

Business angels investing in green ventures: how do they add value to their start-ups?

IV. Business Angels Europe Conference on Angel Investment
Research 2023

07.11.2023

Meike Siefkes

PhD Candidate

Green start-ups are central in the transition toward a zero-emission society.

- Due to longer development times and higher requirements for financial capital, green ventures have been perceived as less attractive by investors compared to conventional start-ups (Ghosh and Nanda 2010; Shepherd and Patzelt 2011).
- Only recently have investors begun to re-configure toward green start-ups, realizing green start-ups' opportunity to leverage both economic and environmental benefits (Bocken 2015; Ghosh and Nanda 2010).
- When conventional investors invest, information asymmetries can lead to mission-drifts toward short-term profits (Bergset 2018; de Lange 2017; Demirel et al. 2019).

Green start-ups are new and young companies that “develop and implement products or services that contribute to the goals of a green economy (reducing greenhouse gas emissions, improving energy efficiency, adopting a circular economy approach etc.)” (Bergset and Fichter 2015).

The unique heterogeneity of green BAs and its consequences are underresearched.

- BAs' independence, mission-drive and willingness to invest in high-risk projects makes them especially interesting for green start-ups (Bergset 2018).
- More and more investors invest in green start-ups, also BAs (Botelho et al. 2023).
- We investigated:
 - *How do BAs add sustainability value to green ventures?*
 - *How are these value-adding activities dependent on the BAs' sustainability characteristics, i.e. motivation to invest, sustainability competence and sustainability investor activity?*
- Results: Meike Siefkes, Øyvind Bjørgum & Roger Sørheim (2023) Business angels investing in green ventures: how do they add value to their start-ups?, Venture Capital, DOI: [10.1080/13691066.2023.2260101](https://doi.org/10.1080/13691066.2023.2260101)

We conducted a comparative case-study to study the phenomenon “BAs investing in green start-ups”.

- Interviewed 14 BAs from Germany and the Nordics
- Multiple case study based on semi-structured interviews
- Purposeful sampling to yield cases that are information rich (Patton 2002)
- Selection criteria:
 - They have invested as a BA without being related to the founders.
 - They are lead investors who are actively involved in their investments.
 - Their investment portfolio contains at least one green start-up.
 - They are based in Germany or the Nordics (Sweden and Norway).

Findings: There are different groups of BAs investing in green start-ups.

Category	Subcategory	Individual A	Individual B	Individual C	Individual D	Individual E	Individual F	Individual G	Individual H	Individual I	Individual J	Individual K	Individual L	Individual M	Individual N
Descriptive dimension	Motivation														
	Portfolio composition														
	Sustainability competence														
Sustainability-value-adding activities	Sustainability strategy advice														
	Sustainability monitoring/supervision														
	Sustainability resource acquisition														
	Sustainability mentoring														
Case		Light green angels										Green angels			

What does it mean for the start-ups?

	Light green angels	Green angels
What do start-ups get?	<ul style="list-style-type: none">• Add value similarly to conventional BAs but recognize sustainability as an important aspect• Focus on building the business• Strong conventional network	<ul style="list-style-type: none">• Sustainability competences plus entrepreneurial background• Sustainability value added across several dimensions
What don't start-ups get?	<ul style="list-style-type: none">• No or limited specific sustainability value added• Possible danger of being used to greenwash their portfolio	<ul style="list-style-type: none">• Less formally organized with other investors• Possible hindrance of the scaling process

→ Green start-ups are advised to carefully select their BAs according to their specific needs as a green venture.

What does it mean for BAs?

- Green angels can build bridges between traditional investors and entrepreneurs.
- Going beyond only investing in green start-ups and actively contributing to their sustainability performance is essential to achieve the transition to a more sustainable society.
- Offering sustainability-value-adding activities might provide a competitive advantage and make the green angels stand out from the crowd.
- The quantification of green start-ups' impact is essential to enable investments targeting “really” green start-ups.
- This way, individual actors can use their financial, human, and social capital to be change agents.

Conclusion and outlook

- BAs investing in green start-ups are specific in the value-adding services they offer their start-ups.
- We introduce *green angels* as a term for BAs that not only invest in green ventures but also add a certain sustainability value through post-investment activities.
- These findings might be applicable to impact-focused angels as well as angels focusing on other knowledge-intensive sectors.
- Future research opportunities are vast, e.g. the role of BA networks in the matching of start-ups and BAs, and in the collaboration among BAs.

Thank you!

I am always open for new interview participants and research collaborations.



Meike.Siefkes@ntnu.no

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BAs add value beyond financial capital.

- Business angels (BAs) play a critical role in the entrepreneurial finance system.
 - They have years of business and entrepreneurial experience themselves.
 - They provide financial capital at an early stage.
 - In addition, BAs can actively provide human and/or social capital:

	Value added based on human capital	Value added based on social capital
Resource provision	Sounding board/strategic role	Resource acquisition role
Governance	Supervision and monitoring role	Mentoring role

Politis (2008).

Who are green angels?

Category	Subcategory	Light green angels	Green angels
Descriptive dimensions	Motivation to invest in green start-ups	<ul style="list-style-type: none"> • Want to be a part of the shift of talent and capital • Bad consciousness • Personal motives 	Aim to affect societal transformation
	Portfolio composition or investor activity include sustainability	Mixed portfolio covering green and non-green start-ups	Specific focus on green or impact start-ups
	Sustainability competence	No sustainability background or experience	Sustainability background and/ or experience

How do green angels add value?

Category	Subcategory	Light green angels	Green angels
Sustainability-value-adding activities	Sustainability strategy advice	<ul style="list-style-type: none"> • Focus on growing the business • Forwarding industry trends • None 	<ul style="list-style-type: none"> • Hold a dedicated sustainability-focused board position • Develop a clear sustainability strategy and sustainability value proposition
	Sustainability monitoring and supervision	None	<ul style="list-style-type: none"> • Require clear sustainability indicators • Request quantifiable indicators that lay the groundwork for the later reporting
	Sustainability resource acquisition	<ul style="list-style-type: none"> • Advertise the start-up in own network • Connect the portfolio startups with sustainability experts • None 	<ul style="list-style-type: none"> • Provide access to sustainability-focused network • Prepare for future sustainable investors/sustainability focused financing • Connect the portfolio startups to create synergies
	Sustainability mentoring	None	Challenge the entrepreneurs' mindset