery, and value capture (Chesbrough 2010; Ries 2011; Teece 2010). The value proposition can be described as the promise of value to stakeholders if they decide to do business with the company (Richardson 2008). It includes the market offering, target customers, and how customer relationships are established and maintained. Value creation and delivery relate to the key activities to realize the value proposition, including resources and capabilities, channels, distribution chains, and key partners (Bocken et al. 2014; Bortolini et al. 2018; Davies & Doherty 2019). Value capture, in turn, refers to the revenue streams and cost structures of the company (Bocken et al. 2014).

Storbacka and Nenonen (2011b) have suggested an enlargement of the firm-focused term value proposition to establish a market proposition on the grounds that value is jointly created in networks of several participating actors. A market proposition means that the market shaper promises to improve value creation for all participating actors in a compelling and beneficial way (Nenonen & Storbacka 2020; Storbacka & Nenonen 2011b). Nenonen et al. (2020, 277) argue that the core content of market propositions conveys what kind of enhanced value creation market actors can expect after the market has been shaped.

2.5 Building networks and legitimacy

Previous literature posits that the stronger the focal actor's network position, the better its ability to influence other market actors (Kjellberg et al. 2012; Storbacka & Nenonen 2011b). However, before an aspiring hybrid entrepreneur can even dream of shaping a market, the new business entity in the making must gather sufficient resources and become perceived as legitimate by the environment in which it operates (Fisher et al. 2016; Gasbarro et al. 2018; Tracey et al. 2018). This notion is missing from the prior market-shaping process models, as they address only incumbents.

Legitimacy refers to "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed

system of norms, values, beliefs, and definitions" (Suchman 1995, 574). Indeed, the existence of a business is conditioned by being recognized by other actors in practical interactions (Andersson et al. 2008; Håkansson & Snehota 1995; La Rocca & Perna 2014). Gaining legitimacy is crucial for new ventures, as not only the business model but also the founding team (Wallnöfer & Hacklin 2013; Parry 2020) must be perceived as credible and to possess the capabilities and resources needed to successfully implement its business model (Parry 2020).

For any new venture, starting from scratch means starting with insufficient resources (Aaboen et al. 2011). The venture needs to network with other actors and establish initial relationships that can supply necessary resources (such as market knowledge, materials, and financing) (Baraldi et al. 2019). According to Håkansson and Prenkert (2004, 89), the power to exert influence when networking may stem from two sources: authority based on trust, and resource access (possession of resources or indirect control of resources). For new actors, the founders' previous cooperative interactions in particular seem to be key, since they may have created a *capital of trust*, that is, the perception by resource providers that a person is trustworthy (Håkansson & Prenkert 2004). This aligns with the notion of the "clout" (Storbacka & Nenonen 2011b, 258), or "skillfulness" of an actor, which refers to a person's ability to persuade others to agree with their market view. In the context of sustainable new ventures, O'Neill and Ucbasaran (2016) suggest that skillfulness involves an actor's ability to gain legitimacy by aligning with existing preferences while remaining authentic to the hybrid mission.

In addition to resource access, a new venture will also utilize its market proposition to establish venture legitimacy (Baraldi et al. 2019; Garud et al. 2018; Håkansson & Snehota 1995; Storbacka & Nenonen 2011b). Hybrid new ventures that integrate competing logics within one organization have been found to face specific challenges when networking (De Clercq & Voronov 2011; Gregori et al. 2019; O'Neil & Ucbasaran 2016). For example, accessing financial resources may be difficult if external investors struggle to understand the hybrid objectives (Santos et al. 2015). Hybrid entrepreneurs must typically also learn how to manage various stakeholders' divergent expectations and values (O'Neil & Ucbasaran 2016; Pache & Santos 2010). However, as Fisher et al. (2016) state, almost all ambitious new ventures (sustainable or not) need to appeal to different audiences with different legitimacy criteria as they develop.

2.6 Testing assumptions

When discussing their process model, Nenonen and Storbacka (2020) imply that for an incumbent firm developing market change assumptions and driving these changes take place simultaneously in the fifth step, *changed market properties*. However, a

hybrid new venture is more likely to have developed its main assumptions by the time it becomes operational in the focal market. This idea is supported by Jaworski et al. (2020), who argue that when entering the market with a novel value proposition, the market shaper has already carefully hypothesized the supporting ecosystem, key customers, and potential obstructors and will then execute its plan by offering its services/products to the market and competing against incumbent providers.

The entrepreneurship and business model literature highlights the key role of a compelling business model in a new venture's success (e.g., Blank & Dorf 2012; Magretta 2002; Bocken & Snihur 2020; Parry 2020). Similarly, market-shaping research suggests that the performative power of the focal actor is influenced by the relative strength of its business model (Kjellberg et al. 2012; Storbacka & Nenonen 2011b). However, it is notoriously difficult for a new venture to construct a profitable business model from conception (Balboni et al. 2019). The strength of a new venture's business model cannot be determined until it is subjected to testing (Ries 2011; Teece 2010). Therefore, a new venture engages in continuous business model development, an experimental "fine-tuning process involving voluntary and emergent changes, in and between permanently linked core components in response to both external and internal factors" (Demil & Lecocq 2010, 239).

Hybrid new ventures, like any other new venture, try to validate their business concept under conditions of high uncertainty (Bocken & Snihur 2020; García-Gutiérrez & Martínez-Borreguero 2016). Inspired by the Lean Startup model (Blank 2013; Ries 2011), popular management literature and business practitioners use the term experimentation to describe a process of "validated learning" (Ries 2011, 8) to reduce this uncertainty. In the process of experimentation and learning, the new venture runs market-based tests for each assumption in its business model and the underlying market change assumptions that were formed in the earlier phases (Bocken & Snihur 2020; García-Gutiérrez & Martínez-Borreguero 2016). Although most new venture development models like the Lean Startup are targeted at tech companies, there are general aspects that can be applied to any type of new venture.

New venture studies suggest that based on the learnings and feedback from testing its business model assumptions in the market, the venture may take one of two actions: pivoting or iterating (Blank & Dorf 2012; Ries 2011). Pivoting means substantially changing one or more assumptions related to the business model elements, formulating a new one, and testing it in the market (Blank & Dorf 2012; see also Bortolini et al. 2018). An example of a pivot could be a significant change in the company's target customer group. Jaworski et al. (2020) acknowledge this need for pivoting in their market-shaping process model.

Iterating means making more frequent and less radical changes in one or more business model assumptions, such as altering the service price (Blank & Dorf 2012).

Because hybrid entrepreneurs tend to "have strong visions and associated values anchored in their individual identities, beliefs, and ideologies", the market tests are typically not performed on the very core of the business idea (i.e., why the company exists), communicated through the market proposition (Bocken & Snihur 2020, 3). Nevertheless, a strong commitment to an unrealistic business idea that is not tested with external stakeholders often leads to unnecessary investment and early failure (Ries 2011).

The sixth step in the market-shaping process model outlined by Nenonen and Storbacka (2020, 267) *quantified and shared value* entails developing "win-win-win value propositions" with every actor in the MVS. Doing so means involving other actors in a collaborative process of developing value propositions to enhance their acceptance of those propositions. In contrast, in the model by Jaworski et al. (2020), the market shaper's concern seemingly lies in persuading other actors to accept its firm-centric value proposition, rather than involving them in co-creation.

2.7 Driving change through market work

As described earlier, several market-shaping studies have distinguished elements of the market that could be targeted by market shapers. It is important to recognize that a systems view of markets means that there no objectively defined market boundaries exist (Araujo 2007; Nenonen et al. 2019a). Therefore, which elements and actors are to be included in a particular market definition is always based on the subjective perspective of the focal actor, that is, the collective, organization, or individual performing the market shaping (Nenonen et al. 2019a; Ulkuniemi et al. 2015). Focusing almost exclusively on incumbent actors, scholars have identified specific market-shaping activities related to driving changes in market elements during established operations (Kindström et al. 2018; Nenonen et al. 2019a, 2019b; Ottosson et al. 2020; Ulkuniemi et al. 2015). Nenonen et al. (2019a, 251) call these activities *market work*, defined as "purposeful efforts by a focal actor to perform and transform markets". As no studies were found looking at market work before a new venture enters a market, prior research seems to imply that market work is undertaken when the market shaper is already active in the market.

Referring to the market elements discussed in section 2.4, market work related to the *market offering* may include modifications to change its performance in some dimension, (re)defining its content, changing its pricing logic or level, and developing specific measurements for probing the offering (Harrison & Kjellberg 2016; Nenonen et al. 2019b; Ulkuniemi et al. 2015). In the energy transition context, these efforts could entail making an existing product or service more energy efficient or building measurement systems that support reliable and effective sustainable energy technologies.

Examples of market work related to *modes of exchange* include building transactional infrastructures, establishing material and organizational arrangements that facilitate exchange, changing the channels connecting market actors, and influencing the way providers and customers are matched (Harrison & Kjellberg 2016; Nenonen et al. 2019a, 2019b; Ottosson et al. 2020). According to Ulkuniemi et al. (2015), an important part of the modes of exchange is the nature of the relationships between actors on the supply and demand sides. Ottosson et al. (2020) recognized that enabling exchange practices may entail work to establish novel supply structures or building on knowledge of user preferences to facilitate trade. When developing a new mode of exchange or providing an alternative to existing ones (e.g., a digital marketplace), market shapers need to validate its functionality within existing structures (Ottosson et al. 2020).

Ottosson et al. (2020, 305) point out that whereas trade-related activities between buyers and sellers (e.g., negotiating on prices, functionality, and terms of delivery) are critical for the shaping of markets, governments may also interfere in facilitating exchange "with the intention to stimulate forms of trade that they consider beneficial for the society". The creation of the GO system in the EU to accelerate the production of renewable electricity is a pertinent example of such institutional interference. In markets requiring substantial changes to become more sustainable, governments often need to step forward and provide incentives (e.g., subsidies) to attract private capital (Ottosson et al. 2020).

Market work concerning *market actors* includes activities targeting the supplier network, the demand side, and/or the other service providers (Nenonen et al. 2019a, 2019b; Ulkuniemi et al. 2015). These activities may relate to altering the type or number of participants in the supply network, forming or approaching new customer groups, educating market actors, and affecting customers' value perceptions of the market offering, among others (Harrison & Kjellberg 2016; Nenonen et al. 2019a, 2019b). By ensuring that actors are well-equipped and capable of acting in a preferred fashion, market shapers strive to decrease or increase the agency of particular market actors (Geiger & Kjellberg 2021). Research has also recognized the importance of (re)devising actors in market-shaping efforts (Kjellberg et al. 2015; Geiger & Gross 2018). Muniesa et al. (2007, 2) define market devices as "the material and discursive assemblages that intervene in the construction of markets". Market devices can include a vast variety of things, such as a tax (Geiger & Gross 2018), a business model (Mason & Spring 2011), or a technology list (Doganova & Karnøe 2015). Equipping some actor group(s) with a new market device, such as an eco-label can shift a market's frames by influencing "producers' and consumers' product evaluation and exchange practices" (Geiger & Gross 2018, 1358).

A typical lens in prior market shaping research for examining market work targeting *institutions* is the institutional work approach introduced by Lawrence and

Suddaby (2006). The forms of institutional work originally identified by the authors are synthesized in Appendix 1. Although extant research has converged on institutional work generally concerning three categories of maintaining, disrupting, and creating institutions, the "types of institutional work vary depending on the context and level of analysis" (Fehrer et al. 2020, 1427).

Arenas et al. (2020) found that hybrid new ventures engage in four types of institutional work: maneuvering around regulation, making sustainability convenient, politicizing economic action, and relational work. Maneuvering around regulation consists of adapting to existing legal regulations, while also trying to extend, alter, or reinterpret them. Making sustainability convenient means portraying sustainable products and services as convenient and attractive alternatives to extant market offerings. Politicizing economic action is about questioning the present market system and theorizing the advancement of the sustainability logic by infusing economic practices with a political meaning. Finally, relational work enables the other types of institutional work. The term refers to the efforts to build connections with different types of actors that may facilitate access to resources and opportunities and enhance the new venture's external legitimation.

Several studies have emphasized the importance of institutions in shaping markets (Harrison & Kjellberg 2016; Kindström et al. 2018; Nenonen et al. 2019a; 2019b; Närvänen et al. 2021). A practice central to sustainable market shaping seems to be narrative construction, which aims to justify the required market changes, create positive images and raise expectations around novel sustainable solutions (Muñoz & Cohen 2018; Ottosson et al. 2020). Narrative constructing entails discursive activities, including attempts to shape markets through promotion, information campaigns, and lobbying. A market shaper may also develop stories that form a beneficial market representation of itself to influence the market (Nenonen et al. 2020). As a temporal discursive construction that provides "means for individual, social, and organizational sensemaking" (Rantakari & Vaara 2017, 271), a narrative conveys interpretations from a specific point of view (Søderberg 2003). For example, in their study of British offshore wind power deployment, Kern et al. (2014) found that advocates' narratives played an important role in creating an appealing image and gaining support for the renewable solution from various stakeholders. In contrast, Ihlen (2009) showed how the Norwegian oil industry used rhetorical strategies to define sustainability to its own advantage by discrediting other energy sources as unrealistic alternatives and comparing Norway's oil production to more polluting production in other countries.

Nenonen et al. (2019a, 258) suggest that market-shaping firms should not focus on the market elements in isolation but strive to find ways in which market work on the different elements can "interact to reinforce each other" (see also Kindström et al. 2018). Because markets are constantly evolving as a result of actors' deliberate

efforts and spontaneous emergence, market development is never fully predictable. Nenonen et al. (2019a) have suggested that market shapers may harness this volatility by embracing an effectual or non-predictive logic (Read et al. 2009) that places less emphasis on controlling and planning and more on experimentation, learning, and iteration. However, as Patvardhan and Ramachandran (2020) argue, market shaping diverges from the completely means-driven thinking of effectuation (Sarasvathy 2001), where imagination is guided and constrained by existing means and the future-oriented dimensions of agency are neglected.

2.8 Validating assumptions and expanding the business

Eventually, after sufficient iterating and pivoting, one of two situations occurs. In a positive situation, the new venture's management acquires a subjective perception that a sustainable business model has been achieved, in the sense that it is deemed durable, scalable, and profitable (Balboni et al. 2019; Bortolini et al. 2018). This can be seen as a validation of the initial new venture idea. Alternatively, in a negative situation, the market tests and consequent learnings show that a sustainable business model cannot be generated. In the latter case, the founding team makes the decision to give up (Bortolini et al. 2018). This becomes the faith of most new ventures, no matter how compelling or innovative was the original business idea (Picken 2017).

A new venture and its founders must overcome several hurdles to avoid failure, such as, acquiring and expanding sufficient resources and capabilities, developing customer relationships, building a competent team, structuring sales and delivery processes, creating a supportive company culture, and establishing legitimacy (Aaboen et al. 2013; Picken 2017; Parry 2020). When a solid base is built, the venture may start to grow and/or scale. Growing refers to increasing revenues while adding resources and thereby incurring costs. Scaling means increasing revenues without significantly increasing the cost base. Either way, expanding the business requires the organization to change from one featuring loosely structured informality and ad-hoc decision-making to one with more structure, process, and discipline (Picken 2017).

For a new venture aiming to shape an existing market, achieving a sustainable business model implies that the venture has also been able to validate at least some of its market change assumptions. A simplified example would be if a venture sets out to shape a market based on product purchasing into one utilizing hiring and leasing. The venture builds its business model around assumed necessary changes in certain market elements. These changes could include improving the demand-side actors' perception of the quality of used products. If the venture's business model proves durable, it has been able to engage enough like-minded actors to support its

change agenda, and a sufficient number of companies have adopted the novel practice of hiring and leasing. This chain of events eventually has the potential to provoke more widespread changes in the market, such as the constellation of competing providers.

In the market-shaping process by Nenonen and Storbacka (2020), the final two steps are *secured actor engagement* and *defence against retaliatory action*. The former means that the market shaper moves from a motivating role to an orchestrating one, providing platforms, orchestrating resources and activities, and building interdependencies among actors in a way that allows interorganizational collaboration. The reach of the market-shaping activities thus expands from the MVS to a broader market. Whether a hybrid new venture can take on these activities is dependent on the resources, legitimacy, and network position it has been able to acquire. Baker and Nenonen (2020) suggest that upon obtaining legitimacy, market shapers can start targeting more actors on the meso layers within the market, such as important gatekeepers. In the process model by Jaworski et al. (2020, 149), reaching a certain number of customers and supporters means presenting the market shaper's value proposition to "the next wave of customers and ecosystem actors", followed by subsequent waves.

Being prepared and defending against retaliatory action is seen as necessary (Jaworski et al. 2020; Nenonen & Storbacka 2020) as market shaping is bound to generate opposition from market actors who are negatively affected by it (Peters et al. 2020). Securing support from powerful actors such as industry organizations would make this task easier for any actor (Nenonen & Storbacka 2020), but for hybrid new ventures it may take time to reach a position where it can build this kind of support structure. Jaworski et al. (2020) suggest that a market shaper should identify potential obstructing actors early on and adjust the evaluation as the market-shaping progresses.

2.9 Summary of the theoretical framework

The theoretical framework of this study is summarized in Figure 4. It is constructed by combining relevant findings in the extant literature on the market-shaping process of an individual actor, new venture development, and hybrid new ventures. The figure provides a preliminary understanding by depicting the potential interrelationship between the evolving core activities in hybrid new venture development and market shaping.

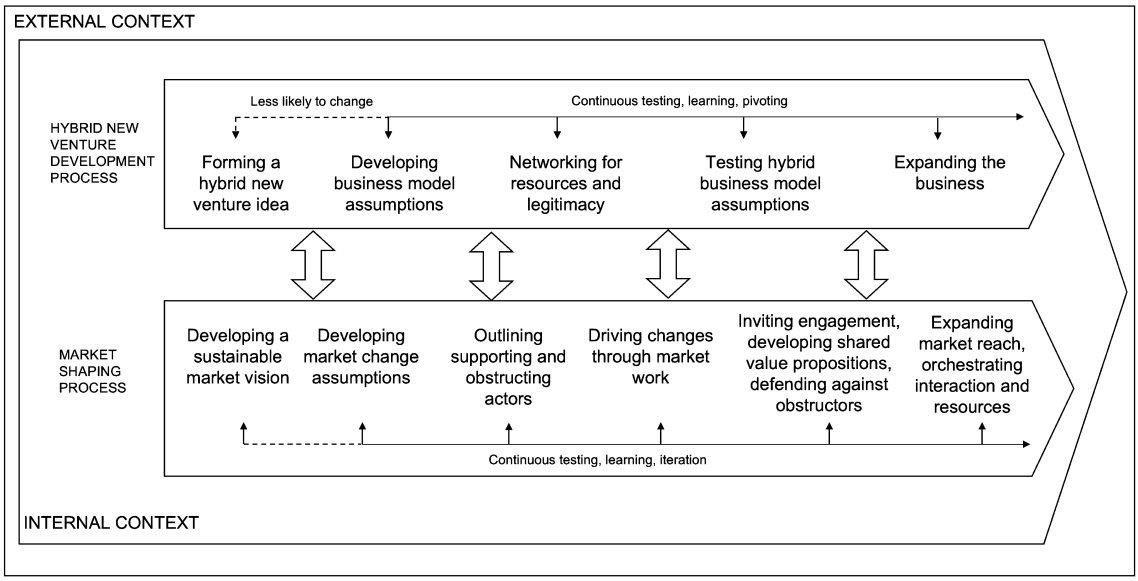

Figure 4. Theoretical framework for examining the interrelation of market shaping and hybrid new venture development.

The market-shaping process is driven by a combination of the entrepreneur's personal characteristics, prior experience, existing knowledge, and social capital. Hybrid entrepreneurs are typically dissatisfied with what they perceive to be the current form of the relevant market and thus create a vision of a more sustainable one. This vision is likely to be formed in connection with a hybrid new venture idea, which reflects the entrepreneur's interpretation of external enablers, and confidence in a favorable opportunity. Formulating a hybrid new venture idea also involves the initial idea of a business model where the entrepreneur or the founding team decides how to integrate the different (in this case, dual) logics in a way that would allow value creation among multiple stakeholders and in the society.

Having formulated a vision, the founder(s) makes assumptions about the changes required in various elements of the current market to realize a more sustainable market form. This part of the process tends to address developing specific business model assumptions, that is, a compelling market proposition and ideas on how the various elements of the venture's business model (related to customers, partners, channels, cost management, and revenue streams, for example) can be harnessed to provide both economic and sustainability value. The founders also need to broadly outline a constellation of supporting actors (that is, an ecosystem or MVS) that could help realize the sustainable market vision. They should also be aware of those actors likely to obstruct the process (such as incumbent competitors) at this stage.

As the new venture's chances of survival and fostering change in the market are highly contingent on the resources gained and legitimacy afforded by other actors, it is crucial to initiate networking before entering the market. During networking, the venture's conception of the constellation of supporting actors is likely to become clearer. It is possible that while networking, the venture already starts driving changes to the market elements based on the assumptions created earlier. However, upon market entry, these change assumptions are put to the test as the venture starts engaging with potential customers through the elements of its business model. Developing shared value propositions with external stakeholders is likely to help acquire additional resources and enhance stakeholder engagement. The venture iterates forward in a highly uncertain business environment by testing and learning. The market change assumptions and business model assumptions created earlier are adjusted through pivoting, based on the continuous feedback gained from the market.

When the founder(s) eventually concludes that the venture's business model is durable, the venture enters a growing and/or scaling phase where it steadily takes on new customers and creates revenue. The business expands, for example, by increasing the products and services offered or by extending the distribution network. The entrepreneur(s) must also manage the new requirements for the internal organization caused by growth. Market shaping is advanced by expanding to new customers or customer groups and supporting actors. At this point, the company can focus on inviting engagement from actors in its network of supporting actors by orchestrating interaction and resource sharing.

The process of market shaping that results from deliberate market-shaping efforts and contextually contingent influencing factors (including the market-shaping activities performed by other, potentially competitive market actors) is highly unpredictable and likely to generate various unexpected outcomes (Tóth et al. 2022). How the process evolution will correlate with the market shaper's initial market vision and hybrid new venture idea is an unknown.

3 Methodology

3.1 Philosophical underpinning

Of the paradigms for conducting social research, I stand closest to scientific realism, which is based on a realist ontology and an epistemology which not fully realist but accepts that the world is, to a certain degree, socially constructed (Easton 2002; 2010). Following Easton (2010, 119), this approach strikes me as pragmatic, assuming "a real world out there" while admitting that such an assumption can never be proved or disproved and no one universal truth exists (see also Fleetwood 2005; Hunt 1990). Through "thoughtful in-depth research with the objective of understanding why things are the way they are", we can acquire an understanding of some of the features of the real world (Easton 2010, 119). In other words, scientific realism accepts that it is possible to move closer to knowing reality through research.

Although empirical observations are the starting point to understanding a social phenomenon, its meaning cannot be measured according to its observable elements (Ryan et al. 2012). Instead, meaning has to be understood, rendering its investigation always, to some extent, interpretive (Sayer 2000; Easton 2010). "Observability may make us more confident about what we think exists, but existence itself is not dependent on it" (Sayer 2000, 12). As a researcher, I must accept that the empirical data collected in this study is a fallible and theory-laden description of the actual events that have occurred (Ryan et al. 2012). The challenge is to advance from merely describing the observations to theorizing the underlying forces driving the focal change process. As Sayer (2000, 14) states: "What causes something to happen has nothing to do with the number of times we have observed it happening" (see also Gioia et al. 2013; Miles & Huberman 1994). Causation is not seen here as regularities or law-like generalizations but as a holistic explanation, which is neither linear nor singular (Pettigrew 1990).

3.2 Single case study

In line with several scholars (Easton 2010; Ryan et al. 2012; Siggelkow 2007; Welch et al. 2011), I evaluated case research to be a particularly fitting methodology for this study, which aims to understand and describe a complex social phenomenon.

The case study is a holistic method that allows the investigation of phenomena in contemporary markets that are "complex, chaotic and unpredictable" (Gummesson 2005, 317). As statistical representativeness is not the aim, a single case study offers an opportunity to understand the focal phenomenon "in depth and comprehensively" (Easton 2010, 119). A case is a single instance, and it "must be able to stand on its own" as its epistemological justification cannot depend on regularity (Easton 1995, 377). According to the realist view, "one case is enough to generalize: not generalizing to any population but to a real world that has been discovered" (Easton 1995, 381-382). Yin (2009, 15) states that case studies "are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a sample and the investigator's goal is to expand and generalize theories (analytical generalization) and not to enumerate frequencies (statistical generalization)."

Determining the method underpinning this study was something I undertook while building the theoretical framework. Toward the end of 2017, after months of familiarizing myself with existing literature, I deemed it was high time to enter the field. However, finding a for-profit new venture that 1) had a clearly stated sustainability mission and 2) was willing to allow me the access necessary to conduct in-depth research turned out to be quite a difficult task. First of all, I had no existing contacts in the startup scene in Finland, and I had to begin my search from scratch. Secondly, after identifying some potential companies, my inquiries seemed to get buried under the hectic everyday work of the entrepreneurs. After weeks of searching, I started to get worried. What happened next was a coincidence that changed the course of my research work in many ways. First, however, some history must be explained.

During my years as a marketing manager in the B2B electricity customer sales in a Finnish energy corporation, I befriended a Norwegian colleague, Hans Petter (here HP, as he is known in the industry and to all his non-Norwegian friends), who at the time was responsible for a large customer portfolio in Norway and developing a green portfolio based on GOs. We worked together in a Nordic Green Expertise Group that developed the company's international green offering for business customers. I also spent three months under HP's supervision in Norway, learning about the green power market. Our paths separated in 2010 due to career developments, but for several years we kept in touch. On February 2, 2018, as my anxiety about finding a case company was rising, I saw a Facebook post by HP. The post stated: "It's a matter of choice; of options and responsibility. For ourselves, our planet and our children. Be courageous. Aim for renewable." Attached to the post was an introductory short video and a link to a company website. The company was called Becour. That same day I called HP, who had four weeks earlier founded exactly the kind of company I was looking for, a profit-seeking venture built on a

sustainable business model. It turned out that the venture's mission was to shape the existing GO market to follow a more sustainable path. The text below is how the company describes itself in a customer presentation.

> Becour was founded in January 2018 on the perceived need for a market player that offers transparent and digital solutions. Becour works closely with electricity producers to secure and increase the supply of renewable energy by marketing their electricity as the high-quality product that it is Becour aims to increase the value of renewable energy in order to accelerate the shift away from fossil and nuclear based production. The key persons in Becour have been actively trading EACs since 2001 and have built up a solid base of understanding and an extensive proprietary database of market information. Becour does not trade certificates for own risk but sells EACs and other instruments on behalf of renewable energy producers directly to end users around the world.

After initial discussions with HP, it became clear that I would be able to take an unusually intimate approach to my case study. Importantly, I could engage in real-time data collection because I entered the field just after Becour was founded. Beyond that, with the consent of the other four founding members, HP trusted me so much that I was granted almost unlimited access and was able to spend as much time at the office as I wanted. The obvious limitation to my stays at the Norwegian office was the geographical distance, as I first lived in Finland, and later moved to Switzerland. I ended up making nine field visits, seven of which I spent primarily at the Becour office. One field visit was to the REC market meeting[3] 2019 in Amsterdam, and another to an Energy Norway GO training day in Oslo, where HP was one of the speakers. During the visits, I not only interviewed HP and other employees of Becour, but also followed their formal and informal meetings, participated in outside office activities, lunch discussions, and talks around the coffee machine. I was invited to workshops, a customer meeting, a board meeting, dinners with HP and his wife Synnøve (also a co-founder of Becour), and informal outings with the team and Becour's international partner. During the days I spent at the office, I could engage in brief ad-hoc discussions with the people present that day.

Consequently, my research approach can be described as entailing ethnographic elements. An organizational ethnographer strives to convey what daily life is like in the examined setting by observing it and engaging with the informants for an extended period of time (Yanow et al. 2012). According to Van Maanen (2011, 221) "organizational ethnographers do not study organizations, they study in

[3] REC market meeting is an annual meeting for EAC professionals, policy makers, markets players, NGOs, and academics in the renewable energy consumption markets.

organizations". Accordingly, my key data collection methods were interviews and participant observation. The extent of participant observation may vary from immersing oneself in the company employees' lives to acting as an outside observer (Eriksson & Kovalainen 2011). My approach lies somewhere in between these two extremes. Although my stays at Becour were no longer than two days at a time, I spent almost every waking hour in the company of Becour's members or actors in its network or wider business environment. Being so deeply engaged with the company poses the risk of "going native", that is, losing objectivity by becoming overly involved and beginning to identify oneself with the community studied. The temporally limited visits and geographical distance to the company helped me avoid that. Despite the intensive observation and open interaction with the company employees during my visits, upon returning home I was able to take a step back and analyze the collected data from a more neutral perspective.

I supplemented the participant observation and interviews with informal conversations, and document analysis. I had relatively open access to all non-confidential documentation in the company, such as presentations, business plans, meeting agendas, etc. The collected data were systematically documented in field notes and using photographs and audiotapes (Gummesson 2005).

3.3 Longitudinal research

Studying how processes evolve requires a longitudinal research design making it possible to observe how events unfold over time. Despite being an established research method, no shared understanding exists of what exactly constitutes a longitudinal case study (Blazejewski 2011). In practice, the time span of a longitudinal study can be almost any period between a couple of months and a couple of decades (Pettigrew 1990). Factors influencing the length include the empirical setting of the research, the researcher's relationship with the subjects on the site, and research funding (Pettigrew 1990). Ultimately, what is judged longitudinal depends on the theme and the research question (Yin 2009).

Van de Ven (1992) encourages conducting real-time research because prior knowledge of the success or failure of organizational change processes has been found to bias the findings. Moreover, while retrospective data helps identify if and what changes took place, real-time data helps dig deeper into why and how the changes occurred (van de Ven 1992). The limitations of real-time studies include emotional bias and misattribution by the researcher, while retrospective studies suffer from issues such as a lack of recall (Blazejewski 2011). Although most of my data were collected in real-time, I also utilized retrospective data as historical documents and descriptions of past events supplemented my understanding of the events unfolding in the present (Hoholm & Araujo 2011).

Several practical issues affect setting the time frame for a real-time longitudinal study. First and foremost, the researcher needs to define when the process of interest starts and ends (Pettigrew 1990). Setting an end is often particularly difficult, as the researcher may not "gain sufficient distance to ongoing events to actually see and set the boundaries of processes still under way" (Blazejewski 2011, 263). In this study, I initially set the case study's temporal starting point to the recent foundation of the venture in early 2018. To estimate the ending, I relied on my theoretical framework (Pettigrew 1990), which pointed toward ending the data collection when the new venture starts scaling. From a practical viewpoint, I had to find a balance between the overall time frame of my doctoral research and a period in the new venture's life cycle that would give me enough relevant data. Thus, I set the time frame for gathering most of the empirical data to approximately 24 months, while retaining the flexibility to increase the time by between one and six months or even to end early if needed. The real-time data collection eventually took almost two and a half years. As some data were also collected retrospectively, the total temporal span of the empirical research is close to three years.

There is always a chance that a real-time case study research is forced to end due to external reasons such as bankruptcy of the focal firm, denial of access, or acquisition (Blazejewski 2011). New ventures always run the risk of failing quickly, and this was something I had to consider in the beginning. In fact, HP was quite clear on the philosophy of *"fail fast",* meaning that if the company was not able to create enough traction from customers and investors, he would not, in his own words, *"beat the horse if it's not running".* However, as my research questions did not assume a certain outcome, the case company's failure would not have damaged my research as long as I had sufficient time and access to gather data. Van de Ven (1992, 182) emphasizes that "truly important research questions do not have clear solutions until after the research has been conducted". It turned out that Becour survived, and the case study ends with the venture's activities toward the summer of 2020 as it had started scaling its business.

3.4 Data collection

The collection of data is summarized in Table 2. The main informant throughout the empirical research journey was HP. His patience and openness helped me to understand the market actors involved, their existing practices, as well as the regulation and history of the market. He not only helped me interpret the events unfolding during my fieldwork but also the relevant events preceding the founding of Becour. After the phone call in February 2018 where he agreed to let me follow the company, we set up an initial visit to Becour's office in March. Based on the interviews and discussions during that visit, it was confirmed that the company had long been HP's dream and

that he had been the sole driver of the company's founding. The other four founding members, convinced to join by HP, were present during that first visit and I conducted an introductory interview with each. During the weeks and months of following Becour, it became clear to me that although the roles of the other founders (later complemented by other employees) were crucial in the firm's development, it was HP's vision, expertise, and network that formed the core of the company, to which the other members added their own valuable expertise and commitment.

Table 2. Data in numbers.

DATA	TYPE	NUMBER
Primary	Field visits (1-2 days each) for observation	9
	Interviews (ca. 30 hours in total)	42
Secondary	Memos of market actor interviews	16
	Becour's offers and presentations to investors, customers, partners, and other stakeholders	12
	HP's emails with weekly/monthly company updates or information on important issues	36
	Documents involving Becour and/or the GO market (see Appendix 4)	56

Overall, the interviews helped build an understanding of the actions, reactions, and decisions taken by HP and the team during Becour's development, the role of the company's evolving network, and the wider context in which it operated. As mentioned, HP was very open to sharing his thoughts, views, worries, and ideas. He often asked for my opinion or perception of Becour's internal issues, or to comment on its external communication material due to my practical expertise in marketing. However, I was never involved in any formal business decisions. As a representative of academia, I was also invited to join the reference group of the externally funded R&D project targeting a digital solution for GO tracking and trading (later named the DINGO project). My task was to observe the project from my research perspective and provide views and opinions in group meetings.

In addition to HP, I also conducted several interviews with the other founders and employees of Becour. I did not use a structured interview guide but prepared a list of topics I thought were relevant (Hoholm & Araujo 2011). For example, I asked my informants to tell me about their daily activities and future plans related to Becour, how their work resonated with the customers, partners, competitors, and other market actors, and also about their perceptions of the evolving new venture and the elements of its business model. The conversational structure allowed for an informal and interactive interview which, according to Sayer (1992, 245), offers the researcher "a much better chance of learning from the respondents what the different

significances of circumstances are for them." Visiting the office was always uncomplicated and I felt very welcome. All field visits were recorded in my research diary, including my own reflections. I tried to include as much detail as possible, so that the notes would later help me recall the events in full.

I made one one-day field visit and eight two-day visits. Most interviews were conducted during these visits, including those with external stakeholders in Becour's network. In addition, I conducted interviews and observed meetings via Skype or Teams. The informants were fully informed about the research first by email and verbally before starting the interviews. All informants participated voluntarily and gave their written or verbal consent. Before publishing the thesis, all informants whose first names and quotes I use in the thesis were asked again for their consent to do so.

All interviews were conducted in English, which is a second language for me and for all interviewees except for one. However, all informants use English daily in their professional activities and express themselves well in the language. As Becour's aim from inception was to reach global markets, almost all its externally communicated material was in English. In fact, this is also why HP was pleased about the chance to run meetings in English among an all-Norwegian team. He saw it as good preparation for the increasing amount of international business interactions. English is also the language of most European GO market-related reports, websites, conferences, white papers, and academic articles. My comprehension of written Norwegian is relatively strong, so I had no trouble reading documents and news articles relating specifically to the Norwegian GO market.

In addition to the interviews conducted firsthand by myself, I also had access to the notes from sixteen market actor interviews conducted for projects between Becour and its partner DNV in the summer of 2019 and the end of 2019 to early 2020. The interviews were mainly conducted by the DNV consultants, and the interviewees were chosen due to their expertise related to renewable electricity sourcing in their home organization. Some of the organizations were Becour's existing corporate customers, some were considered potential customers. The majority represented corporate buyers (demand side), but some energy producers (supply side) were also included. The aim of the interviews was to obtain information on the knowledge, attitude, and possible procurement practices related to GOs of a range of parties. The interviewers tried to elicit why the organizations bought GOs or did not, and if they did, how. A more detailed list of the interviewees is shown in Appendix 2, and the interview questions and topics designed by Becour and DNV in Appendix 3.

Table 3 below lists all the data sources accessed during the real-time data collection in chronological order. The table shows dates and the sources of data (and if more than one interview was conducted with the same person on the same date). In the last column, the title of the informant is stated, or alternatively, the name of the event that I was observing.

Table 3. Real time data collection.

DATE	DATA SOURCE	TITLE OF INFORMANT / NAME OF EVENT
VISIT 08.03. – 09.03.2018	Interview Interview 2 interviews Interview	Adviser, Sustainable Strategies. Becour Adviser, Sustainable Strategies. Becour Chief Digital Officer. Becour Managing Director. Becour COO and Head of R&D. Becour
22.03.2018	Internal meeting, via Skype	
11.4.2018	Interview, via Skype	Managing Director, Becour
VISIT 11.6. – 12.6.2018	Board meeting Interview Interview	 Director. Østfold Energi. Communication Specialist. Østfold Energi. Chief Commercial Officer. Becour.
VISIT 21.08. – 22.08.2018	Customer meeting 3 interviews Interview Interview	Director Sustainability. Elopak Managing Director. Becour Client Adviser. Becour Client Adviser. Becour Chairman of the Board. Becour
29.10.2018	Interview, via Skype	Managing Director. Becour
VISIT 22.11. – 23.11.2018	Workshop with intl. partner 2 interviews Interview	 Managing Director. Becour Managing Director. Mt. Stonegate
10.01.2019	Interview, via Skype	Managing Director. Becour
VISIT 12.03. – 13.03.2019	 Interview Discussions with competitors and industry experts	*REC Market Meeting 2019, Amsterdam* Chief Commercial Officer. Becour
VISIT 21.03.- 22.03.2019	2 interviews Interview DINGO meeting	Managing Director. Becour Market analyst, Europe. Becour
20.05.2019	DNV WS participation, via Skype	
VISIT 06.06. – 07.06.2019	4 interviews DNV project workshop	Managing Director. Becour
24.06.2019	Interview, via Skype	Chief Commercial Officer. Becour
07.07. – 08.07.2019	2 interviews	Managing Director. Becour
VISIT 29.10. – 30.10.2019	 2 interviews 2 live presentation observations Becour's customer interview	*Energy Norway GO Training Day, Oslo* Managing Director. Becour Managing Director. Becour Director Sustainability. Elopak Specialist Manager Sustainability. Elopak Junior Environmental Manager. Elopak
28.11.2019	Interview, via Teams	Managing Director. Becour
VISIT 16.01. – 17.01.2020	Interview Interview Interview DINGO reference group meeting	Chief Commercial Officer. Becour Managing Director. Becour Chief Operating Officer. Becour
29.05.2020	Interview, via Teams	Managing Director. Becour

Table 4 lists the retrospective interviews in which the informants commented on my evolving interpretation of the findings and elaborated on past events. The audio recordings from the interviews and meeting observations total 30 hours. All recordings, except for one, were transcribed and uploaded to NVivo. The one meeting that was recorded but not transcribed was held in Norwegian.

Table 4. Retrospective interviews.

DATE	DATA TYPE	TITLE OF INFORMANT / NAME OF EVENT
05.06.2020	Interview, via Teams	Managing Director. Becour
19.06.2020	Interview, via Teams	Managing Director. Becour
26.06.2020	Interview, via Teams	Chief Digital Officer. Becour Chief Operating Officer. Becour
10.09.2020	Interview, via Teams	Managing Director. Becour
03.11.2020	Interview, via Teams	Director Projects and Portfolio Mgmt. Becour
13.11.2020	Interview, via Teams	Director of Brand and Marketing. Becour
23.11.2020	Interview, via Teams	Managing Director. Becour

I systematically collected data concerning renewable energy sourcing (digital solutions in particular), relevant market actors (such as competitors and corporations that source renewable energy), regulatory development of the GO system, and specific GO market-related issues in Norway. The data include news articles, documents related to GO market policy and regulation, as well as white papers and reports related to renewable energy sourcing and the GO market. A comprehensive reference list of these sources is presented in Appendix 4. In addition, I followed Becour and HP on social media services, such as LinkedIn and Facebook. The secondary data was mostly gathered in real time. It provided a means to capture wider or alternative viewpoints to the unfolding events (such as news regarding the tumultuous regulatory environment) and to complement and triangulate the information received through the primary data. For example, although I was not present in customer meetings, I could read from customer offers, replies to RfQs (request for quotation), and presentations the kinds of arguments and rhetoric Becour used toward them. Or by reading HP's interviews in media outlets, I could analyze the ways in which he strived to increase Becour's external legitimacy.

Throughout the research, I have been committed to the ethical guidelines of the University of Turku, aligned with the responsible conduct of research guidelines issued by the Finnish Advisory Board on Research Integrity (TENK) and EU General Data Protection Regulation (GDPR). The research data are controlled by me and stored on the secure online storage service of the University of Turku. After the five-year storage period recommended by the university, the need for further storage or deletion of the data will be re-evaluated.

3.5 Data analysis

This section describes how I analyzed the vast empirical data informing this study. The messiness of process studies, highlighted by many scholars (e.g., Andersen et al. 2018; Dubois & Gibbert 2010; Langley 1999), manifested in iterating between data collection, data condensing, revisiting literature, analyzing, and drawing conclusions (Miles & Huberman 1994). The home base for my empirical data was the NVivo database, where I uploaded all of the data. As the events unfolded in real time, I was able to organize the data in chronological order. For every month that I followed the company, I created a separate folder with a number of subfolders for various types of data, such as interviews, news articles, social media, and emails.

I transcribed all the interviews verbatim myself. That was a very time-consuming albeit essential task because transcribing the audiotapes took me back to the time of the interviews and allowed me to reflect on everything that had been discussed, and on such things as what the mood around the office was, for example. As the research progressed, I also obtained relevant retrospective data through interviews on events that preceded the company's foundation.

Although qualitative research thrives with open access to a wealth of rich data, the volume of data can become overwhelming in terms of data analysis (Gummesson 2005). Therefore, data often needs to be made more manageable. Gummesson (2005) talks about condensing data, that is sorting the information into a more compact form while preserving variety. I, therefore, constructed a visual map (Langley 1999) of the unfolding events on the various layers of the focal new venture's business environment (an excerpt of the visual map is available in Appendix 5). The visual mapping helped significantly to organize the data and grasp what had been going on both inside and outside the company. Although I stopped following Becour intensively in the summer of 2020, I conducted several interviews afterward with the entrepreneur HP and the other employees. Those interviews offered the subjects an opportunity suggest additions and to correct the order and significance of the observed events on the visual map. I was also able to compare and confirm my visual map with the outcome of Becour members' own view and visualization of the company timeline (Appendix 6).

My next step was to employ a narrative approach to construct a detailed chronological story from the raw data. This task was intended to confer authenticity and communicate the richness of the phenomenon and the broader context (Langley 1999). While writing the narrative, I was again able to recognize some gaps and inconsistencies in the story, requiring collecting additional data. As my aim was to understand and explain the focal phenomenon as unfolding over time, the chronology of the events was particularly important (Mainela et al. 2011). The narrative is used in Chapter 5 of this study, as descriptions of the various periods in the case company's trajectory.

While undertaking the visual mapping and narrative construction in interplay with the theoretical framework, the discontinuities in the trajectory of Becour

became clear. They guided me to decompose the timeline into six consecutive time periods. The transitions from one period to another are my interpretation of internal and external developments that seemed to demarcate a transition in the hybrid new venture development process. The periods, the discontinuities detected, and the data that were primarily used for the analysis of each period are presented in Table 5.

Table 5. Data used during the analysis.

TIME PERIOD	DISCONTINUITIES LEADING TO NEXT PERIOD	DATA
The entrepreneur and background events	Decision to quit current employment and found a company	Retrospective interviews Media articles
Engaging co-founders and planning a hybrid venture (– December 2017)	Official founding of the company Receiving funding for R&D project	Retrospective interviews Internal documents (e.g., business model canvas, business plan, material for potential investors)
Establishing the venture and initial network (January 2018 –July 2018)	Entering the demand-side market Full staff	Real-time and retrospective interviews Observation Meeting notes Media articles Emails Internal documents (e.g., internal presentations, business plan, R&D project funding application)
Entering the market (August 2018 – June 2019)	Strategic decision to pivot Partnership with a prestigious incumbent	Real-time and retrospective interviews Observation Meeting notes Media articles Emails Internal and external documents (e.g., customer offers, presentations)
Pivoting (July 2019 – January 2020)	The subjective view of having validated the business model Key pilot case	Real-time and retrospective interviews Observation Meeting notes Media articles Emails Internal and external documents Interview notes from Becour and DNV's market actor interviews in the summer of 2019
Scaling up and digitalizing the business (February 2020 –)		Real-time and retrospective interviews Observation Meeting notes Media articles Emails Internal documents Interview notes from Becour/DNV market actor interviews in winter 2019-2020

Next, I proceeded with a coding process and thematic analysis based on iteration between data and theory, striving my best not to become blind toward unexpected theoretical insights or findings in the empirical data (Dubois & Gibbert 2010). Following Langley (in Gehman et al. 2018, 297), to develop a richer understanding of the phenomenon at hand, my premise was not to detach from a priori theory (i.e., inductive approach) but rather to connect to it through abduction. As Langley (ibid.) states: "theories that are relevant can take us part, but not all, of the way to an enhanced understanding, and it is the remaining piece that we contribute. Thus, both deduction and induction are present in a kind of cycle."

I decided to code the data for each period according to the theoretical framework while supplementing the results with new codes emerging from the data. I specifically looked for market-shaping activities of the focal firm, and the internal and external factors and events influencing the decisions made and actions taken by the people within the company. It became almost immediately clear that it was not possible to clearly separate the two processes of hybrid new venture development and market shaping and the various activities within them. Instead, the two processes and the related activities appeared tightly intermingled from start. I constantly amended the code labels and definitions and eliminated unfitting ones. The original coding scheme consisted of 88 codes (such as "perceived customer knowledge gap", "joining GO reference group", "list of dream customers", "mockup of platform", "emails to a politician"). Some baffling or surprising elements in the data (e.g., the influence of internal tensions on the company trajectory) encouraged me to ask more probing questions of my informants and to continuously revisit existing literature and the raw data.

After coding all the primary data, I re-organized and combined the codes into more focused theoretically informed themes (e.g., "reform work", "resilience work", "relational work") (Corbin & Strauss 2008; Miles & Huberman 1994). Each theme was checked for coherence and revised by reading the component data extracts. I also checked whether the themes made sense in relation to the entire data set and the theoretical framework. Eventually, the process resulted in further merging of the themes into higher-order categories (e.g., "visioning", "legitimizing", "engaging", "equipping"). Finally, I compared the themes in order to find relationships, patterns, and discontinuities. In sum, the new understanding of the focal phenomenon in this study is based on the interplay between existing research and empirically acquired new knowledge, which has been continuously refined during the research process. In the next chapter, I will describe the empirical context of the research.

4 Empirical context

In this chapter, I discuss the context of this study starting with the macro-level megatrends influencing developments on the meso and micro levels, the system for GOs for renewable electricity, and the market built around it. As the selected case company is based in Norway, I describe the specific features of the GO market in Norway. Describing the various layers of the context constitutes an attempt to address some of the complexity of the case firm's business environment to provide what Möller et al. (2020, 383) call "a more realistic environmental investigation".

4.1 Macro-level context

Megatrends entail complex combinations of economic, political, cultural, and technological factors that typically involve all aspects of society, including markets (Mittelstaedt et al. 2014). For business, megatrends present "inescapable strategic imperatives for corporate leaders" (Lubin & Esty 2010, 2). Megatrends are born out of the development of several phenomena occurring globally. A megatrend can be sparked by the introduction of new technology (e.g., microprocessors) or the emergence of a new world view (e.g., neoclassical economics) (Mittelstaedt et al. 2014). Although "megatrends emerge in the context of their times", they can only be understood as products of their historical developments (Mittelstaedt et al. 2014, 254). Three megatrends that are currently influencing most industries are also key drivers of the energy transition: electrification, digital transformation, and sustainability. Together, the globally interconnected trends have been visioned to contribute to the transition into electrified, low-carbon, and digitally interconnected electricity systems (IEA 2018).

Electrification is the most dynamic element of the energy transition, with the share of electricity in final global energy demand estimated to double from 19% to 38% and the share of renewable energy sources in the power mix growing from 8% to 69% of power generation within the next three decades (DNV 2021). Electrification helps to reduce pollution, decarbonize end consumption, and reach climate goals, but only when paired with the widespread deployment of renewable electricity production (IEA 2019). The electricity sector's exponential growth of solar and wind technologies along with hydropower production places electricity at

the forefront of the energy transition. In fact, renewables are now the cheapest source of energy production in many parts of the world (IRENA 2018). While electrification helps meet climate goals, it also provides access to the nearly one billion people who are energy deprived (IEA 2018). It should be noted, however, that electricity accounts for only a fifth of global energy usage, and the role of renewables in the other two main categories of energy usage, transportation, and heating, remains equally critical to the energy transition (IEA 2018).

Digital transformation is another megatrend that can be harnessed to foster sustainability (Seele & Lock 2017). It entails the transformation of all key areas of the economy, such as energy, mobility, healthcare, and manufacturing, creating "a highly disruptive impact on markets, the world of work, and our social structures" (Kagermann 2015, 24). In this study, that digital transformation is considered to include two elements: digitization and digitalization. Digitization means "the technical process of converting streams of analog information into digital bits of 1s and 0s with discrete and discontinuous values" (Brennen & Kreiss 2016, 1). Digitization helps streamline existing processes enabled by advances in quickly, reliably, and efficiently storing and managing digital data (Ritter & Pedersen 2020). The end state of a digitization process is known and does not entail any fundamental changes to the process itself (Brennen & Kreiss 2016; Ritter & Pedersen 2020).

Digitization may be thought of as a precursor and enabler of digitalization, which is a wider and more ambiguous term (Ross 2017). Digitalization generally refers to the introduction, exploitation, and integration of digital technologies across the economy (IEA 2017; Ritter & Pedersen 2020). Put differently, "digitalization can be thought of as the increasing interaction and convergence between the digital and physical worlds" (IEA 2017, 22). Digitalization is rapidly changing the operational environments of companies as emerging novel business models keep pushing out outdated ones. Importantly, digitally interconnected systems have the potential to fundamentally transform global electricity markets by making them more accessible, connected, intelligent, efficient, reliable, and sustainable (IEA 2017).

The energy transition is triggering an overwhelming increase in the complexity of energy systems, which would be extremely difficult to manage without the solutions provided by the digital transformation (Kagermann 2015). The energy transition is triggering major changes in the current energy supply structures, including a rise in the number of small, decentralized production units providing a highly volatile (i.e., weather-dependent) electricity supply (DNV 2021; Kagermann 2015). Changes in the supply side are accompanied by changes in the demand side, such as the diffusion of electric mobility and energy prosumption (IEA 2017; Kagermann 2015). The resulting complexity poses significant challenges for policymakers, companies, researchers, and consumers alike, requiring systems thinking and collaboration between all relevant actors (IEA 2017; Kagermann 2015).

Finally, **sustainability** is the megatrend that most researchers, politicians, and business leaders consider key to our future wellbeing, even survival (Sheth & Parvatiyar 2021). As Bansal (2019, 11) states: "sustainable development offers the tools and perspective to help ensure that the environmental, technological, and social disruptions contribute to intra- and inter-generational equity". Energy transition is a crucial part of reaching the goals of the Paris agreement. According to the Carbon Majors Report 2017 (Griffin 2017), global average temperatures would be on track to rise by 4°C by the end of the century if fossil fuels were extracted at the same rate over the next three decades as they were between 1988 and 2017. Such a rise is likely to have catastrophic consequences, including a rise in sea level of up to two meters, unprecedented heat waves, severe droughts and floods, substantial species extinction, and global scarcity of food and drinking water.

In 2022, Russia's devastating attack on Ukraine has given further reason to rapidly reduce our reliance on fossil fuels and accelerate the systemic change toward renewable production. The war is increasing dirty energy production (especially coal) in the short term as Western nations fight to end their energy dependence on Russian oil and gas. In the long term, however, it may give the much-needed push to accelerate the energy transition.

The Carbon Majors Report 2017 (Griffin 2017) concludes that a mere 100 fossil-fuel producers have caused over 70% of the world's greenhouse gas emissions since 1988. Although many of the world's largest fossil producers have pledged to reduce climate-warming pollution, suspicions remain about how genuine those pledges are and their effect if they are not accompanied by commitments to cut the output of overall production (Kusnetz 2020; Quinson 2020). Hence, the role of responsible investment, government guidance via policy intervention, and actions of companies on the demand side are pivotal in moving from fossil fuels to cleaner energy sources (IRENA 2018; Sheth & Parvatiyar 2021). Companies are responsible for around two-thirds of the global total electricity end consumption, making their electricity sourcing decisions key in speeding up the energy transition (IRENA 2018). The majority of corporate renewable electricity sourcing comes from their own production for self-consumption. In contrast, the other significant sourcing models are the procurement of unbundled EACs, corporate power purchase agreements (PPAs), and renewable offerings from utilities or electricity suppliers (IRENA 2018).

4.2 Meso-level context

4.2.1 Guarantees of Origin (GO) for renewable electricity

EACs for renewable electricity aim to address the problem of information asymmetry in energy markets (Hulshof et al. 2019). Because electricity users cannot distinguish between renewable and non-renewable energy, they are hesitant to buy the former. The idea behind certificates is that providing market actors with information about unobservable characteristics will incentivize better decisions (Hulshof et al. 2019). One of the most widely used EAC systems is that known as Guarantees of Origin (GOs) established by the EU.

GOs originally appeared in European Union Directive 2001/77/EC for promoting renewable energy use in electricity generation (European Parliament and the Council 2001), popularly known as the RES Directive. The Directive required all EU Member States to develop a GO certification scheme for renewable energy and to recognize GOs issued by other member states. National indicative targets were set for renewable energy production meant to contribute to achieving the overall EU target. Although the EU does not strictly enforce these targets, the European Commission monitors and publishes information on the member states' progress.

The RES Directive was superseded by Renewable Energy Directive 2009/28/EC, known as the RED Directive, in 2009 (European Parliament and the Council 2009). The Directive comprised renewable non-fossil energy sources such as wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogases. In December 2018, an updated Renewable Energy Directive 2018/2001/EU known as the REDII entered into force, establishing a binding renewable energy target for the EU for 2030 of at least 32 percent (European Parliament and the Council 2018). Becoming embedded into the EU law enabled a significant development of the GO market. Two organizations were founded in 2002 to advance the market. The Association of Issuing Bodies (AIB) is responsible for registry and the process of issuing, trading, and canceling the GOs. The AIB created the European Energy Certificate (EECS) standard for the GO system to harmonize the various national systems, and acts as a central hub for the trading of GOs between them. RECS International is a non-profit organization representing the GO market players' interests to policymakers (RECS International 2021).

The GO itself is an electronic document that verifies to the purchasing energy user that each megawatt hour (MWh) of the electricity it consumes is produced renewably (IRENA 2018). Electrons themselves cannot be traced down to their production source and therefore the GO system allows market actors to track energy production information and enables end users to make public claims of using renewable energy (see Figure 5). A GO is therefore a non-tangible financial

commodity, separate from physical power distribution and can also be sold separately (IRENA 2018). Most firms buy the cheapest, most basic GOs that enable them to make a renewable claim, but which are not differentiated in terms of geographical location or technology. In contrast, some companies look for GOs that entail specific attributes, such as originating geographically close to the buyer, and to an additional premium for them (Oslo Economics 2018).

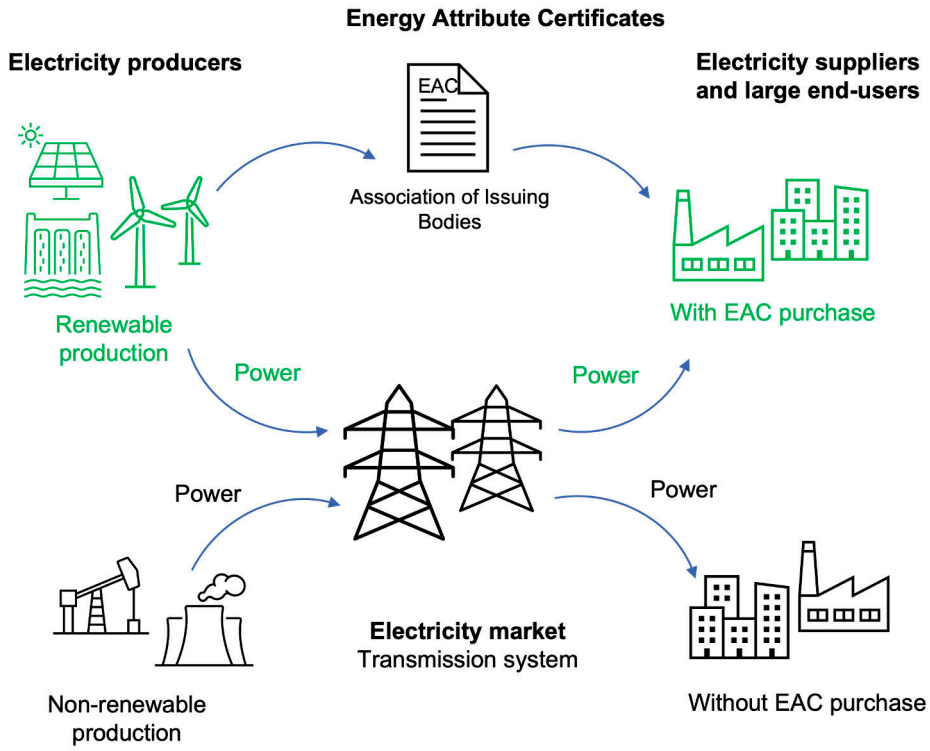

Figure 5. European GO system (adapted from Track My Electricity 2021).

4.2.2 GO market actors

Every producer within the GO system may receive GOs corresponding to the quantity of renewable energy it produces (Oslo Economics 2018). GOs are issued to the producers by an issuing body, typically a national registry that tracks all GO transactions (Oslo Economics 2018). Issuers are independent organizations that do not participate in the production, purchase, sale, or trading of GOs (RECS International 2021). Energy producers can sell their GOs directly to electricity resellers (also called suppliers), large businesses, or public organizations. Although bilateral trade is common, buyers and sellers typically trade only with parties they

know to be creditworthy. This counterparty risk limits trading to a few actors, makes it fragile and hinders knowledge of fair pricing (Oslo Economics 2018).

Intermediation plays an important role in the GO market. Traders, including portfolio management firms, buy GOs from producers and sell them to buyers, acting as a counterparty to both sides. Traders tend to keep their own inventories of GOs. They help the GO buyer in many ways, from finding a solution that matches the customer's needs and helping with the documentation, to supporting the buyers in using GOs in their marketing and communication (Oslo Economics 2018). The GO seller gives a trader a mandate to manage its volumes and typically pays a fixed fee. (Oslo Economics 2018). In contrast to traders, brokers connect buyers and sellers without being part of the trade. They earn commissions for arranging trades between market actors. Intermediaries are valuable to buyers and sellers because they possess the skills, knowledge, experience, and networks that the other actors may not have. Intermediation increases liquidity, lowers the counterparty risk compared to bilateral trading, and also lowers producers' information search costs (Oslo Economics 2018). However, in contrast with regulated exchange (bourse) trade, the prices in intermediated transactions are often not publicly shared (Oslo Economics 2018).

Buyers' demand drives the GO market in the short term, as supply is largely inelastic. However, supply is expected to increase due to the growing share of renewable energy production, which is likely to affect GO prices in the long term (Oslo Economics 2018). Utilities (e.g., gas and electricity companies) are obliged to submit GOs for the energy that they sell to their end customers as renewable, making them major buyers of GOs (Davids et al. 2015). Increasingly, private companies are voluntarily procuring GOs for their consumed electricity as they offer flexibility, simplicity, and lower operational risks (IRENA 2018). Driven by the significant reduction in the cost of renewables and the growing demands for corporate sustainability by investors and end users, GOs have become an attractive option for renewable electricity procurement (IRENA 2018). However, the current market configuration enables companies that want to make their electricity usage greener to do so "in a legally correct and cheap but environmentally questionable way that results in little or no extra generation of renewable electricity" (Jansen 2017, 4).

4.2.3 Criticism of the GO market

As mentioned, the GO system aimed to support additional investment in clean energy by enabling market players to track renewable energy production and allow corporate buyers to make credible claims about its use. The market has succeeded in making GOs a popular tool for companies to "green" their electricity disclosure, as well as creating some extra financial profits for the renewable energy producers and GO traders and brokers. However, criticism has grown and is based on the market

failing to create additional renewable energy production and thus an environmental impact (Jansen 2017; Mulder & Zomer 2016). The most prominent reasons for this are low market transparency and the small premiums that renewable energy producers gain from their sold GOs, giving them little incentive to invest in new production facilities.

The lack of transparency results from the system allowing a low level of open trading, as trade is not done through a regulated exchange (bourse), and the actors are not required to disclose price information. This reduces the transparency electricity users need to trust the system and be confident that their decisions have an impact (BEUC 2016; Davids et al. 2015). Most GOs are used by electricity producers themselves so that they can sell renewable energy directly to their customers. These GOs are bundled with physical power and therefore do not have a true market price (Davids et al. 2015).

Producers' low premiums are a consequence of the consistently low-price level in the market, held down by the large amount of GOs from decade-old renewable energy plants (such as Norwegian hydro plants), causing oversupply (Mulder & Zomer 2016). Because of low transparency and low prices, there has been little incentive to build entirely new renewable energy capacity (BEUC 2016; Davids et al. 2015; IRENA 2018; Jansen 2017). On the buyer side, limited transparency makes it difficult for end-users to compare products, hindering price comparison and thus price competition. The prices of GOs have historically been marginal compared to wholesale electricity prices, casting further doubt on how much GO trade actually supports the creation of new capacity (IRENA 2018).

To have an impact on additional renewable energy capacity, GOs would need to be priced at a level high enough to trigger investment (Mulder & Zomer 2016). When the revenues from GOs remain poor, they do not provide renewable project developers with sufficient investment security (BEUC 2016). Nevertheless, GOs are increasingly popular as they enable retailers to charge higher prices and hence realize extra profits or increase market shares, among other advantages. Mulder and Zomer (2016) state that the impact of GOs on retailer profits seems to exceed the impact on new production.

4.2.4 GO market in Norway

The GO system is contested in Norway. Due to the high share of renewable sources in its power generation, Norway is one of the largest providers of GOs in Europe. However, domestic demand is low, and thus the majority of GOs are exported. While the system creates profits for renewable energy producers, the energy-intensive industry on the consuming side has continuously opposed to the system with many actors refusing to utilize GOs. Although the system is voluntary, staying outside of

it causes reputational disadvantages. Thus, the opponents of the GO system also call for a change in the disclosure regulations for purchased electricity.

The EU Electricity Market Directive (2009/72/EC) requires that utilities and power suppliers must inform their customers of the origin of their electricity supply. The electricity disclosure is what power suppliers must use in their statements when they do not buy GOs (see Figure 6).

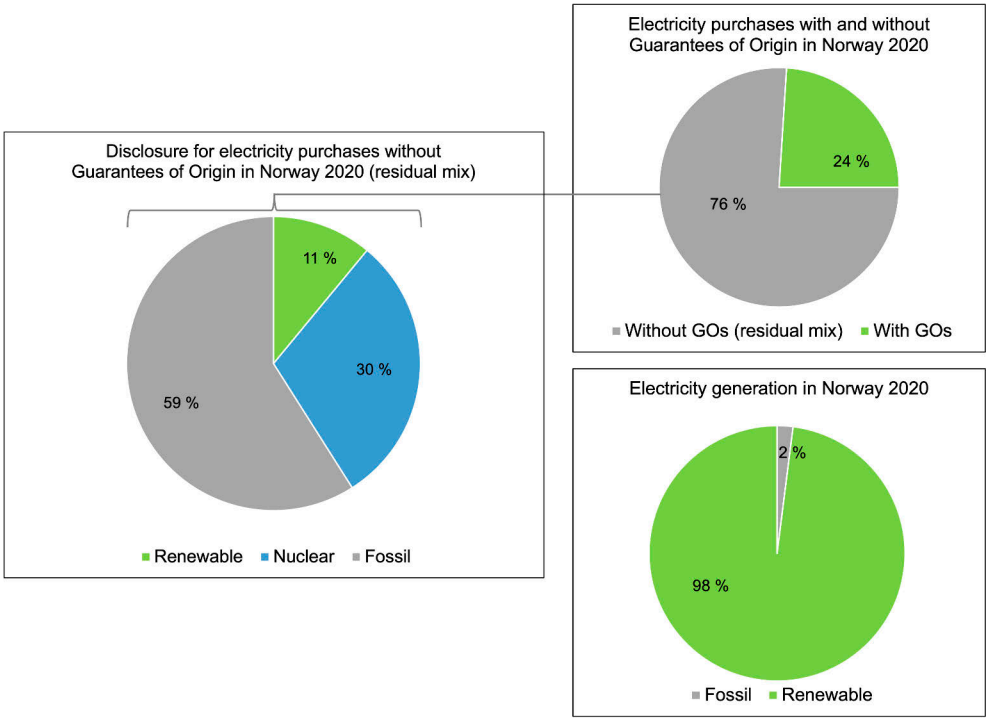

Figure 6. Electricity disclosure statements for power suppliers in Norway 2020.

According to the Norwegian Energy Regulatory Authority (NVE) (2021), the calculation of the electricity disclosure is based on all electricity sold in Norway during the previous year. The electricity corresponding to the sold GOs is subtracted from the total electricity sold. This amount is verifiably of renewable origin. The remaining (subtracted) electricity is of unknown origin and replaced with a European Attribute Mix, which is an estimate of all the electricity sold in Europe without GOs (NVE 2021). For example, in 2020, the disclosure for electricity consisted of only 11 percent renewable power. In comparison, the share of electricity generated from renewable sources in Norway reached 98 percent in 2020 (NVE 2021). In other words, the electricity disclosure does not reflect the actual physical delivery of electricity to end users' sockets in Norway.

Norsk Hydro, a large producer of both aluminum and hydropower, is a known example of an industrial player that has refused to utilize the GO system. In the company's view, partaking in the GO system would force it to pay again for the Norwegian power delivered to sockets that is already 98 percent renewable. The company has criticized the system for exporting the renewable values of Norwegian power generation to the fossil-fuel producing areas of Europe, leaving Norway with a false image of production with high carbon emissions (Moestue 14.12.2021; Mollestad 15.11.2019).

Besides GOs, Norway has deployed the 'elcertificates' system, which is a joint support scheme used by Sweden and Norway. It consists of Tradable Green Certificates granted to renewable producers under certain conditions per MWh of renewable power production, which can then be traded much like the GOs. In contrast to GOs, the elcertificate system is mandatory, and end-consumers are compelled to buy a certain volume of elcertificates to fulfill a quota set by the government. For most private consumers, their electricity suppliers handle the elcertificates obligation (Energy Facts Norway 2021).

4.3 Key terms and actors in the case study

Table 6. Key terms and actors.

Digital trading platform	A digital meeting place for market participants where users can transparently view its own position and the market prices. The main advantages of digital trading platforms include low cost of operation, low cost per transaction, equal opportunity to trade GOs even for small businesses, higher liquidity, and higher transparency. (Oslo Economics 2018).
DINGO project	Digitalized Node trading for renewable energy with GO. Becour's externally funded R&D project conducted with research partners.
Electricity user	Refers to the end-user, i.e., a business actor (company) who uses (consumes) the electricity sourced directly from a producer or from a reseller.
Electricity producer	Organization that transforms various forms of energy into electricity. Production is carried out in power plants.
Electricity reseller	A company with whom the electricity end-user has an electricity supply contract. A reseller purchases electricity from a producer and invoices the end user. In Norway, end users may choose the company who supplies their electricity.
Energy Attribute Certificates	Official documentation that verifies that 1 MWh of renewable electricity has been added to the energy grid. EACs allow energy users to make credible renewable energy consumption claims.

Energy Norway	A non-profit industry organization representing around 300 companies involved in the production, distribution, and trading of electricity in Norway.
Guarantee of Origin	Based on an EU Directive, the only recognized EAC in the European Union, Norway, and Switzerland for tracing the renewable source of the electricity produced.
Over-the-counter (OTC) trading	OTC trades are done directly between two parties. OTC markets are less transparent and less regulated than exchanges (bourse) (Oslo Economics 2018).
Power Purchase Agreement	An agreement between two parties wherein a developer of a new renewable energy project will provide an agreed volume of electricity to a buyer (a company or reseller). The buyer commits to buy all or an agreed portion of the project's production over a longer term, typically 10 years or more.
RE100	A global corporate initiative organized by the non-profits Climate Group and CDP, which brings together hundreds of large businesses. RE100 companies publicly commit to procure 100% of their electricity from renewable sources by a specified year.
Reference Group for Guarantees of Origin	An interest group formed and run by Energy Norway, consisting of versatile Norwegian energy market actors interested in the economic importance and political debate over GOs, renewable energy tracking, and other related business policy issues.
Renewable electricity	Electricity produced from sources that are naturally replenishing such as biomass, hydropower, geothermal, wind, and solar.
RECS International	A European non-profit association of market players (i.e., producers, traders, resellers, and brokers) trading in EACs. It seeks to influence policy on certificate trading at the governmental and regulatory levels.
Residual energy mix	All suppliers of electricity are required to disclose their electricity portfolio regarding energy source and environmental impact. The Renewable Energy Directive defines the GO as the means to prove the origin of electricity. If delivery is not based on GOs, the disclosure to customers is based on a residual mix of electricity.
Scope 2 emissions	Indirect emissions resulting from the electricity consumed by an organization. Direct emissions are created during the production.

5 Case study

This chapter presents the follow-up case study of a hybrid new venture's market-shaping while it develops from an idea into a scaling business. The Norwegian case company Becour operates in the market for GOs for renewable electricity. As described in section 3.1, the company was officially founded in January 2018 by HP with four other co-founders. A few weeks after this, I started following their endeavors. The story of the case company is related as a narrative, starting from the relevant background events and extending to the summer of 2020 when the company started scaling.

As explained in section 3.5., the initial analysis of the empirical data produced six consecutive periods that seemed to demarcate transitions in the hybrid new venture development process. Although the focus of this study is market shaping and not the new venture development process per se, I felt that the new venture development process provided a practical way to present the rich and multifarious empirical data and analyze the unfolding market shaping within that structure. The situation prompted me to present the case study in the following way. First, I narrate one period in the new venture's development process at a time. After the narration, I analyze the particular period for market-shaping activities and factors influencing the market-shaping. I remind the reader here that a comprehensive list of news articles and other documents used as secondary data sources for the case analysis is presented in Appendix 4.

5.1 The entrepreneur and the events leading to a market-shaping hybrid new venture

5.1.1 Narrative description

The founder of Becour, HP, has developed his professional career in parallel with the market for GOs. He started working as a power trader in 1999 at the Norwegian energy incumbent Østfold Energy. During that time, he represented the company as a founding member of the Renewable Energy Certificate System (RECS), the voluntary system for international trade in renewable energy certificates. The current

European Energy Certificate System (EECS) builds on the RECS and provides the platform for the GO market. Since its initiation, HP has actively contributed to the GO market's establishment by participating in the United Nations initiative "The Responsible Ecosystems Sourcing Platform", in a working group developing the new greenhouse gas protocol scope 2 guidance document, and in various international research projects related to the field.

Over the years, HP has also defended the contested GO system in Norway. As a prominent example, in 2016, lobbied by the Federation of Norwegian Industry, the government proposed in its energy report to the Norwegian Parliament to remove Norway from the GO system. The Minister of Petroleum and Energy at the time endorsed the proposal. The Energy and Environment Committee of the Parliament processed the report and started preparing a recommendation. At this point, a wide coalition of GO system supporters joined forces to defend it, led by HP, who in his own words was *"pulling the strings"* behind the scenes. After nearly six months, the counter-lobbying of the coalition managed to turn the negative development around. As a shock for the Norwegian GO market opponents, the parliament ratified the new Energy bill in June 2016, including the endorsement of the GO system in Norway.

For over two decades until 2017, HP worked for several Nordic power companies developing business areas related to sustainability and renewable energy. He was particularly interested in developing tools for market actors to track the origin of the electricity they purchased, which would enable them to make a direct connection to its production in facilities that were each unique based on qualities such as geographical location, age, and technology used. Concurrently, HP's wife Synnøve who is a researcher, was developing environmental data calculation tools (e.g., for food packaging). Building on her work, HP started experimenting with similar calculation tools for tracking renewable electricity. Over the years, these versions developed into one of the first online tracking tools for renewable electricity offered to corporate buyers.

In 2016, a large American fuel services corporation bought the Norwegian energy company HP was working for at the time. He was not satisfied with the new owner whose operations were largely built on the distribution of fossil fuels. He felt that the strategy imposed by the new owner would dictate a less sustainable direction. During his final period at the company, HP worked closely with two like-minded colleagues, Frank Hugo and Marie, on a plan to set up a subsidiary company that would focus solely on renewable energy services. This plan did not go through under the company's new ownership, but the planning process proved to be an important steppingstone for what was to come after HP resigned in June 2017. He felt that the time was right to start his own company where he could carry on the work in renewable electricity tracking while addressing the sustainability-related failure he had recognized in the GO market.

For HP, the main cause for the market failure was lack of transparency. Companies were purchasing cheap GOs mostly from traders and brokers who were not, paradoxically, required to detail the origin of the certificates or release their price information. The less knowledgeable other actors were, the more money was to be made by the intermediaries. Most buyers were satisfied with the situation as the prices remained low, and they only purchased GOs to be legally able to claim to use renewable energy. They did not know the system sufficiently well to judge its effectiveness. However, the model was unsatisfactory for the few companies with truly ambitious sustainability targets because it was difficult to verifiably claim whether their GO purchase had any impact. Consequently, these forerunner companies did not see GOs as a credible option and turned to other renewable energy solutions like PPAs, and HP foresaw that the continuously growing stakeholder pressure for verifiable sustainability impact would soon impel other companies to follow, leading to the stagnation of the GO market.

5.1.2 Analysis

5.1.2.1 Grounding work

Empirical data revealed that the process of market shaping and the activities driving it were inseparable from those of hybrid new venture development from the start. For example, the excerpt below demonstrates that without recognizing the market failure that motivated market shaping toward a more sustainable market form, no business opportunity had existed for HP's hybrid new venture idea.

> We are now at a turning point. Over the years a market structure has come in place where traders and middlemen are buying and selling the certificates. So, the producer is selling to a trader, which is selling to a trader, selling to a trader, selling to an energy supplier, which is then selling them on to an end customer. And this is then a breach of purpose. Because the purpose was that the energy consumers were to choose renewable energy, and economic benefit were to be provided to the producers so that they had an economic incentive to produce more renewables and less fossils, for instance. Now, more than 80 percent of the economic benefit disappears on the road to the producer[4]. So, the middlemen are

[4] This observation was verified in 2018 in a report conducted by economics analysis organization Oslo Economics (Oslo Economics 2018). The report included data showing how in 2017, only one fifth of the money end customers paid for GOs ended up with the renewable energy producers.

> taking out eight out of ten kroners, and the producer gets two out of ten. And this is a breach of purpose, and a business opportunity. (HP, Founder and CEO)

As market shaping clearly started even before a new venture was officially formed, I realized that the concept of *market work* (or the even more vague term *market-shaping activities*) was not adequate to describe what the entrepreneur was doing to drive the market-shaping process. The hybrid entrepreneur HP could not start with market work in the sense in which the term has been used in previous research, that is, as specific and concrete activities to influence certain elements of the market: more fundamental activities were required first. I refer to these more fundamental activities as *grounding work*, activities that are necessary to build a foundation, or groundwork if you will, for market shaping of an emerging business entity. It is very difficult to clearly distinguish these activities as relating to either market shaping or new venture development. The forms of grounding work detected during this first empirical time period were: *recognizing a sustainability-related market failure*, *forming a sustainable market vision*, and *forming a hybrid new venture idea*. This grounding work was a precursor for the entrepreneur to move on in the market-shaping process, as will be discussed later.

Years of working in the market revealed a failure in the market structure to HP. The existing structure steered GO sales revenues away from the renewable electricity producers, thus creating a disincentive to invest in new production, which in turn hindered the creation of environmental output from the market. Having recognized the market failure, HP formed a broad market vision, where the failure was alleviated, and the GO market was more sustainable. HP envisioned a future market in which producers would invest an increased revenue flow from GOs into additional renewable electricity production. In turn, demand-side actors would choose GOs directly from their preferred source of production. The market actors were connected through transparent digital channels, leaving no place in the market for opportunistic middlemen operating through arbitrage. In the future, renewable electricity sold via GOs would be considered a branded product rather than a commodity, differentiated based on its unique origin.

An opportune moment, combined with *internal and external enablers* (discussed in next the section), pushed HP to take action and to crystallize his thoughts, observations, and ambitions into a hybrid new venture idea that could be communicated to other actors.

> I saw an opportunity to actually do something I had then thought about since 2003, and that was to start a company based on the idea of "doing green by black numbers". A business that is a great place to work, economically sustainable, and that is making the world a little bit better. (HP, Founder and CEO).

> HP decided to start this like 100 percent honest, transparent company, who should make profit but at the same time deliver a real progress in environmental issues. (Frank Hugo, Co-founder)

The new venture idea was to build a new kind of service provider in the GO market; one that could exploit the growing demand for GOs while creating economic and environmental value for multiple stakeholders by alleviating the recognized market failure.

5.1.2.2 Antecedent influencing factors

HP's decision in 2017 to start developing a market-shaping hybrid new venture was triggered by a favorable momentum in his career, but fundamentally resulted from a long process enabled by *internal and external contextual factors*. These factors could be detected in HP's description of the background events, confirmed by other informants and secondary data.

Although the GO market was steadily growing, HP felt that it was threatened both exogenously and endogenously. As described earlier, there was strong opposition to the GO system from industrial actors in Norway. HP had a strong personal belief that the energy transition was key in solving the climate crisis, and that the GO system was a key element in accelerating the transition. He saw that having the system in place was worth defending, as long as it started functioning according to its original purpose. In other words, HP saw a need to support the GO system's resilience but at the same time change certain elements in the market to make it more sustainable. *Market resilience* has been defined in previous research as the ability to ensure the "maintenance of functions and structures in the face of disturbances" (Beninger & Francis 2021, 293). For example, in the attempt in 2016 to remove Norway from the GO system, HP's commitment to the market as an active contributor and advocate led him to take a leading role in defending the future of the GO market's existence in Norway.

> This was kind of like a defensive move? (Mariia)

> Yes. This was "ok if I don't do it, the market is gone." (HP, Founder and CEO)

Beyond the market's struggles with external forces, however, HP saw that the incumbent market actors were contributing to the market's erosion from the inside. Being involved in the creation of the GO market and having witnessed its evolution from within enabled HP to recognize that the market's original purpose was not realizing as the GO trading was largely dominated by actors driven by market logic.

As the majority of GO sales profits flowed to the various intermediary actors operating between supply and demand, producers' revenues remained small, and the actors were not incentivized to invest in new, additional production. In HP's view, this was a market failure from a sustainability logic viewpoint, threatening the credibility, and thus the future, of the entire market.

The most relevant *internal enablers* for initiating market shaping seem to be HP's agential characteristics, his *extensive knowledge of and experience* in the GO market system, and his *embeddedness in both market and sustainability logics*. These enablers allowed him to question the status quo in the GO market (i.e., exercise reflexivity). The assertion that HP was embedded in the two logics is supported by the many discussions with HP, which revealed a lifelong balancing of the two logics, manifested in his education and career choices, ambition in growing businesses, as well as his passion for protecting the natural environment where he spent most of his free time trout fishing, hiking, and skiing.

> I'm not an environmentalist. But I'm a businessman that cares about the environment. (HP, Founder and CEO)

There were also *external enablers* that convinced HP to act on the new venture idea and initiate market shaping. As the *megatrends of sustainability, electrification and digitalization* were transforming the energy industry, large corporations became more amenable to the idea of ambitious sustainability strategies. HP thought the momentum was there for market shaping to advance sustainability in the GO market. Digitalization played a key enabling role, as the existing GO trading system was old fashioned and largely based on analog procedures. As Paul, the Chief Commercial Officer of Becour put it, "*the trading bit is done on the phone, and you know, when they're sending orders, it's almost faxing bits of paper and signatures.*" This helped maintain the opaqueness in the market as relevant information was not easily available to market actors. Having spent years developing tools to make GO tracking more transparent, HP now recognized a chance to increase market transparency, credibility, and convenience in a way that had not been possible until recent developments in digital technologies. HP saw that digitalization could facilitate GO tracking and trading by making the current system more transparent and secure and thereby more credible to firms that doubted its effectiveness.

5.1.2.3 Summary

The findings thus far are summarized in Figure 7. As mentioned earlier, I realized that the concept of *market work* did not help me describe the activities performed for market shaping in this emerging phase. Instead, I conceptualize the activities

undertaken as *grounding work*, three forms of which were detected during this period: *recognizing a sustainability-related market failure*, *forming a hybrid new venture idea*, and *forming a sustainable market vision*. Without performing these activities, market shaping during hybrid new venture development could not have moved on from internal visioning and ideating into interaction with other actors and more concrete planning.

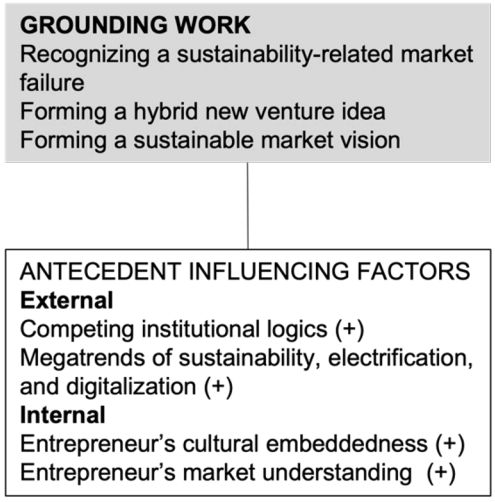

Figure 7. Forms of grounding work and antecedent influencing factors.

I also detected several external enablers (competing institutional logics, technological development, megatrends) and internal enablers (entrepreneur's cultural embeddedness and market understanding) that seem to have positively influenced the initiation of the market-shaping process, as listed in the figure above. No negatively influencing factors could be detected from the data.

5.2 Engaging co-founders and planning a hybrid new venture (– December 2017)

5.2.1 Narrative description

After his resignation in July 2017, HP started engaging key individuals to join him in the new venture development as co-founders. As he had long been debating sustainable business ideas with his friends and colleagues Frank Hugo and Marie, it was a natural continuation for them to join the process. HP also engaged his wife Synnøve who had a strong scientific research and project management background,

and his old friend Rune, who had a long experience in IT and also entrepreneurship from running his own IT consultancy firm. The name for the company became Becour, a combination from the words "Be Courageous". The name symbolized the idea that working toward change takes courage, as the change agent was bound to face criticism and resistance from competitors and other players on the market. The company's mission was to become "a leading global player in the market for renewable energy certificates" and thereby participate in increasing the amount of renewable energy production and consumption.

Becour's business model was built for a two-sided marketplace, as depicted in Figure 8. Although providing a digitized trading platform for GO tracking and trading was a key part of Becour's business idea, the company was to start its operations by utilizing the existing trading infrastructure. The digital platform would be developed as soon as possible, granted that the venture gained sufficient funding. In a way, the founders of Becour started developing a traditional and digital business in parallel. On the supply side, Becour's customers were renewable energy producers. Through portfolio management agreements, they would provide an inventory of GOs for Becour to offer to the customers on the demand side: electricity resellers, and companies with relatively large energy consumption. Becour was to approach demand-side customers through direct bilateral sales.

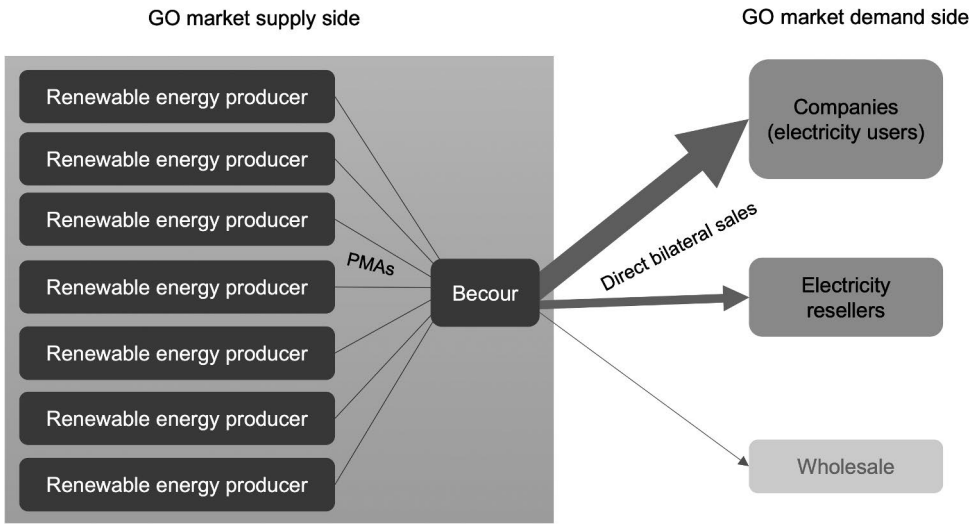

Figure 8. Becour's business model for a two-sided marketplace.

Although a seemingly conventional business model for the GO market, its novelty lies in its complete transparency and the exclusion of other intermediaries from the trading process. Becour's initial market proposition sought to capture the two-

sidedness, while referring to a novel technological solution: "*creating added value for energy users and renewable energy producers by letting energy users choose renewable energy directly from the manufacturer in a transparent peer-to-peer platform.*"

Becour's strategy was, in its founders' words "*to be on the side of the producers*." This meant building a strong alliance with the GO supply side and presenting the renewable electricity producers to the demand-side buyers as those delivering the true value in the market. The main message was that it was not sensible for each producer to establish systems and deploy resources to optimize the value of their GOs. Instead, Becour had the required expertise, experience, and an existing network, and thus a greater opportunity to reach the market on behalf of the producers, without unnecessary intermediaries.

The supply side value proposition was to provide producers with higher revenues from their sold GOs through a revenue model referred to as the "*80/20 principle*". Becour's aim was to reverse the prevailing flow of revenue shares in the GO market (see Figure 9). Positioning itself as the only intermediary between supply and demand, Becour would take up to 20 percent of the GO sales price and by dealing directly with the producer, guarantee that it receives at least 80 percent. The model offered producers a much greater revenue share from sold GOs and offered the buying company assurances that its money went to the kind of renewable electricity production it wanted to support. The price of Becour's demand-side offering was likely to be somewhat higher than that of its competitors, but the founders believed that the extra money spent by buyers would be compensated for by increased trust and commitment from their own stakeholders.

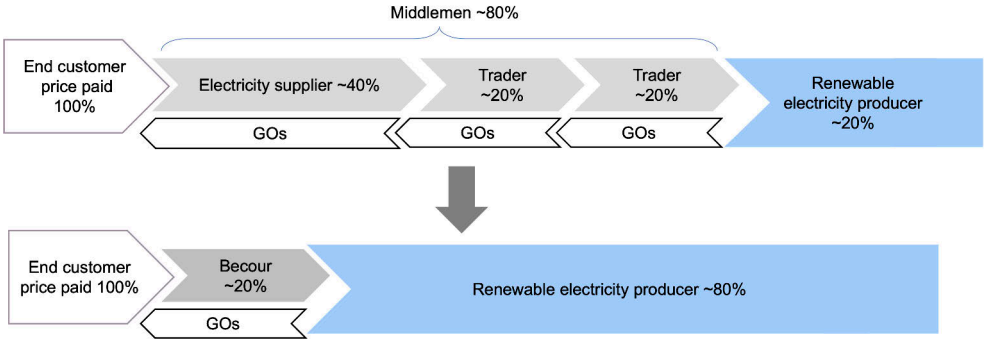

Figure 9. Becour's 80/20 revenue model.

The value proposition to the demand side was allowing companies and resellers to choose the specific kinds of GOs that suited their needs (e.g., supporting a small

local wind power plant) and to credibly claim the origin and impact of their electricity sourcing to their own stakeholders. Becour's main channel to reach customers would involve face-to-face communication, as it planned to work with large business customers who expect a personal sales approach. However, Becour's aims included significantly increasing the amount of business done digitally as soon as the digital GO trading platform was developed. Becoming a digital business would allow Becour to maintain a small cost base and thus operate more efficiently than its competitors. Lower costs would also permit a smaller margin, which in turn would create more value for customers.

From the start, Becour's business model was based on partnering with other actors. A crucial early requirement was finding a partner company for IT development, as planning, developing, testing, and implementing a novel digital technology required external resources. The eventual platform would be kept as a core resource within the company. Having full internal control of it would safeguard against becoming reliant on external actors. However, most of the non-strategic IT work was to be outsourced (e.g., coding).

> What you have to have in the house, you have to have full control of. And the rest I think we should use partners to do. That also goes for these new services - should we have everything in-house, or should we pair up with somebody else and offer something together and then keep the core. (Rune, Co-founder and Chief Digital Officer)

To secure global access to GOs and market intelligence, Becour needed to find international distribution partners. The company also needed a communication agency that could help visualize the company's brand identity.

5.2.2 Analysis

5.2.2.1 Grounding work

During this period, two forms of grounding work for market shaping and new venture development can be detected: *developing core assumptions* and *outlining the supporting ecosystem*. The first refers to the assumptions regarding the changes that would need to occur in various market elements to realize the market vision and the interrelated assumptions on how the hybrid new venture could induce these changes through its business model. Owing to the tight interrelatedness of the assumptions, I refer to them as *core assumptions*.

Outlining the supporting ecosystem refers to the identification of actors whose support would be necessary for realizing the market vision. Although the new

venture started by striving to build a more constrained constellation of supporting actors, that is, a network, its horizon was already extended further to a future ecosystem. However the venture's idea was not to induce change by directly interacting with an increasing number of actors, but rather to trigger changes in a limited number of key organizations, who would then induce new thinking and behavior in their own value networks; thus eventually reaching different layers of the business environment. Developing core assumptions and outlining the supporting ecosystem were closely intertwined.

Becour's core assumptions concerned different market elements. The first element comprises the market actors. As for the actors on the demand side, Becour assumed that they needed to know where, when, and how their energy was produced so that they could judge the potential sustainability impact of their purchase. Buyers would thus need to start engaging with GO service providers who operate transparently. Becour's business model would induce this change by enabling buyers to connect directly with energy producers and to choose GOs based on their own preferences. That process contrasted with the prevailing one in which GOs were selected for the buyer by an intermediary based on price. The idea was thus to increase the agency of the buyers and reduce the agency of the market intermediaries. The main target group on the demand side was large international companies that sourced significant amounts of renewable electricity and whose sourcing decisions could trigger changes in their value networks.

Becour also assumed that the demand-side actors needed to extend their perception of utility from GOs. Beyond providing the legal right to claim renewable electricity usage, buying GOs with a verified, unique origin could be used far more widely in companies' marketing and stakeholder communication. In its business model, Becour planned to support its customers in this effort through innovating and collaborating with them in close relationships.

As for the actors on the supply side (producers of renewable electricity), Becour assumed that they would need significantly greater economic revenues from GO trading to incentivize them to invest in new, additional renewable production. Becour reflected this change hypothesis in its business model by positioning itself "*on the side of the producers*" and promising them an increased money flow through reversing the current revenue model in the market that involved 80 percent of revenue going to the pockets of various intermediaries.

> We are going to disrupt this model, take out the middlemen, and make sure that the producer gets 80 percent. (HP, Founder and CEO)

Becour assumed that in order to realize the vision of a more sustainable market, the number of intermediary actors operating through arbitrage would have to decrease

significantly. The above-mentioned changes in the demand and supply side actors was anticipated to contribute to this. Furthermore, the overall representation of an intermediary actor in the GO market had to change. This was reflected in Becour's business model with the aim to build close, reciprocal collaboration with all customers instead of acting as a mere trader of commodities, focusing on finding the lowest price. In addition, Becour's business model was based on the open book principle, where actors on both sides of the market had access to all relevant information related to the GO trades.

The core assumptions also concerned the exchange process. A major change assumption entailed increased prices for GOs. This was closely intertwined with the need to change the current market representation of GOs. In Becour's view, the market suffered from commoditization; a situation where customers do not perceive any factor that differentiates a product or service offered by various providers, nor can they recognize if providers renege on their obligations. When buyers see all products as similar, they typically buy the cheapest, and market prices are driven down. Becour reflected these change assumptions in its business model by aiming to educate and consult companies, helping them understand the market and the added value of verified GOs. According to Becour, renewable electricity should not be perceived as a commodity, or raw material like steel or lumber but as one of the key ingredients that increase the value of a company's market offering. For example, an electric vehicle manufacturer could utilize the story and imagery of a Norwegian hydropower plant located amid beautiful mountain scenery as the natural power source for its end products. If the market actors started decommoditizing GOs, they would be willing to pay more for them, thus increasing the credibility of the market and the revenue flow for the producers.

Another change assumption related to the exchange process, and supporting all the other assumptions, concerned the modes of exchange between GO providers and buyers. Becour believed that energy producers and corporate buyers needed to be connected directly to each other without unnecessary intermediaries, and the best way to do that was by digitalizing the current GO trading and tracking procedures. Becour's business model addressed the issue by ensuring that no unnecessary middlemen were used in GO trades, and by developing a novel digital GO tracking and trading platform.

Table 7 summarizes my interpretation of the changes in the GO market elements that Becour's founders thought necessary to achieve the sustainable market vision, and the corresponding business model assumptions through which the venture could - with the help of other actors - trigger those changes.

Table 7. Becour's core assumptions.

MARKET ELEMENTS	MARKET FACETS	MARKET CHANGE ASSUMPTION	BUSINESS MODEL ASSUMPTION
Market actors	Supply-side actors	Producers need to invest in new, additional renewable electricity production.	Providing the 80/20 revenue model, where producers' revenues grow.
		Producers need to stop utilizing arbitrageurs.	Building an alliance with renewable electricity producers.
	Demand-side actors	Buyers need to demand to know where, when, and how their purchased electricity was produced.	Enabling buyers to choose GOs directly and transparently from the producer.
		Buyers need to stop utilizing arbitrageurs.	Building collaborative relationships with buyers.
	Intermediary actors	Number of arbitrageurs needs to decrease.	Operating with an "open book" principle.
Exchange process	Pricing	The sales price of verified GOs needs to increase.	Building collaborative relationships with buyers, helping them understand the added value of verified GOs.
	Modes of exchange	Energy producers and buyers need to be directly connected.	Acting as the only intermediary between the sides.
		Digitalization of GO trading and tracking.	Developing a digital GO trading platform.
Institutions	Representations	GOs need to be considered high-quality products, rather than commodities.	Enabling buyers to choose GOs directly and transparently from the energy producer.
			Helping customers communicate their renewable electricity usage.
		Intermediary actors need to create environmental and economic value together with both producers and buyers.	Close and transparent collaboration with all customers.

The data also show that the grounding work of outlining the ecosystem actors included recognizing actors that could take on retaliatory action, such as those incumbents Becour defined as conventional brokers and traders. Becour's founders thought that if the new venture's market proposition was accepted by enough market actors, incumbent players would be faced with having to change their business models, which might provoke hostile reactions.

> The heart of this Becour business is actually not only to put Becour... Guarantees of Origin in the front line in the market but you also have to change something. And then, you will create a lot of enemies. Because you take away the business from all of these gatekeepers. (Frank Hugo, Co-founder)

HP was under no misconceptions about the influence a new venture could exert on an existing field. Rather than radical or immediate changes, the aim was to initiate a chain reaction in the market, starting from a few actors on both sides of the GO market. The underlying idea was that with enough small nudges in the desired direction, in HP's words "*the system would start to move*". Getting a few large companies to commit to Becour's market proposition could amplify the initial effect on the market by triggering chain effects in their upstream and downstream value chains.

> This is (about) ripples, you know. Ripples, small waves. Ripples in the water and we want to… you know, play with precision. You know, if you have a lot of marbles and you drop one, they go everywhere. And if you send one into the crowd, you get this… what you call it… this chain effect. And we want to start a chain. Because we think that sustainability and renewable energy is something that you do in value chains and value networks, it's not something one company can decide to achieve on its own. It's about upstream and downstream. So, by being precise on how we play, we want to make this movement [shows a chain effect motion] through the crowd. (HP, Founder and CEO)

5.2.2.2 Influencing factors

Although Becour's co- founders' attitudes to acting in an environmentally conscious way varied from practical (e.g., economic reasons for green consumption choices) to ideological (involvement in environmental activist groups), all seemed very much *aligned with the hybridization* of market and sustainability logics in the new venture. This implied to me that the founding team had a high level of initial internal legitimacy. Returning to prior literature, I found evidence underlining the relevance of internal legitimacy. Drori and Honig (2013, 347) argue that a new venture's external legitimation is tied to the development of its internal legitimacy. That is defined as "the acceptance or normative validation of an organizational strategy through the consensus of its participants, which acts as a tool that reinforces organizational practices and mobilizes organizational members around a common ethical, strategic or ideological vision." Drori and Honig's longitudinal case study of a new venture indicated that eroding internal legitimacy can lead to conflicts that hamper the firm's ability to access resources, the decoupling of practices and values from the original ones the venture was built upon, and inhibiting the team members' capacity for action, for example.

The venture's hybrid mission was crystallized in the company motto "*doing green by black numbers*."[5]

> It's a new way of building a business. Because we're not just… we're saying the green is a business idea. And by doing green, you can do good. And you can do black numbers. (HP, Founder and CEO).

> We have started up different kinds of businesses, but Becour is not like a… it's not a business where you have profit as your main purpose. The main purpose here is impact. (Frank Hugo, Co-founder)

> The totally unique company strategy and foundation that HP has decided to build is very refreshing. I think. To state it so clearly. And that… the courage that he shows doing exactly the opposite that this business field usually does with 20/80. And he turns it the other way around, well knowing that he will have lots of people… yeah resistance. But also, that's where the upside is, and the opportunities lie. So, it's a very interesting case. It's really so inspiring to have the opportunity to be part of it. It's very unique indeed. (Marie, Co-founder)

Hybridity manifested in integrating environmental and social costs and revenues into the venture's business model alongside the economic value capture elements. However, the founding team had a realistic approach to environmental value creation. They knew that before the new venture could reach any of its long-term sustainability objectives, it needed to become economically sustainable.

> It's not just a green coat because it's the idea to enable more renewable energy at the core. But in order to enable that we need to make money. People need to get paid.... we need to pay the rent and everything in order to be able to do what we want to do. (HP, Founder and CEO)

Hybridity influenced Becour's market shaping through the underlying longevity in its time, scope, and growth ambitions. Unlike many startups, especially in the field of technology, Becour's aim was not to grow fast and maximize profits to sell the company quickly; there was no exit plan. According to HP, the fact that Becour was

[5] Having black numbers is a business term that means that a company is profitable, producing positive earnings after all expenses. The term stems from accounting history. Before computers, accountants used red ink to denote unprofitable firms and black ink for profitable ones (Investopedia 2021).

not set up for an exit was the most important element in "*setting the tone"* for the company both internally and externally.

> This is what we want to do. And that is a different perspective. Because you run such an operation differently than if you, say you have a three-year or five-year business plan with a very clear exit. "Yes, in five years we're going to go sell this to a venture fund." Then that is what's driving your business. But we don't have that. Our exit is our pension. Our exit is when we're going to stop working. And that's also putting a very different thinking into how we do things. (HP, Founder and CEO)

Having a sustainability mission alongside an economic one also influenced the company's attitude to competition. Although Becour aimed to differentiate itself from conventional brokers and traders and win business from them, the founders knew that a single firm would have a tough time shaping the GO market, even with a wide value network. The founders hoped Becour's action would attract competitors with similar ideologies to initiate the spread of the sustainability logic across value chains, thus increasing the "size of the cake" for such players instead of forcing them to fight over market share. Moreover, they believed that having competition in fostering transparency would inspire all actors to do better.

For HP, planning for growth in the long term was a cornerstone of a sustainable company. He felt that many companies branded themselves as environmental but in his words, were actually first and foremost "*in it for the money"*. Over the years, HP had witnessed several opportunistic initiatives aiming to exploit the green shift and technological hype (e.g., by selling carbon credits). These ventures typically invested highly in marketing to support the goal of maximizing the company value until exiting within a relatively short amount of time. In contrast, Becour was built to be something that would "*live forever"*. For HP, setting up a sustainable business meant growing very slowly initially but systematically adding momentum to the business. Like any for-profit, the company would strive to build black numbers as soon as possible but not merely in light of the next quarter's result. In essence, the actions were guided by the question: "*what do I do to stay in business for a long time?*"

> If you grow too slow, then you will never get to heaven, and if you grow too fast, you'll create chaos. So, you're systematic, you walk at the same pace in good times and bad times. You focus on a long-term goal, and you add to the business every year. More like a farmer. Not like a hunter. It's like building a good farm. You add things to your farm every year, and you always have to think ahead. It's not like a hunter, who can fire, shoot a moose, and then live from that

> until they get hungry and then shoot another one. That's up and down. It's more like farming, you grow slow. (HP, Founder and CEO)

Finally, hybridity also influenced the decision to build Becour on two equally important pillars: operating in the market and advancing research and development (R&D). Running a purely market-based operation would make the company more vulnerable to external market forces, whereas building its own technological solutions through an R&D program would enable it to remain more independent and recognize new opportunities in the evolving market. Although benefiting from the megatrend of sustainability, the founders wanted to build Becour based on scientific, verified data, not merely on green hype.

> I think if you want this kind of company to be really solid, you need to be in front of what's the newest, best available knowledge. I think of every point in time, if you just go from moment to moment, and try to do business on that basis, you could be easily swiped off the field. But if you are always thinking a couple of steps ahead...and I think the way to do that is to have an R&D strategy. (Synnøve, Co-founder)

Distributed ledger technology (DLT) allowed Becour to ideate and benchmark other industries on the creation of a digital platform that would build on the existing energy attribute tracking systems (GOs, REC, and IRECS) and link the market sides more closely together. A distributed ledger is a database decentralized to various nodes and accessible by numerous participants. Therefore, no central authority or intermediaries are needed to verify transactions. By removing manual procedures, all participants in the digital platform would have access to secure information regarding GO trading.

> You see this same kind of openness and other platforms for just micro communities for energy trading and all this kind of stuff where you actually directly link the producers and the customers. So, you see it evolving in other markets. What's happening now within the financial markets and other areas, they're trying to get rid of this administration, this middle part. The part in the middle that actually doesn't really add anything to the products. (Rune, Co-founder)

5.2.2.3 Summary

The findings related to the period after HP's resignation until Becour was officially founded are summarized in Figure 10. Two forms of grounding work were detected:

developing core assumptions (related to market changes and business model elements) and *outlining the supporting ecosystem*. In addition, I found *internal and external contextual factors* that seemed to have influenced the market-shaping process. An external enabling factor was the development of *DLT.* Of the internal factors, the first one was the *hybridity* of the venture in the making. However, this influence cannot be evaluated as either positive or negative, rather, it characterized the founders' attitude to growth and competition, as well as the organizational setup. The second internal factors that seemed to have positively influenced the market-shaping process was the *founders' like-mindedness and alignment around the hybrid mission*. Again, no factors were detected that seemed to have influenced the market-shaping process negatively.

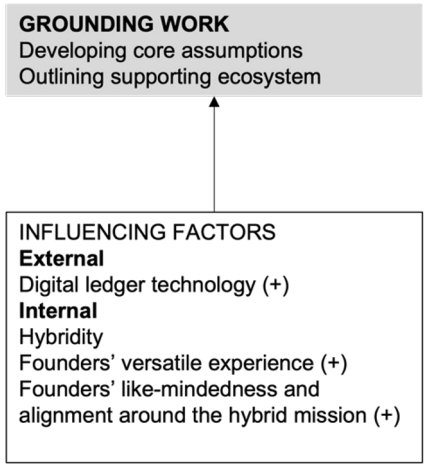

Figure 10. Grounding work and influencing factors until December 2017.

At this point of the analysis, I realized that all the grounding work done by the change agent thus far - recognizing a market failure, forming the hybrid new venture idea, forming the sustainable market vision, developing the core assumptions, and outlining the supporting ecosystem - seemed to belong to and be conducive to an underlying subprocess that was driving forward the intertwined processes of market shaping and hybrid new venture development. I refer to this subprocess as *visioning*, an initially internal process where the grounding work performed was aimed to formulate a vision, the ways to realize it, and the actors needed to support it. The forms of grounding work done during visioning were a precondition for the focal actor moving on in the market-shaping process, but nothing in the data implied that visioning would not also have continued.

5.3 Establishing the venture and building the initial network (January 2018 – July 2018)

5.3.1 Narrative description

During this period, Becour became a formal legal entity, and its vital functions and structures were put in place (e.g., office space, IT tools, and insurance). HP became the CEO. Synnøve started building the company's R&D strategy and worked initially for Becour alongside her job as a senior research scientist. Rune also continued working full-time as a senior IT consultant, doing work for Becour in his free time. Marie and Frank Hugo were not employed by Becour, but a separate contract was made with them to make Becour known by operating as advisers on sustainable strategy. Their task was to target C-level executives and boards in large international organizations and corporations. The arrangement allowed them to operate quite independently and without reporting responsibilities. The first hired employee was Kristine, who took charge of administrative issues. The recruitment of supply-side customers was initiated, but Becour did not enter the demand-side market immediately. Hence, the firm was not considered fully operational during the first six months after its founding.

HP's main task as the CEO was to search for external investors. The targeted organizations were Norwegian renewable electricity producers who could have a strategic interest in supporting Becour's market vision and who could also provide GOs for Becour's inventory. HP ran what he termed "*a roadshow across Norway*" to present the business plan to several producers. After the second round of discussions, two energy incumbents, Lyse and Østfold Energi, decided to become shareholders of Becour (Vilnes, O. (23.03.2018). Both owners gained a seat on Becour's newly established board of directors. HP had no previous contacts with Lyse, whereas with Østfold he had a long relationship, having started his career as a power trader in the company.

The team expanded with two more people recruited in the spring. In April, Paul, a former colleague of HP's was hired as the Chief Commercial Officer. With extensive experience in energy sales and marketing, his responsibility became the demand-side customer sales. In May, Becour strengthened its resources in market analysis by hiring Marine (a master's degree candidate) to support this area as a summer intern.

After finding external investors for the company, two processes were key. The first was building an adequate supply-side customer base of renewable electricity producers to have a wide inventory of GOs to sell to the demand side. HP was well-equipped to do this owing to his existing relationships with Norwegian producers, many of whom he had worked with previously. Moreover, producers' interest in

optimizing the GO prices was growing due to the recent market price increase. Several offers were sent out to producers, and many of them led to negotiations. In May, Becour obtained its first countersigned portfolio management agreement, providing the startup with its first small reoccurring revenue stream.

The second key process was initiating an R&D project around the digitalization of GO tracking and trading. Becour engaged several organizations (including two research institutes, a university, a renewable energy producer, an electricity reseller, an IT consultancy, and RECS International) to join the project, provided that additional external funding could be found. In collaboration with the project group, Becour applied for funding from a public research fund. Simultaneously, Rune was taking the first steps in designing the system architecture for a digital trading platform and forming a support network for IT development. In June, Becour received the positive news that the public research fund would finance the R&D project (Skovly 13.10.2018). The digitalization project could then be commenced immediately.

From the outset, Becour had to monitor the regulatory environment in Norway, which presented a potential business risk. In the spring of 2018, on request from the parliament Committee on Energy and the Environment, the Norwegian Ministry of Petroleum and Energy (the OED) started evaluating the GO system in Norway. The Committee members criticized the current system for being disadvantageous to energy-intensive industries and demanded its abolition in Norway. The OED ordered an external report from the economic analysis organization Oslo Economics to be used as a basis for the Ministry's assessment of the GO scheme and product declaration for electricity (Regjeringen.no. 21.04.2018). The report was due to be published in fall 2018. HP suspected that the evaluation process might open up yet another political debate on the socioeconomic value of GOs in Norway.

Becour joined the Reference Group for Guarantees of Origin to encourage a collective effort to influence the market’s regulatory development, and to network with other Norwegian proponents of the GO system. The group was formed and run by Energy Norway, a non-profit industry organization representing companies involved in the production, distribution, and trading of electricity in Norway. The Group consisted of versatile Norwegian energy market actors interested in the growing economic importance of GOs and intensifying political debate on them, renewable energy tracking, and other related business policy issues.

5.3.2 Analysis

5.3.2.1 Grounding work

During this period, two forms of grounding work were detected: *building a core enabling network* and *establishing initial legitimacy*. I use the term core enabling network to denote that the actors involved, and the resources they provided, were crucial in enabling Becour to gain the adequate resources and legitimacy to transition into full market entry after the summer of 2018. Notably, however, although Becour had to convince these actors of its market proposition to acquire necessary resources, the actors in the core enabling network were not the targets of Becour's market work, that is, the company did not strive to purposefully alter some aspect in them. Instead, the actors played a vital supporting role in this early phase of Becour's market shaping. Figure 11 depicts Becour's core enabling network in the summer of 2018. The figure is divided into four sectors: actors on the supply side of the GO market (blue), actors on the demand side (gray), actors related to Becour's R&D operation (green); and actors not specifically related to either side of the GO market or R&D (white).

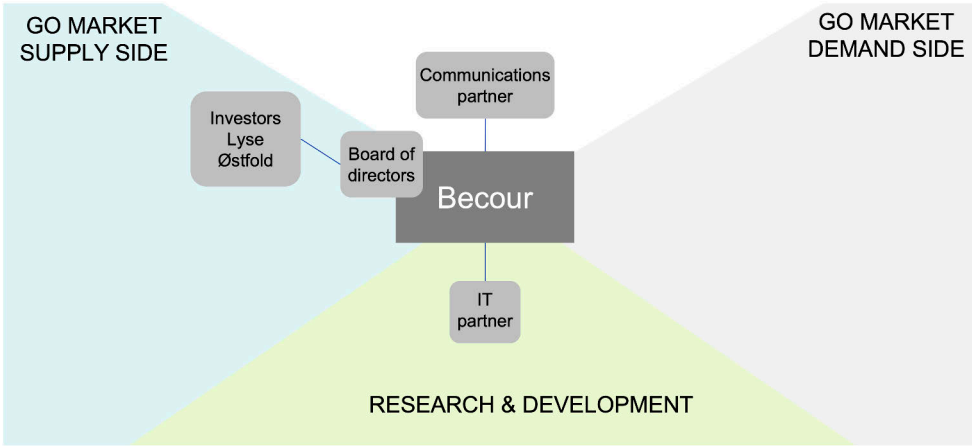

Figure 11. Becour's core enabling network

Østfold and Lyse belonged to the core enabling network through their roles as strategic owners, providing necessary equity and business support. At a later stage they also became supply-side customers of Becour through PMAs. The strategic owners' dialogue with Becour took place through the board of directors. The Board members provided intangible resources for Becour in the form of strategic guidance and recommendations. Beyond the investors' representatives, the other members were found in HP and Frank Hugo's existing networks. They offered experience and

different viewpoints and especially realism to the strategic discussions. Clearly, not all were entirely convinced of Becour's ability to differentiate against competitors with its sustainable mission. As the Chairman of the Board said of Becour's business idea:

> I don't think it's entirely unique. I think it's sort of maybe better thought through than other approaches that you see on the market. But there is… I mean you are putting up something that in some ways appears to be different. But it's not like a sort of totally new approach. I mean this is basically the messaging that I think you will find from most players, also pure brokers of GOs.
>
> I think you should also be realistic. I mean Becour is a company that contributes to that picture, but Becour is not going to be the sort of company that will fight climate change. And I think we should sort of be realistic about that and understand what our contribution is. We're not going to save the planet!

Even before the official founding of the company, an important relationship had been formed with a communications agency, which helped crystallize Becour's market proposition into textual and visual forms and supported in planning and implementing communication to various audiences. Finally, the IT partner's expertise was vital in designing and developing a novel and complex digital ledger technology-based solution. As Synnøve stated, the actors in Becour's core enabling network played an important role in "*shaping Becour's thinking"*.

The second form of grounding work, establishing initial legitimacy was closely interconnected with building the core enabling network. Although his long experience granted HP an established status on the supply side of the market, the newly formed business venture lacked legitimacy as a service provider for the demand side. To be able to move on in its market-shaping process and start approaching corporate customers, the new venture needed to reach an adequate level of initial legitimacy. That legitimacy was afforded to it by the actors in its core supporting network, particularly the investors.

5.3.2.2 Market work

During this period, Becour started performing *market work*, which can be distinguished from grounding work, as explained in section 5.1.2.1. Market work refers to concrete and specific activities targeting a particular market element. I observed however that not all of Becour's market work sought to change market elements, some had a different function. I thus distinguish three different types of market work: reform work, relational work, and resilience work. *Reform work* refers to purposeful activities to change a particular element of an existing market. The

term resonates with the dictionary definition for *reform*, which is to change something into an improved form or condition. *Resilience work*, also identified in prior research (Beninger & Francis 2021), refers to purposeful efforts to maintain the fundamental functions and structures of the focal market when faced with disruptive developments. *Relational work*, identified in earlier literature (Arenas et al. 2020), refers to purposeful efforts to build connections with different actors that may facilitate access to resources and opportunities and enhance the new venture's external legitimation.

Although HP's status provided the new venture with access to actors on the supply side of the market, on the demand side, the firm had to start from scratch, and thus *relational work* played a significant role. Whereas an incumbent company may initiate market-shaping efforts while relying on an existing customer- and revenue base, a market-shaping startup has to begin by becoming recognized as a legitimate actor by its target audiences. By using their social and networking skills and vast international networks, Marie and Frank Hugo strived to put Becour on the map by discussing its market proposition directly with top-level organizational leaders, who are notoriously difficult to reach. When meeting with the organizations, Marie and Frank Hugo discussed different sustainability strategies and tools, with GOs being one of them. They also encouraged leaders to look for sustainability partners in companies who were, as they put it, "*doing the right thing the best way*" such as Becour. The underlying idea was that real change in corporations is most effectively initiated from the top. Middle management, typically tied with tight budgets and plans, is far less likely to push for the type of change within their organizations that would be required to accept Becour's market proposition. Instead, if new ideas could be implanted into the minds of top executives, the necessary changes would be more likely.

This kind of *relational work* as explained above is referred to here as *acknowledgment work*, a purposeful and targeted activity to ensure that relevant audiences acknowledge the new venture and its market proposition. Importantly, acknowledgment work is distinguished from sales and marketing. Marie and Frank Hugo's effort was aimed at opening doors for the company's actual sales. For the acknowledgment work to be effective, Marie and Frank Hugo deemed it crucial that they were perceived as advisers to corporate leaders, not as salespeople of Becour. As the following excerpts show, they felt that being connected to sales would have complicated their access to the C-level, harmed their credibility, and diminished the chances of exerting influence.

> We don't sell anything because as soon as…when people start looking at us as salespeople then... (Frank Hugo, Co-founder)

> …then you're an agent, you know. (Marie, Co-founder)

> And then the doors are closed, and you end up in kind of...in the middle management. So, we have a meeting with the top management. With managing directors, board members. Because a lot of these things are, from their point of view, a strategic decision today. (Frank Hugo, Co-founder)

Building strong relationships with renewable electricity producers was vital because both Becour's business idea and market vision were directly dependent on acquiring sufficient GOs to sell for companies. While the overall market demand for GOs was outstripping supply, Becour could not rely on finding many unattached GO producers. This meant the new venture needed to squeeze itself into the market to capture producers from existing traders. As the excerpt below demonstrates, to gain the support of producers to both develop its business and for its change agenda, Becour undertook *partnering*, a form of *relational work* aimed to build an alliance with the producers, placing Becour on their side against the conventional brokers and traders.

> Without the producers, we will be nothing. So, we build a model of loyalty with the producers that they stand together with us. And we want them to succeed, and they want us to succeed, and that's a very strong fence toward the traders. (HP, Founder and CEO)

Overall, Becour started purposefully building open and trustful relationships with all actors in its network. Although some competing portfolio management companies also seemed to cherish close customer relationships (based on discussions with industry representatives and competitors' websites), the level of openness Becour wanted to provide represented a whole new way of building stakeholder relationships. The venture thus undertook *reform work* of *redefining exchange practices* by adopting an open and strongly relational over transactional approach with all market actors. The aim was to foster credibility and transparency in the market.

> The partner philosophy that every customer is actually a partner. And a producer is actually a partner as well. And to build your partners stronger with the company's philosophy. So, everybody…every part of the [...] value chain should build each other stronger, with their philosophy and their mentality and their actions. (Marie, Co-founder)

As another type of *reform work*, Becour was *redefining the pricing logic* in the GO market through building its business on the 80/20 revenue model. The model offered renewable electricity producers a much greater revenue share than was typical in the market from GOs they sold. The aim was to incentivize renewable electricity producers to invest their GO profits in a way that created a sustainability impact, and

also to reassure the buying company that its money was spent on the kind of renewable electricity production it wanted to support.

Becour was also performing *reform work* of *educating the producers* about the failure in the market structure where unnecessary intermediaries were reaping most of the financial benefits from the GO trade. The traditionally low prices of GOs and thus their small economic relevance meant most producers had had little interest in learning about the complexities of the market. Concurrently, Becour was also *constructing identities* in the GO market by presenting itself as an alternative to the traditional brokers and traders. This meant openly taking the producers' side while also being a trustworthy and competent partner whose aim was transparently to help customers' value creation on both sides of the market. Becour also strived to change the demand side's perception of the seemingly distant renewable electricity producers by presenting them in a new light - as the actors delivering the true value in the market through unique production facilities and technologies.

Becour's *reform work* also related to the market offering The idea was to create an emotional bond to a product most actors regarded as a commodity. Becour started *aestheticizing* renewable electricity by using appealing visualizations of specific power plants in its communication materials, embellished with emotional elements. This is demonstrated in Figure 12, contrasting the Øvre Forsland powerplant with a generic power production image. Becour got the mandate to sell GOs from the Øvre Forsland powerplant when it signed its first PMA with the Norwegian incumbent Helgelandkraft. HP described the powerplant as a "real pearl" that could be used in the company's communication due to its beautiful location and exterior. The plant was described as an "unusually handsome hydroelectric plant" in The Guardian newspaper (Dredge 08.09.2016).

Figure 12. Example of Becour's communication aestheticizing electricity.

A major aspect of *reform work* for Becour was *theorizing*, which means formulating ideas into compelling forms so that they acquire legitimacy. That might involve discourse, rhetoric, and explaining the consequences of rejecting change (Greenwood et al. 2015). *Discourse*, the use of cultural symbols and language to support novel

behavior, was an important means of theorizing for Becour. For example, Becour used a large-scale inflatable globe to create an impact in its public presentations. Becour's representative would start the presentation by kicking the globe into the crowd. Allowing it to be bounced around throughout the presentation symbolized the way we treat planet Earth. A key metaphor utilized throughout Becour's communication was the children's game of marbles, where each player uses one marble to knock out other marbles, sometimes causing chain reactions. For Becour, the marble was a symbol of the imprint we leave on the planet and all the choices we make in our lives. The message was that how we play our marble matters. Becour representatives used the metaphor to underline the importance of each actor's individual decision to support renewable electricity production in a system where all elements are interconnected.

> Imagine that everyone is given a marble at birth. Just one. One marble that represents unknown possibilities - a chain of actions and reactions. The game of marbles is ongoing and everlasting. Everyone is playing it. All around the world. At one point, you will have to play yours. Only once. And how you play will influence the entire game. What will you aim for? (Becour website)

Figure 13 shows some examples of Becour's use of metaphors. The first picture on the left shows Becour's inflatable globe in the crowd at a time when a group of students borrowed it for a School Strike 4 Climate[6] event. The picture in the middle shows an example of how marbles were used in Becour's external communication. Marbles were also used internally, and the last picture shows a bowl of marbles at Becour's office.

Figure 13. Examples of Becour's use of metaphors.

6 An event held by school students in Becour's hometown Fredrikstad inspired by Greta Thunberg's FridaysForFuture movement, which demands action from political leaders to prevent climate change (FridaysForFuture 2021).

Rhetoric focuses on persuasion, that is, how language and other symbolic forms influence a targeted audience's thoughts, feelings, or actions (Higgins & Walker 2012). Rhetoric is conventionally characterized by the three Aristotelian elements of ethos (credibility), logos (reason), and pathos (emotion). Ethos is used to convey the authority of the speaker, in this case, an organization. Becour used ethos by highlighting the substantial experience of Becour's members.

> We need to sort of project an image that this is professional and as big as possible and still be honest about the fact that it's a startup, we can't hide that. So, we talk a lot about the fact that we've been doing this for a long time and...we've got 25 years of experience. [...] This is the market, we have experience, we know what we're doing. (Paul, Chief Commercial Officer)

Pathos appeals to the listener's emotions. Becour employed it to explain how the status quo of the market might be changed, and also why it should be. The plan was to invite market actors to "participate in the green shift," by becoming part of the growing community of actors fostering sustainability transitions.

> Whether we know it or not, everybody wants to be a part of something that's bigger than themselves. And that we actually can be proud of, talk about, and communicate. (Marie, Co-founder)

Logos, or appeal to logic, entails persuading listeners with reason, using facts and data to support one's argument. Becour was determined from the start that in order to get its message through, it needed to build its arguments on solid scientific evidence.

> To be able to convince all, everybody on the planet, that the renewable part is the right way to go and that's really, really important. And for that, you need solid evidence, and data. (Synnøve, Co-founder and Head of R&D)

Becour was also *theorizing* by *clarifying the consequences* of not supporting the necessary changes in the GO market. Through this form of theorizing, the change agent simplifies the reasons for proposed new practices and explains the outcomes from following one institutional logic over another to foster their adoption (Greenwood et al. 2002; Lawrence & Suddaby 2006). HP was able to use his access to the media to theorize change. For example, only one month after Becour was founded, Montel, a leading news outlet for the European energy markets, ran an article in which HP was interviewed and allowed to explain the need for a market revolution.

> He said that he started the firm with the belief that the renewables sector is "ready for a revolution" and that it should be easier for consumers to actively choose green power supplies. "The GO system needs to reconnect with the intention from when it was started 20 years ago. It was meant to encourage consumer awareness around renewable energy." (Vilnes 22.01.2018)

While Becour's objective was to induce change in certain aspects of the GO market, it also strove to support the resilience of the GO system in Norway, that is, *resilience work*. HP suspected that the evaluation process ordered by the OED would open up yet another political debate on the socioeconomic value of GOs in Norway. For Becour, this also posed a potential business risk as its operation leaned heavily on the GO system's existence in Norway. Becour participated in *collective advocacy* to mobilize political and regulatory support for the system through the venture's engagement with the Reference Group for Guarantees of Origin.

> It's a systemic risk for us. If the government decides to do what the industrial groups want. Then we need to think very radically different about our business. [...] I mean, that's also part of our company's role, you know. You have to do whatever you can to create the conditions in order to do business. (Paul, Chief Commercial Officer)

Beyond its efforts in Norway, the Reference Group for Guarantees of Origin worked with other European industry organizations to influence EU policymakers reviewing the status of GOs for the revised Renewables Directive (REDII). Negotiations around the content of the new Directive were ongoing throughout the spring of 2018. In June, the GO proponents' desired result was achieved, as the EU policy-making institutions agreed on the wording for the new Directive: "*electricity suppliers* shall *use GOs to disclose the share of renewables in their energy mix*" (Vilnes 15.06.2018, emphasis added). Although a seemingly small issue, this wording was deemed critical for the future of the market because it replaced the discretionary "*may* use GOs" in the original. The initial wording would not have made the use of GOs mandatory for renewable energy disclosure and claims, thus paving the way for versatile EAC trading instruments, and making the market more chaotic and unpredictable.

5.3.2.3 Influencing factors

An important internal enabler for successful networking and resource access was that the five co-founders possessed *versatile and complimentary knowledge, capabilities, and experience* (e.g., in IT, management, environmental research,

project management, entrepreneurship, and business sustainability), coming into the new venture development process, which created a strong resource base that attenuated the liability of newness that is typical for new ventures.

The founders' existing *social capital* allowed them to utilize their existing networks to benefit the new venture. For example, the board members were found among HP and Frank Hugo's existing networks. Moreover, some of HP's former superiors mentored him on issues such as establishing the board of directors and presenting to investors.

The capital of trust garnered by HP during his years in the Norwegian energy industry proved particularly relevant to Becour's initial networking and legitimation. This is exemplified in Østfold Energy's decision to become a strategic owner of Becour. In the previous year, Østfold had decided to invest in energy-related startups that could provide the company with new revenue streams. Beyond this fortunate momentum, knowing HP's professional record, and perceiving him to be trustworthy and capable of reaching the new venture's objectives, significantly influenced the investment decision. This is shown in the excerpts from interviews with Østfold Energy's Director of Market and Business Development.

> It's a bet on if we believe in HP and if he is going to succeed in this business.... Of course, he's done it before in Kinect and Bergen Energy, and we know his record from earlier. We want to do energy-related [projects], and we want to be in small companies with great minds. It was a perfect match. And the timing was also just perfect for us.

> We really believe in Becour and the business case and the person [...] Companies like that to succeed, they need an entrepreneur who's really all in. And really believes in it [...] and no plan B.

HP's long experience and extensive knowledge of the GO market gave him a *unique status* in the market and brought credibility to the venture in a way that would not have been possible for someone coming from outside of the field. As the chair of Becour's board stated:

> Clearly HP has probably one of the best… probably the person in Norway with the best understanding of how the market works. [...] It <u>is</u> a market today, big money is changing hands, there is money to tap into. So of course, sort of knowing the levers that you need to pull and those you shouldn't is also… a strength of the company.

HP's being on the inside of the Norwegian energy market was a significant advantage for Becour as its founders strived to obtain recognition by the media. HP's status and background ensured that his new venture immediately attracted interest in its business environment and opened doors to get interviewed in various industry outlets. Furthermore, HP's social capital allowed him to gather vital market intelligence typically accessed by word-of-mouth and not easily available to market newcomers.

> Like the phone call that I just had with one of the windmill producers in Norway; talking to him I understood exactly what kind of structures he is seeing when it comes to who's buying, who's selling, who's talking to whom. So, by talking to people, you pick up these small threads of information all around, and that builds a complete picture. It's like a puzzle. (HP, Founder and CEO)

An external enabler detected was the recent significant *development in the GO market prices.* Norwegian energy producers' interest in their share of the GO sales revenues had been relatively low due to the continued low price level. Continuously increasing market prices, however, had turned the revenue share into a more relevant issue, causing an increase in the demand for GO trading services and an interest in price optimization. Becour's value proposition to quadruple GO revenues for renewable electricity producers was thus a powerful motivator.

> It was pretty small money before, and the broker took... [...] yeah more than us. But we didn't care because it was still pretty small money. It was one percent of our revenue, maybe. So... we really didn't care, but now suddenly the value is... five times [what it was] last year. And suddenly, it gets a bit more important. (Director of Market and Business Development in Østfold Energi)

Another external enabling factor was the existence of local *public support systems* for companies such as Becour wanting to develop and commercialize digitalization and sustainability-related innovations. The funding from the public research fund enabled Becour to commence its R&D project around digitalization immediately rather than having to wait for a sufficient revenue stream to build through sales. A negatively influencing external factor was the *turbulent regulatory environment* in Norway, which presented a potential business risk for Becour and generated a sense of uncertainty for its employees and stakeholders.

5.3.2.4 Summary

The findings relating to the period January 2018 – July 2018 are summarized in Figure 14. Two forms of grounding work were detected: *building a core enabling network* and *establishing initial legitimacy*. In addition, several forms of *market work* were identified, and further distinguished into three different subcategories: *reform work*, *relational work*, and *resilience work*.

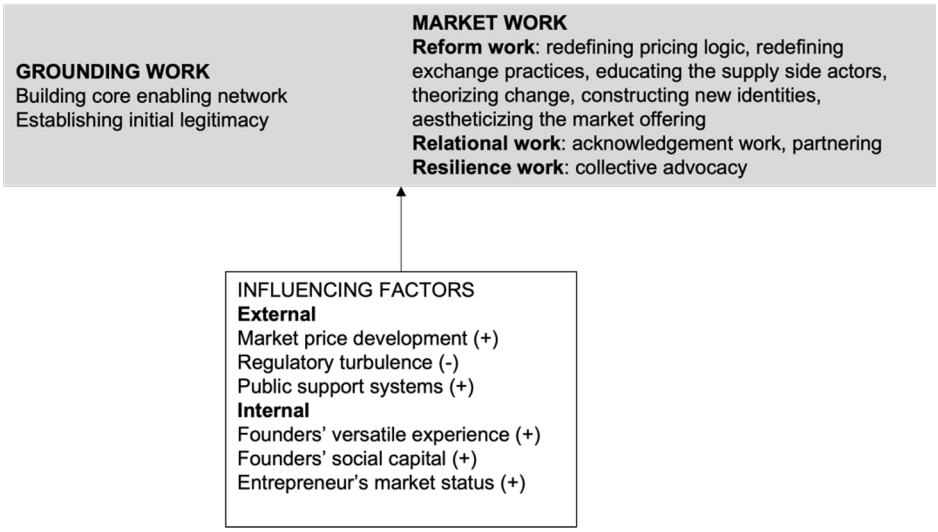

Figure 14. Grounding work, market work, and influencing factors January 2018 – July 2018.

I also found both *external and internal contextual factors* that seemed to have influenced the market-shaping process. *Market price development* and the existence of *public support systems* fostering sustainable innovation had a positive influence on the process, whereas *regulatory turbulence* influenced the process negatively by creating uncertainty and increased risks. The internal factors that seemed to have positively influenced the market-shaping process were the founders' *versatile experience* and *social capital*, as well as the *entrepreneur's market status*.

The grounding work done by the focal actor during this time period did not seem to belong to the subprocess of visioning detected earlier, although visioning continued as the founders continuously adjusted the vision, ideas, and assumptions previously formed based on their interaction with external actors. Whereas the focus of concern in visioning was building a coherent image of a future market and the ways of getting there, the focus of concern now was on legitimizing the new business entity and its market-shaping agenda. Thus, I infer that the grounding work *building a core enabling network* and *establishing initial legitimacy* belong to and were

conducive to a subprocess called *legitimizing*. That refers to an interactive process where the foundation is built to enable the market shaper to enter and operate in an existing market. The grounding work done during legitimizing was again a precondition for the focal actor to advance in the intertwined processes of market-shaping and new venture development.

5.4 Entering the market (August 2018 – June 2019)

5.4.1 Narrative description

After the summer of 2018, Becour became fully operational, and sales started on the demand side of the market. The desired staff structure was completed as two more employees, Anna and Lise, were recruited as client advisers to join the sales team with Paul. Internal resources were also strengthened as Rune and Synnøve started officially working for Becour, although initially part-time. Moreover, Marine continued in a part-time position while finishing her master's thesis. The R&D development project for digitalizing GO trading was formalized with partners and named DINGO ("Digitalized Node trading for renewable energy with GO").

From the start, Becour was meant to appear as a credible global actor. Accordingly, two international partnerships were formed. The first was with a Taiwanese green asset management company Mt. Stonegate, whose CEO HP knew well (Meland 12.06.2018). The aim here was a close collaboration that enabled both firms to access each other's market areas and enhanced the possibility of engaging multinationals. Mt. Stonegate would also gain access to Becour's digital technology. The other partnership was with a USA-based consulting company from San Francisco that provides global renewable energy solutions. HP described the latter as a looser, case-by-case collaboration. The partnerships allowed Becour to offer global solutions to European customers with operations in Asia and North America, and vice versa.

There was little progress in sales volumes during the fall. Initiating discussions with corporations took longer than expected as their purchasing processes were slow. Even finding the right contact person could be challenging. Paul found it difficult to entice corporations merely with GO trading, as most were already attached to other traders. Consequently, several other market offerings were tested, such as carbon accounting, elcertificate cost optimization, bundling electricity suppliers and GOs, services related to solar rooftop PV installations, and advising corporates on selecting an electricity supplier. The idea was to gain a foothold with customers through another product, establish a relationship, and establish a good position to offer GO trading services later. At the same time, the ambition was to sign up at least

one globally well-known brand, which would provide proof-of-concept to stakeholders. A list of what Becour referred to as "*dream customers"* was formed comprising MNCs with high-level energy consumption and a public commitment to renewable energy, such as those within the RE100 initiative. Although Becour, in collaboration with Mt. Stonegate, managed to set up meetings with most companies on its list, discussions did not lead to business contracts.

On the GO supply side, Becour also faced unexpected challenges in signing producers during the fall of 2018 due to an unprecedented increase in market prices that made producers hesitant to use external service providers in the GO trade. Finally, at the end of the year, the venture signed PMAs with three producers. However, these contracts did not increase Becour's inventory as expected because the producers' GO supplies had largely been sold by the previous trader at the end of its contract.

At the turn of 2018, Becour was still in a *cash burn phase*[7] with little revenue coming from sales. HP prepared to initiate cost management measures and even a shutdown if the revenues did not increase early in 2019. To obtain some money flow, HP started doing OTC trading. With long experience in OTC, he was well-equipped for it, but the decision was forced due to the venture's financial situation. HP started approaching potential new investors in January to increase the company's equity capital and to gain financial relief. HP hoped to close Becour's second issue of shares during the first quarter of 2019.

The year 2019 started with a sales success, as the Norwegian RE100 company Elopak signed a GO contract with Becour. This was the first major sales win and a cause for celebration. During the spring, other deals were signed, although none as large as hoped for and not as many as were needed to secure cash flow. The sales team was very active, continuously traveling to meet customers face-to-face. A "*mockup*" of the digital GO trading platform was created and used as a sales tool. Toward the summer, the hopes of signing a well-known brand were high as Becour received invitations to tender by several large corporations in e.g, pharmaceutics, car manufacturing, telecommunications, and fast fashion. Developing complex offerings was highly resource consuming but being pushed forward in the tendering processes was motivating and provided valuable learning.

In June 2019, however, Becour lost all the major tenders. An initial conclusion was that customers did not perceive Becour different enough from competitors, and that companies' final procurement decisions depended on price. It thus seemed extremely challenging to sign customers with the higher margins essential in Becour's business model. Not having reached sales objectives and lacking revenues,

[7] A cash burn phase is typical for startups, where the company is not yet self-sustaining but operates on the cash provided by the shareholders.

discussions were initiated with the external investors for what HP called "*a bridging financial solution"* until new capital was found. The search for new investors had been unexpectedly difficult, which HP ascribed to his lack of experience in shareholder negotiations. Again, HP prepared to adjust Becour's cost base, but he remained positive and continued to believe in the business idea. At the end of June, Becour's management group met for a strategic discussion on the company's situation: HP believed they could find the right way forward.

Even as the sales crisis unfolded, there were positive developments in Becour's network. First, a reasonable number of producers PMAs were signed in the spring and an extensive global distribution network was built. Second, Becour had started discussions with DNV-GL (DNV) on a potential collaboration. DNV is an international accredited registrar and classification society headquartered in Norway and operates in over 100 countries. It provides services for several industries, including maritime, oil & gas, renewable energy, and electrification sectors. The business area within DNV interested in Becour was Business Assurance, which offers verification, certification, assurance, and training services to companies' products, processes, and supply chains (DNV 2020). DNV's interest in Becour was part of a larger strategic transition unfolding in the corporation due to the digital transformation. DNV invited Becour to join a "*sprint"* over the summer to see whether the two companies could collaborate on what they referred to as "*assured sourcing of renewable energy with guaranteed origin globally"*. To better understand the market actors, Becour and DNV started conducting a series of interviews that included renewable energy producers and large corporate buyers from various fields.

During this period regulatory turbulence continued. In September 2018, Oslo Economics delivered its report on the GO scheme to the Norwegian Ministry of Petroleum and Energy. As a follow-up, the Ministry asked for consultation statements from interested parties through a public hearing. Becour delivered a response with arguments supporting the GO system, as did Energy Norway (Kropelien & Solberg 19.12.2018), for example. By June 2019, however, there was still no output from the hearing when a proposal called Document 8 was presented to the Norwegian parliament by the Labor Party, challenging the EU's forthcoming revised Renewable Energy Directive. The Labor Party's aim was to dismantle the GO system in Norway on the grounds that paying for GOs in a country with nearly 100 percent renewable energy production was a major economic disadvantage for industrial manufacturers. Industry Energy, the trade union for workers in the industry and energy sectors lobbied for the proposal.

5.4.2 Analysis

5.4.2.1 Grounding work

The grounding work detected during this period is referred to as *testing core assumptions*, entailing the assumptions on how certain facets of the market needed to change to reach a more sustainable path and how those changes could be induced through the venture's business model. Some of the core assumptions regarding market actors had already been tested before full market entry (e.g., when approaching the investors and some supply side actors), and now Becour also started testing its assumptions on the actors on the demand side. Large international corporations were the primary target based on the assumption that they were pressured by multiple stakeholders to show a verifiable impact of their sustainability efforts. However, those corporations often lacked a detailed understanding of the GO system and of specific alternatives that could deliver verifiable impact. This initial assumption is evident in a comment by Paul:

> I think companies probably in the earlier days bought on faith. And on trust. But I think now, there really needs to be this sort of clear link between the investment and the impact. Because people aren't willing to waste money, and they definitely don't want to be wasting money without getting any environmental impact.

As the company started garnering feedback from the market, constant iterations were made, especially to the value proposition offered to corporate customers. Becour initially steered away from the GO offering and tested various other renewable energy-related offerings. As the interest from its main target group increased, Becour focused more on the GO offering, but the interest from large corporations did not translate into business deals. Subsequent data analysis indicated that the problem of not gaining business deals stemmed from the way Becour evaluated potential customers during this period. Instead of considering whether the customer really needed its offering, Becour assessed and chased potential customers based on the benefit that could be gained from being attached to their known brands.

> At the time it was just "we like this brand, we will just try to be the GO supplier for this brand in any way. [...] And we talked also about this 80/20 model and everybody was so positive to this model. And they all thought that it was really nice to have that much transparency because they didn't know anything. But they knew so little about the GO market that, at that point, it was almost just explaining. Like we almost had a workshop with every meeting because we had

> to explain what was the failure in the market and how we would fix the failure. In the end, we came out with a higher price. So, the players that we talked to, they thought it was interesting when we talked about the GO market but when it came to the price, they'd just look for the cheapest GOs that they found. (Marine, Market Analyst)

Becour had also not accounted for large corporations' institutionalized practice of inviting tenders, under which the lowest price was essentially the single most important purchase criterion. Some team members seemed to interpret this as a clear signal that corporations' interest in transparency and verified impact was not strong enough to pay any extra for GOs. This interpretation was reinforced because most of the tendering corporations had given the impression during negotiations that price was not their first selection criterion and that Becour's value proposition was compelling and well aligned with their sustainability targets.

> We were pretty certain that we were going to get it [a deal]. I mean, the guy said before the tender that "you know we really want to use you guys". And also, he wrote the criteria for the tender basically using our text. But when it came down to it, he sort of said: "well, yeah price is actually the most important thing and it's not really up to me; it's up to my boss". (Paul, Chief Commercial Officer)

If Becour started competing on price, it would just be like any other trader on the market, and the promise of growing revenues for producers would not be fulfilled. Then the firm would be able to do little to alter the market status quo. Moreover, being forced into price competition severely complicated Becour's ability to make money based on its revenue model.

> It basically becomes like a race to the bottom. So, I think we've kind of realized that our assumptions were too optimistic. I mean, we can get these bigger companies. But that's not really the issue. It's just that we can't make any money on them. (Paul, Chief Commercial Officer)

Becour members realized that they had had a misguided assumption on how receptive large corporate customers would be to novel ideas and practices, as shown in the quote by HP below. This learning paved the way for a necessary pivot in some business model assumptions.

> Either they are highly educated on the topic, and they are falling into the commoditization trap, or they don't know anything, and they need to learn. So actually, both categories need to learn. Some think they know, and they just line

> them [GO traders] up and say: "we want the cheapest GOs, give me your offer". And others say: "we don't know what this is, we are in a strategy process, it will take 6-12 months, come back when you..." or "let us know everything you know, and we will take it into our strategy". So, it's a knowledge gap which has to be bridged. And that was something we thought we were beyond. I thought we were beyond. I thought they were more quality focused. (HP, Founder and CEO)

5.4.2.2 Market work

Under considerable pressure to differentiate itself from the competition, Becour started early to talk about developing a digital solution for GO tracking and trading. Initially, the idea of a digital solution seemed too abstract for companies as nothing similar existed. After Rune created a mockup of the digital platform, Becour was able to perform *reform work* of *visualizing the novel technology* for potential customers. Although a very early version of the future platform, the mockup simulated GO buyers' transparent and direct access to renewable electricity with guaranteed origin and was received positively in customer meetings. The mockup was also important to gain feedback from potential users for the IT development. Nevertheless, presenting the technology through the mockup was not without issue, as some potential customers became even more confused.

> For some customers, it's too far ahead to talk about that way of buying. And that is one of the things we do know, we have to get off showing too much of the technical stuff. […] I think we might get too fascinated about the technology or the sort of the coolness of all the things you can do, instead of thinking "ok this is what the customer needs". (HP, Founder and CEO)

Lacking an actual platform, Becour had no way of demonstrating the true value of its new solution over the existing one. Customer confusion allowed competitors to portray Becour as the single market actor who made a standardized and simple market practice unnecessarily complex just to differentiate itself. HP inferred that because the current market offering was built on the trader's ability to provide low prices for the customer, it was easy to dismiss Becour's novel and seemingly complex ideas as mere marketing tactics. It thus seems that Becour started presenting the novel technology too early. The first requirement was to increase corporate buyers' knowledge and skills around the GO market, so that they could understand the market failure. Only then would they understand the value of a fully transparent digital solution. Consequently, Becour began to invest significant effort into *educating the demand-side* market actors on the benefits of digitalization.

> We have to realize that customers have to be led into this: They're not ready. Because they haven't heard about this before. So, it's not that they know what they want. It's like you have to train them to understand the value. Because they're trained to be relaxed based on very simplified solutions. (HP, Founder and CEO)

Simultaneously, Becour members felt that by educating the demand side on the general functioning of the GO market and its market failure, the venture could engage them in its market shaping. Becour's persistence and willingness to share its market knowledge with corporate buyers were rewarded with heightened interest. This enhanced the recognition afforded to Becour but, at the same time, seems to have created a false sense of progress regarding sales.

> It was very exciting because you feel that you are getting somewhere when you talk with people, and the response is positive. (Marine, Market Analyst)

It turned out that Becour's openness also hindered its progress. Through workshops and meetings several companies used Becour to learn, but when it came to signing business deals, they declined. However, if Becour was to convince anyone of the changes needed in the market, it had to share its knowledge and ideas. This dilemma is exemplified in HP's description concerning the tender process by a global fast fashion retailer.

> We are running the risk of educating the market. Because that is one of the feedbacks from [the fast fashion retailer]. Because as you saw [with] the offer that we made, they appreciated the ideas regarding communication very much. And they thanked us for the inspiration. [...] So, I'm quite sure [the fashion retailer's current service provider] will get some questions that are leading them to create solutions that are very well aligned with ours.

It is possible that Becour was inducing changes in buyers' thinking through its market education and that buyers started demanding more transparency from their current service providers. However, as a for-profit company, it was essential for Becour that it could also reap financial benefit from this reform work.

Becour members' assumption about the need to change market actors' view of GOs as commodities proved correct. The venture strived to *reframe the market offering by altering current terminology*. HP suggested that Becour should reduce the use of the term 'GOs', and instead talk about "*renewable energy with guaranteed origin"*. Talking about GOs and explaining the trading system seemed to only reinforce the current commoditization. By altering the terminology, HP thought that

Becour could underscore the unique attributes of GOs. Despite his realization, HP struggled to get the sales team to internalize the importance of changing the terminology. This was an early sign of internal misalignment regarding Becour's sales approach, which grew in the coming months.

> I'm still struggling with sort of getting my colleagues to really to start to talk like that. They still talk about Guarantees of Origin. As a system. We sell Guarantees of Origin, we don't sell renewable energy. We have to go from selling a tracking mechanism to selling impact. (HP, Founder and CEO)

At the same time, there were clear indications that some of the things that HP was thinking did not always translate to the other team members.

> A lot of things start in Hans Petter's mind and then slowly open up to the rest of us. (Lise, Client adviser)

A key form of *relational work* for Becour was *partnering*, manifested during this period in its initial engagement with DNV. HP realized that the possibility of achieving Becour's market vision would be significantly enhanced if it had the support of DNV's resources, customer base, and business expertise. DNV's global operations could provide Becour with a completely different kind of reach than it could create on its own. Without the digital platform, it was difficult to differentiate from incumbent service providers, but working with an esteemed corporation that believed in Becour's market vision could significantly influence the startup's legitimation. In turn, DNV would access Becour's creativity, agility, and technological competence.

> If DNV really catches on to this, they will shape the market for us. (HP, Founder and CEO)

The market actor interviews conducted with DNV during summer 2019 were an important confirmation of Becour's belief based on its subjective criteria that the thinking of most corporations around renewable electricity sourcing was not sufficiently mature. The corporations had not considered how they should source renewable energy, how they could utilize it in their communications, and how they could benefit from its digitalization.

> They were talking about renewable energy in a very immature way. Many of them were confirming that they were just starting to build a strategy around renewable energy. So in order to get them on the right track, making sure that

> they understand the difference between GOs and tracking and PPAs is important in order to level the playing field. It was not possible to talk about digital tracking before they understood what renewable energy is, and what potential they have in their portfolio. (HP, Founder and CEO)

> So, to go in and shape the market in a way, shape the customers would be a benefit both for the old market but also for being positioned when they're ready. (HP, Founder and CEO)

Although Becour networked with other actors to advance its business, as all businesses do, the venture also performed *strategic networking* as a form of *relational work* to support its market-shaping process. The company signed up as a partner with Norwegian Centre for Energy Transition Strategies (NTRANS), a newly established, large research center focusing on the role of the energy system in the transition to a zero-emission society. There was no business incentive to doing so but participation in the project was seen as strategically important in that it provided another arena to voice Becour's concerns about the GO market failure and present its market proposition. Becoming a partner in the research center also offered access to new knowledge and new interested parties from both the business and research areas. Moreover, participation provided legitimacy by positioning Becour as an equal partner among several large and influential energy market players supporting the research center.

> We are a small startup company together with like Equinor, Hydro, very huge companies in this project. Because we have another view on things. So, we're seen as important to have onboard in the project. (Synnøve, Co-founder and Head of R&D)

Besides reform work and relational work, Becour continued its *resilience work* to support the relatively newly established institutions of the GO system. After the publication of the Norwegian GO market analysis by Oslo Economics, the Norwegian Ministry of Petroleum and Energy (OED) organized a public hearing inviting consultation statements from interested parties to support its evaluation of the GO system's future in Norway (Regjeringen.no 21.09.2018). By sending its own 8-page statement (Kildal 21.12.2018) Becour was performing *advocacy* on an *individual level* while simultaneously continuing *collective* advocacy by participating in the Reference Group for Guarantees of Origin.

5.4.2.3 Influencing factors

During this period, I was able to detect external and relational influencing factors. A positive relational factors was that Becour acquired *more supporting actors in its network*, which helped secure resources and legitimacy. Becour gained access to global markets through its international partnerships in Taiwan and the U.S.A and was able to portray itself as a global player. Moreover, preparing offers for the tender processes run by large international corporations forced Becour to quickly expand its global distribution network. When necessary, the venture could now provide EACs for corporate buyers through local renewable energy solutions in most markets worldwide. Becour established a network of research partners collaborating on the DINGO project to support its R&D operation.

The venture acquired legitimacy, which manifested in its strong supply-side customer base by the summer of 2019, having gained a few relevant customers on the demand side, and the discussions initiated with DNV. The firm also received many invitations to present at conferences and seminars, was asked to provide expert commentary for the industry media, found market actors referencing its social media updates and conference presentations, and people recalling the company name when approached over the phone, all of which indicate Becour's new-found legitimacy. Becour's enabling network by summer 2019, extended from the core enabling actors, is depicted in Figure 15.

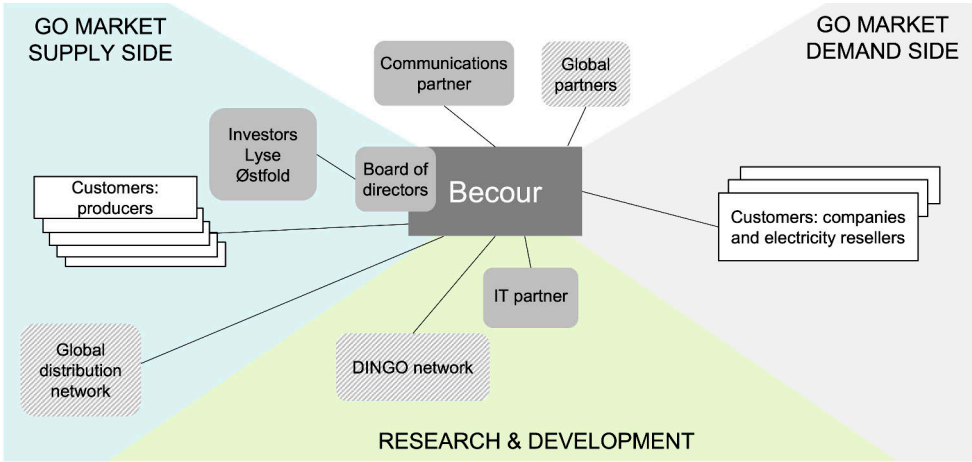

Figure 15. Becour's enabling network by summer 2019.

Another relational factor that significantly influenced Becour's market shaping was *losing several tenders* in a short period of time. This triggered the company to pivot some of its key assumptions, especially those related to key target customers.

Although losing the tenders was disappointing to Becour, this factor's influence on its market shaping cannot be characterized as clearly negative or positive.

When Becour was founded, the rising GO prices had been an external enabler for the venture as it increased producers' interest in optimizing their GO sales revenues. However, an *extreme price increase* during the fall of 2018 had the opposite effect, as it made many producers more hesitant to sign PMAs with external service providers. The prospect of making a lot more profit on GOs motivated producers to consider handling trades in-house. The situation slowed Becour's supply-side customer acquisition, leaving its GO inventory small during its first months of operation and reducing the attractiveness of its offering to the demand side. Acquiring inventory also slowed as a result of competitor action. Most renewable electricity producers were tied into PMAs with other traders and their GO service providers, which made it difficult to switch to Becour. For example, Becour's owner Østfold Energy, who also became its supply-side customer, faced challenges as its current service provider threatened to sell out their GO supplies upon termination of the contract so that Becour would not have anything to sell.

> Of course, they are taking the contract and reading it with lawyers and saying ok: "you are going to quit, and we are going to force you to sell everything on a three-year basis. We have never done that before, but the contract is saying we are allowed to do that". And we are saying: "are you crazy, this is not the way we have done it for eight years". Yeah, we have also hired lawyers now. (Director of Market and Business Development, Østfold Energy)

This kind of retaliatory action was normal *competitive behavior* in the market and cannot be interpreted as a reaction to Becour shaping the market. However, it shows the power of the incumbent service providers and the unpredictability of the market even for an experienced actor such as HP. On the other hand, Becour did succeed in winning over supply-side customers. A major enabler of that success was the *support from its investors* Lyse and Østfold Energy. Being connected to these well-known energy production companies gave Becour credibility when negotiating PMAs with other producers and leverage against the competitors.

> We see the benefit of having Lyse and Østfold as owners as very high. [...] We see that to increase that strategic platform is of high value because that gives us legitimacy and also it gives us inventory. So, it gives us access to their portfolios, and their logos. That gives us legitimacy when it comes to talking to other producers. (HP, Founder and CEO)

Moreover, Lyse and Østfold shielded the new venture from failure occasioned by a lack of revenue by providing *patient capital*. The term refers to equity or debt that is provided to a venture in the hope of capturing benefits (including but not limited to financial gains) in the long term, and which is not pulled out even when the venture does not react to short-term challenges and pressures in the market (Deeg & Hardie 2016). In other words, the investors' primary interest remained in the long-term health of the company rather than its short-term economic value creation even in conditions of uncertainty.

> The investors are sort of not just being there with money, they want to be there as what we call strategic, not industrial. Because they're not big enough to be industrial but they're strategic, so they are sort of offering their help. (HP, Founder and CEO)

During this period, the *overall competition in the market* for GOs continued to grow and new players entered the field almost every month. HP estimated that some years back, there were 30 to 40 companies working with GOs in Europe, whereas by 2019 hundreds of companies were in the field operating worldwide. Driven by the opportunities arising from digitalization, electrification, and renewable energy, some actors were also developing digital solutions for renewable electricity sourcing. The tightening competition influenced Becour in two ways. First, it gave the venture internal confidence that it was heading in the right direction. HP believed Becour had been able to gain a lead by being the first GO service provider to talk about transparency, the 80/20 model, and the market's need to create verifiable sustainability impact. Furthermore, the market could only be shaped if other actors joined.

> If we were totally alone, it would be a very heavy-lifting job to create the market. If we were the only ones seeing in this direction, it might be that we are wrong. But when we see that this direction is catching interest and new competitors and new market entrants are going in the same direction, and the old ones are starting to pick up our messages, that's a confirmation of our strategy. (HP, Founder and CEO)

Second, the team members came under pressure to quickly sign up customers to maintain the firm's forerunner position. HP predicted that Becour would soon find competitors also stating they wanted to "*clean up this market*." He also expected attempts by other traders to "*piggyback on the drive*" that Becour had created, backed up by much larger resource bases.

> It's starting to become a race. There are two market positions that have not been taken, which we are competing about, and one is to become the one that is able to make renewable energy a branded product, and the other one is to be the one that digitized the tracking mechanism. (HP, Founder and CEO)

Whereas the digital transformation was an external enabler for new business ideas like Becour's, it was a risk for many existing ones. DNV's interest in Becour was influenced by the fact that its own business model was threatened by digitalization, such as novel blockchain enabled solutions, which would remove the need for assuring individual structures such as gas pipelines, and power plants. Hence DNV was eager to explore a business model with Becour where both companies would get a small payment for each micro transaction on an assured digital platform. This could provide a novel revenue stream based on volume rather than consulting hours. By verifying Becour's GO tracking and trading platform, DNV could help with building a much larger market for it, while tapping into an advanced digitalization project with unique knowledge and skills needed in the unfolding transformation.

Companies' insistence on conventional tendering practices and price prioritization indicate *inertia* generated in existing, stable market configurations where companies operate under similar strategies, practices, and structures (Jaworski et al. 2020; Storbacka & Nenonen 2011a; Storbacka & Nenonen 2015). The dominant market logic tends to cause what Sull (1999, 42) calls "active inertia", that is continuing or accelerating the same activities as before even though a shift in the market would require a significant change in the mental models of companies (Nenonen et al. 2014). In Becour's case, existing structures were difficult to influence as company-run tenders were usually the responsibility of an energy procurement manager, who lacked the authority to reprioritize the selection criteria. Hence, the access to highest corporate leaders became ever more important, but to date, the efforts in this area had created few concrete sales results beyond increasing the overall recognition of Becour.

Companies' responses in the DNV/Becour market actor interviews reveal a potential explanation to corporate inertia regarding changes in their GO sourcing. Several actors implicitly or explicitly described their approach to GOs as pragmatic because it was the only convenient option to achieve their renewable energy targets (if compared with PPAs and own production). As one of the interviewees said: "*the system is there, and we have to deal with it.*" Even if companies had doubts about the GO system's impact, it was still legitimized by being a legal system created by the EU, and practical enough to fulfill companies' minimum obligations. This indicates an overwhelming bias for market logic, leading to an ostensively sustainable market. Furthermore, GO sourcing typically represents only a small fraction of CSR reporting, which includes multiple complex items such as overall

energy usage, biodiversity loss, water and chemical usage, waste management, material recycling, employee inclusion and diversity, human rights, and occupational safety. As an example, one of the interviewees clearly stated: "*this is only a small part of our sustainability report, so it is not very high up on our agenda*."

Another potential explanation for corporate inertia could be that purchasing GOs remains merely a symbolic environmental initiative aimed to project the company's environmental commitment externally without ensuring that the activity has true environmental impact (Bowen & Aragon-Correa 2014). Like utilizing environmental certification, GO purchasing may be a strategic response to external pressures from corporations to show environmental compliance (Martin-de Castro et al. 2017). Delmas and Montes-Sancho (2010) argue that symbolic environmental management can be considered a mechanism to enhance corporate environmental legitimacy without actually improving environmental performance. Whether symbolic environmental commitment played a role in this case is of course hard to ascertain, as the companies would not openly admit it.

Once Becour had established legitimacy in the market, the team members started detecting reactions from competitors; early signs that the market shaping was having a small impact. As the Norwegian market was relatively small and HP extremely well connected, he heard rumors about competitors' actions and statements. He was told that some competitors portrayed Becour's value proposition as *naïve* in a business based on purely financial factors. The rumors annoyed HP but also had a positive influence as they confirmed to him that Becour's competitors were acknowledging the newcomer's change agency. Even if they did not yet consider Becour as a major threat to their business model (based on hiding prices), HP was convinced that over time the customers Becour educated about the market failure would start to ask questions of their providers that would erode their legitimacy.

> For me it's more a matter of time. [...] the traders won't give away the business easily but unless they change their business model, the customers will start to ask. [...] "Who do you buy from? "."I don't know." So, then you don't know [what happens] to the money either. (HP, Founder and CEO)

5.4.2.4 Summary

The findings related to the period August 2018 – June 2019 are summarized in Figure 16. During this time, the market shaper's focus was on one form of grounding work: *testing core assumptions*. In addition, several types of market work were identified in the categories of reform work, relational work, and resilience work.

I detected *external factors* that seemed to influence Becour's market shaping. Market price development turned out to be a constraining factor during the first

months after Becour's full market entry. Similarly, although the existence of competing logics in the GO market had positively influenced the initiation of the market-shaping process, it now had a constraining influence through implicit *corporate inertia*. Increased competition in the market seemed to have both a positive and a negative influence on Becour. No internal factors were detected during this time period, but several *relational factors* influenced the process. The growing network, international partnerships, and investors' support and patient capital all seemed to have a positive influence. Competitors' reactions had both negative and positive influence. Losing the multiple customer tenders pushed Becour to pivot its business model elements, and albeit significant, this factor cannot be categorized as positive or negative.

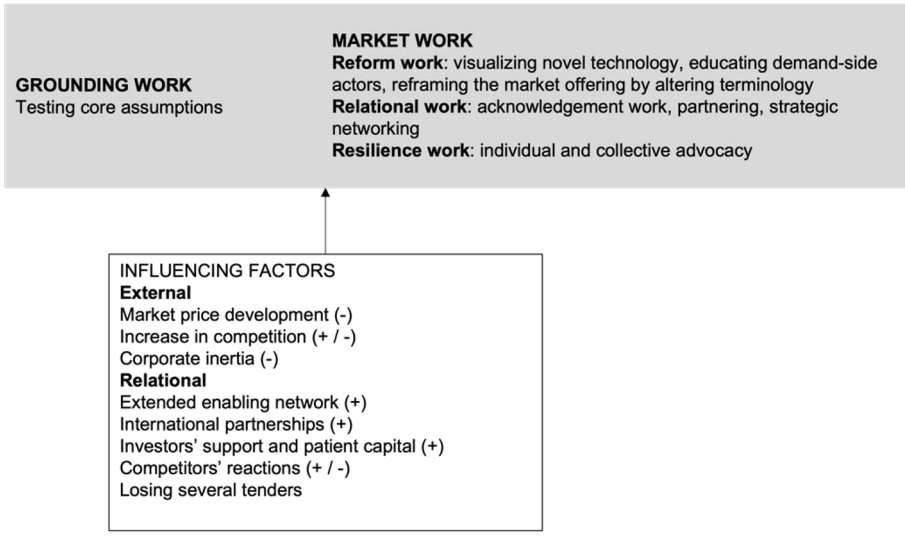

Figure 16. Grounding work, market work, and influencing factors August 2018 – June 2019.

Although the market-shaping subprocesses of visioning and legitimizing continued during this time, the grounding work done by the market shaper indicated another underlying subprocess driving forward the intertwined processes of market shaping and hybrid new venture development. The focus of concern now became involving actors beyond the core enabling network to join the change agenda. I inferred that the grounding work *testing core assumptions* belonged to and was conducive to a subprocess of market shaping called *engaging*. Engaging here refers to a process of inducing other actors to participate in market shaping to deliver the market vision and thereby the value promised to all stakeholders. It is important to highlight that as with the other subprocesses, the starting point of engaging was not clear-cut.

However, it was at this point that it became most prominent and was enabled by the grounding work undertaken in the previous phases.

5.5 Pivoting (July 2019 – January 2020)

5.5.1 Narrative description

After the management team's strategic discussion about the future of Becour, the founders decided to pivot some of the business model elements. The first pivot concerned the main customer target group. Following the key learning point that the resource-intensive corporate tendering processes were not bearing fruit, they should be put on hold. Moreover, Becour needed to withdraw from extensive workshops and meetings with new companies that only resulted in sharing its market insight and educating the customer without any commercial benefit.

Relatedly, the other major pivot concerned the main channel used. The corporate face-to-face sales process was too slow and resource intensive for the new venture; however, the digitalized GO trading platform was not yet ready. In the DINGO project, developing a front-end solution (a customer interface) had been secondary to the back-end development (database and technological infrastructure). Now, due to dragging sales, Becour decided to speed up the front-end development. The team hoped that a digital sales channel would provide a way to reach a wider audience in a resource efficient manner while giving Becour positive visibility and strengthening its image as a first mover. Some of the DINGO project funds were steered into a separate initiative to create a webshop for corporate buyers where they could buy GOs by matching their own preferences with the profiles of renewable electricity plants. The web shop named REact was created over the summer and officially launched in October 2019. REact was not initially connected to the DLT-based platform developed in the DINGO project, and the GO trades thus had to be completed manually. However, it represented the first attempt to provide a digital market space for corporate buyers, and could later be incorporated into the finished platform.

Becour and DNV had been pleased with the summer *"sprint"* outcome and decided to formalize their partnership. This move was supported by the market actor interviews, which had shown significant interest from renewable energy buyers for solutions with third-party insurance. The collaboration aimed to develop Becour's digital GO tracking and trading platform into a *digital ecosystem* operated by Becour and assured by DNV. The system would render micro transaction-based revenues instead of revenues based on contract fees and hours.

Pilot projects were a key part of the DNV collaboration. Accordingly, Becour searched for a handful of companies with brand visibility and complex renewable

energy sourcing needs. The pilots were meant to allow the development of scalable market offerings and deliver external legitimacy. In the fall of 2019, concrete negotiations started with Ingka, the operator of 383 IKEA stores in 31 countries, leading to a pilot project offer. The objective was to create a solution for a real-time matching of Ingka's own wind production with the consumption in its warehouses. If successful, this would be the proof-of-concept Becour had been hoping for. The solution would be complex enough to allow the full utilization and further development of Becour's digital platform. Also, through Ingka's connection to IKEA meant Becour would be associated with a famous brand with highly ambitious sustainability goals. By the end of 2019, an important milestone was reached as all slots for pilot projects were filled.

Throughout the fall of 2019, the search for external owners continued to drag but finally in October renewable energy producers Akershus Energi and Glitre agreed to invest in Becour (Greenfact 30.10.2019; Vilnes 28.10.2019, 01.11.2019). The financial security from the new ownership base, the prospects of the DNV collaboration, and a full list of pilot projects all contributed to HP's conclusion that Becour had established its business model.

Nevertheless, the problems with sales remained. The pilot projects were not financially driven and did not significantly increase cash flow. At first, the key reason for the sales challenge seemed to be corporations' lack of market understanding and restrictive tendering practices. However, HP still found it curious and frustrating that Becour's value proposition had not gained more business traction. He felt that the social momentum was on Becour's side with the attention afforded to Greta Thunberg's climate strikes, grave warnings from the IPCC, and many corporations publicly committing to action and joining initiatives such as RE100 and Science Based Targets. HP felt that Becour's market proposition was a good fit with the overall sentiment in global business and the increasing need for transparency.

While HP's analysis of Becour's sales evolved, important internal developments were taking place. Throughout the fall, friction grew between the sales and R&D operations, which was accompanied by some discord over responsibilities within the sales team. By November 2019, HP concluded that the challenge with sales was connected to these internal issues. He felt that Becour's way of selling to companies was misguided and that the internal resource setup was holding the company back. Changes would be required.

First, the separate contracts with Frank Hugo and Marie as sustainability advisers to large organizations were terminated after consensual discussions. Although their work was highly valuable and particularly important when Becour started, it had become less important as the company had established itself. Second, HP decided to take a bigger role in demand-side sales. He felt more personal exposure was needed

to win over customers, along with the tenacity to persuade the often-reluctant corporate buyers. Although Becour had been successful in accessing many big brands, HP's view was that business opportunities were lost by not being sufficiently passionate and daring. The discussions with the sales team culminated in the reorganization of Becour in January 2020. Paul and Anna decided to pursue other career opportunities, while Rune agreed to work full-time, and Marine's contract was made permanent.

5.5.2 Analysis

5.5.2.1 Grounding work

During this period, Becour continued the grounding work of *testing the core assumptions*, although now based on the pivot that had been deemed necessary. The main pivots concerned the sales channel used and the customers targeted. Another form of grounding work detected during this period was *developing shared value propositions*, which manifested most clearly in Becour's collaboration with DNV. The purpose of this grounding work was to guarantee the engagement of an actor, whose support was pivotal in building a wider reach and enhancing the new venture's chances of shaping the GO market.

Becour and DNV started ideating four different value propositions and created work packages around each. The first was built on DNV's core competence of consulting. As was learned, the demand side did not have enough market knowledge to fully grasp the added value of digitized GO trading. Consulting was thus seen as a necessary "pre-step" to prepare the customers. The second work package was based on DNV's third-party assurance of Becour's digital platform, including the time matching algorithm, country matching, transparent pricing for certificate sellers, and avoiding double counting certificates. The third work package entailed finding solutions to assure renewable energy deliverance in countries where a certificate system was either missing or of low quality. The fourth work package concerned verification of the impact from GO trading. The aim here was to help producers verify that their GO revenues would be re-invested in a way that made a positive impact. However, what constituted that impact remained open to interpretation at that stage. Becour and DNV engaged Statkraft, the Norwegian state-owned hydropower producer, in a pilot project around impact verification and initiated a new round of market actor interviews to learn about their perceptions on impact.

5.5.2.2 Market work

Becour continued *reform work* by *educating the demand-side actors* about the functioning and market failure of the GO market. Moreover, the frustration with what Becour members experienced as corporate inertia made them sharpen their rhetoric toward large corporate buyers and *theorize change by clarifying the consequences* of not adopting new market practices. It was underlined now that while striving for the lowest possible GO prices, companies were participating in upholding the market failure and that unless they could provide verified impact claims from their GO sourcing, they made themselves vulnerable to greenwashing accusations.

> "You push the prices so low that nothing happens." That's what we train now, we're changing the story to actually say: "sure you can do it, but you are risking becoming accused of greenwashing because nothing happens." (HP, Founder and CEO)

As for the GO supply side, to date Becour had focused on forming alliances with producers, striving to acquire inventory by enticing them with the value proposition of higher sales profits. Now that the venture was also acquiring some demand-side customers, it needed to focus more on the change that was required from the supply side to deliver its promised verifiable impact. A significant change seemed to be needed in suppliers' practices. The data from the DNV/Becour market actor interviews supported HP's conclusion (based on his long experience with producers) that most renewable electricity producers had only focused on creating extra revenues rather than on building systematic approaches to demonstrate the impact of GO sales on their production. As an apt example, when asked about the motivation for selling EACs, one international producer replied: "*pure and simple: bottom line*." When the same producer was asked about the impact GO sales profits had on the company, the answer was: "*no impact or purpose in particular. We don't really track what the money is going to*." The interviewed producers did express interest in ways to earmark the GO revenues, but only if it meant greater sales profit. However, there were also some positive signs of gradual progress, as the following observation by HP shows.

> I got into a meeting a week ago, where that discussion actually came up among the [incumbent energy producer's] people. So, they were saying to each other that "the real problem is that we're not earmarking money". That's the first time I've ever heard that. So, there's a concern that they might lose out - lose this revenue stream because they're not able to convince their customers that they are doing good with this money. (HP, Founder and CEO)

Based on these insights, Becour *theorized change* to the supply-side actors by *pointing out consequences* of merely harvesting the highest sales revenues from GOs. Becour argued that this would not be enough in the future and that the producers needed to start creating the processes for documenting their money flows from GO sales. Becour argued that when energy users' demands for impact increased, it would increase producers' risk of losing revenues unless they could show a clear connection between GO revenues and investments that increased the sustainability output of the market. After all, the market was not originally created to only support existing renewable production but also to create new production.

Alongside its reform work directed at the market actors, Becour continued its efforts to *redefine the market offering*. The company used appealing images of specific power plants in its communication materials and altered the terminology used from GOs to "*renewable electricity with guaranteed origin"* to support the perception of a unique product. Now, Becour's reform work also entailed *concretizing environmental value*, that is, the non-concrete elements related to the market offering. A key part of Becour's market proposition was that a company's GO purchase should have real sustainability impact. However, the company had thus far talked about impact on a very general level, typically referring to an increase in renewable energy production and a decrease in CO2 emissions. Now it was apparent that the concept was perceived in various ways by different market actors. Moreover, HP's own ideas around impact had evolved over time.

> In the beginning, I was thinking that's more renewable energy production. But it's not just that. The basic impact is that you have chosen to buy renewable energy as such. So, the first level is to say, "yes, I have a contract with Guarantees of Origin." That is impact number one. Then it opens up a myriad of different alternatives from reinvestments to fish ladders to providing for solar panels in Bangladesh, to… could be a lot of different things. (HP, Founder and CEO)

Consequently, Becour and DNV initiated a pilot project with Statkraft, including another round of market actor interviews to learn about their perceptions and definitions of impact. This data would be used to operationalize the non-concrete elements of impact into a digital market offering. Becour's idea was that allowing corporate buyers to choose GOs based on their own definition of impact would provide them an opportunity to express their corporate values to their audiences.

> It's not about renewable energy as such, it's about identity. (HP, Founder and CEO)

Becour's reform work also targeted modes of exchange in the GO market. By launching the web shop REact, Becour provided corporate buyers with a new kind of channel to connect directly to the sources of renewable electricity. In other words, Becour was *re-devising the market* to increase the agency of demand-side actors and thereby to decrease the agency of conventional intermediaries. Upon its launch, REact was meant to be an "*experiment*," a base to build on to discover the possibilities of a digital customer interface for GO sourcing. A key function of the webshop was to provide feedback and learning; it was intended to be changed and rebuilt based on how the users responded.

An idea proposed in an internal workshop led Becour to start referring to REact in its external communication as the "*Tinder for renewable energy*" (see Figure 17), because it allowed end users to choose renewable electricity based on the production plants' profiles. An association was thereby created to the popular dating app Tinder where users select preferred companions based on other users' profile pictures and introductions (Becour 14.02.2020).

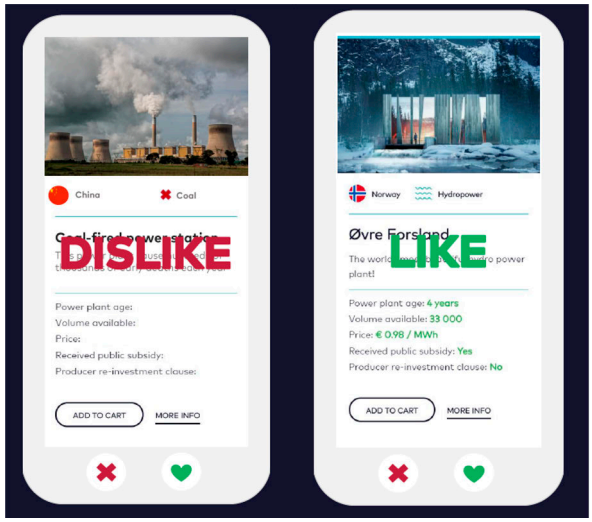

Figure 17. Associating REact with Tinder.

By associating REact with Tinder, Becour was performing *mimicry*, a type of institutional work for creating new institutions, where new practices are associated with existing sets of practices, technologies, and rules to ease adoption (Lawrence & Suddaby 2006). In HP's words, Becour also strived in this way to "*add taste and smell*" to renewable electricity and make it more emotionally appealing to the demand-side customers.

> When you say it, they [the audience] understand that it is not just a trading platform, it's about presenting a profile - matching with an interest on the side. And then on the other side it's about looking as nice as possible and finding the words and the ways to present yourself in a way that leads to positive feedback. So, it's sort of a very rich story that we can tell about this because people can resonate with what we are trying to say. It's not just about the renewable energy, it's about the location, it's about the nature around, how it's perceived around the local community. (HP, Founder and CEO)

The customer pilot projects provided a means for reform work through *undermining core assumptions and beliefs* upheld in the market. Institutions endure due to the costs that actors associate with moving away from existing patterns of practice, technologies, and rules (Lawrence & Suddaby 2006; Scott 2001). By offering pilot projects to major actors for only a nominal fee, Becour had a chance to undermine the effort that actors associated with innovation adoption.

Changing normative associations means reformulating the connections between sets of practices and the moral and cultural foundations for those practices (Lawrence & Suddaby 2006). This work simultaneously supports existing institutions and leads actors to question them. For Becour, a major challenge was encouraging companies to keep buying GOs but to start selecting providers based on their ability to provide impact rather than low prices. This would take a fundamental change in the way companies thought. To accelerate the change process, the external advisers to corporate leaders, Frank Hugo and Marie, asked increasingly provocative questions, those that Becour thought the companies' own stakeholders would soon raise, leading to a potential loss of credibility.

> Frank Hugo and Marie have already started asking those questions. We [employees of Becour] cannot do it because we're considered to be biased or trying to advocate our own case. But Frank Hugo and Marie, they are actively asking: "So where do you buy from?". And people say: "I don't know". And then they say: "Well, you should know. Because it's a Guarantee of Origin. It's not a commodity". And then the second question is: "Ok, so what is the money being spent for? Does anything happen? Is there any impact? Or is it just a greenwashing thing? Do you just do this to cover your back?". (HP, Founder and CEO)

Becour continued its *resilience work* in the tumultuous regulative environment by *theorizing stability*. In an interview in the industry news outlet Montel, (Mollestad

15.11.2019), the Vice President of Energy at Norsk Hydro[8] strongly opposed having the GO system in Norway. He stated, for example, that Norsk Hydro had chosen not to buy or sell GOs even though it produces around 10 TWh hydropower in Norway per year. HP publicly responded to the stated issues, also in a Montel interview, arguing that it was arrogant of Norsk Hydro to ignore the well-established GO scheme based on an EU Directive and pointing out inconsistencies in the company's arguments (Vilnes 21.11.2019).

> He [Vice President of Energy at Norsk Hydro] thinks I'm arrogant and a troublemaker. But that's a conscious decision. To actually step forward and say: "hey, you are doing it wrong, and you have to behave properly, you are not above agreed systems". (HP, Founder and CEO)

Becour also continued advocating the GO system in Norway both individually and collectively. *Individual advocacy* is manifested in HP approaching the energy policy spokesperson from the Norwegian Labor Party (AP) via private email to raise concerns over the parliamentary proposal (Document 8) the party had made (Stortinget.no 06.06.2019). The spokesperson answered the email but was unable to arrange a meeting with HP. Becour then built a comprehensive list of arguments defending the GO system in Norway, which HP sent to the spokesperson. The effort appeared to have no effect, however, as the spokesperson soon made it clear publicly that the Labor Party remained on the energy-intensive industry's side in the GO debate (Mollestad 20.08.2019).

Collective advocacy manifested in Becour's continuous involvement in the GO reference group run by Energy Norway. A major issue in the fall of 2019 was trying to build a more constructive dialogue with the energy-intensive industry regarding the GO market debate and Labor Party's Document 8 proposal. The result desired by Becour and the GO Reference Group was obtained in January 2020, as the majority of parties in the Norwegian parliament rejected the proposal (Mollestad 28.01.2020a,b). However, most actors shared the concerns highlighted in the proposal that the GO scheme could give the impression that Norwegian power generation is not renewable. Consequently, the government was called upon to finally finish its evaluation (initiated in early 2018) on the interrelation between the GO system and the product declaration system in Norway.

Although the boundaries of this case study do not allow detailed evaluation of the impact of Becour's market work, HP was convinced that the company had succeeded in setting things in motion in the market. For one thing, he felt that

[8] Norwegian Norsk Hydro is a one of the largest aluminium producers in the world with operations in around 50 countries. It is also a major producer of hydro power.

Becour's competitors had begun considering the new venture as a force based on the various signals detected by the team. HP also heard market rumors constantly which persuaded him that besides some competitors striving to undermine Becour's messages, some were starting to use similar terminology as Becour.

> They are adapting. And that's fun. They are, well some are, trying to talk us down but they have done that from day one. But now they are starting to adapt. They're starting to talk about… talk in different words. They are starting to use words like 'impact' for instance. They didn't talk about impact a year ago. That is something we have introduced.
>
> We will never be credited for this. But something changed when we came into the market. That I'm sure of. Because we have now had 56 meetings with high-level executives in large companies over six months and we have told them the same story, all of them. And I'm sure that our competitors have been asked: "So, where does my money go? How much do you make? How can I make an impact? What power plant do I buy from? How can I use GOs to put new power plants on the grid?" Those are the questions I'm sure they are asking. And our competitors hate it. And I love it. (HP, Founder and CEO)

HP's certainty that Becour was shaping the market also manifested in his perception that the company was getting through to people and inducing changes in their mindsets. This development was, for him, the most important sign of achievement in market shaping.

> So, we are making an impact, we are shaping the market. But as you say not in a dramatic way. We are banging a drum in a way. Just continuously telling the same story to everybody. And people understand. People understand the notion of transparency. People understand that...it has to have an impact. (HP, Founder and CEO)

5.5.2.3 Influencing factors

During this period, Becour's core enabling network was strengthened by the partnership with DNV. *Collaborating with a highly respected and globally recognized corporation* was not only a source of external legitimacy for Becour, but also improved the startup's internal confidence in its business idea and vision.

> This is developing into something that could be of enormous value for us. [...] They have 10 000 consultants all over the world talking to the companies we

> want to talk to. [...] And they have [...] a massive amount of very clever people, they have been sort of very targeted in the recruitment process. And they have acknowledged that they need to change. And they picked up Becour. (HP, Founder and CEO)

Although the DNV collaboration positively influenced Becour's market-shaping process, it does not represent what Baker and Nenonen (2020, 240) define as "collective market work—the orchestrated purposeful actions of a collaboration to shape a market." DNV did not operate in the market for GOs and had no interest in shaping its future per se. However, DNV saw that the digitalization capabilities Becour was developing could support its own ambition business transformation to better respond to the potential threat from digitalization. By providing legitimacy and global reach to Becour, DNV could support Becour's market-shaping aim. It can thus be said that the two companies' aims, and complimentary resources were, at least temporarily, aligned to facilitate the development of common value propositions and thereby advancement of both companies' individual aims (see Figure 18).

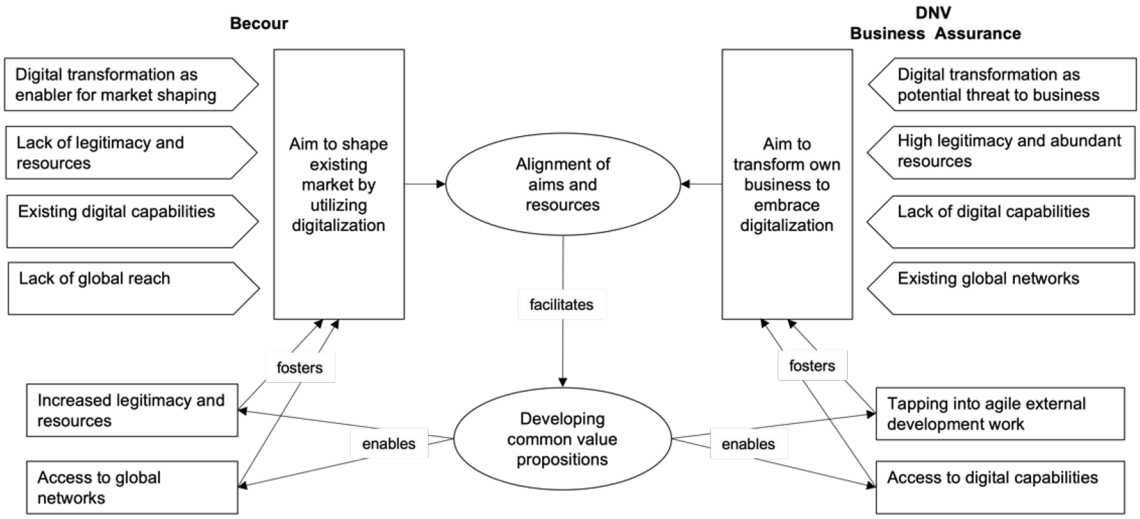

Figure 18. Alignment of Becour and DNV's complimentary resources.

Becour quickly started to mention DNV in its external communications to increase its legitimacy. DNV's verification of the transactions was a key part of the web shop REact's marketing. Being backed by a renowned assurance organization also provided significant benefits for Becour's sales effort when striving to convince customers of the higher quality of its offering.

> We always tried to sell something premium, but it was only our words. And to have DNV-GL with us was really nice because this way we had a really good advantage at least in what we tried to do, to tell our clients that we were different and that we were really transparent. [...] Some of the big clients they work with DNV-GL and then it directly rings a bell. [...] I think the clients saw this as really different from what they are used to seeing in the GO market. (Marine, Market Analyst)

Moreover, as a new venture, Becour benefited from the systematic approach to projects that DNV both required and helped deliver. The approach pushed Becour members to organize and document everything they did in a way that had not thus far been prioritized in the hectic life of a startup. Systematization could be used as leverage when engaging external stakeholders in the future.

> We can now sort of take all the documentation and say "ok this is how we do it, this is the technical specs of what we do. This is the algorithms, this is the data models, this is the process charts, this is the relation diagrams". If we are to pick up more investors, this would be an enormous value to say to them. Because next time we will not be able to run my story about this big market. They want to see substance. (HP, Founder and CEO)

Collaborating with DNV, whose main interest lay in Becour' digital capabilities, also forced Becour to focus its demand-side offering on GOs and other EACs. That shift meant decreasing the testing with various renewable energy-related products that had characterized the previous months. Moreover, this forced the team to consider the overall direction in which the venture needed to develop.

> I think when we started the collaboration with DNV, we kind of were forced to be more focused on the EACs. And also working with a big actor like DNV-GL, we needed to maybe… it felt like we had to be more professional, in a way. And just be more concrete with what direction we wanted to go with Becour. I think that was a turning point. (Lise, Client Adviser)

During this time, the digitization of renewable energy sourcing was advancing rapidly, and more players were launching projects in the area (Parnell 29.1.2020). A major example was Vattenfall and Microsoft's launch of a pilot project for hourly matching of GOs, resembling the planned project between Becour, DNV, and Ingka. The fact that other major actors were moving into the market provided DNV with further evidence that Becour was on the right track and seemed to increase inter-partner legitimation. The latter concept refers to partners' mutual acknowledgment

that the other's actions are appropriate and acceptable (Persson et al. 2011). Although building pressure, HP still saw *large players joining the competition in digitalizing the market* as a positive development because it was bound to extend the market. Moreover, he felt that Becour had kept its forerunner's advantage by starting much earlier.

> It's positive that these big players are seeing what we see. And are willing to sign onto projects, to do pilots in this space. It creates a much bigger market for us. Because not everybody's going to work with Microsoft or Vattenfall. I think that's sort of giving us - giving me - motivation that we are heading in the right direction. Giving me the security that this market will be growing, and we are positioned well to take a part of it. (HP, Founder and CEO)

Another source of inter-partner legitimation was the planned *pilot project with Ingka*. Becour had established its relationship with Ingka alone over time and could have initiated a development project without DNV. However, a joint effort was considered to be far more beneficial. Being able to bring such a player as big as Ingka into concrete negotiations with DNV was a notable achievement from a startup venture. In addition, Becour estimated that DNV's involvement was likely to enhance the legitimacy of Becour's value proposition to Ingka.

The other major developments in Becour's network during this period were the customer collaborations developed through pilot projects and the new external investors, as shown in Figure 19. Having enough pilot customers at this point - and even more lined up with a concrete interest in future projects - was an important confirmation of the legitimacy and success of Becour.

> [HP] actually had to say to both producers and energy retailers that you can kind of sign up on a waiting list for partners for the testing of the platform. So that was a turning point [...] because then we started stacking up clients for later. (Synnøve, Co-founder and Head of R&D)

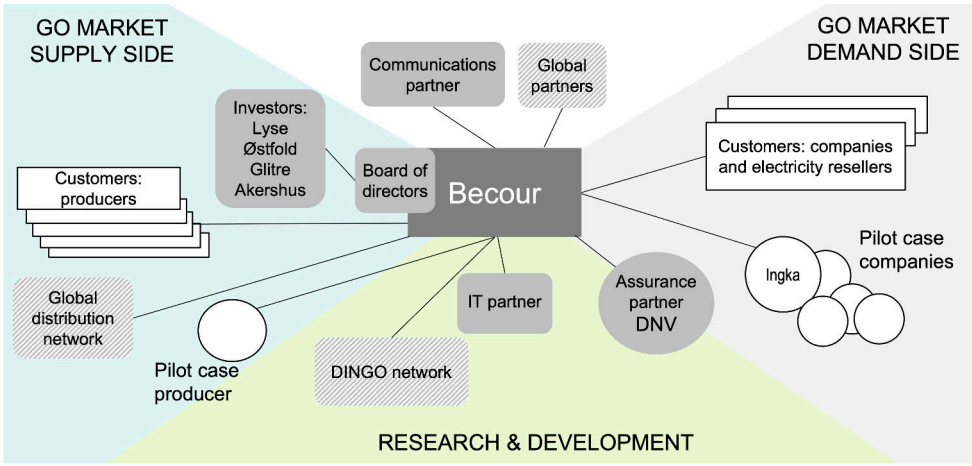

Figure 19. Becour's network in January 2020.

HP said he was very satisfied with the new owners who provided financial security, external legitimacy, and an wider GO inventory for Becour. Both new owners were also committed to actively developing Becour's business. The combination of the developments in the pilot projects with DNV, and gaining new owners were the key triggers in HP's perception that Becour's business model had been established. As HP said to me:

> When you started following us, we didn't know if we would make it. So now you know we did.

The challenging process that finally led to financial security provided by the new owners revealed that external actors were confused about Becour's organizational image. One example was the feedback Becour received during the summer of 2019 from potential investors, stating that from the outside, Becour resembled a consultancy, and that made it a less interesting investment prospect than a technology startup.

> We got very negative feedback from potential investors. That when they looked at our webpage, they thought we were consultants, just giving advice to companies. So, it didn't really say what we were actually doing. Our webpage communicated something that didn't show what we actually were. (Synnøve, Co-founder and Head of R&D)

HP concluded that the cause of Becour looking like a consultancy or a conventional trader to potential investors was the firm's decision to run market tests with versatile

offerings on the demand side of the market and that Becour's own communications had amplified the misperception. My interpretation is that the confusion about what Becour actually was stemmed from the founders' decision to *develop both a digital and a traditional business in parallel*. Becour was aiming to disrupt the market with a digital solution but did not initially have any specific tools to support its image as a new kind of digital market actor. The lack of interest from investors was a financial challenge at the time, but it also pushed Becour to re-evaluate how it could convince the market that it was a new kind of actor. It was decided that to differentiate and raise more interest, the company should focus on digitalization significantly more than it had.

> Now we have to sort of rewrite the story about who we are. So, the basis - we are going to change the world, we are going to green up the world - that is still there. But we now need to attract a different type of people.
>
> I have a post-it note on my desk saying, "we are a tech company." I didn't have that a week ago. So, we are trying to formulate this idea that we are not pushing GOs. We are tracking. We are using technology to track. (HP, Founder and CEO)

HP also worried that Becour was not differentiating on a more fundamental level. The basic idea had been to create a new kind of hybrid actor that would foster a change in the GO market by distinguishing itself from the conventional, market logic driven traders. For HP, this was not manifested adequately in Becour's operations. HP was contemplating Becour's internal legitimation, that is, whether some of the team members were aligned around a common vision and the actions, practices, and values benefiting the company.

> My interest [in running the company] would burn out if I see that we become just opportunists, trying to make money out of the green shift. Then I'm not interested. So…we are not…we are becoming too much of an opportunist... well, I'm not saying that we are, but instead of going the way I want to go, we're slightly turning into a more traditional business, which I don't like. (HP, Founder and CEO)

Meanwhile, pressure was building due to growing *internal tensions* caused by three main triggers. First, the responsibilities within the sales team were not clearly defined from the outset and became even less clear after the decision to focus less on face-to-face large customer sales and more on digital sales channels and value propositions. The existing organization no longer matched the new, increasingly

digital operation. Moreover, retrospective interviews with the team members showed that the perceptions of leadership and organizational hierarchy had been misaligned within the team. The second, related reason was that the R&D and sales functions had become siloed. From the start, more resources had been put into sales because Becour needed to prove its business concept to investors by being able to gain customers before the digital platform was ready. However, the R&D team was clear that Becour's future success depended on the outcome of the DINGO project, and therefore it should not have to fight for resources.

> It was also an internal friction between the research project, like DINGO, and the rest of the organization. Because it was like, "we are doing the important work and what you are doing over there in this project, we don't understand why we do this, need this project." (Synnøve, Co-founder and Head of R&D)

The third reason was HP concluding that Becour's sales success and thus its market-shaping power had been hindered by two interrelated issues: the internal setup in sales and Becour's way of selling. For HP, Becour had been operating too much "*off-stage"* and focusing too much on presenting data and facts. Instead, he felt that corporate buyers needed to be engaged in market shaping on an emotional level, which could only be achieved by getting up on stages and engaging audiences with passion and enthusiasm.

> You have to preach the message. And you have to sort of… it's [GOs] not something companies need. It's not like bread and butter, you know. It's not like electricity. And that's maybe where many people in the business miss the point. This is not electricity, which everybody needs. This is something on top of electricity, which is a choice. So, then you have to sell on quality, you have to sell on impact, you have to sell on transparency, all these softer items. [...] You have to get the spin going. You have to get word-of-mouth going. You have to get the enthusiasm up. You have to sort of get everyone to point at Becour. (HP, Founder and CEO)

In HP's view, selling GOs according to Becour's market-shaping proposition as high-quality products required a completely different kind of rhetoric than when selling them as commodities. It also meant that accepting customers' initial skepticism or reluctance was not an option.

> It's not something you sell off the shelf. Because you have to shape the market, you have to convince, you have to push, you have to be provocative.

> You have to hit hard. And you have to sort of argue with the customers in order to get in the door.

> We have so much good stuff, we have so many great stories, but they don't get out there without us really yelling it. Taking the microphone, telling the story "the world is changing". So that's what we're missing. We're waiting for the customers to find us too much. It's like this Greek god that is pushing the rock up the hill. At some point it comes over the top and starts to fall down. But you have to push it to the top. That job doesn't get done by itself. When you're changing the market or you're challenging the current market. That's where we are. [...] We're waiting for this just to trickle down too much. We're not pushing enough. (HP, Founder and CEO).

Based on the discussions at the time with HP and retrospectively with the other team members, there seemed to be a fundamental difference between Paul and HP's views on what Becour was trying to accomplish and how to run the firm's demand-side sales. Therefore, HP felt he needed to change the sales team set up and participate more in customer engagement. Much of the company's organizational identity was built on HP's persona, but this had not been utilized in demand side sales. It seemed that in many cases, an important element for convincing potential customers of the new venture was, as HP put it, "*showing the owner and entrepreneur himself*". HP not only had the history, expertise, and status required, but most importantly, the enthusiasm and perseverance.

> I live and breathe it, you know, and you sell on enthusiasm. If you don't have it, if you don't feel the passion for it, then you won't sell it. (HP, Founder and CEO)

5.5.2.4 Summary

The findings related to the period from July 2019 – January 2020 are summarized in Figure 20. During this time, Becour continued *testing the core assumptions* but also another form of grounding work was detected: *developing shared value propositions*. In addition, as listed in the figure below, several forms of market work in all the three categories (reform work, relational work, resilience work) were identified.

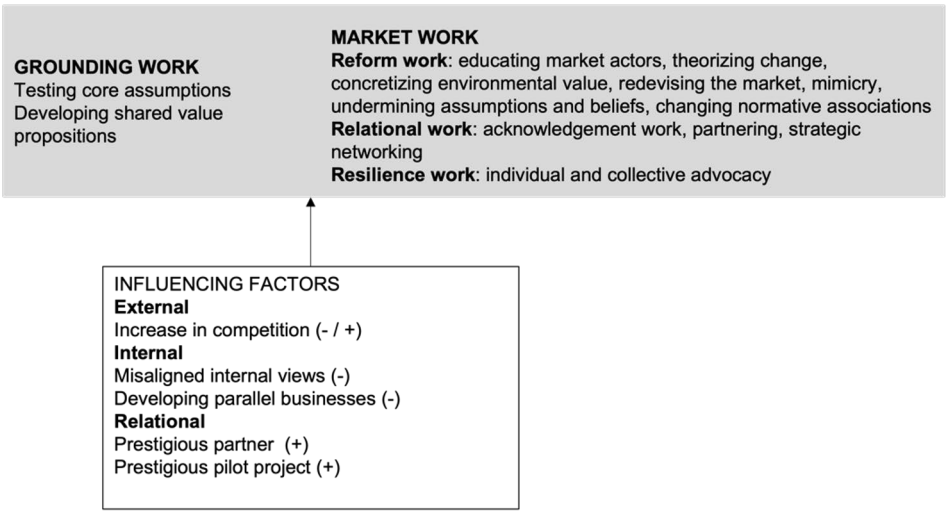

Figure 20. Grounding work, market work, and influencing factors July 2019–January 2020.

As in the earlier phases, *increasing competition* was an external factor that influenced the market-shaping process, and this time it seemed to have a clear positive influence in that it enhanced inter-partner legitimacy. Two interrelated internal influencing factors constrained the market-shaping process: *the misaligned views* of Becour's members on how to move forward and *developing a conventional and a digital business in parallel*. In contrast, the two detected relational factors - *partnering with a prestigious company* and *engaging another prestigious company on a pilot project* - both positively influenced the market-shaping process.

During this period, Becour pivoted important elements in its business model, and the venture's focus remained on involving actors beyond the core enabling network in its change agenda, that is, in the subprocess of market shaping named earlier as *engaging*. However, the grounding work of testing core assumptions and developing shared value propositions performed thus far enabled Becour to now move on in its market-shaping and venture development processes.

5.6 Scaling up and digitalizing the business (February 2020 –)

5.6.1 Narrative description

In February 2020, after an internal reorganization, the Becour team consisted of the founders HP, Synnøve, and Rune, and the three younger employees, Lise, Marine, and Kristine. The team held an off-site meeting to determine the focus and priorities for the new year and to agree on common working principles. The emphasis was on

unifying the team, ensuring that everyone felt they could use their voice as an equal team member regardless of experience, age, or job role. The responsibilities of Lise, Marine, and Kristine were expanded, and their roles more clearly defined to avoid any confusion. HP wanted everyone working toward the same goal from that point on while independently developing their own areas of expertise.

The customer pilot projects were key to developing final market offerings on Becour's digital platform and thus building the base for a scalable business. The aim was to finalize the pilots in Q4 of 2020. A major concern, however, was having adequate resources to manage and deliver the projects on time. HP described Becour as "*kind of oversubscribed*" in the sense that each pilot, although building on the same technological platform, was to be tailored to the customers' specific needs and thereby required close cooperation. The first priority was the most resource-intensive Ingka project, which was officially signed off and launched in the spring. The resourcing situation was eventually alleviated by hiring a part-time project manager. In addition, the project manager from DNV, who had been involved from the start of the partnership, allocated more time to the Ingka pilot.

There were several positive developments in demand-side sales. HP felt that finally, the interest created in the market started to "*make economic sense*". During the spring of 2020, Becour tripled its sales figures despite the lockdown and other precautions following the Covid-19 pandemic that led to a global recession (Dalfest 07.05. 2020). Becour's bottom line was still negative, but all the signs indicated it would grow during 2020. There was also an increase in the number of inbound customer contacts. Moreover, the GO webshop REact started gaining traction in the market. Since its launch, over 60 power plants from Europe had been entered into its selection, which increased the options for GO buyers to choose from. Many more companies were drawn to REact through inbound marketing (i.e., based on their own search for solutions and service providers) or due to Becour's targeted social media campaigns. Two significant sales contracts were signed with major international brands, initiated by their own interest in REact. That development proved that the direct online customer interface was starting to work.

As the profile of Becour's customers changed, the team could focus more on project sales than product sales. Companies could still buy GOs from Becour, but more complex, long-term customer cases were prioritized. Becour seemed to attract companies that already utilized solutions to their renewable energy sourcing needs (e.g., their own production or PPAs) and needed a partner who could support them in controlling their energy sourcing data, provide a way to match electricity consumption with production, to sell excess volumes, and to buy more volume if necessary. Becour's digital platform provided versatile options for customer solutions. Becour also developed a new offering that provided customers with an opportunity to commission brand-new renewable electricity production. By

investing in these *Future Build* -projects customers could tap into a renewable energy plant that had not yet been built and enter into GO contracts with the project owners that would provide the financial security to build it.

5.6.2 Analysis

5.6.2.1 Grounding work

During this final period in the case study, Becour moved on to performing two forms of grounding work I refer to as *expanding the sphere of influence* and *providing tools for change.* This would not have been possible without the grounding work undertaken previously. In particular, as part of *testing core assumptions*, the company iterated and pivoted its business model elements based on feedback from the market. Those moves had led to a key revelation regarding the kind of companies Becour should target on the demand side. Redefining the target group enabled the team to engage in more advanced discussions with customers because they were more receptive to Becour's market proposition.

Expanding the sphere of influence meant that Becour was approaching and engaging actors on a wider plane than previously to accelerate market shaping. This action was supported by its established position as an expert organization in the market and its increased usage of digital channels. The number of organizations that found Becour independently when seeking solutions to problems was also growing, which offers validation of its business model. New, mostly international customers were regularly signed up and more actors were added to the distribution network. HP and the rest of the team could also start outlining the opportunities to expand Becour's market offering beyond the immediate needs of its customers to the actors in the customers' upstream and downstream value chains. The evolution implies an increased trust in being able to influence wider networks.

> Like, let's say you're a manufacturer of electric cars, the thing is to show that the assembly of the car is done using renewable energy, but what about all the suppliers in your value chain? How can we aggregate renewable energy up in your value chain so that you can talk about the aluminum that was melted on the west coast of Norway to the carbon fiber from North America? (HP, Founder and CEO)

Providing tools for change refers to grounding work through which Becour helped the actors in its supporting network to implement change in their own organizations. Becour's support was in the form of both education and developing specialist tools, methods, and channels. The venture could move on from primarily trying to persuade

actors to consider its market proposition, as many actors in its network had already accepted it. Instead, Becour increasingly focused on planning and developing tangible solutions tailored to their customers.

5.6.2.2 Market work

In its pilot customer projects Becour was performing *relational work* I refer to as *enclosing customers*. This means fostering engagement among actors in key target groups through pilot projects related to the digital trading platform. Although the customers had to commit human resources to a development project with an uncertain outcome, the potential benefit of the finished tailor-made technological solution was deemed very high, and the customer only had to pay a nominal fee for participation. For Becour, committing to the pilots entailed a risk, as much of the market-shaping power of the pilot cases was based on future prospects. However, great expectations were placed on these projects, especially on the Ingka collaboration. HP predicted that being able to publicly present the project results by the end of the year would create significant market awareness and interest from customers who wanted similar solutions.

> If we have those cases or stories to tell in Q4, we are very much capable of shaping the market. (HP, Founder and CEO)

As Becour's target audience on the demand side became clearer, the team members also realized that reaching the most receptive audience would mean breaking the reliance on existing communication arenas such as industry conferences and seminars. Moreover, participating in tendering processes and being invited by companies to run workshops for them had only led to Becour sharing its knowledge without any business gain. Now, Becour undertook *reform work* that I refer to as *constructing new communication arenas*. This involved the firm organizing its own webinars and increasing the volume of content marketing.

> Customers start to qualify themselves by contacting us. We want to do more of that, we want to show, be open, be transparent, we want to share knowledge. But in our arenas. Not in their arenas. (HP, Founder and CEO)

> We see a fantastic development when it comes to what we are talking about. Transparency. Impact. Credibility. Credible claims. Peer-to-peer. Digital solutions that talk with their own internal systems. So more and more of the talks that we have with these companies is less and less about the GOs, and more and

> more about how they use the information. Which is perfect for us. (HP, Founder and CEO)

At the start of Becour's journey with no existing customer base, the company had mostly persuaded supply-side actors (producers) with financial incentives and by educating them about the unbeneficial market structure where intermediaries were taking the largest share of the GO sales revenues. Later, Becour started pointing out the potential risk of losing some of that revenue unless the producers were able to document to the energy buyers where the profits from GO sales were going. However, at this point, Becour had learned that most renewable electricity producers lacked the internal procedures required to earmark GO revenue flows. The situation was a prominent challenge for Becour which had to deliver on its promise to corporate buyers to deliver a verifiable impact from their GO sourcing through Becour.

> Can we say that if you buy GOs, you are actually having an impact on something? And what should that be? And how could you do it? (Synnøve, Co-founder and Head of R&D)

Accordingly, Becour started *cocreating solutions with the supply-side actors* to help them implement change in their organizations as a type of *reform work.* This meant building processes and tools for producers to earmark revenues from GOs. Becour would in this way equip the producers with the means to advance transparency and provide verifiable additionality (i.e., additional renewable energy production). Knowledge gathered through the impact-related work package with DNV significantly supported this work. Related to these efforts, Becour was also *extending the GO market offering* by working together with energy producers to develop and offer the Future Build projects. This was a novel, forward-looking way to provide *"long-term GOs"* to corporate customers by allowing them to finance the development of brand-new power plants.

Becour was also *cocreating solutions with the demand-side actors* that allowed them to implement new practices in their organizations. Instead of offering relatively ready-made solutions, the venture focused on cocreating solutions with corporate customers, particularly through pilot projects. These included tools for companies to track and trade GOs, monitor and control their renewable energy portfolios, and (through the learning from the Ingka pilot) even match renewable electricity production with consumption.

Becour also continued *resilience work* by targeting the GO market offering. As prior studies have found, the intangibility of an environmental feature in an offering is often difficult for other market actors to internalize and may hinder end users'

buying decisions (De Marchi 2012; Ramirez et al. 2014). Darby and Karny (1973) call this the "credence quality" of environmental offerings as their sustainable attributes may not be assessed in everyday usage but require additional information (often acquired over long periods). Therefore, providers must find ways to reassure different audiences about the environmental features of their offering (Rex & Baumann 2007), such as green energy. They must also be able to verify the sustainability of the offering's inputs from their value chain partners, which indicates increased importance of trust and reputation within the focal company's entire value network (De Marchi 2012). To *lend credence to the GO offering*, Becour became licensed to sell electricity certified with locally and internationally recognized and trusted standards, such as Bra Miljöval and EKOenergy.

In response to the Norwegian parliament's refusal of the Document 8 proposal, HP wrote an opinion article in the online news outlet Enerwe (Kildal 06.02.2020), applauding the decision, and also supported the ideas for improving the GO system and electricity disclosure so that they would better reflect the renewable nature of Norway's energy production. Privately, HP was concerned that the system could be changed in the wrong direction. As the GO scheme is important for many Norwegian power producers' value generation, it is crucial for the value creation of Becour. HP also published a similar posting on his personal LinkedIn account (Kildal 05.02.2020). As a form of *resilience work,* he was *theorizing stability* by pointing out potential consequences of removing Norway from the GO system, as was advocated by some industrial players. HP argued that not having to pay anything extra for verified green energy (through GOs) would only financially benefit the global shareholders of those companies at the expense of Norwegian renewable energy producers and resellers.

> The fact that international industry players with operations in Norway, on par with other international companies, have to pay to document that they use our renewable energy, is a small cost compared to the gain for Norway and the climate. (HP in Enerwe 6.2.2020)

The above excerpt also shows how HP was *valorizing* the Norwegian renewable energy industry and its participation in the GO system by creating positive images of its role in benefiting the Norwegian economy and the fight against climate change.

5.6.2.3 Influencing factors

The *organizational restructuring* of Becour was an internal enabler that influenced the venture's ability to perform market shaping by allowing the re-establishment of internal legitimacy. The remaining team members were aligned over Becour's hybrid

goals and how to reach them. HP felt that until that point, one of Becour's core values, stated as being "*a great place to work"*, had not been fully realized. Instead of exemplifying the equality, openness, and flat organization HP thought essential for a hybrid organization, the venture had become siloed and hierarchical.

> I felt that we were becoming too much of a corporate. Hierarchical. "You report to me, I don't report to you". Those kinds of things I don't want to have. First of all, we're a small company - you build a hierarchy because you have to. Not because you want to. And we don't have to. (HP, Founder and CEO)

With clearly defined roles and responsibilities, as well as working practices that were discussed and agreed upon, the remaining team members could now fully focus their efforts on addressing the external challenges facing Becour. The team made it their priority to define who the company was targeting. This exercise made Becour's market shaping efforts more productive, as the company was now focusing on those actors who did not utilize Becour to support some pre-existing agenda but needed the company's offering to solve some specific challenge around renewable electricity sourcing.

> I feel like we have a clearer direction. And like I said, we have defined our key target audience, and we know their problems and their challenges and how we can solve them. And I think that's also a kind of milestone for us because before, we didn't have that. We didn't even know who we would sell to. So, it was challenging. I think that's kind of a key finding for us. (Lise, Client Adviser).

An unexpected external enabler for Becour's market shaping was the *Covid-19 pandemic*. In March 2020, Norway, like most European nations, implemented a lockdown to manage the spread of the novel coronavirus. After the initial shock of moving to home office working and suspending all face-to-face meetings, the Becour team realized that after some adjustments, they could continue working in a relatively normal manner. In some ways, their collaboration even improved, because they had to streamline activities, schedule regular meetings, and continuously update each other on developments within their own areas of responsibility. Moreover, all Becour's staff with a sales responsibility had been traveling extensively to meet customers and network at industry events, which now came to a complete halt. However, the compulsory halt to travel had an unexpected and significant positive influence on Becour's market shaping, as described below by HP.

> By me not traveling, I was able to do much more business. So suddenly by sitting still, I got more done. I got real stuff done. So, I'm going to continue doing that.

> And I'm never going back to the old ways. I will travel when I have to. And we are also discussing now internally maybe that is us, maybe we are a little bit strange, maybe we are the ones that are a little bit difficult to get out of the office. [...] And the result of that is that we are focusing more on the digital footprint of our communication and our output to the world.

Being unable to travel led Becour to take a significant leap toward *becoming more digital*. The company started creating more online content, which boosted the number of companies initiating contact with Becour. These companies were typically experienced in sourcing renewable energy and looking for specific solutions to certain problems. Instead of chasing large companies that were deemed suitable, traveling extensively to meet them, and running workshops at corporate offices, Becour was able to present its ideas and offerings through its own digital channels.

> We have started with webinars, putting even more stuff out on LinkedIn, and starting now to get more followers on the web profile on LinkedIn. Creating digital awareness is becoming even more important in order to create inbound. (HP, Founder and CEO)

By redefining its target audience on the demand side and increasing the digitalization of its business also enabled Becour to develop its organizational identity along with a sales approach that supported that identity. HP felt that Becour was released from the pressure to participate in tenders and chase customers. It became free to grow customer relationships in the way that had been the aim since the beginning. This development is exemplified in the case of the Telecom corporation whose tender process Becour had participated in the previous summer. Despite not winning the business, Lise had kept the relationship warm through a continuous, friendly, and open dialogue. The outcome was business negotiations and a small sales contract. Starting from GO sales to a single location where the customer operated, the telecom firm had gradually sought contracts for most of its international locations. Eventually, it was agreed that Becour would handle all of the customer's global GO sourcing.

> They are sort of maturing step by step. And it's one of the best examples of how we can make business by presenting us as what we are. Not trying to be something different than we are. And we are not selling anything. We are just connecting producers of renewable energy with consumers. We're a platform. (HP, Founder and CEO)

The demand-side sales success combined with the *focus on the pilot projects* led to a situation for Becour that was both positive and challenging: the number of customers signed up was increasing, and more working hours were needed to manage customer relationships, but there was still not enough cash flow to increase internal resources in a way that would match the growing workload. And at the same time, a significant increase in the number of employees was not what HP wanted for the future anyway. The aim was to digitalize most of Becour's business and thereby operate more efficiently and scale through further digitalization. Hence, although Becour was increasingly digitalizing its business, it still had to rely on the conventional business procedures it had started with, which were very resource intensive.

By this time, it had become clear that shaping the market by convincing one large customer at a time would be a long and arduous road. Instead, much of Becour's future potential to shape the market lay in its digital GO tracking and trading platform. Undertaking a *complex pilot case project* with Ingka thus positively influenced Becour's market shaping. The Ingka collaboration provided Becour a unique chance to test and develop many novel elements of the platform, such as real-time matching of renewable electricity production and consumption. However, the reputational value from working with Ingka could only be realized after the project had finished. Placing so much resource on the Ingka case was not financially beneficial for Becour in the short term, but the feedback received, and technical development achieved was expected to produce a more versatile and higher value end product.

5.6.2.4 Summary

The findings related to the time period after January 2020 until the summer of 2020 are summarized in Figure 21. During this time, Becour could focus on two forms of grounding work: *expanding the sphere of influence* and *providing tools for change*. The venture also performed several types of market work, as listed in the figure below.

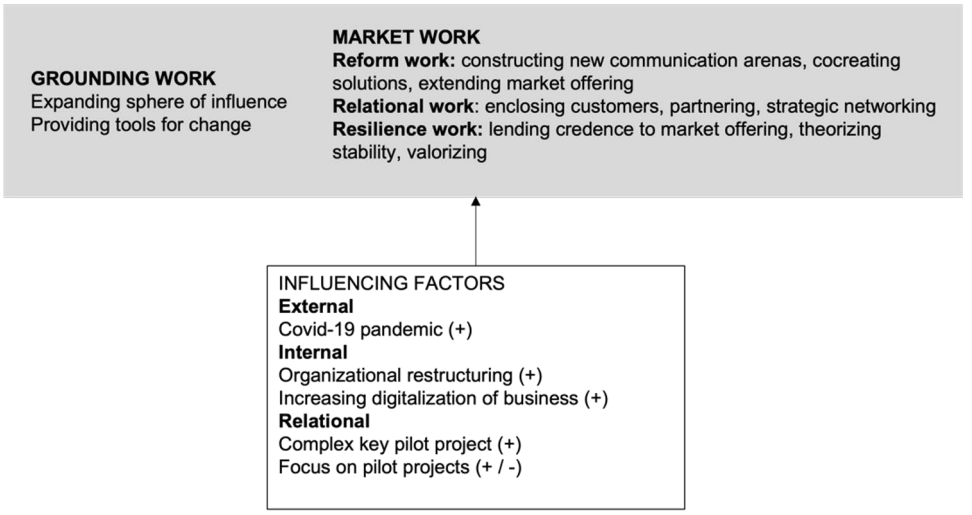

Figure 21. Grounding work, market work, and influencing factors after January 2020 until summer 2020.

Several *influencing factors* were also detected. The *Covid-19 pandemic* was an external factor that positively influenced Becour's market shaping. Two internal enabling factors were detected, *organizational restructuring* and the *increasing digitalization* of the business. Two relational factors were also found. Whereas engaging in a complex pilot project with Ingka seemed to have a positive influence, the overall focus on pilot projects had both a constraining as well as supporting influence on Becour's market shaping.

Once Becour had established its business model and engaged supporting actors in its network (beyond the core enabling network), its focus turned from persuading (often-reluctant) actors to helping (already engaged) actors to implement change in their everyday business. The two forms of grounding work *expanding the sphere of influence* and *providing tools for change* thus belong to and were conducive to a fourth subprocess driving forwards the intertwined processes of market shaping and hybrid new venture development, here termed *equipping*. The process of equipping does not refer to merely explaining the reasons for and the ways to change to other actors but rather making something possible for them by providing the concrete means to integrate new ideas and behaviors into their organizations. Equipping is closely related to and largely parallel with engaging, but my observation is that only having successfully initiated engaging can the market shaper move on to equipping.

6 Summary of findings

The previous chapter presented the narrative and the analysis of a follow-up case study. In this chapter, I will summarize the main findings. Aware that the concept of market work was not adequate to describe what the venture was doing to drive the processes of market shaping and hybrid new venture development, I distinguished the detected activities into the categories of *grounding work* and *market work*. The first, grounding work, refers to the fundamental activities necessary for a hybrid new venture to advance in the market-shaping process while developing into a commercially viable venture. The forms of grounding work are prerequisites for subsequent grounding work activities. However, this does not imply that the various aspects of grounding work can be described as completed, even when the new venture is advancing. Instead, grounding work is continuously assessed and strengthened over time as the market shaper interacts and learns with actors in its business environment.

The second category of market-shaping activities, market work, refers to the concrete and specific activities targeting a particular market element. Market work performed by the hybrid new venture can be further divided into three subcategories based on their function: reform work, resilience work, and relational work. Market work also drives the market-shaping process forward, but unlike grounding work, any form of market work can occur at any time during the market-shaping process. Although the nature of a particular type of market work remains the same regardless of when it is performed, its purpose may differ.

Figure 22 depicts the different types of grounding and market work performed by the hybrid new venture over time. The figure shows how market shaping evolves from starting up to expansion while intertwined with the process of hybrid new venture development from starting up to scaling. Certain forms of grounding work must be undertaken before moving on to subsequent activities (as shown by the thick gray arrow) but the market shaper continuously evaluates and adjusts the grounding work done as the market-shaping progresses (as shown by the bent arrows between the various steps).

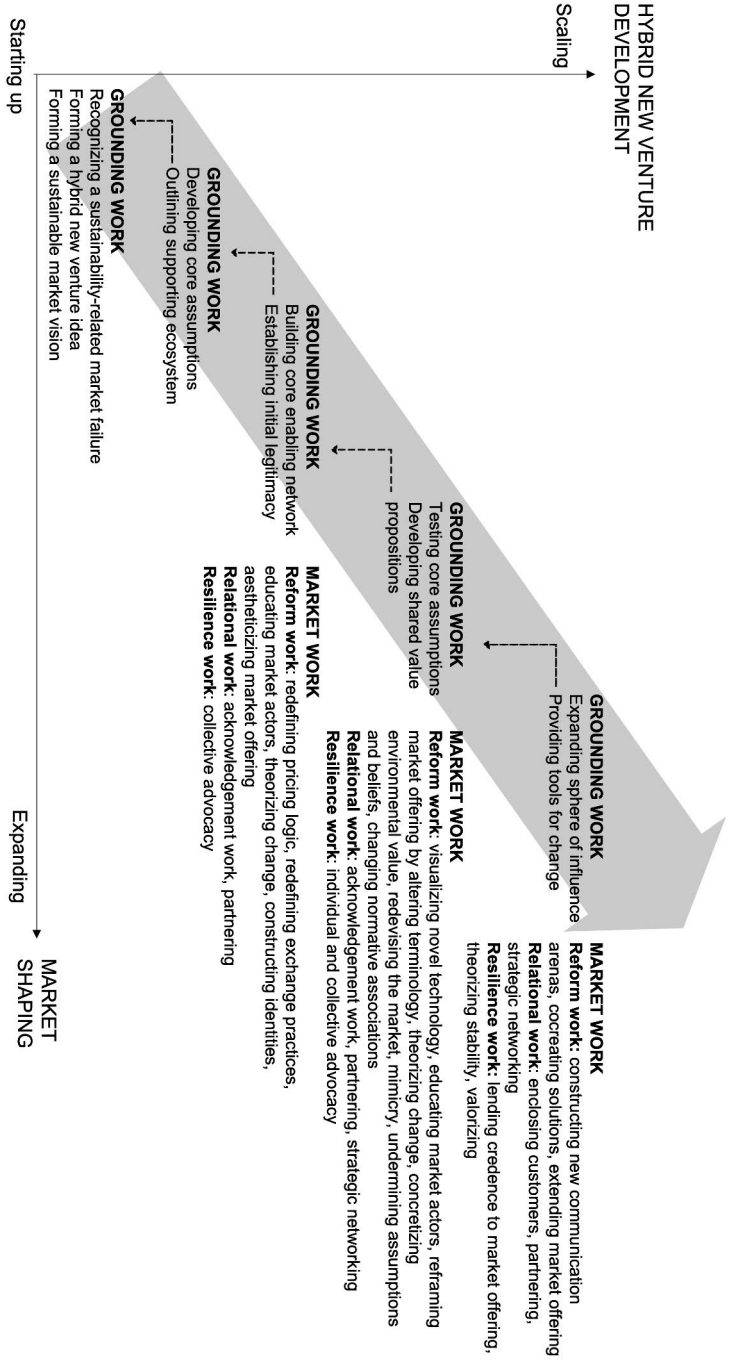

Figure 22. Grounding work and market work performed over time.

The identified forms of market work are synthesized in separate tables below. The last column of each table includes my interpretation of the intended effect of a particular form of Becour's market work. I use the term *intended effect* because the temporal scope of the research does not allow for a detailed examination of the outcomes of the market work. First, the identified forms of *reform work* are listed in Table 8. Reform work refers to the specific and purposeful activities taken to change some element of the existing market. The findings show that Becour engaged in versatile forms of reform work targeting all three previously identified and broadly defined market elements: market actors, exchange process, and institutions.

Table 8. Types of reform work.

MARKET ELEMENT	TYPE OF WORK	EXAMPLE	INTENDED EFFECT
Market actors	Educating supply-side market actors	Explaining GO market failure	Decreasing use of unnecessary middlemen in GO trade Motivating producers to document GO revenue flow
	Cocreating solutions with the supply side	Building tools together for earmarking money flows from GO trades	Helping producers to document usage of GO profits and thus increasing credibility
	Educating demand-side market actors	Explaining how the GO market functions	Fostering adoption of new practices by providing buyers with knowledge and skills
		Explaining GO market failure	Delegitimizing usage of conventional brokers/traders Motivating buyers to demand transparency and impact
	Cocreating solutions with corporate customers	Building solutions together for tracking, trading, and managing energy procurement	Inducing implementation of new ideas and practices in corporate buyers' business
	Demonstrating the value of market offering	Showing ways to use GOs in marketing and communication	Expanding corporate buyers' perception of utility value from transparent GOs
Exchange process	Theorizing change	Using rhetoric and discourse to render new ideas into compelling formats	Inviting market actors to ascribe legitimacy to new ideas
		Pointing out the consequences of not adopting new practices	Helping buyers understand chains of cause and effect that could harm their business
	Redefining pricing logic	80/20 revenue model	Incentivizing producers to invest GO profits in a way that creates additionality (impact)
	Redefining exchange practices	Adopting a relational over transactional approach; treating all customers as partners	Increasing market transparency and credibility

	Re-devising the market	Creating the REact webshop for sourcing GOs	Increasing the agency of buyers and decreasing the agency of conventional brokers/traders
	Constructing new modes of exchange	Developing a digital GO tracking and trading platform	Enabling transparency in the market through replacing analog procedures
	Visualizing new technology	Presenting a mockup of a new solution to potential customers	Concretizing an abstract solution
	Constructing new communication arenas	Creating inbound digital content, and own webinars	Increasing the chance of reaching receptive audiences
	Extending market offerings	Developing the Future Build projects	Extending the range of solutions with GOs to induce demand side motivation
Institutions	Reframing the market offering	Altering terminology from GOs to electricity of renewable origin	Decommoditizing by emphasizing renewable electricity as the actual market offering
		Aestheticizing renewable electricity by images and stories	Creating an emotional bond to market offering
		Creating an understanding of market actors' views on sustainability impact	Concretizing the abstract elements of renewable electricity with guaranteed origin
	Constructing identities	Presenting Becour as an alternative to conventional brokers and traders	Redefining an intermediary actor
		Operating and disclosing information transparently	Delegitimizing conventional brokers and traders
		Portraying producers as the true creators of value	Motivating acceptance of 80/20 revenue model
	Changing normative associations	Connecting buyers to unique renewable electricity sources	Reassociating electricity with GOs as a branded product, thus enabling higher pricing
		Categorizing market actors' perceptions of sustainability impact	Concretizing the non-concrete elements of the market offering
		Asking provoking questions from corporate leaders	Inviting actors to question the status quo
	Mimicry	Associating REact webshop with Tinder	Facilitating the adoption of a new mode of exchange by associating it with a popular platform in another field
	Undermining assumptions and beliefs	Engaging customers in pilot projects	Decreasing perceived effort and risk of adopting new practices

Second, the identified forms of *resilience work* are listed in Table 9. Resilience work refers to activities intended to support the resilience of an industry or a market. Becour's resilience work aimed to support the resilience of the GO system in Norway, on which the GO trading market is built. It is, therefore, the structure that enables supply to meet demand and sellers and buyers to conduct an exchange.

Table 9. Types of resilience work.

MARKET ELEMENT	TYPE OF WORK	EXAMPLE	INTENDED EFFECT
Exchange process	Lending credence to market offering	Adopting certification labels for renewable electricity	Increasing market actors' trust in GO market offering
Market actors	Theorizing stability	Pointing out the political and economic consequences of demolishing the GO system	Delegitimizing disruptive market work by opposing actors
Institutions	Individual advocacy	Writing emails to politicians and opinion articles in news outlets	Maintaining and mobilizing political and regulatory support for the GO system
	Collective advocacy	Participating in GO Reference Group	Maintaining and mobilizing political and regulatory support for the GO system
	Valorizing	Creating positive images of Norwegian renewable electricity production	Legitimizing the system

Third, the identified forms of *relational work* are listed in Table 10. The purpose of relational work is to build connections with external actors that can support the focal actor's market shaping by providing resources, legitimacy, and additional networking opportunities. While relational work advances the venture's commercial objectives, it also plays a central role in enabling and supporting the venture's market and resilience work. For example, acknowledgment work laid the groundwork for theorizing change to high-level corporate leaders and partnering enabled the alignment of Becour and DNV's complimentary resources.

Table 10. Types of relational work.

MARKET ELEMENT	TYPE OF WORK	EXAMPLE	INTENDED EFFECT
Market actors	Acknowledgment work	Consulting C-level leaders	Enhancing gatekeepers' adoption of new ideas
	Partnering	Collaboration with DNV on digital platform	Increased market reach and legitimation
	Networking	Joining the NTRANS research center	Gaining access to market actors
	Enclosing customers	Involving companies in pilot projects	Increasing corporate customers' commitment to change process

A key finding in the case study is that the two processes of market shaping and hybrid new venture development are closely intertwined and advanced through four distinct but closely interrelated subprocesses. The recognized forms of grounding work each belong to and are conducive to one of those subprocesses. The first subprocess is *visioning the hybrid venture and a more sustainable market.* Visioning begins in the mind of an individual entrepreneur who thinks how to shape an existing market toward sustainability employing entrepreneurship. Several forms of grounding work occur during visioning: *recognizing a sustainability-related market failure, forming a hybrid new venture idea, forming a sustainable market vision, developing core assumptions,* and *outlining a supporting ecosystem*. As the venture evolves and connects to the visions and business models of other actors, its initial vision and assumptions evolve too. In other words, visioning starts with an individual actor but quickly becomes a networked process. The term networked highlights that the company's visioning is influenced by the cognitions of a much wider group of actors than the founding team.

The second subprocess *legitimizing the venture and the change agenda* becomes increasingly important when the venture has taken a legal form and starts interacting with external stakeholders. Legitimizing is guided by the concern of how to gain acceptance for the venture and its change agenda and it involves both internal and external legitimacy. There are two forms of grounding work necessary here: *establishing initial legitimacy* and *building a core enabling network*. Unlike an incumbent actor, a hybrid new venture needs to achieve initial legitimacy that enables it to operate in the focal market as a credible service provider. Supporting actors like investors and partners significantly influence the market-shaping venture's legitimizing process.

As the new venture starts operating in the market it wants to shape, its main concern becomes how to get customers to adopt and implement the proposed changes. At this point, the subprocess *engaging market actors* becomes key, while visioning and legitimizing continue. Engaging refers to inviting, persuading, and motivating actors in the venture's business environment to adopt new ideas and practices. Until this point, the new venture's market shaping has been about developing a change agenda and acquiring resources and legitimacy for its implementation. When operating in the market and engaging actors, two forms of grounding work are key: *testing core assumptions* and *developing shared value propositions with supporting actors*. Engaging is strengthened by the market shaper's increasing legitimation and supported by the evolving visioning process.

When the market-shaping new venture starts scaling, its core assumptions (at least most of them) will have been validated and it will have managed to trigger change in the market. The venture can then focus on how to escalate change. At this point, *equipping market actors*, the fourth subprocess, becomes the most relevant,

although it is likely to have started in parallel with the subprocess of engaging. Equipping is about providing concrete means for engaged actors to implement new ideas and behaviors into their own organizations and help them provoke change in their value chains as well. The forms of grounding work conducive to equipping market actors are *expanding the sphere of influence* and *providing tools for change*. The subprocesses driving market shaping and hybrid new venture development and their inherent forms of grounding work are depicted in Figure 23. The faded coloring in the beginning of the arrows depicting the subprocesses represents the observation that no clear and definite starting point can be indicated for them.

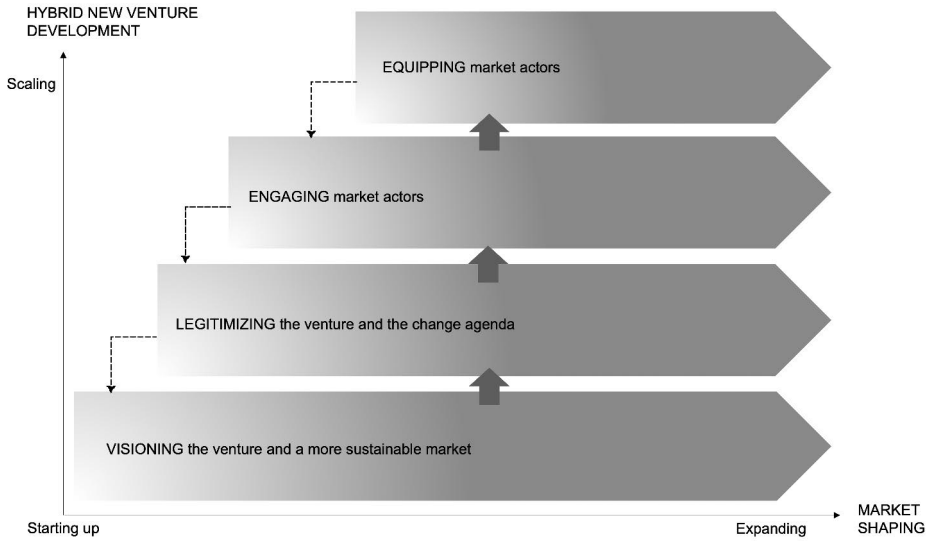

Figure 23. Subprocesses driving forward the intertwined processes of market shaping and hybrid new venture development.

The empirical findings of the study show that the intertwinement of market shaping and hybrid new venture development did not occur in isolation but was continually enabled or constrained by various contextual factors and events. These are categorized into internal, external, and relational factors and events. Table 11 below reflects my interpretation of what these key contextual factors and events were and how they influenced the interrelated processes of market shaping and new venture development. The same factor could have both an enabling and a constraining influence, depending on other contingencies in the business environment.

Table 11. Contextual influencing factors and events.

FACTOR / EVENT	TYPE	INFLUENCE
Competing institutional logics in the focal market	External enabler External constraint	Created a market failure and a sustainable business opportunity. Reinforced ostensive sustainability and thus corporate inertia toward change.
Megatrends of sustainability, electrification, and digitalization	External enabler	Increased the demand for solutions providing a way for companies to achieve their energy-related sustainability targets.
Entrepreneur's experience and deep understanding of the market system	Internal enabler	Helped formulate a market vision that is compelling to versatile actors.
Entrepreneur's cultural embeddedness	Internal enabler	Enabled the recognition of a sustainability-related market failure and a corresponding new business idea.
Development of digital ledger technologies	External enabler	Allowed the creation of new solutions and modes of exchange.
Hybridity	n/a	Influenced the venture's growth ambition and attitude toward competition.
Founders' like-mindedness and alignment on the hybrid mission	Internal enabler	Increased initial internal legitimacy.
Market price development	External enabler External constraint	Increased electricity producers' interest in revenues from the exchange object. Decreased electricity producers' interest in using external service providers.
Regulatory turbulence	External constraint	Increased business uncertainty.
Public support systems for sustainable innovation	External enabler	Enabled access to external funding for the R&D project and its immediate initiation.
Founders' versatile experience	Internal enabler	Attenuated the liability of newness.
Founders' social capital	Internal enabler	Allowed access to initial resources and legitimacy.
Entrepreneur's market status	Internal enabler	Helped getting the venture's voice heard.
Increase in competition for digital solutions in the focal market	External enabler External constraint	Increased internal and inter-partner legitimacy. Increased pressure to maintain the forerunner position.
Corporate inertia	External constraint	Decreased actors' willingness to change.
Misaligned internal views on how to engage the market	Internal constraint	Eroded internal legitimacy.
Developing conventional and digital businesses in parallel	Internal constraint	Unclear organizational image. Tension in internal resource allocation.
Extended enabling network	Relational enabler	Increased external legitimacy.
International partnerships	Relational enabler	Enabled initial global reach. Increased external legitimacy.

Investors' strategic support and patient capital	Relational enabler	Enabled venture development without the pressure of short-term financial gain.
Competitors' reactions	Relational enabler Relational constraint	Increased confirmation of strategy. Decreased external legitimacy.
Losing several corporate tenders within short time period	n/a	Led to pivoting the business model elements.
Collaboration with prestigious partner	Relational enabler	Increased external legitimacy. Increased structure and focus. Formalization of processes and systematic documentation. Alignment of resources.
Prestigious and complex pilot project with key customer	Relational enabler	Increased internal and inter-partner legitimacy. Enabled learning related to real-time matching of renewable energy consumption and production.
Covid-19 pandemic	External enabler	Increased streamlining of operations. Accelerated business digitalization.
Organizational restructuring	Internal enabler	Enabled internal re-legitimation.
Focus on customer pilot projects	Relational enabler	Enabled co-creation of customer-centric solutions. Increased external and internal legitimacy.
Increasing digitalization of business	Internal enabler	Helped in customer refocus and redefining organizational identity

Beyond allowing for the identification of influencing factors and events, the data analysis showed their contextual contingency and interrelatedness. For example, developing customer pilot projects positively influenced Becour's market shaping and hybrid new venture development; nevertheless, the projects provided few short-term financial benefits, so focusing on them would not have been feasible without the patient capital provided by the investors in the venture. Moreover, some of the external factors (e.g., development of digital ledger technologies) would not have had their enabling influence without the agential qualities of the focal entrepreneur and the founding team. In other words, how HP and the founding team recognized and exploited the external enablers was key. A single factor or event could also have a constraining effect despite a positive effect caused by another factor. For example, although Becour's founders' like-mindedness and alignment around the hybrid mission enabled high initial internal legitimacy, it was eroded due to the misalignment of views on how to engage the market. Figure 24 shows the contextual factors and events enabling and constraining Becour's market shaping and new venture development over time.

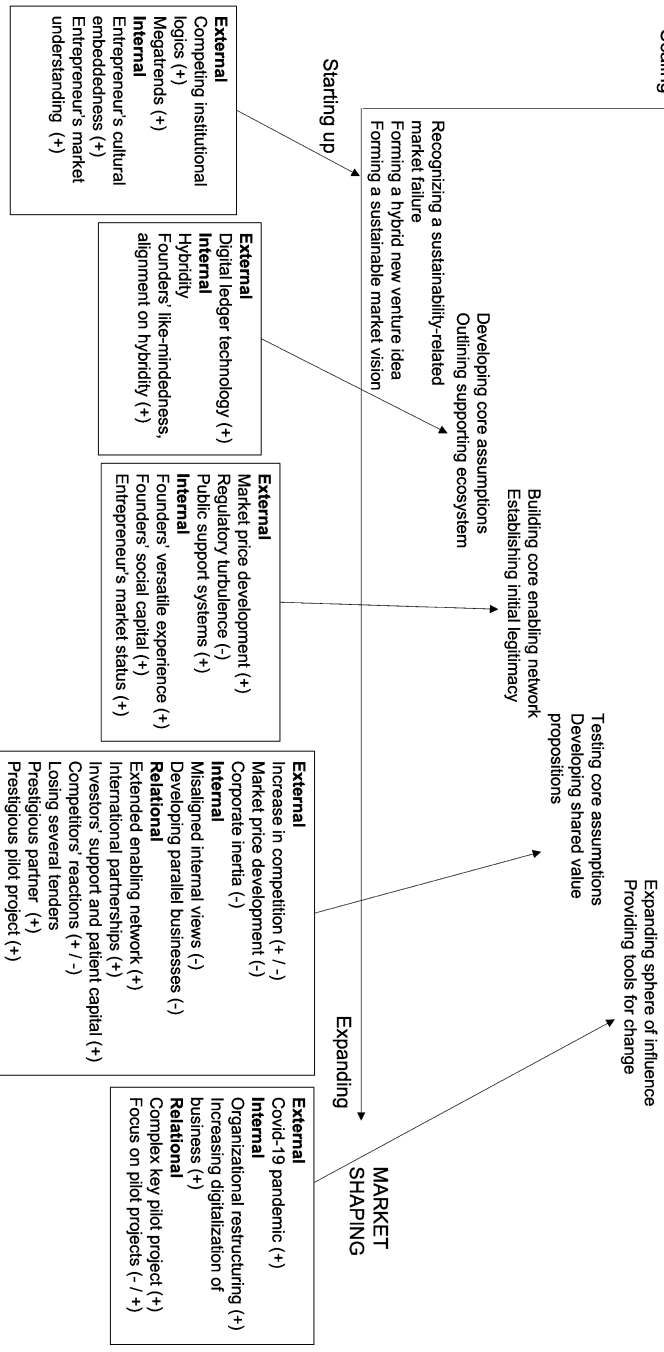

Figure 24. Contextual influencing factors and events over time.

7 Conclusions

7.1 Theoretical contribution of the study

This thesis aims to offer a processual and contextual explanation of how market shaping for sustainability and early hybrid new venture development are interrelated. I set out to answer three research questions to help achieve that purpose. The results of the study mainly contribute to theory development in market-shaping research within the business-to-business marketing literature. In this section, I discuss this study's theoretical contributions by returning to the research questions.

Which activities enable a hybrid new venture to shape a market toward sustainability? This study addresses a call for more detailed analysis of the specific activities market shaping entails (Nenonen & Storbacka 2021). The findings broaden the understanding of *work* in the market-shaping context by illuminating its nuanced nature. A key theoretical contribution relates to the conceptual distinction between grounding work and market work. This finding was enabled by studying market shaping in the research context of hybrid new venture development. Prior research has used the terms *market-shaping activities* (e.g., Kindström et al. 2018; Ottosson et al. 2020) or *market work* (e.g., Fehrer et al. 2020; Nenonen et al. 2019), presumably as a consequence of its focus on incumbent actors. That perspective fails to recognize the existence of other, more fundamental forms of work that must be undertaken iteratively if a new venture, suffering from liabilities of newness and smallness, is to advance its market shaping and take on market work. Moreover, this study extends current knowledge by illustrating that market shaping extends to the early stages of hybrid new ventures, and that their initial market shaping actions are taken long before they become legal business entities.

This study also contributes by fleshing out many specific activities the focal actor performs to change specific market elements, that is, market work. I confirm and complement prior work by distinguishing market work into three subcategories based on their function: reform work, resilience work, and relational work. Other authors have recognized relational work (Arenas et al. 2020) and resilience work (Beninger & Francis 2021), but, to the best of my knowledge, this is the first study that specifically distinguishes them from what I refer to as reform work and investigates how the focal actor engages in all three simultaneously. Moreover, Flaig

et al. (2021a) have recently suggested that purposeful market shaping is employed either offensively by fostering market change or defensively by attempting to prevent emerging change. This study's findings contradict this notion by showing that while market shapers' market work aims to change some market elements, it can simultaneously be aimed at supporting the resilience of the system producing the market. The targets of all these forms of market work may be the same. In other words, this study shows that the market shaper may guide its purposeful market-shaping activities both offensively and defensively.

Another contribution of this study is to confirm and extend the current understanding of the content of market shaping, that is, what exactly market shapers are striving to shape. Several market-shaping studies seek to identify elements of the market that change agents can influence (e.g., Harrison & Kjellberg 2016; Kindström et al. 2018; Nenonen et al. 2019a). This study confirms those previous findings by showing how market shapers simultaneously target multiple facets of the market within the three broadly defined market elements: the exchange process, market actors, and institutions. The current study also adds a novel insight by empirically showing the dynamic nature of what is being targeted by market shaping. There is an interconnection between how the content of market shaping evolves as its process and context evolves. In other words, this study shows how the *what* of market shaping is intermingled with the *how* and the *why*. The hybrid new venture's founding team formulates assumptions of the changes required to specific market elements and which actors' support would be required to implement those changes. Simultaneously, the future venture's business model assumptions are tied to instigating these changes. As the new venture starts interacting with external actors, seeking legitimation and engagement, the initial core assumptions are subjected to continuous assessment of their validity and priority.

Which contextual factors influence a hybrid new venture's market shaping? This study contributes to the literature by offering a detailed analysis of the contextual factors and events that influence a hybrid new venture's market shaping as the venture itself evolves. These factors and events can be divided into three categories: internal, external, and relational. Despite underlining the dynamic and volatile nature of markets, prior studies describing the process of market shaping by an individual actor (Jaworski et al. 2020; Nenonen & Storbacka 2020) do not account for such contextual elements. I argue, that to understand market shaping of hybrid new ventures, and of any actor, it is necessary to understand its context. As an example, from the case study, the macro-level factor of the Covid-19 pandemic influenced the focal venture's process positively, yet created enormous strain for a myriad of other companies. My analysis shows that the influencing factors are contextually contingent rather than generally favorable or unfavorable at all points in time or to all hybrid new ventures and illuminates new ventures' constant wrestle with occurrence and intention.

Another important contribution of this study to existing research is in showing that hybridity, and thus the explicit aim of shaping a market toward sustainability, influences the way market shaping is conducted. Many market-shaping studies build on the underlying assumption that market shaping is driven primarily by market logic and therefore argue that focal market-shaping actors attempt to direct the market-shaping process "in their own favor" (Flaig et al. 2021a, 254; Storbacka & Nenonen 2011b, 255). That approach aligns with market actors pursuing increased competitive advantage (Azimont & Araujo 2007; Jaworski et al. 2000; Kindström et al. 2018; Kjellberg et al. 2012; Ulkuniemi et al. 2015), or growth in sales, financial performance, or market share (Brege & Kindström 2020; Nenonen et al. 2019b). This study shows that in the case of hybrid actors, these economic objectives form only one side of the market shaper's aims. A hybrid new venture wants to shape a market because it is the morally right thing to do, and because it provides benefits (both tangible and intangible) for both its network actors and the natural environment and society at large. Without these non-commercial objectives, the venture would not exist. The definition of market shaping by Nenonen et al. (2019b, 618) does not imply any specific motivation or aim:

> Market-shaping implies purposive actions by a focal firm to change market characteristics by re-designing the content of exchange, and/or re-configuring the network of stakeholders involved, and/or re-forming the institutions that govern all stakeholders' behaviors in the market.

Consequently, I suggest an adaptation to the above definition by Nenonen et al. (2019b) when concerning market shaping driven explicitly by the aim of shaping a market toward sustainability:

> Market shaping for sustainability implies purposive actions by a focal firm to change market characteristics to generate outcomes that reduce environmental and/or social impairment by re-designing the content of exchange, and/or re-configuring the network of stakeholders involved, and/or re-forming the institutions that govern all stakeholders' behaviors in the market.

Beyond firm-centric views, market-shaping scholars have increasingly called for companies to adopt a more systemic view, one that would present the aim of market shaping as to "increase the size of the pie" (Nenonen et al. 2019b, 632). Doing so, involves growing the size and profitability of the market and thus enhancing the value creation and realization for multiple stakeholders. However, research adopting a systemic view has neglected actors specifically committed to increasing the sustainability output of the market. This omission poses the risk that the underlying

assumption in market shaping remains that economic objectives are prioritized to produce economic value in the form of shareholder profit (Dyllick & Muff 2016). Under that logic, the economic value created goes primarily to shareholders (followed by management and customers). The resulting negative externalities are typically not understood, measured, or declared; worst of all is if they are ignored (Dyllick & Muff 2016, 163). The integration of hybrid entrepreneurship with the systems perspective of market shaping in this study offers normative implications for business-to-business marketing research adopting systems thinking (e.g., Kjellberg et al. 2015; Nenonen et al. 2019b). The integrated perspective in this study suggests a transition from the notion of *green marketing* in dyads and narrowly defined networks into market shaping and narrative formation among systemic actors for more sustainable futures. The integrated perspective also advances our understanding by providing insights into the role of hybrid new ventures in performative market shaping processes toward more sustainable markets.

By extending the focus on incumbent actors found in prior market-shaping studies (e.g., Kindström et al. 2018; Storbacka & Nenonen 2015; Nenonen et al. 2019b; Ottosson et al. 2020; Ulkuniemi et al. 2015; Werner et al. 2022) to novel ventures in the making, this study offers new insights on the emergence of market shaping and thereby contributes to a more holistic understanding of the market-shaping process. Whereas the antecedents of new venture creation, and more specifically of hybrid new venture creation, have been well documented in prior research, less scholarly attention has been paid to the antecedents and early stages of market shaping, as pointed out by Nenonen and Storbacka (2021). This study addresses this omission for example by showing how agential qualities and characteristics of the entrepreneur (and later the founding team) influence how external contingencies are leveraged in early-stage market shaping.

How does a hybrid new venture's market shaping evolve over time? This study shows that for a hybrid new venture with a market-shaping aim, the two processes of new venture development and market shaping are tightly intertwined and interdependent. This extends our current understanding by showing that an actor's market shaping is not driven along a separate trajectory but it is continuously (re)shaped by the complex process of new venture development and vice versa. A process model depicting the intertwinement of hybrid new venture development and market shaping to advance sustainability is presented in Figure 25. The model provides a means to understand and explain how market shaping evolves reciprocally with the new venture development process driven by activities performed by an agent, yet all the while influenced by factors and events in its internal and external context. Although the explanation is purposefully grounded in a local context, the theoretically representative case has aided theory development at a more general level in this study and could also do so in future studies.

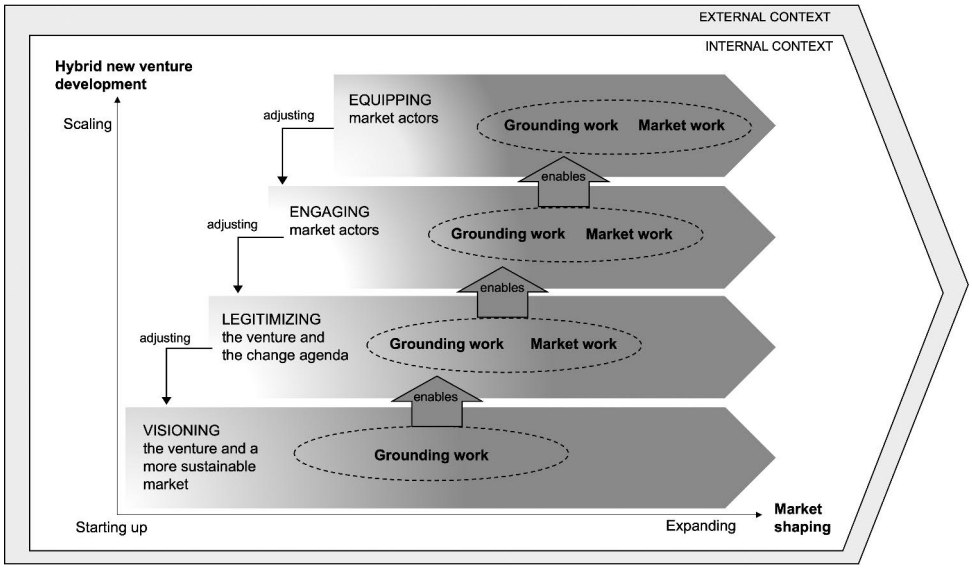

Figure 25. Intertwinement of market shaping and hybrid new venture development.

The intertwined processes of market shaping and hybrid new venture development were found to be driven by four interrelated and reciprocal subprocesses: *visioning the hybrid venture and a more sustainable market*, *legitimizing the venture and the change agenda*, *engaging market actors*, and *equipping market actors*. This is a novel contribution that recognizes the underlying, continuous, and interrelated subprocesses that enable and enforce an individual actor's market shaping instead of merely seeing market shaping as a collection of stepwise activities detached from organizational development, such as in previous market-shaping process models (Nenonen & Storbacka 2020; Jaworski et al. 2020). None of the four subprocesses alone is sufficient, but their interplay enables and enforces the market shaper's change agency and its commercial viability. The four subprocesses are ongoing and run in parallel, with none of them having a clear-cut starting point. Visioning is the only subprocess that is likely to start as a completely internal process, as it initiates in the mind of an individual entrepreneur. However, visioning, like the other subprocesses, comes to involve a growing number of participating actors as it progresses.

The intertwined processes of market shaping and hybrid new venture development can be characterized as entrepreneurial, as they are advanced through trial and error in an uncertain and ever-changing context, rather than a planning and control-based process of management within markets (Vargo & Lusch 2014). This study's findings support the suggestion by Baker and Nenonen (2020) and Nenonen et al. (2019a) that market shaping reflects the logic of non-predictive strategy,

emphasizing experimentation and learning based on how the market responds to the market shaper's efforts. In contrast however, the findings show that in addition to iteration based on developments in the present, market-shaping hybrid new ventures express forward-looking agency, which means actively and deliberately working toward a changed market (Patvardhan & Ramachandran 2020). Importantly, a market-shaping aim informs the organizational development of a hybrid new venture from the start rather than emerging along the way. Market shaping for hybrid new ventures is thus intended rather than incidental or optional and unfolds as a constant balancing of deliberate action and contextual contingency. Although a market-shaping hybrid new venture must effectually navigate through a highly unpredictable and complex environment through learning-based iteration (where luck also plays a significant role), it is constantly guided by specific goals that foster the realization of an envisioned, more sustainable future. Market shaping has a purpose, but it is mostly advanced by situated improvising (Smets et al. 2012).

This study does not claim that significant change in market elements can be achieved by a single actor alone - this requires the efforts of multiple engaged actors (Fehrer et al. 2020). However, the study adds to prior claims (e.g., Kleinaltenkamp et al. 2021; Nenonen et al. 2019b) that single actors have agency through market work to nudge other actors in a new direction and catalyze chain effects. When synchronized with versatile actors' dispositions and behaviors, the changes may "diffuse through the network until they are collectively embraced and accepted by most actors" (Kleinaltenkamp et al. 2021, 70). The role of market devices, such as a digital platform, is also highlighted in a novel actor's efforts to shape a market. Without the idea of a platform, the entrepreneur would not have initiated market shaping and new venture development. Aligned with the notion of distributed agency (Araujo & Easton 2012), the evolving platform (even though not finished) had performative power by influencing not only the market shaper, but also its stakeholders: assurance partner, producers, corporate customers, even competitors.

7.2 Managerial contribution of the study

This study has practical relevance for both aspiring entrepreneurs and corporate managers. Market shaping for sustainability is an equally relevant and timely topic for all business actors. Recent statements from powerful business institutions signal an incipient transition away from shareholder value thinking. For example, the Business Roundtable, representing over 180 major companies in the U.S.A., stated that "Corporate America is responsible for providing economic benefits to all, not just its investors" (Business Roundtable 2019). The pledge overrides more than three decades of thinking that corporations exist to serve shareholders and is likely lead to disruptions in "business as usual". At the same time, the financial world is being

shaped by the rapidly increasing number of investors judging companies based on ESG-criteria. This study confirms earlier research underlining the important interplay between incumbents and new ventures in sustainable transformation of industries (Hockerts & Wüstenhagen 2010). As big ships turn slowly, corporations should look into partnering with hybrid new ventures who are already built on sustainable business models and who enable incumbents to tap into innovative sustainable solutions. These kinds of collaborations are bound to support and advance all the subprocesses driving market shaping and hybrid new venture development, perhaps leading to quicker and more concrete sustainability outcomes.

Practitioners can utilize this study's findings to better understand the various forms of activities market shaping may entail. To gain a position of enough power to shape a market, a hybrid new venture must build a solid foundation through various types of grounding work. The account of the case venture's continuous and contextually contingent engagement in a wide array of market work in the three identified subcategories (reform work, resilience work and relational work) should help practitioners make informed decisions on how to organize and plan their market-shaping efforts.

The findings of this study show that it is highly beneficial when entrepreneurs and managers have a deep understanding of the market they aim to shape. Especially when trying to shape such deeply rooted elements as values and morals, the shaper faces a difficult task unless equipped with tacit knowledge of the actors and practices of the focal market. Access to word-of-mouth information and having existing relationships with versatile actors operating in the market is also important. Even with extensive experience in a certain field, a market shaper is bound to face surprising factors that produce unexpected outcomes and require assumptions to be reviewed and re-established. Importantly, having experience and understanding saves time, a resource that is quickly depleting for us all. Before we run out of time to stop the irreversible changes to our natural ecosystems (IPCC 2021; 2022; Rockström et al. 2009), every entrepreneur and manager should look at the market in which they operate and question whether its fundamental practices are leading to a more or less sustainable path. Moreover, they should closely consider whether the sustainability practices of the market are actually leading to a more sustainable path. This study has demonstrated that is not always the case.

Continuous monitoring of industry and market-related factors that could constrain or enable market shaping and hybrid venture development is essential for entrepreneur(s) and managers. Such factors include for example potential target customers' actual commitment to creating sustainability impact, and investors' level of patience when it comes to capturing financial benefits in the long term. Increased understanding of these potentially constraining or enabling factors and events helps

entrepreneurs and venture managers to recognize risks both in the internal and external environment, as well as in the relationships it is tied to.

The findings of this study underline that corporations' interest in change is not the same as committing to change, and definitely not the same as chan*ging*. This is particularly poignant in viable markets that are sustainable by definition, but not necessarily producing the environmental/social value output intended. I suggest that one way to overcome this hurdle is for the market shaper to focus on engaging actors that are looking for sustainable solutions to clearly specified challenges rather than offering a more sustainable solution to actors that the market shaper thinks would be beneficial to its cause. The market shaper must from early on be prepared for continuously readjusting its assumptions related to its target audience, as well as the content and channels of its communication to various audiences.

Reaching scale is difficult for any new business, and it may be particularly difficult for new ventures with a hybrid mission (Bocken et al. 2016). However, a remarkable aspect of the case study was how the focal venture managed to establish its business model and start scaling within just two years of its establishment. The findings of this study lead me to two main inferences. First, full integration, that is, serving economic and environmental value creation through the same organizational activities, as well as a flexible prioritization of sustainability and market logics, enables hybrid ventures to navigate a market characterized by competing logics. Second, (and closely related), the role of investors' patience is crucial in shielding a hybrid venture from having to succumb to the short-term financial pressure inherent in market logic. Nevertheless, the hybrid business model does need to demonstrate a clear path to future revenues. In a situation where competition for resources is tight, few aspiring entrepreneurs can pick and choose their investors, but, when possible, it is highly advisable to look for investors with strategic rather than purely financial interests, even if it means having to wait. At the same time, the findings of this study also show the importance of timing when launching a new for-profit venture aiming to take a forerunner position.

As economic and sustainable value creation are served through the same operations in an integrated hybrid, mission drift - failure to manage tensions between the social mission and financial margin - is not as significant a threat as for social enterprises. However, the study's findings indicate the importance of a hybrid new venture having a strategy to uphold internal legitimacy, which will affect its externally oriented market-shaping efforts. Therefore, continuous assessment of internal legitimacy through open discussion and alignment of interests is highly advisable.

A popular example of successful integrated hybridity is microfinance, where both social objectives and economic revenue generation are pursued by providing loans to extremely poor people, who are simultaneously the beneficiaries and the

paying customers of the hybrid enterprise (Battilana & Dorado 2010). In contrast, in the case examined in this study, the customers are no more the beneficiaries of the company's environmental mission than any other actor or living organism on the planet. A company's mission to foster the creation of more renewable energy and thereby mitigate the effects of climate change is far less tangible than pulling a relatively well-defined sociodemographic group out of poverty. Rather intangible benefits are more challenging to communicate to potential customers, and also make the focal actor's goals more susceptible to being undermined by those benefiting from the status quo. It is then important that hybrid firms strive as soon as possible to visualize and concretize the calculable benefits from their offer to the environment and society. Nevertheless, a firm with its environmental mission fully integrated into the business model can avoid constant trade-offs between achieving environmental and economic goals.

The case study provided a rare possibility to follow the journey of a hybrid new venture in making. Given the significant failure rate among new ventures, it is important to present and analyze real-life success cases. Much can be learned from stories of failure, but equally much can be learned from accounts of activity leading from an idea to an established, viable business. That is not to say, however, that the process unfolds predictably and with no unintended consequences. On the contrary, the findings of this study reveal the iterative and open-ended nature of the market-shaping process.

7.3 Trustworthiness of the study

In discussing the trustworthiness of this study, I will utilize the widely employed and pragmatic evaluation criteria for qualitative research by Lincoln and Guba (1985), complimented by the more recent model for quality in qualitative research by Tracy (2010). The four criteria for trustworthiness by Lincoln and Guba (1985) are credibility, dependability, transferability, and conformability. The eight criteria by Tracy (2010) include a worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethics, and meaningful coherence.

According to Tracy (2010) a *worthy topic* is relevant, timely, significant, and interesting. The worthiness of this study's topic is supported by multiple factors, as described in Chapter 1. Market shaping is a research area in which interest has been growing, particularly during the past decade (Sprong et al. 2021). Market shaping is attracting attention from scholars in many disciplines as it reflects the increasing complexity and ambiguity of markets (amplified by such timely challenges as pandemics, cyber threats, extreme weather events, and global component shortage), and at the same time markets' malleability in the face of agent-driven efforts (Nenonen & Storbacka 2021). Considering market shaping to create more

sustainable markets is critical, as are any efforts to provide insights and tools for slowing the most catastrophic effects of climate change. Moreover, the case study presented in this thesis provides a rare glimpse into the life of a hybrid new venture as it came into existence, in contrast to the typical retrospective approach.

Assessing the *credibility* of this study means considering whether my interpretation of the data is plausible and makes sense to readers in general, and my informants in particular (Lincoln & Guba 1985; Tracy 2010). I strived to enhance the credibility of my research in various ways. First, I utilized constructs used in the established literature in market shaping, sustainable entrepreneurship, and new venture development. Second, during the qualitative data collection, the several intensive periods I spent in the field over two years allowed me to better understand the market for GOs and immerse myself in the life of a startup company. Third, I have described the context and the actors as meaningfully as possible within the page limits of a monograph thesis to provide the reader with an "authentic portrait of what we are looking at" (Miles & Huberman 1994, 278). My prior knowledge of and experience in the energy industry provided an understanding of the study's context and allowed me to "speak the language" of my informants from the beginning. Fourth, I triangulated among complimentary data sources. This allowed me to compare information received and check whether it led to converging conclusions. Fifth, after concluding real-time data collection and moving into more in-depth analysis, I asked my informants to comment on my evolving interpretation of the events and to validate the order and content of the events on a multilayered timeline. These discussions largely confirmed that we had similar understandings of what was going on but also provided opportunities to correct some important omissions and misunderstandings.

Some limitations to the credibility of the study do exist. I could have used more informants from the core enabling network of the case company to get additional information on their engagement in the market-shaping process. A larger sample could also have increased the possibility of unearthing negative evidence. The credibility of the research process could have also been improved by utilizing multiple researchers. However, the longitudinal, in-depth, and real-time nature of the study did not allow the constant presence of other researchers that would have been required.

Dependability relates to the consistency and reliability of the research findings, including that the research process can be traced back and is clearly documented (Lincoln & Guba 1985). In other words, the research process should pass the auditing of other researchers (Miles & Huberman 1994; Healy & Perry 2000). I strived to increase the study's dependability by creating figures and tables that summarize data, carefully choosing relevant quotations, and describing in detail the case selection, access, and process of data analysis. In other words, I strived to fulfill the

dependability criterion by describing the research process as openly and comprehensively as possible. The real-time nature of most of the data collection minimized the chances of informants not recalling events or recalling them incorrectly. Research dependability and credibility can also be enhanced by striving for *rich rigor* (Tracy 2010). In my study, this aim manifests in choosing a context well-suited to the study's purpose, spending a large amount of time in the field, gathering abundant data, and being transparent about the sorting and analysis of data.

A clear limitation to the dependability of this study is my personal relationship with the main informant, HP. It is not certain if he would have opened up to another researcher in a similar way. On the other hand, as it is typically difficult for a researcher to evaluate whether the thoughts shared by the informants represent their true values, beliefs, assumptions, and goals, my long acquaintance with HP provides fairly convincing evidence that what he conveyed to me was indeed valid. Moreover, if he had not trusted me, it is uncertain if the data collected would have been as rich, accurate, and credible. As for all the informants in the study, it is always possible, although highly unlikely, that they provided false or inaccurate information. This risk remains regardless of the researcher.

Transferability in qualitative research does not concern generalizability but how well a study's findings can be applied to other cases, situations, and contexts (Lincoln & Guba 1985). According to Tracy (2010), through transferability a researcher may reach resonance, that is, the ability to evoke empathy and reverberation in readers so that they can apply the research in their own situations. The evaluation of transferability is left to the reader. To provide the readers with a sound base for judging the applicability of this study, I strived to describe the context and the lived experiences of my informants thoroughly and vividly. However, contextual research can never be complete. No matter how well the researcher knows the context or how extensive the gathered data is, it is impossible to capture the full complexity of the phenomenon in focus. Finally, as an active player in the research process, I have openly described my pre-understanding and experience of the context and my connection to the informants to enhance the reader's ability to assess the study's transferability.

Confirmability means establishing that the researcher's findings and interpretations are clearly derived from the data and not merely a product of the researcher's imagination (Lincoln & Guba 1985). I have tried to fulfill this criterion by demonstrating how I arrived at my interpretations and conclusions in an unbiased manner. As explained in section 3.1, being deeply engaged with the case company for two and a half years posed the risk of *going native* and might have limited my ability to look at what was happening through the eyes of a researcher rather than as a member of a community. This risk was mitigated by visits to the case firm being of limited duration (one to two days) and dispersed, such that there were several

weeks or months between visits. The geographical distance to the company also contributed. I have also strived for *sincerity* (Tracy 2010) throughout the research process by being transparent and reflecting on my subjective values, motivation, and biases. Healy and Perry (2000) call this the value-awareness of realism. However, writing out a compelling and trustworthy report meant balancing detailing the challenges faced and turns taken and avoiding unnecessarily ponderous descriptions. *Ethical considerations* have included a high respect for and collaborative stance toward my research participants, assuring their consent, and avoiding any kind of fabrication, omission, or fraud (Tracy 2010).

I believe this study provides a *significant contribution* as described in the previous sections of this chapter. I have achieved my stated purpose for the study, which was to build a processual and contextual explanation of how market shaping for sustainability and early hybrid new venture development are interrelated. The research questions posed arise from existing literature and the study's findings help answer them. The abductive research design and case study methodology align well with the scientific realist paradigm. The study's conclusions connect empirical data with existing literature and address the omissions identified in previous studies. Hence, following the criteria suggested by Tracy (2010), this study shows *meaningful coherence*.

7.4 Limitations and future research

This study focuses on a topic that has thus far gained little attention in the market-shaping literature and therefore provides many opportunities for future research endeavors. As with any research, it is also subject to some limitations. While the intensive focus on a single actor in a particular industry can be seen as a strength of this study, it is also a limitation. Adding a comparative case could have offered valuable insights into the interplay between market shaping and hybrid new venture development. However, it must be acknowledged that finding another hybrid new venture in the making would have been extremely challenging during the time period available to conduct this research. Although difficult, finding such ventures to study is well worthwhile, as this study's contributions show.

Another limitation that is a consequence of focusing on the market-shaping firm is a limited understanding of the other actors related to the process. For example, without having interviewed the large companies that turned Becour's business offering down, it would be too bold to assume that their decisions were merely based on inertia, as the interviews and discussions with the Becour members imply. There are likely to be other influential issues such as timing, existing contracts, and risks involved in choosing a startup company as a supplier. Expanding the interviews to

the companies Becour failed to sign would have provided relevant insights into the analysis.

This study has focused on the initial phases of the market-shaping process, where a single hybrid new venture strived to catalyze a chain of small effects, eventually leading to more wide-reaching alterations in the focal market's form. Thereby, the study's focus was clearly delimited on the emergence and early phases of market shaping. However, the lack of detailed evidence on the outcomes of market shaping can be seen as a limitation of this study. The time span available for the study meant the effects of the case company's market shaping could not be evaluated. The next step in future research would thus be to investigate the tangible outcomes of market shaping, as has been suggested by other scholars (Nenonen et al. 2019a; Stathakopoulos et al. 2022). There is a need for longitudinal studies in versatile markets to further explain hybrid new ventures' market shaping.

Processual and contextual research can never be complete. No matter how well the researcher knows the context or how extensive the data gathered, it remains impossible to capture the full complexity of the phenomenon in focus. However, the purpose of this study was to provide a contextual explanation instead of presenting a universal explanation of the focal phenomenon. Applying this research approach to various types of hybrid new ventures in versatile markets would further our understanding of the complex and contextually contingent process.

Although the time span of this research did not permit an analysis of the influence of the case company's finished digital platform on its market shaping, the study's findings open up interesting research avenues regarding the role of novel technological solutions as market devices facilitating market shaping to deliver sustainability. These insights align well with those of Geiger and Gross (2018, 1358), who state that "market devices are particularly interesting to study when they are deployed with an intent to make the market 'better' or more just." Introducing a digital solution that provides unprecedented transparency and traceability to an existing market could significantly affect market actors' behavior and it would be highly relevant to examine why and how these changes occur.

The case company in this study is based in an open, developed economy, where the institutional context supports entrepreneurship and sustainable innovation. As the findings of this study highlight the key role of contextually contingent enablers and constraints, a logical future research avenue would be to investigate and explain the unfolding of hybrid new ventures' market shaping in versatile contexts involving different technologies, countries, industries, and cases. That approach could, for example, make it possible to recognize generic and context-specific forms of market work related to market shaping to advance sustainability.

The findings of this study also point toward an interesting future research topic regarding communication in market shaping. A market-shaping firm uses different

types and channels of communication to address various audiences. Future research could investigate how actors playing different roles in the market perceive different forms of rhetoric, how effectively they are reached through various communications channels, and whether these previous points influence how receptive the actors are to the market shaper's change agenda. This could improve our understanding of how communication during market shaping motivates or deters actors.

Recently, Nesterova (2021) has suggested that pro-environmental and values-driven small firms need to be "radical" to be considered agents of sustainable change. The findings of this study show that a market-shaping hybrid new venture does not need to deviate radically from what Nesterova (2021) calls "the firm-as-profit-maximiser reduction in neoclassical economics and mainstream business theorising". I thus urge scholars to extend their research to businesses that operate across a wide spectrum of hybrid companies. However, this more inclusive view on hybridity makes it difficult to distinguish hybrid and non-hybrid businesses, especially in climate-change-sensitive fields such as renewable energy. It may be nearly impossible to distinguish what makes a company hybrid (or not) just by looking at it from the outside. That is because most businesses have acknowledged the requirements for and benefits of communicating their efforts in creating social and/or environmental value. Moreover, like the case company in this research, many hybrids might not identify themselves as hybrids. Despite these challenges, I encourage researchers to make the effort to find new ventures expressly founded to serve an integrated mission and which are hybridizing economic and environmental/social value creation. As Battilana et al. state (2012, 55, emphasis added): "hybrid organizations offer a bold, *sustainable infusion of humanitarian principles* into modern capitalism".

Finally, I echo the call by many researchers to bring back the moral elements into business sustainability research instead of merely focusing on the business case for sustainability (e.g., Bansal & Song 2017; Antadze & McGowan 2017; Halme 2021; Suckert 2019). As Bansal and Song (2017, 130) argue: "when business and society issues are framed with existing theories, then the issues are treated as just any business issue or societal context." The authors highlight that while the sustainability discussion focuses on the business case for socially or environmentally responsible business practices, managers and organizations will tend to act responsibly only if it fits their current strategy, can be expected to generate economic profit, or at least will not create extra cost. Unless business scholars join in collective action with other agents to shift the focus away from the normative prescriptions of market logic, we are bound to see an unending pursuit for unconstrained economic growth, leaving future generations with disrupted natural and social systems (Bansal & Song 2017).

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Appendixes

Appendix 1. Forms of institutional work (Lawrence & Suddaby 2006).

PURPOSE	FORM OF WORK	DEFINITION
CREATING INSTITUTIONS	Advocacy	The mobilization of political and regulatory support through direct and deliberate techniques of social suasion
	Defining	The construction of rule systems that confer status or identity, define boundaries of membership, or create status hierarchies within a field
	Vesting	The creation of rule structures that confer property rights
	Constructing identities	Defining the relationship between an actor and the field in which that actor operates
	Changing normative associations	Re-forging the connections between sets of practices and the moral and cultural foundations for those practices
	Constructing normative networks	Constructing of interorganizational connections through which practices become normatively sanctioned and which form the relevant peer group with respect to compliance, monitoring, and evaluation
	Mimicry	Associating new practices with existing sets of taken-for-granted practices, technologies, and rules to ease adoption
	Theorizing	The development and specification of abstract categories and the elaboration of chains of cause and effect
	Educating	The education of actors in skills and knowledge necessary to support the new institution
MAINTAINING INSTITUTIONS	Enabling work	The creation of rules that facilitate, supplement, and support institutions, such as the creation of authorizing agents or diverting resources
	Policing	Ensuring compliance through enforcement, auditing and monitoring
	Deterring	Establishing coercive barriers to institutional change

	Valorizing and demonizing	Providing for public consumption positive and negative examples that illustrate the normative foundations of an institution
	Mythologizing	Preserving the normative underpinnings of an institution by creating and sustaining myths regarding its history
	Embedding and routinizing	Actively infusing the normative foundations of an institution into the participants' day-to-day routines and organizational practices
DISRUPTING INSTITUTIONS	Disconnecting sanctions	Working through state apparatus to disconnect rewards and sanctions from some set of practices, technologies, or rules
	Disassociating moral foundations	Disassociating the practice, rule, or technology from its moral foundation as appropriate within a specific cultural context
	Undermining assumptions and beliefs	Decreasing the perceived risks of innovation and differentiation by undermining core assumptions and beliefs

Appendix 2. List of interviews conducted by Becour/DNV.

Date	Interviewee	Company type
27.05.2019	Sustainability manager	Norwegian financial services company
28.05.2019	Director Climate & Sustainability	Telecom based in Norway
05.06.2019	Adviser to CEO, Environment	Norwegian hydropower producer
06.06.2019	Senior executive adviser, Environment	Norwegian airport operator
07.06.2019	Head of climate reporting	Norwegian public service company
13.06.2019	Sustainability manager	Norwegian oil producer
13.06.2019	Renewable Certificates Portfolio Manager	International energy based in Germany
20.06.2019	Head of Sourcing	French electricity retailer
25.06.2019	Expert on Green Bonds	International banking group based in Sweden
01.07.2019	Renewable energy specialist	Multinational B2B based in Sweden
03.07.2019	Environmental Program Manager	Global financial institution based in the Netherlands
08.07.2019	Director sustainability	Norwegian B2B company
19.12.2019	Environmental Manager	Norwegian real estate management company
09.01.2020	Head of electricity procurement	International high fashion Becourased in France
09.01.2020	Sustainability developer Sustainability manager	Norwegian outdoor clothing and equipment company
22.01.2020	n/a	Norwegian financial services group

Appendix 3. Interview questions and topics from the market actor interviews conducted by Becour and DNV.

First round of interviews during May 2019 - July 2019

Examples of used interview questions for <u>potential buyers</u>:

1) Could you give me a short description of your organization and your role?
2) What would you consider to be your company's main sustainability target? How does renewable energy fit in?
3) Do you believe your end customers care if you are a climate-neutral company or not?
4) What about other stakeholders, owners, employees, NGOs, and interest groups?
5) Is your company currently buying GOs?
    a. If yes: For what purpose are you using them? (climate reporting, promoting products, anything else?)
    b. If no; Why not? Have you used them in the past? Would you ever consider buying them?
6) What is your motivation for buying these certificates?
7) What do you see as the greatest benefits and weaknesses of the GO system?
8) Do you find it difficult to know what is best practice when acquiring GOs? What do you use as a source?
9) How much time is spent on deciding to buy/not buy GOs?
10) At what platform are you buying GOs today? How do you buy GOs; from electricity supplier, middlemen, producer, platform?
11) Do you have, or would you have requirements, regarding GOs (e.g. wind power, from Norway etc)? Would it be a deal-breaker to buy it from a company that also invest in fossil fuel?
12) Do you have any trust issues with buying GOs today or other types of carbon certificates? Do you believe all the money you buy for a certificate goes back to the producers? Are you afraid of double counting?
13) What are your thoughts around the GO system? What can be done to make it work better?
14) What impact would you like to see when buying GOs? How should it be measured?
15) If global company; Do your concerns of buying green energy differ between countries? Or locations?
16) Anything I should have asked you that I haven't?

Aim of buyer interviews:
1. What are they claiming and proving? Motivation behind buying GOs
2. Do they have a trust issue with GOs todays or in the likely future?
3. Would more information generate more value?

4. What are their assurance needs?
5. Do they really want to see impact of GOs?

Examples of used interview questions for <u>potential sellers:</u>

1) Could you give me a short description of your organization and your role?
2) would you consider to be your company's main sustainability target? How does renewable energy fit in?
3) Do you believe your end customers care if you are climate neutral company or not?
4) Are you familiar with the GO system? Have you ever sold GOs from your renewable plant to a client?
5) What is your take on the customer wanting to buy PPAs and virtual PPAs (e.g. GOs)? What is the easiest and preferred option for you and why?
6) Do you find it difficult to find out what type of certificates you can buy?
7) What is your motivation for selling these certificates?
8) What impact does the money you collect from GOs have for your company? Do you have any examples?
9) What platform/channel do you use to sell your GOs?
    a. Is it difficult? Is it easy, convenient and effective? Do you get the solutions you want?
    b. Does it take you long time to find client?
10) What do you see as the greatest benefits and weaknesses of the GO-system?
11) What are your thoughts around the GO system? What can be done to make it work better?
12) What does the customer get when they buy these certificates from you? Who are your customers?
13) Have you meet potential customers that are concerned/worried about buying from your company? Why were they concerned?
14) Some of the customers we have been in contact to want to see an impact when buying GOs - is this something you are thinking about? How should it be measured?
15) Would you be interested in "earmarking" the money, if it gave you a higher profit margin?
16) Do you have any trust issues with selling GOS today? Do you believe all the money customers buy for a certificate goes back to you as a producer?
17) Do you sell these certificates to the highest bidding? Do you have any rules?
18) If a global company: do you sell green attributes certificates outside the EU?
19) If you are buying them -what is the purpose? What do you use them for?

Second round of interviews during December 2019 – January 2020 related to the "impact project" with DNV and Statkraft.

Interview discussion topics for potential buyers:

1. Step 1: Strategy for handling scope 2 emissions (buying offset, buying GO or own initiatives)
2. Step 2: Buying behaviors – When you are buying GOs, what would you choose (directly from producer, from supplier etc.)
3. Step 3: Arguments against GO system
4. Step 4: Verification need - What is important for you? Which option would you go for? (None, some, or all information is verified)
5. Step 5: Reinvestment – Situation today
6. Step 6: Reinvestment - What should the money be spent on
7. Step 7: Localization
8. Step 8: Matching power consumption and time
9. Steg 9: What should be focused on to improve the GO system

Appendix 4. List of documents involving Becour and/or the GO market used as secondary data.

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Vilnes, O. (17.08.2018). *Becour to sell GOs from new Lyse power plant*. Montel EQ.

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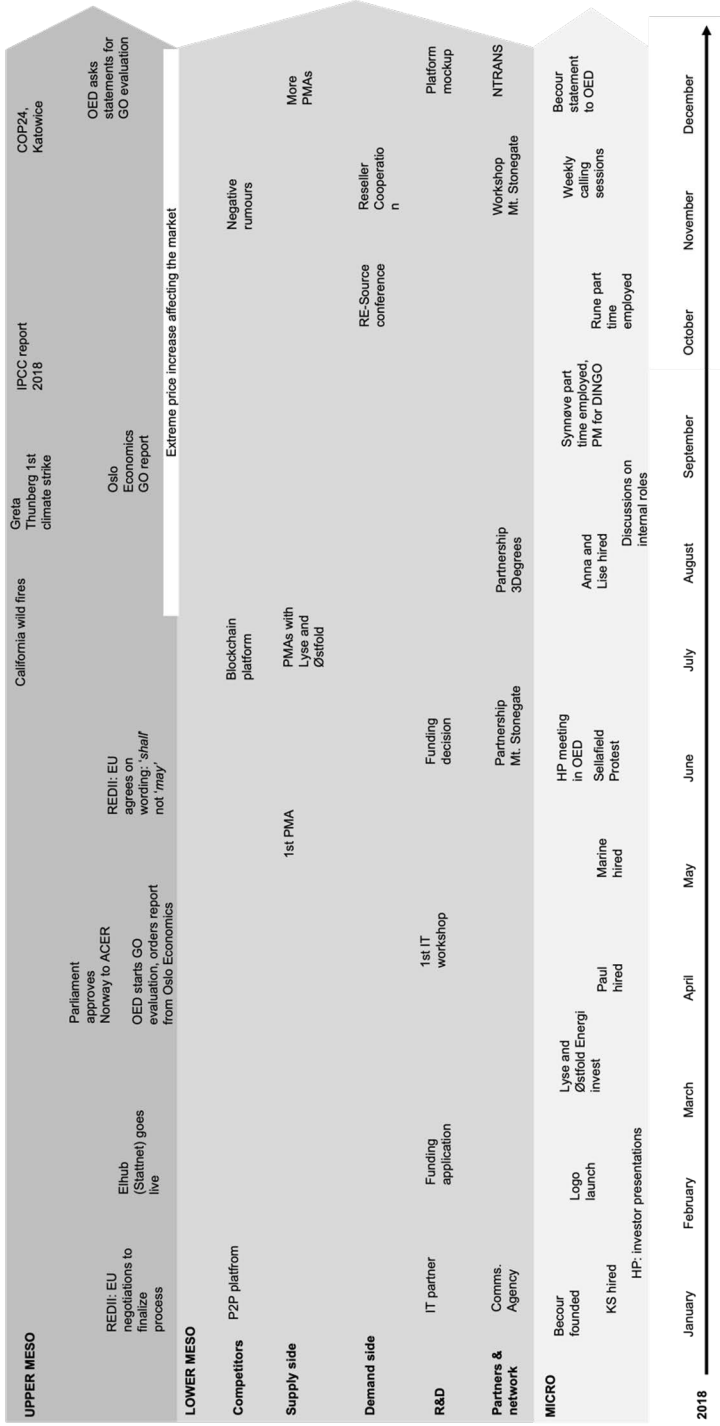
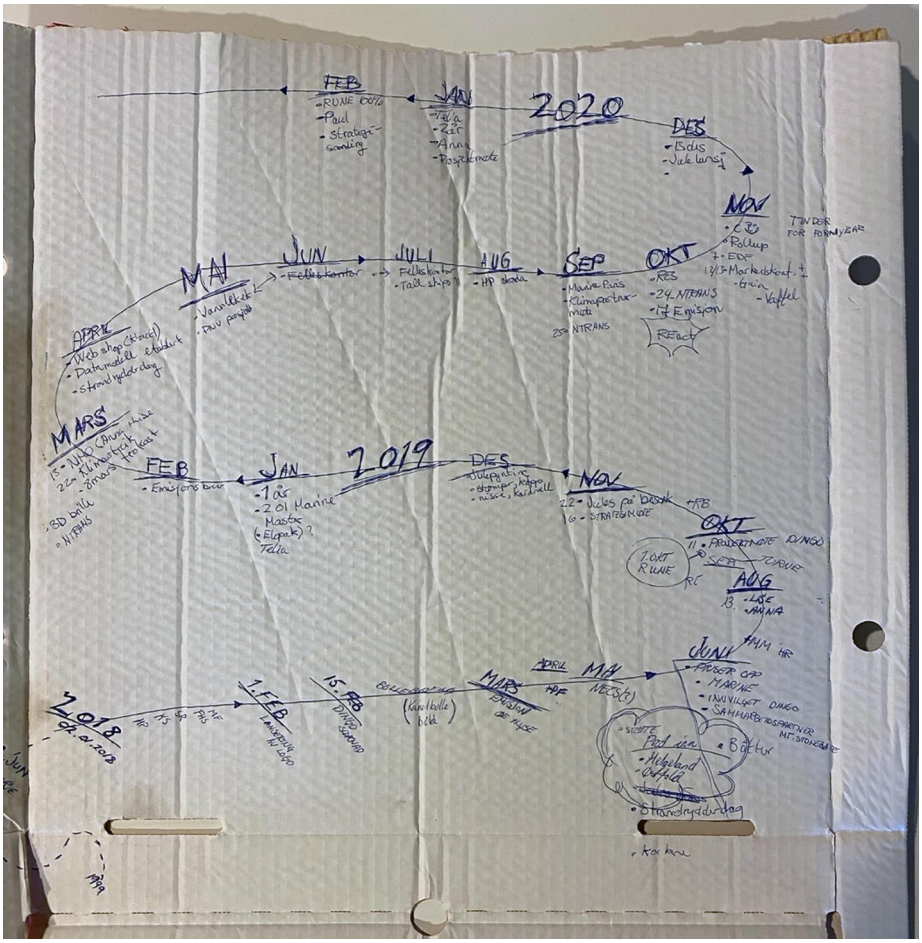
Vilnes, O. (01.11.2019). *Norwegian utilities buy shares in GO company Becour.* Montel EQ.

Vilnes, O. (21.11.2019). *Arrogant of Hydro to ignore the GO market.* Montel EQ.

Appendix 5. Excerpt of visual map.



Appendix 6. Pizza box timeline by Becour.



TURUN
YLIOPISTO
UNIVERSITY
OF TURKU

Painosalama, Turku, Finland 2022

ISBN 978-951-29-9001-6 (PRINT)
ISBN 978-951-29-9002-3 (PDF)
ISSN 2343-3159 (Painettu/Print)
ISSN 2343-3167 (Verkkojulkaisu/Online)