

Sustainable Crowdfunding: Insights from the Project Perspective

Natalia Maehle

Western Norway University of Applied Sciences, Bergen, Norway

Purpose – This paper explores the peculiarities of sustainable crowdfunding from the project perspective. The research question is: what are the distinctive features of sustainable crowdfunding, in terms of crowdfunding motivation, platform choice, crowdfunding costs and relationships with backers?

Design/methodology/approach – The current study follows a qualitative approach, through conducting in-depth interviews with representatives of sustainable projects, which have had successful crowdfunding campaigns. The selected projects represent various industries and crowdfunding models.

Findings – Sustainable entrepreneurs have both financial and non-financial motivations for crowdfunding. A distinctive feature is the importance of community engagement, since the community spirit of crowdfunding is well suited to sustainable projects. The choice of the crowdfunding platform is more complex for sustainable entrepreneurs, as they need to consider the platform's sustainability. Sustainable entrepreneurs also have to put more effort into their communication activities with potential backers, to compensate for the intangibility of sustainability claims. Moreover, they need to have a greater focus on building relationships with backers due to both the community spirit of their projects and legitimacy issues.

Originality/value – The current paper contributes to the limited literature on sustainable crowdfunding and the literature on funding of sustainable businesses, and can act as a foundation for further research in this field. Current findings also have high practical value. Crowdfunding platforms may use the insights provided here to better meet the needs of sustainable entrepreneurs, while sustainable entrepreneurs can better understand what they need to pay attention to in their crowdfunding campaigns.

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Sustainable Crowdfunding: Insights from the Project Perspective

Natalia Maehle

Western Norway University of Applied Sciences, Bergen, Norway

1. Introduction

In recent years, entrepreneurs have become an important force in driving transformation towards a more sustainable society. A new breed of sustainable entrepreneurs has emerged, using their innovative potential to resolve environmental and societal challenges with innovative business solutions (Cohen and Winn, 2007). However, projects addressing sustainable value creation often experience problems in getting financing from traditional sources, primarily due to these projects having a weaker focus on financial performance. Unlike traditional entrepreneurs, who mainly focus on economic aspects, sustainable entrepreneurs have to balance economic, social and environmental goals, the so-called triple bottom line (Belz and Binder, 2017; Elkington, 1999). Sometimes these goals can be mutually reinforcing, but often sustainable entrepreneurs have to make trade-offs. That may add ambiguity and complexity to their projects and lead to higher risk perceptions among conventional investors (Messeni Petruzzelli *et al.*, 2019).

Previous research (Ortas *et al.*, 2013) demonstrates that lack of financial resources is one of the major barriers to launching sustainable projects. To overcome this challenge, crowdfunding can provide a good alternative for financing sustainable initiatives (Testa *et al.*, 2019). Several platforms catering only to sustainable projects have recently been established and most mainstream crowdfunding platforms host a significant number of sustainable projects. Sustainable crowdfunding – financing sustainable ventures via crowdfunding (Hörisch, 2018) – has therefore become a phenomenon on its own, which is reflected in researchers' recent interest in the topic (Messeni Petruzzelli *et al.*, 2019; Motylska-Kuzma, 2018; Testa *et al.*, 2019; Wehnert *et al.*, 2019). However, this field is still in its infancy and more research is necessary (Messeni Petruzzelli *et al.*, 2019; Testa *et al.*, 2019). Moreover, the findings provided by the existing literature are contradictory. Some researchers claim that sustainable initiatives are more likely to succeed in crowdfunding compared to conventional ones (Calic and Mosakowski, 2016; Ryu and Kim, 2018), whereas others do not consider a project's sustainability as a significant advantage in terms of crowdfunding success (Hörisch, 2015, 2019; Motylska-Kuzma, 2018).

In addition, it is unclear whether a sustainability orientation has some important implications for projects' crowdfunding process. Messeni Petruzzelli *et al.* (2019) argue that it is necessary to re-interpret the findings from the general crowdfunding literature in the context of sustainable projects. Based on the existing literature, the current study identifies four potential areas for distinct peculiarities of sustainable crowdfunding from the project perspective, namely motivation to seek crowdfunding, platform choice, crowdfunding costs and relationships with backers. Sustainable entrepreneurs have more complex motivations for seeking crowdfunding, as they believe that a sustainability orientation is well suited to the community spirit of crowdfunding (Ryu and Kim, 2018). Crowdfunding can, for instance, provide additional legitimacy to sustainable projects due to the democratic selection process by the crowd (Lehner, 2013; Lehner and Nicholls, 2014). Moreover, sustainable entrepreneurs experience more complexity in their choice of crowdfunding platform, as they need to consider the additional dimension of the platform's sustainability (Messeni Petruzzelli *et al.*, 2019). Sustainable entrepreneurs may also bear higher costs related to crowdfunding, due to the intangibility of sustainable claims and outputs, as additional effort is required to convey their value proposition and convince backers to support their projects (Hörisch, 2015; Messeni Petruzzelli *et al.*, 2019). Finally, sustainable entrepreneurs need to pay closer attention to

building relationships with backers as a result of higher risk perceptions of sustainable projects and therefore a higher need for legitimacy (Lehner, 2013; Lehner and Nicholls, 2014; Messeni Petruzzelli *et al.*, 2019).

To further explore the issues mentioned above, we interview representatives of eleven successfully crowdfunded sustainable projects, representing various industries and crowdfunding models. Our aim is to understand the peculiarities of sustainable crowdfunding from the project perspective. The research question is therefore: what are the distinctive features of sustainable crowdfunding in terms of crowdfunding motivation, platform choice, crowdfunding costs and relationships with backers? By illuminating these issues, the current study contributes to the limited literature on sustainable crowdfunding and illustrates how crowdfunding may become one of the enabling forces for sustainable entrepreneurship.

The article is organised in the following way. First, we provide a theoretical background for the current study where we identify peculiarities and challenges of sustainable entrepreneurs and discuss the concept of crowdfunding, with special focus on the literature on sustainable crowdfunding. Then, we describe our methodological approach and present our main findings. Finally, we discuss the peculiarities of sustainable crowdfunding from the project perspective and provide a summary of our potential contributions and limitations.

2. Theoretical background

2.1. Sustainable entrepreneurship: Peculiarities and challenges

Historically, entrepreneurial success was evaluated in terms of economic performance and ability to generate economic gains. Value creation was mainly concerned with economic and financial outcomes. However, in recent years there has been a growing focus on sustainable value creation, which is a multifaceted process involving economic, social and environmental concerns (Hart and Milstein, 2003). As a result, a number of academics and practitioners have turned their attention to sustainable entrepreneurship, i.e. ‘the process of discovering, evaluating, and exploiting economic opportunities that are present in market failures which detract from sustainability, including those that are environmentally relevant’ (Dean and McMullen 2007, p. 58). Initially the research on sustainable entrepreneurship mainly focused on the entrepreneurial activity related to the environmental aspects, but gradually the term evolved to a broader approach of the triple bottom line perspective (Elkington, 1999; Sarango-Lalangui *et al.*, 2018). Unlike conventional entrepreneurship, sustainable entrepreneurship extends its goal beyond market success to the creation of sustainable development through entrepreneurial activities (Schaltegger and Wagner 2011). To pursue this goal, sustainable entrepreneurs attempt to balance economic, social and environmental objectives (Cohen *et al.*, 2008; Schaltegger and Wagner, 2011). The research on sustainable entrepreneurship represents a unique perspective emphasising the development of non-economic gains for individuals and societies (Sarango-Lalangui *et al.*, 2018).

Despite the increasing attention to sustainable entrepreneurship, most studies focus on the first phases of the process of sustainable entrepreneurship, i.e. opportunity recognition, development and exploitation (Belz and Binder, 2017), and there is limited research on the funding of sustainable businesses (Vismara, 2019). However, funding is a critical phase in new business formation (Shane 2003), especially in the case of sustainable entrepreneurs as their non-traditional business view might lead to difficulties in attracting traditional investors (Choi and Gray, 2008). According to previous studies (Hörisch, 2015, 2018; Ortas *et al.*, 2013), they often experience a lack of funding. The need to balance economic, social and environmental goals makes sustainable businesses more ambiguous and therefore less attractive for traditional investors compared to purely profit-oriented firms (Messeni Petruzzelli *et al.*, 2019). The multiplicity of goals may also extend the time necessary for the project to become profitable. Moreover, a majority of sustainable entrepreneurs have limited

business experience (Choi and Gray, 2008). Therefore, sustainable entrepreneurs with limited access to traditional sources of capital need to find an alternative solution. New financial trends such as crowdfunding can help them to cope with this problem (Calic and Mosakowski, 2016; Testa *et al.*, 2019; Toxopeus and Maas, 2018).

2.2. Crowdfunding: Concept and models

One of the most commonly employed definitions describes crowdfunding as “an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights” (Belleflamme *et al.*, 2010). The crowdfunding process usually involves three actors: platform, backers and entrepreneurs. The platform provides the ‘rules of the game’ and regulates relations between backers and entrepreneurs. Roles of the platform include relation mediator (intermediary between supply and demand sides) and social gatekeeper (Ordanini *et al.*, 2011). Entrepreneurs create the projects, while backers provide money for projects. The role of the backers depends on the type of crowdfunding model. According to Ordanini *et al.* (2011), they can act as agents (by selecting and promoting offers), shareholders (by expecting monetary reward) or donors who do not expect any reward for their participation.

It is possible to distinguish between four crowdfunding models, i.e. donation-based, reward-based, equity-based and lending-based crowdfunding (Mollick, 2014; Ziegler *et al.*, 2018). In donation-based crowdfunding, backers donate money to support a certain cause based on philanthropic or civic motivations, with no expectation of monetary or material return. Reward-based crowdfunding offers backers various non-monetary rewards or products in exchange for their participation. The lending type of crowdfunding represents a type of peer-to-peer loan, where backers expect to receive fixed periodic income as well as repayment. In equity-based crowdfunding, backers receive equity in the venture they support (Ahlers *et al.*, 2015).

2.3. Sustainable crowdfunding

There is still rather limited literature on sustainable crowdfunding (Messeni Petruzzelli *et al.*, 2019; Testa *et al.*, 2019). However, the topic has been gathering increased attention from researchers recently, including a special issue of *Technological Forecasting & Social Change* from April 2019, exploring the role of crowdfunding in moving towards a sustainable society.

Crowdfunding is therefore acknowledged as a novel socio-technical practice with potential to provide new opportunities for sustainable entrepreneurs and innovators (Testa *et al.*, 2019). However, there is an ongoing discussion around whether a project’s sustainability orientation contributes to crowdfunding success. On the one hand, Calic and Mosakowski (2016) find that an environmental or prosocial orientation not only increases the probability of a project reaching its funding target, but also the chance of receiving funds in excess of the original goal. Vasileiadou *et al.* (2015) provide more empirical evidence in support of this assumption by demonstrating that crowdfunding platforms fully dedicated to renewable electricity initiatives fare better than platforms with a broader orientation. The authors present their qualitative investigation of renewable energy crowdfunding initiatives in the Netherlands, drawing on data from several platforms. Moreover, Lam and Law (2016) find that donation- and reward-based crowdfunding models (in combination with other sources of capital) can be successfully used for providing initial capital for small-scale and remotely located sustainable energy and green innovation projects. On the other hand, Hörisch (2015) reveals that the environmental focus of a project does not positively correlate with the probability of successful funding. One of the explanations is that backers’ behaviour is affected by the problem of free riding, since sustainability is frequently described as a collective good. Based on rational choice theory, backers will be unlikely to finance collective goods as contributing

to their creation does not provide individual incentives or direct access to the resulting benefits (Hörisch, 2015). However, he finds that non-profit projects find it easier to collect funds, suggesting that sustainability-oriented projects might benefit from being recognised as non-profit. It must be noted that, despite the relatively large total sample of campaigns, only ten sustainable projects were included in the dataset. Later, while analysing the implementation of environmentally-oriented crowdfunding projects, Hörisch (2019) identifies an important challenge, namely that only a few projects disclose information on their actual environmental benefits. This makes it impossible for funders to evaluate whether the environmental benefits promised by the projects are actually realised. Hörisch (2019) considers these findings to be an indication of the prevalence of economic motivations for backers of sustainable projects. He argues that backers' decision-making is not dominated by altruism, and they are therefore similar to conventional investors who put financial returns first. Motylska-Kuzma (2018) provides further support for this idea. After analysing fifty successful crowdfunding projects, she finds that the sustainable orientation of the project is not so important for the project's success and the level of realisation of the objectives of sustainable development is low. Therefore, the findings on the crowdfunding success of sustainable projects are rather contradictory.

There is also a discussion on the peculiarities of sustainable crowdfunding. Messeni Petruzzeli *et al.* (2019) argue that general findings from the crowdfunding literature require re-interpreting and adapting to the specific context of sustainable crowdfunding. They suggest several theoretical propositions based on the five-dimension framework, which includes the main actors, the process and the outcomes of crowdfunding campaigns. For instance, Messeni Petruzzeli *et al.* (2019) suggest that (a) sustainable entrepreneurs have to make a greater effort to communicate with potential backers than creators of commercial projects; (b) committed backers play a more important role in promoting sustainability-oriented campaigns compared to commercial crowdfunding projects; (c) sustainability-oriented campaigns launched in crowdfunding platforms which are active in communicating and promoting sustainability are more successful. However, these propositions need empirical validation, which we partly address in the current study.

In general, we identify four potential areas for peculiarities of sustainable crowdfunding from the project perspective, which will be discussed in the following sub-sections.

2.3.1. Motivation to seek crowdfunding

We expect that motivations to engage in crowdfunding are more complex for sustainable projects, as they attempt to balance the triple bottom line. The current literature indicates that motivations to seek crowdfunding are not limited to economic ones (Mollick and Kuppuswamy, 2014). For instance, Belleflamme *et al.* (2013) demonstrate the importance of the publicity component, with 64.3% and 21.4% of respondents citing increased exposure of their product and/or company as, respectively, highly relevant or relevant to their decision to start a campaign. Moreover, feedback on the project idea is an important consideration for approximately 60% of respondents. A qualitative study conducted by Gerber *et al.* (2012) and a follow-up paper by Gerber and Hui (2013) identifies several additional motivations. Entrepreneurs may engage in crowdfunding to replicate the successful experience of others, in line with the principle of social proof, i.e. when "people behave in ways that they see others behaving" (Gerber *et al.*, 2012, p. 6). In addition, they often seek validation, to gain confidence in their abilities and build self-esteem through getting public recognition of their ideas or success. Moreover, crowdfunding allows for unprecedented creative and strategic freedom. At least in the case of reward-based crowdfunding, the project owners make all decisions alone, with no interference on behalf of venture capitalists. In addition, Lam and Law (2016) find the benefits of crowdfunding include attaining public support and legitimacy.

Non-financial motivations can be even more relevant for sustainable projects as their philosophy is well suited to the community spirit of crowdfunding. Crowdfunding may be especially well suited to sustainable projects, as backers typically focus most on the ideas and core values of the firm instead of collaterals or business plans (Lehner, 2013). For backers, social and psychological motivations may be equally or more important than financial returns (Testa *et al.*, 2019). Moreover, crowdfunding can provide additional legitimacy to the venture, as the selection process by the crowd is inherently democratic (Lehner, 2013; Lehner and Nicholls, 2014). In addition, Ryu and Kim (2018) demonstrate that social entrepreneurs are one of the most suitable types of creators in crowdfunding platforms and a project's societal contribution is positively associated with its total amount of funding, which indicates that in crowdfunding the community spirit, not commercial purpose, prevails. Similarly, Vismara (2019) shows that in equity crowdfunding backers do not usually have prior experience in financing and make decisions based on a community logic rather than a market logic. Following community logic, backers consider projects' non-monetary aspects, such as "bettering the world". In addition, Bento *et al.* (2019) argue that while evaluating clean-tech crowdfunding projects, backers use non-financial considerations such as the environmental and social impact. In general, creating a community around a project is easier when collective benefits are to be created, which is the case for sustainable ventures (Toxopeus and Maas, 2018).

2.3.2. Platform choice

By enabling and coordinating the interaction between entrepreneurs and backers, platforms play an important role in the crowdfunding process. For example, the development of trust between entrepreneurs and backers is affected by the platform, as backers also have to trust the platform in order to invest in the campaign (Macht, 2014). Therefore, entrepreneurs need to be careful and take into account multiple characteristics when selecting a crowdfunding platform. One of the characteristics to consider is a platform's size. Larger platforms may benefit entrepreneurs in two ways. First, the presence of a larger crowd increases the chances of financing the project and second, a larger crowd of potential consumers/ investors may provide more efficient market testing for the crowdfunding projects (Belleflamme *et al.*, 2016). However, the platform size is not the only criteria to consider, as the composition of the backers can also be important. For instance, a strong perception of shared values (i.e. a common outlook on what is right and what is wrong) between entrepreneurs and backers increases trust within a relationship and can contribute to crowdfunding success (Macht, 2014). Such shared values can be of special importance for sustainable projects.

Previous studies (Cumming and Zhang, 2016; Rossi and Vismara, 2018) also demonstrate that the due diligence services and other value-added services provided by the platforms (e.g. post-campaign services such as exit assistance, periodical updates and advisory services for further funding) are associated with higher funds raised and a greater percentage of successful campaigns. Moreover, platform attributes can influence the backers' behaviour. Jiang *et al.* (2018) demonstrate that platform attributes such as operation time and the composition of participants (e.g. presence of high-profile backers and entrepreneurs) can weaken the herding effect (i.e., prior backers' actions have a strong influence on later backers' decisions), while the accumulated investment amount and platform's market share strengthen the herding effect.

The choice of crowdfunding platform is even more complicated for sustainable entrepreneurs, as they need to consider the additional dimension of a platform's sustainability. In crowdfunding, backers generally share a 'loose ideology', and different platforms may differ in their loose ideologies, depending on their mission and the values and beliefs shared by backers visiting the platform (Calic and Mosakowski, 2016; Testa *et al.*, 2019). Therefore,

sustainability-oriented platforms are expected to contribute to the projects' crowdfunding success (Messeni Petruzzelli *et al.*, 2019).

2.3.3. Crowdfunding costs

Despite the numerous benefits of crowdfunding, several challenges may discourage entrepreneurs from abandoning traditional funding schemes. One of the main barriers is the disclosure requirement (Agrawal *et al.*, 2014; Gerber and Hui, 2013). Other methods of funding allow entrepreneurs to keep most of the information about the product private while crowdfunding, by design, requires them to describe the project and the underlying innovation, if any, to the general public. The public nature of initiating a crowdfunding campaign can have other negative consequences as well. Some entrepreneurs fear personal embarrassment in the case of failure (Adams, 2014; Gerber and Hui, 2013). Others might not be willing to risk starting a campaign and failing to reach the funding goal, as this public information could negatively impact their chances of receiving funding from other sources, such as venture capitalists, who could be reluctant to invest in a start-up that did not pass the "crowdfunding test" (Gerber and Hui, 2013).

Furthermore, one has to consider the opportunity cost of raising money through crowdfunding (Adams, 2014; Agrawal *et al.*, 2014). By opting to initiate a crowdfunding campaign, entrepreneurs forego capital from professional investors – and therefore are deprived (at least until subsequent rounds of financing) of the expert business and industry knowledge, reputation and useful connections, which venture capital investors possess (Agrawal *et al.*, 2014; Ingram and Teigland, 2013). Another barrier is investor management, which might be considerably more costly than when acquiring capital from more traditional sources, due to the high number of investors (Agrawal *et al.*, 2014; De Buysere *et al.*, 2012; Gerber and Hui, 2013). Addressing the numerous needs and questions of hundreds or thousands of backers might put so much pressure on entrepreneurs that their ability to work on the project itself will suffer (Wortham, 2012).

Most of the costs mentioned above are universal and inherent to the very concept of crowdfunding. However, the crowdfunding process in itself is even more challenging for sustainable ventures and they may therefore experience higher costs related to crowdfunding. A higher degree of intangibility of sustainable claims and outputs requires greater efforts from the creators of sustainability-oriented campaigns in their communication activities with potential backers (Messeni Petruzzelli *et al.*, 2019). Sustainable projects usually provide a public good, e.g. an environmental or social benefit, instead of tangible and immediate outputs, and therefore more persuasion is necessary to convince the backers (Hörisch, 2015; Messeni Petruzzelli *et al.*, 2019). In addition, sustainable projects suffer from higher uncertainty as their benefits are often difficult to measure, especially in the short term. Due to the higher importance of social and psychological motivations (Testa *et al.*, 2019), the project owners also need to successfully convey their values and passion during the campaign, which requires additional effort (Messeni Petruzzelli *et al.*, 2019).

2.3.4. Relationship with backers

The business angel literature (Steier and Greenwood, 1999) argues that entrepreneurs need to build a trusting relationship with their investors, as opposed to considering the investment as a one-off transaction. The same is true in the case of crowdfunding (Gerber and Hui, 2013; Macht, 2014). To attract backers and obtain the value-added crowdfunding benefits beyond the financial investment (e.g. providing advice or introducing contacts), entrepreneurs should employ the principles of relationship marketing, i.e. building long-term, cooperative relationships (Morgan and Hunt, 1994). In crowdfunding, the provision of capital is only the beginning of a (potentially) long-term, ongoing relationship between backers and

entrepreneurs (Macht, 2014). By using marketing activities, this relationship can last well beyond the fundraising period (Hui *et al.*, 2014). The relationship with backers is especially important for the building and preservation of trust, which is a necessary requirement for crowdfunding success. For example, regular communication between entrepreneurs and backers increases the entrepreneurs' trustworthiness and may motivate backers to provide positive word of mouth, which can result in increased interest for the project (Hui *et al.*, 2014). Entrepreneurs who continuously share information with their backers reduce information asymmetry, which in turn may result in increased trustworthiness (Macht, 2014). Moreover, communication should be of high quality (Liu and Arnett, 2000). Wang *et al.* (2018) demonstrate that comment quantity, comment sentiment, reply length and reply speed are positively associated with crowdfunding success.

Building close relationships with backers is even more crucial in sustainable crowdfunding, due to the higher risk perceptions of sustainable projects and therefore a greater need for legitimacy and trust (Lehner, 2013; Lehner and Nicholls, 2014; Messeni Petruzzelli *et al.*, 2019). Highly committed backers are especially important for sustainable crowdfunding projects as they can promote the campaign and its sustainable benefits through word-of-mouth and in this way reduce the uncertainty associated with sustainable projects. As discussed earlier, lack of immediate and discernible benefits can lead to more hesitation around funding sustainable projects, so mitigating the higher uncertainty is extremely important (Messeni Petruzzelli *et al.*, 2019).

As crowd involvement secures increased legitimacy (Lehner, 2013), it is also crucial for sustainable entrepreneurs to engage their social network during the early stage of their campaign. This social network usually acts as a catalyst of the crowdfunding process based on the rational herding principle (Bretschneider and Leimeister, 2017; Burtch *et al.*, 2013; Kuppuswamy and Bayus, 2015; Zhang and Liu, 2012). Therefore, entrepreneurs need to invest effort into building a wide social network (Mollick, 2014; Mollick and Kuppuswamy, 2014).

3. Method

The field of sustainable crowdfunding is still in its infancy and therefore requires a more explorative research design. The current study follows a qualitative approach, which allows us to gain deep understanding about the phenomenon of sustainable crowdfunding and its peculiarities from the project perspective. An important reason for this choice is the flexibility of qualitative methods and the opportunity to obtain meaningful explanations about the phenomenon. As our data collection method, we chose to conduct semi-structured in-depth interviews with representatives of sustainable projects using crowdfunding. This method of data collection ensures flexibility, as it gives the opportunity to follow-up on the issues requiring further exploration and vary the questions depending on the flow of the conversation (Saunders *et al.*, 2016). At the same time, the interview guide with an overview of general topics gives direction and structure to the interview process.

The data collection was conducted between October 2017 and January 2018. To identify interview respondents, we conducted a search on several major crowdfunding platforms to select projects focusing on sustainable value creation, i.e. projects addressing either social or environmental concerns (or both) in addition to the economic ones (Hart and Milstein, 2003). We then analysed the project descriptions on the crowdfunding platforms to identify the projects with successful crowdfunding campaigns (i.e. ones that managed to collect their target amount). We also aimed to achieve a diversified sample by including projects with different types of crowdfunding models (donation, reward and lending) and from various industries. As a result, we identified eleven projects satisfying our criteria, i.e. focus on sustainable value creation, crowdfunding success and variation in crowdfunding models and

industries (see Table 1 for project overview). Most of the projects come from developed crowdfunding markets (the Netherlands and the US). As the current study has a theory development purpose, our sample is sufficient for meaningful analysis due to the purposeful selection of cases (i.e. selecting information-rich cases for in-depth study; Patton, 2015). The in-depth approach used in the interviews secured sufficiently rich material for the purpose of our study.

Table 1 about here

We sent interview invitations by e-mail to the project owners, in which we briefly explained that we were interested in hearing about their crowdfunding experience. All the project owners agreed to participate in the study. Interviews were conducted as video conversations in the telecommunications application Skype. They lasted between 50 and 60 minutes.

The specific interview procedure was as follows. The interviewer began by explaining the purpose of the project, that is to understand entrepreneurs' crowdfunding experience and their motivations for using crowdfunding. He also reassured the respondents that all information provided would be kept confidential and asked for permission to record the interview. All respondents agreed to be recorded. Then, the interviewer followed a semi-structured interview guide mainly addressing the three potential areas for peculiarities of sustainable crowdfunding from the project perspective, namely motivation for seeking crowdfunding, crowdfunding process and relationships with backers (see Appendix 1 for the interview guide). In addition, we asked the respondents to describe their projects, so we could confirm their sustainability orientation. All the interviews were transcribed and analysed using the constant comparative method (Glaser and Strauss, 1968). The objective was to identify the main themes emerging in the data by searching out patterns of association and assumption (McCracken, 1988). The author carefully read all of the interviews, created coding categories reflecting the consistency that emerged in the data and identified exemplary responses that illuminated the emergent themes. The most illuminatory exemplars of the themes were retained for the paper and incorporated into the Findings chapter. All identifying characteristics were removed from respondents' quotes to secure anonymity.

4. Findings

4.1. Motivation to seek crowdfunding

Similar to the previous findings in the general crowdfunding literature (e.g. Mollick and Kuppuswamy, 2014; Belleflamme *et al.*, 2013), most sustainable entrepreneurs argue that the main reason for seeking crowdfunding is their need for funding and difficulty in raising money from other sources:

We needed the money. (Project 10)

There was no other possibility to get different sort of funding... we need a quite big funding to begin with. (Project 4)

Since we were not able to acquire a loan of the size we needed, where else can we get this money. (Project 8)

This is not surprising, taking into account sustainable entrepreneurs' lack of financial resources (Ortas *et al.*, 2013). Moreover, other funding options are too risky and many entrepreneurs try to "avoid traditional debt" (Project 11):

Other options for supporting the project pretty much involved taking up loans and that felt risky based on the overall situation of the farm... Because of our goals of being involved in the community we felt there was going to be a lot of support from the

community and that was true so it seemed like a good option without the risk of debt.
(Project 7)

Avoiding traditional debt is especially relevant for sustainable projects as their ventures have a higher degree of uncertainty (Messeni Petruzzelli *et al.*, 2019). The triple bottom line approach also leads to a multiplicity of goals, which may extend the time necessary to achieve profitability. Crowdfunding is a good alternative as it provides entrepreneurs with lower cost of capital (Agrawal *et al.*, 2014) and at the same time allows for unprecedented strategic freedom and a high degree of independence in decision making (Gerber and Hui, 2013; Lam and Law, 2016).

As in any crowdfunding project, motivations to seek crowdfunding are however not limited to financial ones (Mollick and Kuppaswamy, 2014). By participating in crowdfunding companies may satisfy various needs, e.g. visibility, support (moral, material, economic and financial), and better communication with stakeholders (Alfiero *et al.*, 2014). This is particularly true for sustainable projects. Despite the fact that most of the entrepreneurs admit that they needed the funding, they also mention that crowdfunding is a good way “*to know if people find the idea interesting*” and conduct a kind of “*proof of concept*” (Project 2). Moreover, crowdfunding campaigns may give projects good marketing and publicity, which is very important for increasing the legitimacy of sustainable projects (Lehner, 2013; Lehner and Nicholls, 2014; Messeni Petruzzelli *et al.*, 2019):

There is a twofold reason why. It is not only about fundraising, but also about reaching out and finding a broader audience. When you put yourself out there on the internet it is not just a local impact. (Project 9)

More exposure and allowed people locally to learn about the farm, maybe some additional customers. (Project 7)

That corresponds with the findings from previous literature that identified multiple non-financial benefits of crowdfunding, such as raising public awareness (Belleflamme *et al.*, 2013; Gerber *et al.*, 2012), obtaining feedback (Belleflamme *et al.*, 2013; Lam and Law, 2016) and assessing potential demand (De Buysere *et al.*, 2012; Mollick and Kuppaswamy, 2014). Crowdfunding may also promote sustainable behaviour change (Sakamoto and Nakajima, 2013), which is often one of the important goals for sustainable projects.

Besides, sustainable entrepreneurs believe that the community spirit of crowdfunding is well suited to the sustainable nature of their projects. It is easier to build a community when sustainable goals are involved (Toxopeus and Maas, 2018):

A big part of our mission is to be a valuable member of our community in a lot of different ways so we work really hard at that and then also felt that our community worked really hard to support us and we felt there would be the support there. (Project 7)

It is like a way to connect with the people that love us and want to support what we are doing... it makes them feel good to contribute. (Project 11)

Indeed, previous studies on sustainable crowdfunding (Calic and Mosakowski, 2016) demonstrate that an environmental or prosocial orientation increases both the probability of a project reaching its funding target and the chance of receiving funds in excess of the original goal. Moreover, increased crowd participation and the democratic flair of crowdfunding will improve legitimacy in the eyes of the public (Lehner, 2013).

4.2. Platform choice

Sustainable entrepreneurs have a more complex decision-making process when choosing the platform compared to conventional entrepreneurs, as they need to consider the sustainability orientation of the platform. Different platforms may differ in their loose ideologies (Calic and Mosakowski, 2016; Testa *et al.*, 2019), and it can be important for project owners to match

the values and beliefs shared by backers frequenting the platform. Therefore, most of the respondents agree that the sustainable profile of the platform is an important factor. They want to appeal to people who share their sustainability values and believe they will achieve more engagement by addressing the sustainable crowd:

Platform A does a lot of environmental projects as well, which were related to what we were doing so that actually was the main choice to go for Platform A, because the conditions and terms of all the different platforms are more or less the same. (Project 4)
We made a scan of potential platforms. Each one has a different focus (IT, sustainability, engineering, etc.). The ones with the most sustainable focus and network were most relevant to us. Because for our company sustainability is a core driver and we like to appeal to the people who find this important. We also believed that these people would be more involved and enthusiastic to invest in an initiative like ours. (Project 5)

We thus support the earlier finding from Vasileiadou *et al.* (2015) who demonstrated that crowdfunding platforms fully dedicated to sustainable initiatives (e.g. renewable electricity) work better for these kinds of projects than platforms with a broader orientation. This finding is also in line with the proposition of Messeni Petruzzelli *et al.* (2019) stating that sustainability-oriented platforms contribute to projects' crowdfunding success. Some entrepreneurs go even further and prefer the niche platforms specific to their industry (e.g. a platform focusing on agriculture):

It narrows the playing field... people who go look at your campaign are already predisposed to have an awareness of food and sustainability. (Project 9)

It felt the most congruent, because then it is a community of people who are producing food and farming, so it also connected us to like-minded folks even beyond our own social circles. (Project 11)

When we address the global vs. local orientation of the platform, there is variation in preferences. While some entrepreneurs choose local platforms due to their local customisation (e.g. local payment system) and reduced competition, others prefer the global reach of the international platforms:

I think ninety percent (90%) of people funding us are Dutch, eh... so going international I mean, we would be within a huge amount of different projects. And besides that, the main group of our supporters are Dutch, and here in the Netherlands you got a payment system called "Ideal". And that's from the Dutch banks, and the international platforms don't support that. But it is the main thing that Dutch people use to transfer money online. (Project 1)

We didn't want to expose internationally. (Project 3)

We chose crowdfunding platform that we believe can help us to connect with donors from international as well as local area. (Project 6)

Its global reach was very beneficial, although I did not realise that at first. (Project 8)

Global reach of the platforms is especially relevant for sustainable projects as they have an appeal for a larger audience interested in sustainability issues. By its very nature, sustainable projects have a global impact not just a local community impact.

The platform's size and reputation are also important. As discussed in the previous literature (Belleflamme *et al.*, 2016), platforms with a larger crowd can increase the chances of getting sufficient funding and provide better opportunities for market testing. Moreover, established platforms are more trustworthy and can therefore contribute to the further legitimacy of projects, which is especially crucial for sustainable entrepreneurs (Messeni Petruzzelli *et al.*, 2019):

Platform has high standards for project selection and therefore only serious businesses get in and therefore good reputation – helps to get high success rates... (Project 2)

...it was the biggest player in that space, the most established, the most name recognition among people. We felt that gave confidence when people are making donations online with their credit cards they are using a platform that had that type of credibility. (Project 7)

As the trustworthiness of the platform is particularly important for sustainable entrepreneurs, in many cases they use recommendations from friends, local banks and media to secure their choices:

...I had a small workshop about crowdfunding, and I asked the person who did the workshop “I got this and this project, which platform should be my best option?” And they came with Platform A, and that’s why we came with Platform A. (Project 1)

...and a friend of us recommended to do it there. (Project 10)

We actually have a subscription for Modern Farmer and there was an article on crowdfunding for farms. We saw that article... and thought “this is the one”. (Project 11)

4.3. Crowdfunding costs

Most of the sustainable entrepreneurs are satisfied with their crowdfunding experience. However, as expected, they found the crowdfunding process rather challenging and admit that it involved more work than they expected, which is “*definitely a challenge*” (Project 7):

You have to comply to a lot of rules, you know, which makes sense, because you’re basically investing somebody else’s money, so, of course you need a lot of rules. So, I can relate to that. But at some point, you know, the need to report and the need to get this whole finance thing in order was a lot of work and it still is. (Project 4)

Crowdfunding campaign takes a lot of effort. (Project 1)

Fulfilling the rewards is especially challenging:

Fulfilling the rewards was definitely a challenge and a less fun work... We actually hired someone part-time specifically to help manage the rewards because we had a lot of donors and it was a pretty big project to do all of that work. (Project 7)

Moreover, as suggested by previous studies (Messeni Petruzzelli *et al.*, 2019) the creators of sustainability-oriented campaigns have to invest a lot of effort in their communication activities with potential backers. In addition to the online campaign promotion, many projects have a number of offline events to gather additional support, which adds to the workload:

We had 30 or 31 days of campaign, and in the third week was the Dutch design week. So, we did a kick off, then the open house, then the design week, and then we had another pop up-store at the final days. (Project 2)

And you have to be on exhibitions and stuff, always asking people for email addresses... (Project 1)

We therefore confirm the earlier findings indicating that managing a large number of investors can be a challenge (Agrawal *et al.*, 2014; De Buysere *et al.*, 2012; Gerber and Hui, 2013) and even more so for sustainable projects. In some cases, it can put too much pressure on entrepreneurs and even decrease their ability to work on their own project (Wortham, 2012). An increased dispersion of control may also hinder thoughtful experimentation and necessary changes of strategy by the founders and therefore reduce entrepreneurial innovation (Lehner, 2013).

Moreover, the public nature of crowdfunding can have negative consequences (Adams, 2014; Gerber and Hui, 2013). For example, asking for money in general sometimes feels “uncomfortable” (Project 7). Another challenge is the high cost of organising crowdfunding campaigns:

The interest rate are extremely high and also the payment to Platform A, is quite high. So, no. It’s not cheap funding. (Project 4)

Another interesting finding is how entrepreneurs evaluate the attractiveness of different types of crowdfunding models. The previous studies on sustainable crowdfunding (Lam and Law, 2016; Vismara, 2019) show that various models can be successfully employed. Our findings provide similar conclusions. Some of our respondents prefer rewards-based crowdfunding due to its simplicity:

The nice thing about the rewards-based is that it is very simple versus an investment-type situation... I would definitely be open to look at other options, but probably not direct investment. We did have some backers reaching out and say that they would be interested in investing further money as an investment as in a shared business and that would just complicate things as a very small business so that would not an option for us. (Project 7)

However, others believe that using the reward-based model will limit their opportunities to attract backers and therefore consider other models more attractive:

People earn money from this proposition [lending crowdfunding]. So, people who don't even like your product could step into this. Because people have to like your product to buy it, you know. But people don't have to like your product if they don't own it... you know, they don't really want the product or something, but they do like the idea of what you're doing, and then believe in it. (Project 3)

4.4. Relationship with backers

The community spirit of crowdfunding (especially in the case of sustainable ventures) makes building relationships with backers extremely important (Messeni Petruzzelli *et al.*, 2019). This fits with the social movement literature demonstrating that social movements create legitimacy for entrepreneurial activity that is aligned with their values (Akemu *et al.*, 2016). Legitimation is especially important for high-risk ventures, which is often the case for sustainable projects.

To initiate the buzz around their crowdfunding campaigns, sustainable entrepreneurs start by capitalising on their own social network and local community, which is similar to the general findings on crowdfunding (Agrawal *et al.*, 2014; Agrawal *et al.*, 2011). Addressing friends, family and “people in the immediate circle” (Project 11) allows entrepreneurs to capitalise on the herding effect (Zhang and Liu, 2012) and attract external backers:

All in the Netherlands. And I think around 20 % came out of our own network. (Project 2)

When people see others giving the mental barrier of giving becomes lower. The inner circle of your social network is the catalyst for others to become involved. They are the 'evidence' that the cause is worthy of a donation. (Project 1)

One of the keys of the success of our campaign was the support of our own network. I think about 60-70% of the funding came from our network, 30-40% from unknown investors. (Project 5)

Moreover, a project's sustainability appeal allows engagement with a wider like-minded audience sharing sustainability values. Sustainable projects may therefore attract distant and even international backers, who believe that the project's sustainability focus benefits the environment and therefore benefits everybody, regardless of their location:

Our feeling was that we would draw most of our funds locally, but that ended up not being entirely true... We did have some international donations. We had one sizeable donation like a five-figure donation from Great Britain, someone who just appeared to be a Kickstarter philanthropist and supported a lot of projects. (Project 7).

I thought that for a local farm not many people will be interested because I will not be able to ship my tomatoes to China. I felt like I was only going to get donations from my local community, but we also got donations from California to China, so we actually

got international donations as well. I asked why people wanted to donate to a small farm in New York that will not have many benefits to you, and a lot of people said that the project benefits the environment and that benefits us all. (Project 8)

Building strong relationships and trust leads to higher commitment among backers and can provide positive word-of-mouth, hence increasing interest in the project (Hui *et al.*, 2014):

There is a very high percentage of donors that will come from your close network. Let's say 60 % or 80 % of people that donate are probably going to be in your close social network one or two degrees out, so enlisting them and getting their help in spreading the word on social media was very beneficial. (Project 8)

Building up a community of committed backers is a key to crowdfunding success and in the case of sustainable ventures, backers are more likely to become involved if they understand/support the value proposition (Toxopeus and Maas, 2018). Therefore, sustainable entrepreneurs invest considerable effort in building relationships, both through social media and offline contact (e.g. by making a call, attending offline events):

The Facebook... Twitter and LinkedIn. And after that we did a lot with the investors, of course. Give them a call and like "hey, who are you?" (Project 3)

We obviously leveraged Facebook quite a bit, and I do not know if we were on Instagram at that point. Then we have a pretty big newsletter so we had a pretty big following there that we used to promote it and then a lot of reaching out through family and friends... We posted updates through Facebook and our newsletter and our platform-site, but we also identified potential backers that we felt could be higher donors and we reached out to them directly with personal letters and phone calls to try to solicit donations in that way, so outside of the platform. (Project 7)

It is important to note that the relationships with backers do not end at the end of the crowdfunding campaign and follow-up activities are an essential part of communication, especially for sustainable projects (Messeni Petruzzelli *et al.*, 2019). As one of the respondents mentions: *"the commitment and involvement of the crowdfunders is still quite strong almost 2 years later"* (Project 5). Following the relationship marketing perspective (Morgan and Hunt, 1994), the crowdfunding campaign is only the beginning of a (potentially) long-term, ongoing relationship between backers and entrepreneurs (Macht, 2014):

Some of them [backers] are still customers at the farm. It is nice that in the second campaign I run you could name a chicken at the farm. So, two weeks ago a customer said that she donated and wanted to see the chicken that she named. That is a rewarding part of this experience, the customers coming back and seeing where the money went and know that it went to a good cause and reap the benefits of helping start this farm up. (Project 8)

5. Discussion: Peculiarities of sustainable crowdfunding from the project perspective

The current paper explores the peculiarities of sustainable crowdfunding from the project perspective by looking at sustainable entrepreneurs' motivation to seek crowdfunding, their choice of crowdfunding platform, crowdfunding costs and relationships with backers. Based on the previous literature (e.g. Messeni Petruzzeli *et al.*, 2019; Testa *et al.*, 2019; Vismara, 2019), we expect that in these four areas the crowdfunding experiences of sustainable entrepreneurs require special attention. The findings from the in-depth interviews with representatives of successfully crowdfunded sustainable projects reveal several interesting trends (see Table 2 for overview of main findings).

Table 2 about here

Similar to conventional entrepreneurs (Belleflamme *et al.*, 2013; De Buysere *et al.*, 2012), sustainable entrepreneurs admit that raising money is one of their main motivations. Moreover, they discuss the difficulties of getting funding from traditional sources, which is especially problematic for sustainable projects (Ortas *et al.*, 2013). The lower capital cost provided through crowdfunding (Agrawal *et al.*, 2014) may help sustainable projects to overcome their financial challenges related to the multiplicity of their goals and possible lower profitability. However, as identified in the earlier crowdfunding literature (e.g. Mollick and Kuppaswamy, 2014; Gerber *et al.*, 2012; Gerber and Hui, 2013; De Buysere *et al.*, 2012), money is not the only motivation for seeking crowdfunding. That is also true for sustainable entrepreneurs. Many of them want to increase awareness around their projects and get direct contact with their supporters. The democratic nature of crowdfunding also increases the legitimacy of sustainable projects and the resulting sustainable products, which can help them to resolve uncertainty issues (Lehner, 2013; Lehner and Nicholls, 2014; Messeni Petruzzelli *et al.*, 2019; Wehnert *et al.*, 2019). However, the motivation of sustainable entrepreneurs has one additional aspect: they believe that the community spirit of crowdfunding is well-suited to the sustainable nature of their projects and highlight the importance of community engagement. In crowdfunding, backers to a large degree focus on the core values of the firm (Lehner, 2013) and therefore the community spirit, not commercial purpose, prevails (Ryu and Kim, 2018). Even in sustainable equity crowdfunding, backers use a community logic instead of a market logic (Vismara, 2019). Moreover, since sustainable ventures often provide collective benefits, creating a community is easier in this case (Toxopeus and Maas, 2018). Based on the discussion above, we suggest the following proposition, which we invite the future studies to test empirically.

Proposition 1: The level of motivation of sustainable entrepreneurs to seek crowdfunding is positively associated with:

- a. The extent to which it is difficult to fund the project via other sources of funding;
- b. The extent to which project owners wish to raise public awareness around their projects;
- c. The extent to which project owners wish to tap into a community spirit aimed at achieving collective goals.

The choice of the crowdfunding platform is more complex for sustainable entrepreneurs, as they need to consider the platform's sustainability. It is reasonable to expect that the crowd on sustainability-oriented platforms is more enthusiastic about sustainable initiatives as every platform has its own loose ideology, based on the values shared by its backers (Calic and Mosakowski, 2016; Testa *et al.*, 2019). In this way, we provide additional support to the earlier research demonstrating that sustainable crowdfunding platforms work better for these kinds of projects than platforms with a broader orientation (Vasileiadou *et al.*, 2015; Messeni Petruzzelli *et al.*, 2019). Moreover, some entrepreneurs prefer the niche platforms for their industry (e.g. a platform focusing on agriculture), to get access to an even more specialised audience. As for sustainable entrepreneurs' preferences for global and local platforms, there is an additional aspect to consider, namely, sustainable projects have a global impact and therefore appeal to a larger audience interested in sustainability. Global platforms may then be especially relevant. Not surprisingly, a platform's trustworthiness (based on the platform's size, reputation and recommendations) is also an important choice criterion for sustainable entrepreneurs as it can further contribute to the legitimacy of their projects. The following proposition regarding the platform choice for sustainable projects is suggested.

Proposition 2: The choice of crowdfunding platform for a sustainable project is positively associated with:

- a. The extent to which the platform specializes in sustainable projects versus general/broader scope of projects;
- b. The extent of global reach of the platform;
- c. The level of perceived trustworthiness associated with the specific platform.

As for the crowdfunding costs, sustainable entrepreneurs encounter a number of additional challenges. They experience a rather high workload related to their crowdfunding activities. As suggested by the previous literature (Messeni Petruzzelli *et al.*, 2019), sustainable entrepreneurs have to put more effort into their communication activities with potential backers, to compensate for the higher degree of intangibility of sustainable claims and outputs. Our findings demonstrate that sustainable entrepreneurs employ both online campaign promotion and offline events to gather backer support. Most of the respondents argue that crowdfunding takes a lot of effort, much more than they expected to begin with. Overall, managing a large number of investors can put pressure on entrepreneurs (Agrawal *et al.*, 2014; De Buysere *et al.*, 2012; Gerber and Hui, 2013) and even distract them from the original project (Lehner, 2013). However, in contrast to the previous literature (Adams, 2014; Agrawal *et al.*, 2014; Gerber and Hui, 2013), most sustainable entrepreneurs do not discuss problems related to disclosure of product information and the opportunity cost of raising money through crowdfunding. This can be explained by the nature of the selected projects. For some of the project owners (e.g. farmers), disclosure of product information is less critical as it is difficult to copy their products. Moreover, sustainable entrepreneurs often experience more difficulties in raising money from traditional sources (Ortas *et al.*, 2013) and therefore the opportunity costs are low. As for crowdfunding models, we confirm the findings from the previous literature (Lam and Law, 2016; Vismara, 2019) that sustainable projects successfully use various models, and entrepreneurs should carefully consider the advantages and disadvantages of each model for their particular projects. Therefore, backers can engage with sustainable projects in a variety of ways, depending on the crowdfunding model. In some cases, they can take on the role of a donor, when they provide funding without expecting financial returns (e.g. donation-based and reward-based models). At the same time, their role may be extended to shareholder status in equity-based crowdfunding (Mollick, 2014). In this way, sustainable crowdfunding extends citizens' involvement in the sustainable economy. They can now vote for sustainable products with their money, not only by buying them but also by investing in their production. Thus, through crowdfunding citizens may take on a more active role and support sustainable entrepreneurs from the very beginning. The following proposition summarizes our main findings on the crowdfunding costs for sustainable entrepreneurs.

Proposition 3: The level of costs associated with crowdfunding a sustainable project is positively associated with:

- a. The extent of workload related to the crowdfunding activity;
- b. The efforts placed on communication mitigating intangibility of project outcomes.

Finally, building relationships with existing and potential backers is extremely important for sustainable entrepreneurs due to the community spirit of their projects (Messeni Petruzzelli *et al.*, 2019) and legitimacy issues (Lehner, 2013). In line with the existing research (Bretschneider and Leimeister, 2017; Burtch *et al.*, 2013; Kuppuswamy and Bayus, 2015; Zhang and Liu, 2012), we find that backers' behaviour follows the pattern of rational herding. Therefore, it is essential for crowdfunding projects to gain initial momentum and

entrepreneurs need to have a wide social network that can act as a catalyst for the crowdfunding process (Mollick, 2014; Mollick and Kuppaswamy, 2014). Most of the entrepreneurs argue that the support of their social network is crucial to their success and they have to invest a lot of effort in building the network (e.g. through participation in various events). We also find that many backers come from the entrepreneurs' social network and local community, which supports previous studies (Agrawal *et al.*, 2014; Agrawal *et al.*, 2011). However, sustainable projects also manage to engage with a wider global audience due to their sustainability appeal. We therefore suggest that to achieve crowdfunding success, sustainable entrepreneurs need to focus on relationship building with potential backers and put effort into creating a community around their projects. Moreover, it is important to highlight the sustainable nature of the projects to attract additional support (Calic and Mosakowski, 2016). It is also critical to remember that relationships with backers do not end at the end of the crowdfunding campaign and entrepreneurs have to engage in follow-up activities to nurture these relationships (Messeni Petruzzelli *et al.*, 2019). We suggest the following proposition based on our findings.

Proposition 4: The level of crowdfunding success of sustainable projects is positively associated with:

- a. The extent to which entrepreneurs invest in building relationships with their backers;
- b. The extent to which entrepreneurs invest in creating a community around their projects.

6. Contribution and limitations

The current paper contributes to the limited literature on sustainable crowdfunding by discussing its peculiarities from the project perspective. Sustainable entrepreneurs often struggle to attract traditional investors and lack financial resources to launch their projects (Ortas *et al.*, 2013). Crowdfunding therefore represents a unique opportunity for sustainable entrepreneurs and it is important to understand how they can exploit this growing source of alternative finance to fill the funding gaps. Despite the increasing importance of sustainable crowdfunding, research on this topic remains limited (Messeni Petruzzelli *et al.*, 2019; Testa *et al.*, 2019). There are rather contradictory findings around the success of sustainable crowdfunding campaigns (Hörisch, 2015, 2018; Calic and Mosakowski, 2016; Vismara, 2019), and there is a need to adapt findings from the general crowdfunding literature to the context of sustainable crowdfunding. Researchers have begun to explore the peculiarities of sustainable crowdfunding (e.g. Messeni Petruzzelli *et al.*, 2019); however, more empirical studies on this topic are necessary. By looking at four potential areas for peculiarities of sustainable crowdfunding and empirically investigating some of the project-related propositions from Messeni Petruzzelli *et al.* (2019), the current study acts as a foundation for further research in this field. We also add to the literature on sustainable entrepreneurship by contributing to the limited research on funding of sustainable businesses (Vismara, 2019) and illustrating the use of crowdfunding as a source of entrepreneurial finance.

In addition, our findings have practical value for both sustainable entrepreneurs and crowdfunding platforms. We provide valuable insights into what motivates sustainable entrepreneurs to engage in crowdfunding and how they approach the choice of crowdfunding platform. Crowdfunding platforms may use these insights to better cater to the needs of sustainable entrepreneurs, which may help to attract more sustainable projects to the platform (e.g., by increasing the focus on sustainability in their profile or establishing a separate category for sustainable projects). At the same time, our findings can help sustainable entrepreneurs to understand what kind of challenges they may experience in crowdfunding, so that they can be better prepared when they initiate their crowdfunding campaigns. Moreover,

we provide suggestions on what they need to pay special attention to when organising crowdfunding campaigns (e.g. building up a community of committed backers, focusing on the ongoing relationship with backers through constant communication and follow-up activities).

However, the current study has a number of limitations, and we encourage further research on the topic. First, we limit our approach to focusing on the project perspective. In the future, it would be interesting to explore the phenomenon of sustainable crowdfunding from backers' and platforms' perspectives. For instance, do backers' motivations differ for sustainable projects compared to mainstream projects? Second, in the current study we only interview representatives of successfully crowdfunded projects. Future studies are encouraged to compare sustainable projects with successful and unsuccessful crowdfunding campaigns. Third, it would be interesting to conduct a systematic comparison of sustainable projects using different crowdfunding models. Moreover, future research may address the differences between various types of sustainable projects (e.g. green energy projects vs. agricultural projects). There are also several methodological limitations. Despite our efforts to achieve variety in terms of crowdfunding models and industries, the small sample size may limit the generalisability of the findings. In addition, conducting interviews with representatives of both sustainable and non-sustainable (conventional) projects and comparing the results could further strengthen the current findings. However, we believe that this article provides a good starting point for further investigation of sustainable crowdfunding from the project perspective and future studies are invited to shed more light on the topic by empirically testing the propositions emerging from our findings.

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Table 1. Overview of the interviews with crowdfunded sustainable projects

	Project description	Crowdfunding model	Size of crowdfunding campaign (amount raised)
Project 1	Protecting and restoring coral reefs around the world.	Donation	12,046 euros
Project 2	Sustainable tailor-made knitwear that is produced with low-impact, renewable and fair-trade raw materials.	Reward	31,600 euros
Project 3	Producing tents made of 100% recyclable cardboard to address the problem of unrecyclable waste at music festivals.	Lending	50,000 euros
Project 4	Offering e-bikes for people and businesses, available for either rental or purchase, to reduce car use.	Lending	307,125 euros
Project 5	Producing high-quality chocolate locally in the Netherlands with the focus on reducing waste throughout the process.	Reward/lending	73,100 euros
Project 6	Empowering young climate activists in Vietnam.	Donation	5,088 US dollars
Project 7	Dairy farm with two-pronged project: to renovate the old “Stone Barn” to be used as a community space and invest in solar power.	Reward	115,000 US dollars
Project 8	Local farm providing locally produced, pesticide free, organically grown fruits and vegetables.	Reward	10,022 US dollars
Project 9	An urban farm growing lettuces and herbs together with fish in a closed-loop aquaponic system.	Reward	3,035 US dollars
Project 10	Agricultural project in Mexico aiming at building an eco-village.	Reward	10,050 US dollars
Project 11	Building a profitable agricultural enterprise while performing ecological restoration.	Reward	15,440 US dollars

Table 2. Overview of the main findings

Statements		Number of projects
Motivation to seek crowdfunding	Financial (getting funding and avoiding debt)	11 (100%)
	Proof of concept	5 (45%)
	Marketing and publicity	10 (91%)
	Community spirit of crowdfunding / building community around the project	9 (82%)
Platform choice	Preference for a sustainability-oriented platform	7 (64%)
	Preference for a niche platform specific to a particular industry	3 (27%)
	Preference for global platform	6 (55%)
	Preference for local platform	5 (45%)
	Focus on platform's trustworthiness	10 (91%)
Crowdfunding costs	Workload, incl. extensive communication efforts	11 (100%)
	Public nature of crowdfunding	2 (18%)
	Crowdfunding expenses	3 (27%)
Relationship with backers	Capitalising on own social network and local community	10 (91%)
	Attracting distant / international backers	6 (55%)
	Importance of positive word-of-mouth	7 (64%)
	Investing efforts in building relationships, e.g. through various events	11 (100%)
	Importance of follow-up activities	6 (55%)

Appendix 1

Interview guide

1. Can you please briefly describe your project?
2. How did you get familiar with crowdfunding?
3. Why did you decide to seek finance via crowdfunding?
 - Did you have any other sources of finance?
 - Did you have any experience with crowdfunding before?
4. Why did you choose platform X?
 - Which factors did you consider while choosing the platform?
 - What are the features of the platform that you find useful\challenging?
 - How does platform X fit your overall business strategy?
5. How was the process of launching a campaign on platform X?
 - Please describe the process and the related challenges.
 - Who were involved in your crowdfunding process?
 - Did you involve your social network? How?
6. Who were your backers?
 - Local or distant?
7. Did you communicate actively with your backers/potential backers during the campaign? How?
8. What was your experience with crowdfunding process? What were the challenges?
 - Do you think that the campaign was a success?
 - Would you have done something differently?
 - Do you keep contact with your backers? How?
9. Do you think you will use crowdfunding in the future?
 - Similar or different kind of project?
 - Same or different platform?
 - Same or different type of crowdfunding (reward, loan, donation, equity)?