

50 Shades of Green Business angels funding green opportunities

BAE Business Angels Europe Conference on Angel Investment Research 2019

13th of March 2019

1. Introduction

- The need to control and reduce environmental degradation has brought together governmental, business and civil society stakeholders.
- Wealth creation and economic prosperity delivered in previous decades has resulted in acute problems for all our environmental resources.
- Recent studies have noted that atmospheric carbon dioxide concentration is now higher than it has been for hundreds of thousands of years and is already disrupting the climate in ways that we find difficult to predict.

1. Introduction (2)

- As a result, ambitious policy agendas are being set by governments aiming to control harmful environmental emissions.
- Against this background, organisations are under pressure to reduce their environmental impact at an unprecedented rate where step change was proven to be unsatisfactory.
- Such pressure provides organisations with a new playing field for innovation to deliver on the demanding sustainability agenda.
- In this context, niche innovations hold more promise in providing alternatives to the current high pollution growth paradigm.

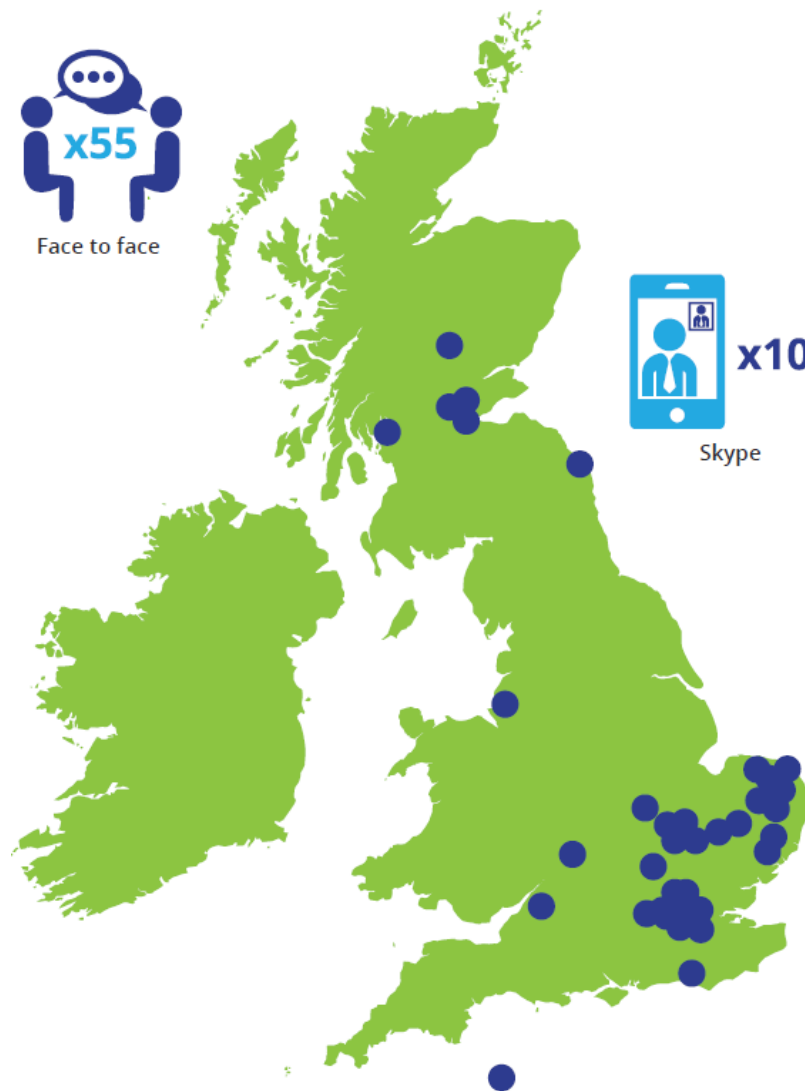
1. Introduction (3)

- Governmental funding and large-scale, public-private investment partnerships tend to support innovation at lower technological readiness level (TRL).
- While these schemes help advance science they rarely result in market-ready products and are often too risk-averse to focus on niche technologies, necessary for radical sustainability improvement.
- As a result, smaller-scale, advanced TRL initiatives with disruptive potential for sustainability are not prioritised, leaving room for angel investors to play a significant role in bringing step-changing, green-tech innovation to the market.

2. Angels in the study

- *Data Collection*

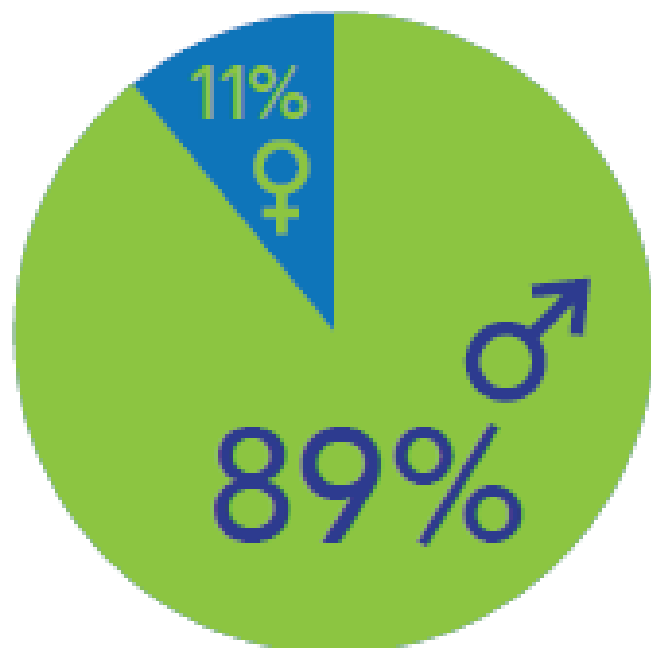
Interviews



2. Angels in the study (2)

- Gender

Figure 1.
Sample by
Gender



Investors in Green/Clean Tech



Figure 2. Investment in green/clean tech by gender



2. Angels in the study (3)

- Age

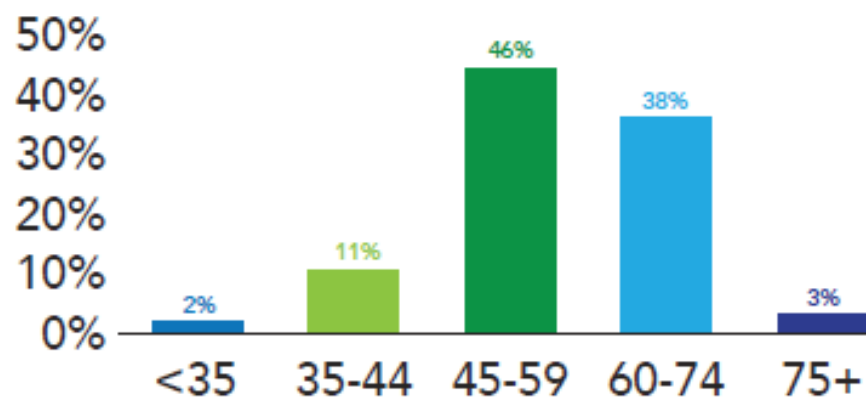


Figure 3. Sample by age. ▲

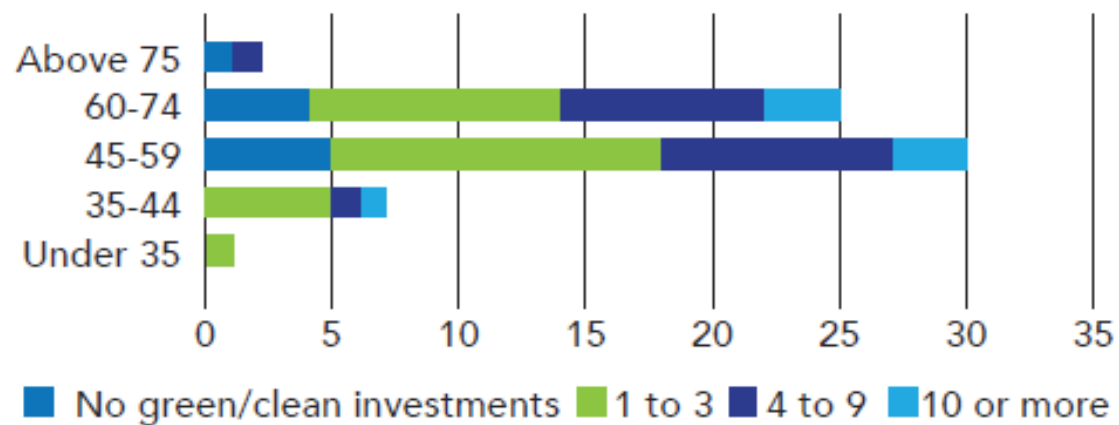


Figure 4. Green/clean investments per age. ▲

2. Angels in the study (4)

- Education

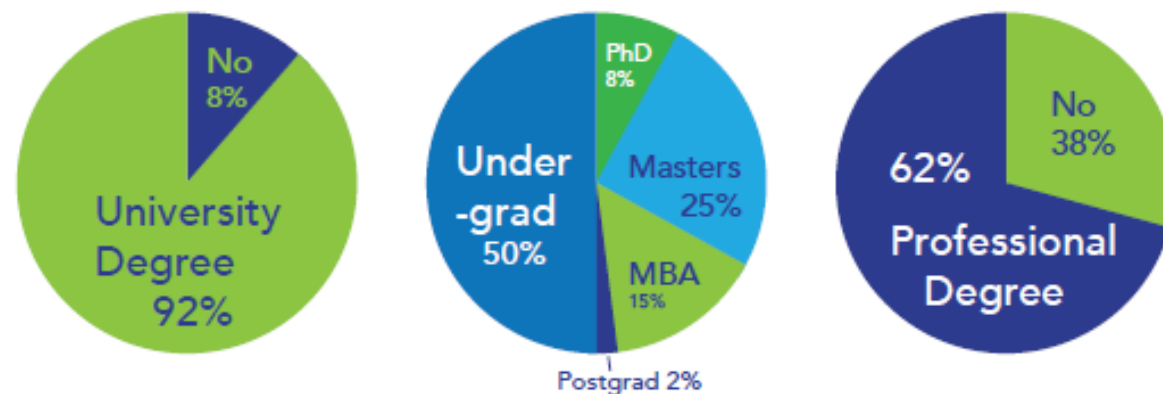
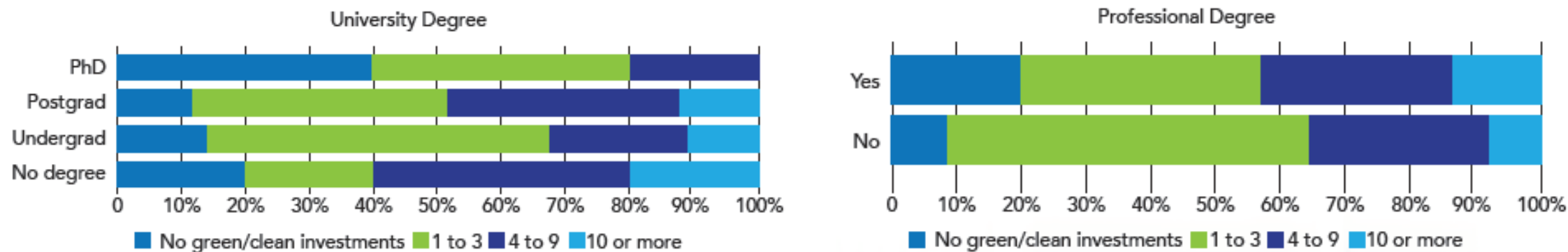


Figure 5. University and professional degree per angels ▲

Figure 6. Green/clean tech per university and professional degrees ▼



2. Angels in the study (5)

- *Entrepreneurial experience*

Figure 7. Entrepreneurial experience. ▼

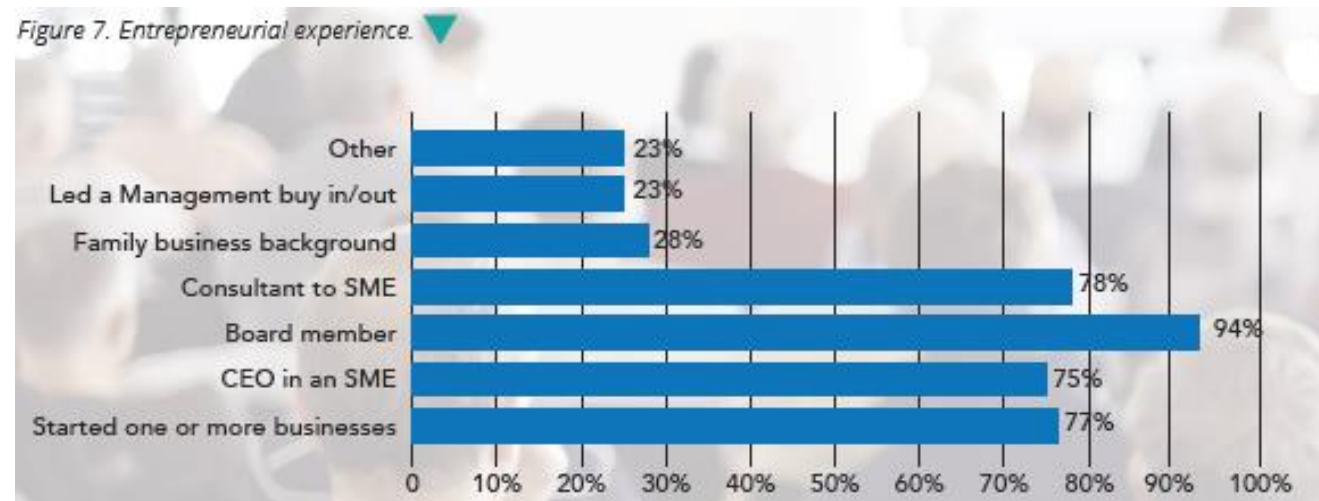
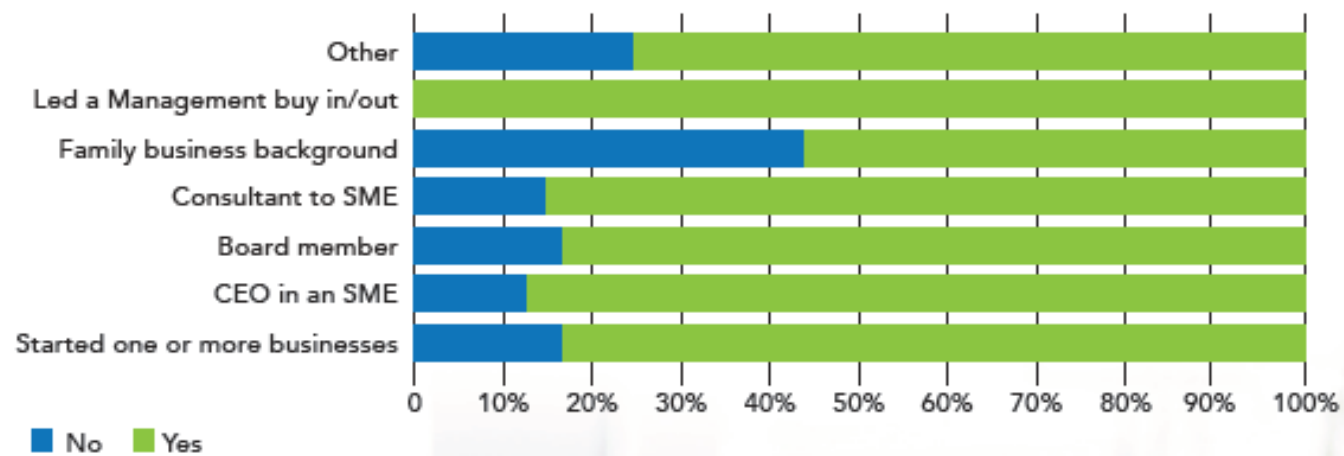
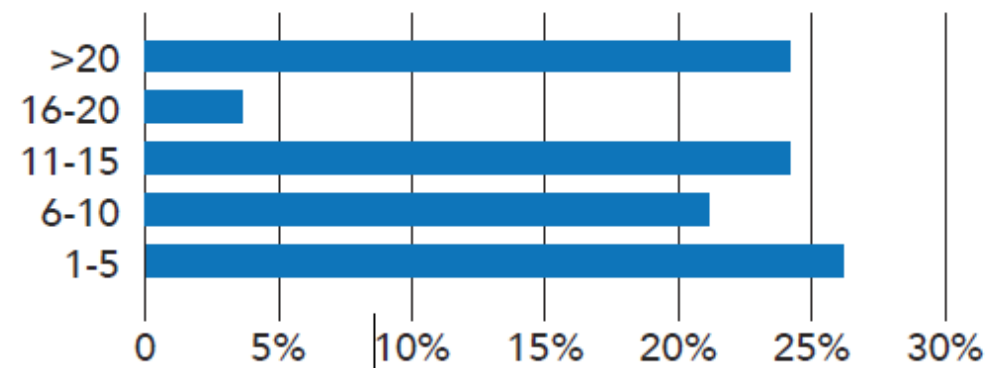
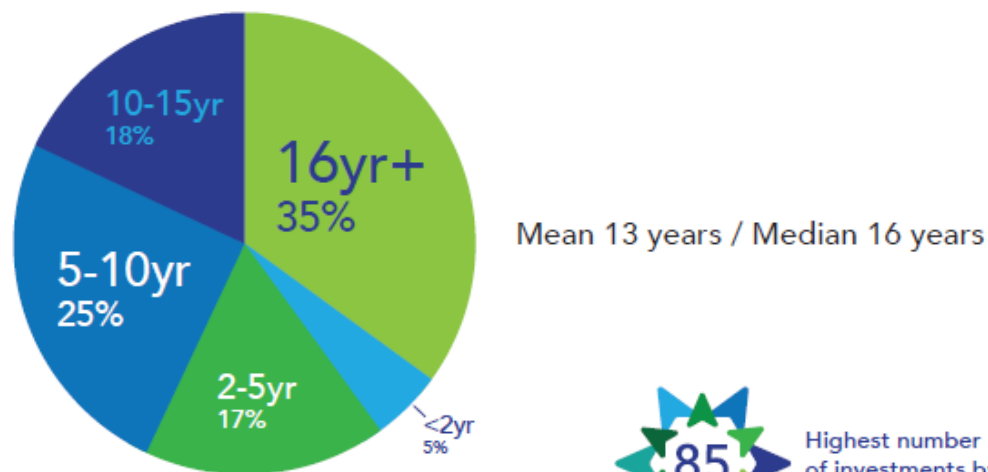


Figure 8. Entrepreneurial experience and green/clean investments. ▼



2. Angels in the study (6)

- Investment experience



85
Highest number of investments by one angel.

Figure 10. Number of Investments by Business Angels ▲

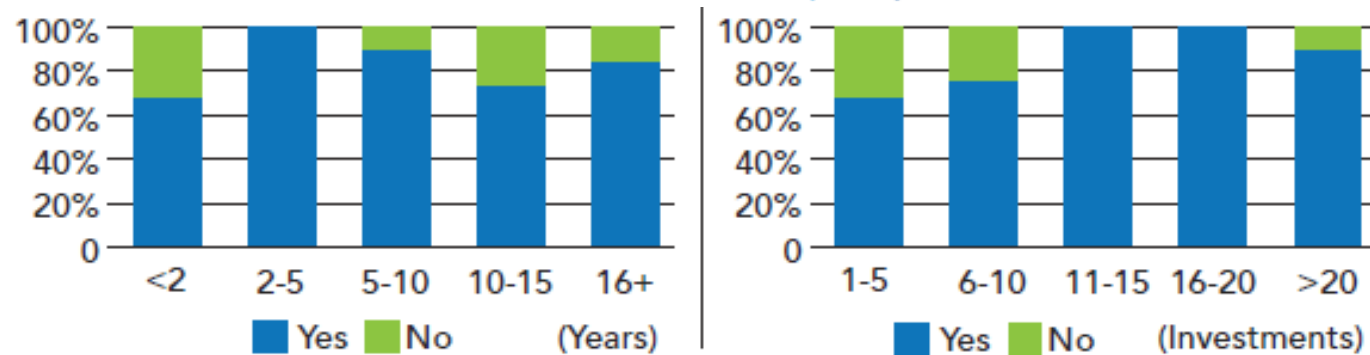


Figure 11. Investment experience and likelihood of investing in green/clean tech. ▲

2. Angels in the study (7)

- Attitudes, Behaviour and Knowledge influencing green/clean investments

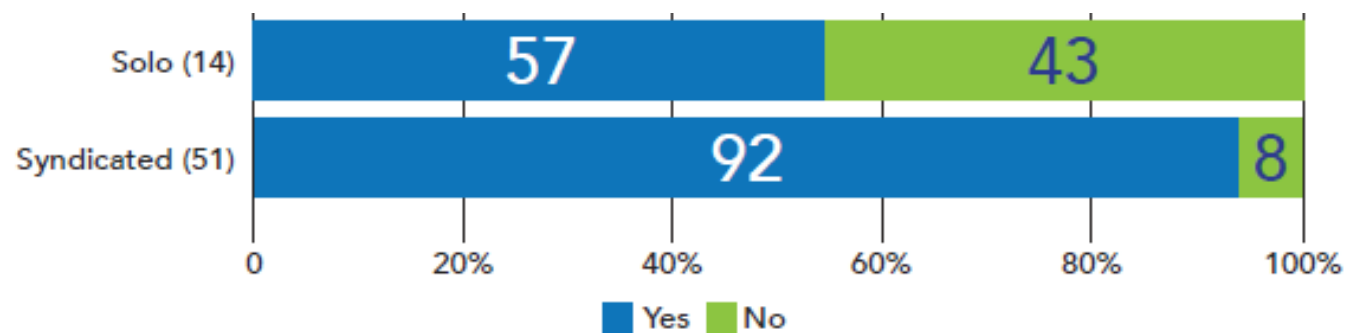


Figure 12. Group membership and impact of group membership in green/clean tech. ▲

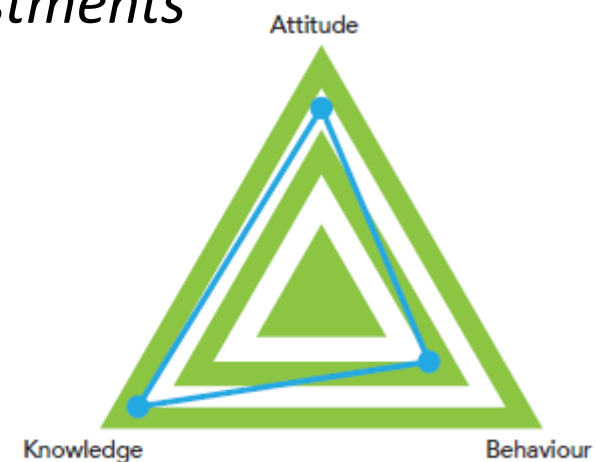


Figure 13. External factors ▲

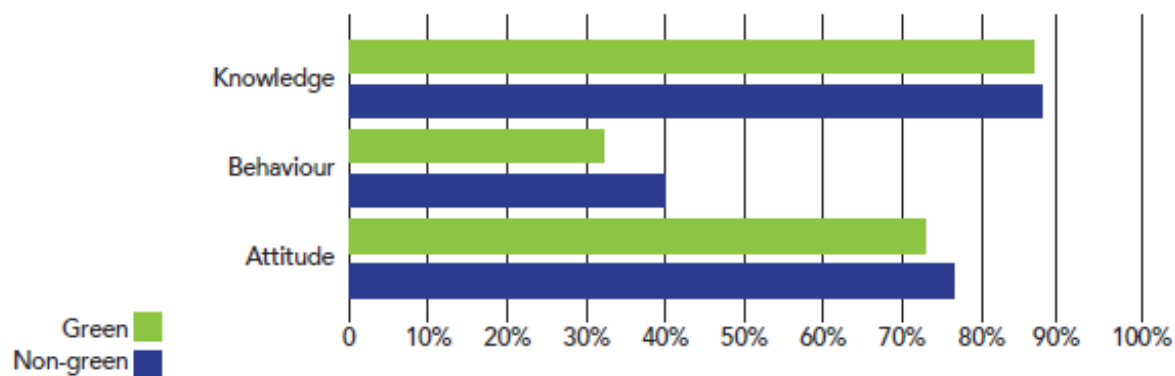


Figure 14. Scores of external factors for green and non-green investors ▲

3. Green/clean Investment Behaviour

- Green/clean tech investment experience

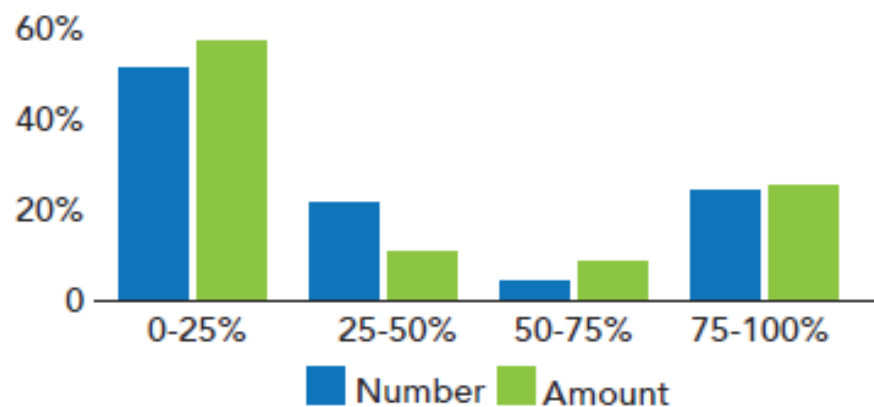
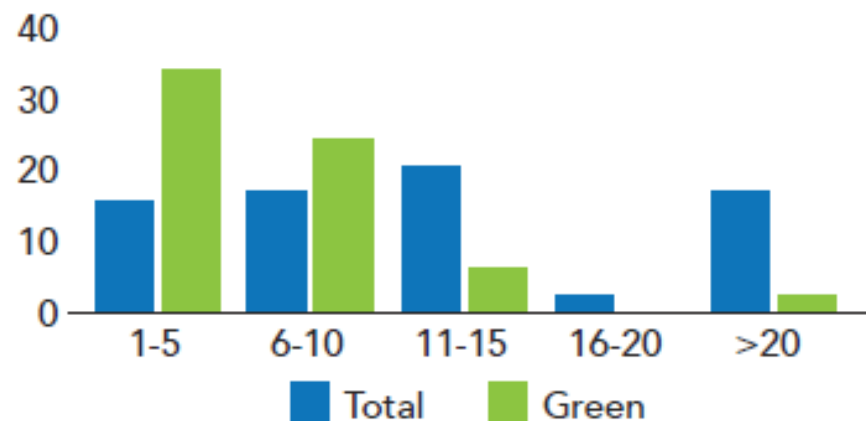


Figure 18. Weight of Green/clean tech in angel portfolios ▲

3. Green/clean Investment behaviour (2)

- *Green/clean tech investment motivations*

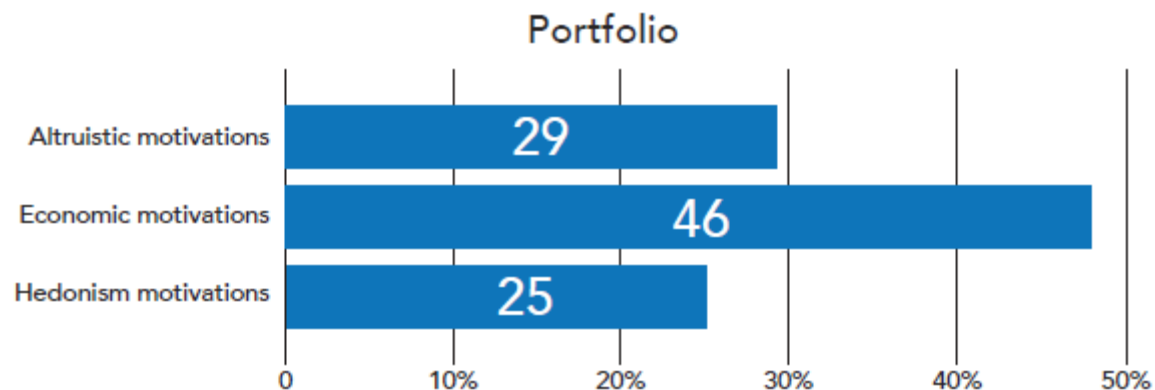


Figure 19. General investment motivations ▲

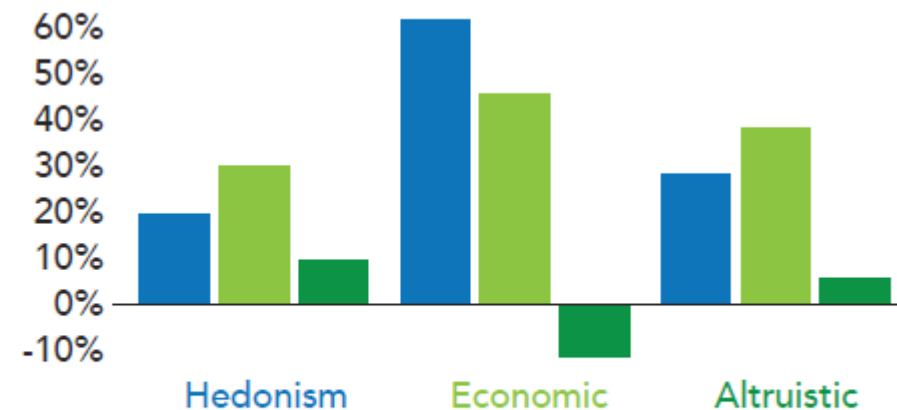


Figure 20. Green angels vs Non-Green ▲

"It's a business, it's buying and selling. I'm not a charity, if I want to be a charity I give to charity."

4. Investors views on green/clean tech investments

- *Ethical and financial considerations*

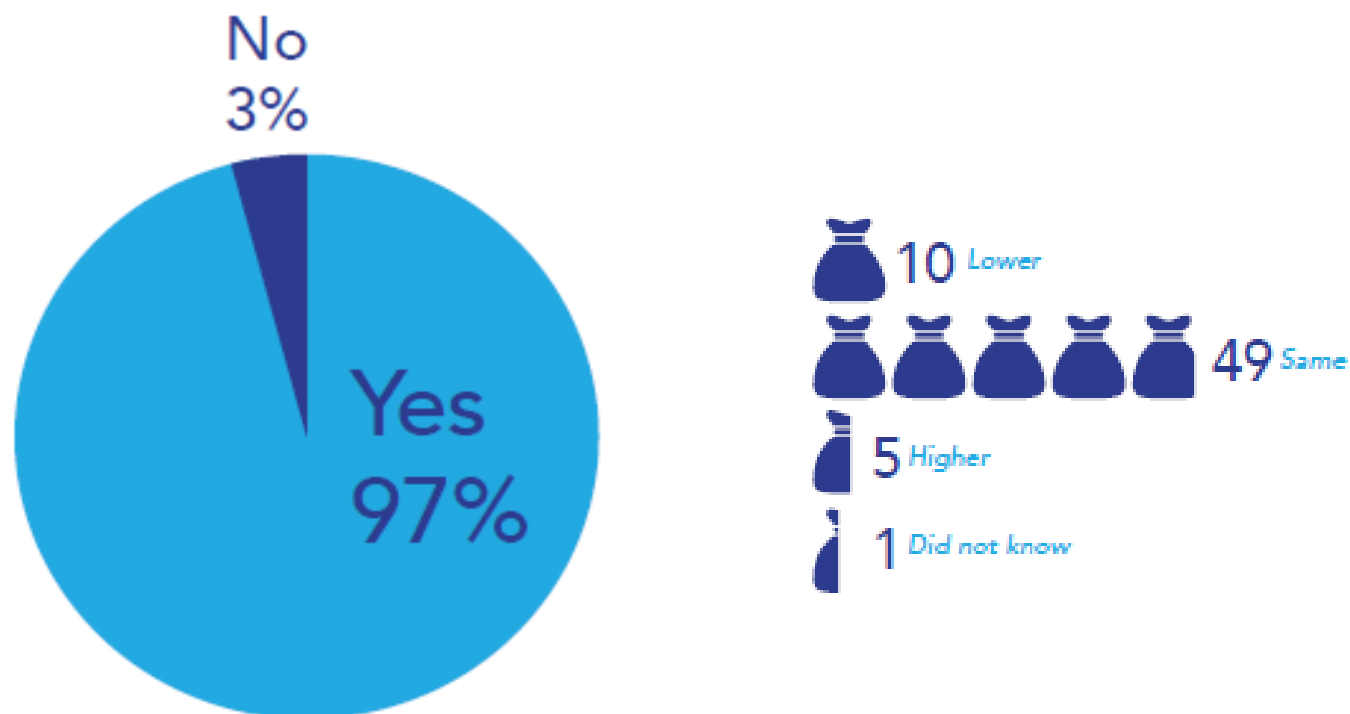
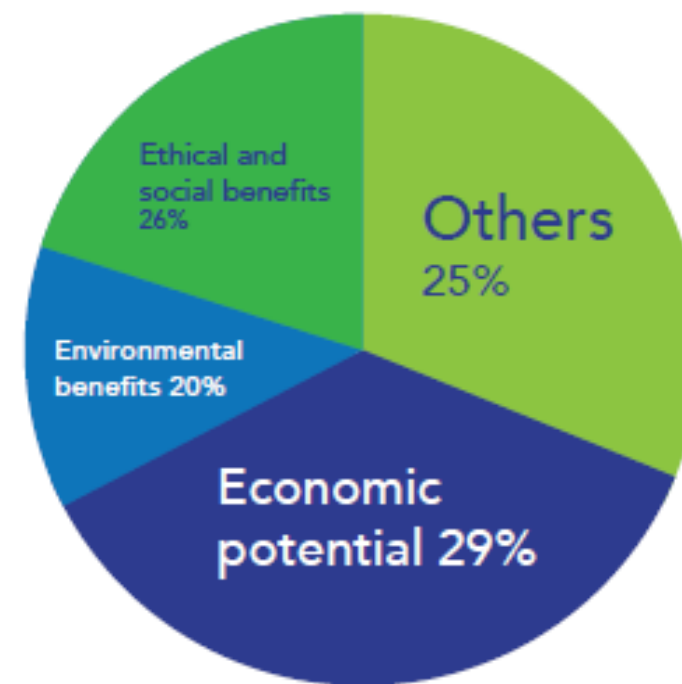


Figure 21. Ethical and financial returns while investing in green/clean tech. ▶



◀ Figure 22. Advantages of green/clean tech investments.

4. Investors views on green/clean tech investments (3)

- *Improve attractability of green/clean tech investments*

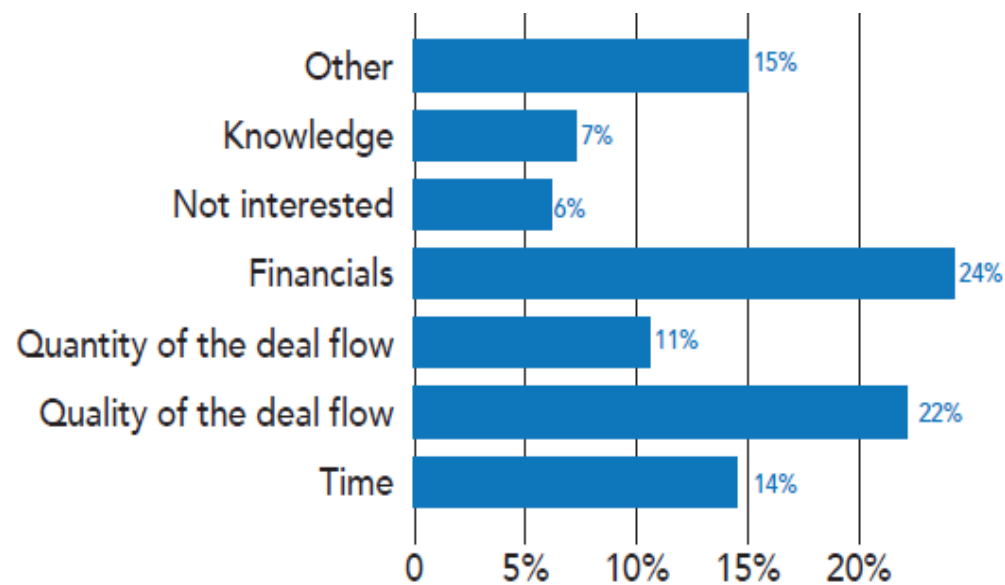
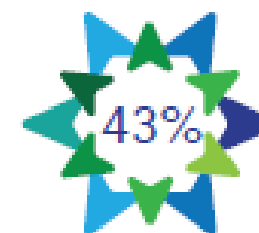
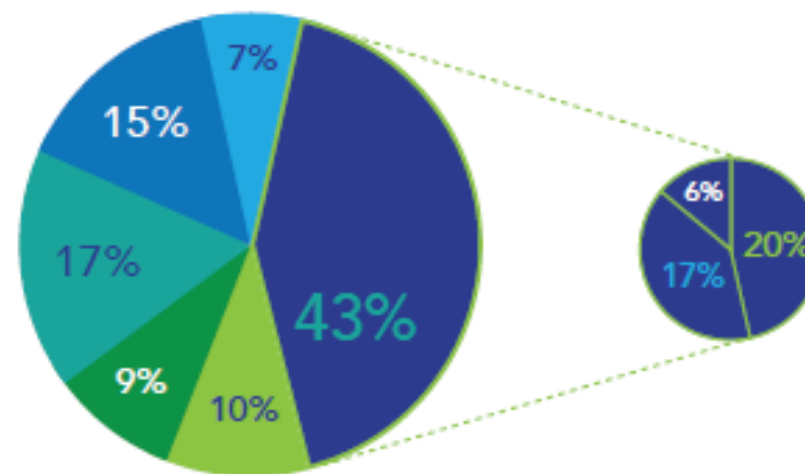


Figure 24. Reasons why investors did not conduct more green/clean tech investments.

“Need to sell a green investment like it is a brown investment”



of cited ways to make green/clean investments more attractive were linked to government interaction.



- Other
- Green platform
- Education
- Government support - funding
- Commercial drive
- Entrepreneurial teams
- Government support - regulation
- Government support - tax break

4. Investors views on green/clean tech investments (4)

- Government role in green/clean tech angel investments



“Government could help by providing the carrot (awareness) and stick (regulation), more of the former...”

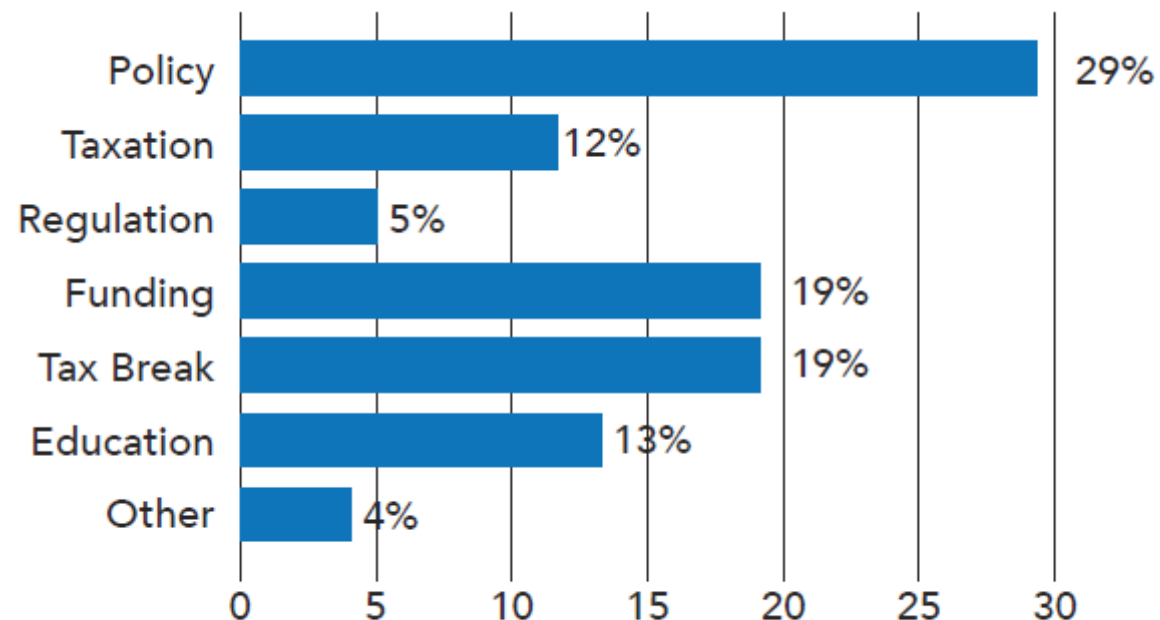


Figure 27. Government intervention in green/clean investments. ▲

5. Conclusions

- Younger angels are more likely to have invested in green/clean tech;
- Less experienced angels (<2 years) are less likely to have green/clean tech in their portfolios;
- Angels investing through groups are more likely to have invested in green/clean tech;
- Angels that have invested in green/clean tech give less importance to economic motivations than investors who have not invested in this space;
- Angel investors show very high levels of attitudes and knowledge about environmental problems, however, their behaviours could be more eco-friendly;
- Participants acknowledged pollution as the key environmental problem;
- Investors identified human activity as the key cause for environmental degradation;
- Green/clean tech investments do not seem to have a disproportional weight in terms of amount invested when compared to the weight of total number of investments;
- Financial considerations, quality of the deal flow and time were the key reasons why investors have made more green/clean tech;
- Business angels recognize an ethical dimension to green/clean tech investments;
- The economic potential (return) is seen as the key advantage of investing in this space;
- Risk/uncertainty was identified as the major disadvantage of green/clean tech investments;
- Angels in this study did not conduct more green/clean tech investments because of financial reasons;
- Government support was the most cited way to improve the attractiveness of this type of investment;
- Government intervention received moderated support as a fundamental way to make green/clean tech investments more attractive;
- Consistent, clear and long-term policies were seen as the most wanted government intervention.

5. Conclusions (2)

- The key implication from this study is that green/clean tech has all the potential to attract angel investors. However, the reasons why investors might be interested in this space differ, which is not surprising given the heterogeneous nature of the angel market. Similarly to opportunities in other sectors, green/clean tech opportunities must be financially viable to attract angels. Investors recognized the importance of economic motivations when investing in this space.
- The role for Government was also revealed during this research as one that could provide crucial support for green/clean tech investment. This can include direct monetary benefits in the form of subsidies and most importantly tax breaks as mechanisms to compensate the risk undertaken in investing in early stage green/clean tech opportunities. However, angel investors highlighted the importance of clear, consistent and long-term policies in this space. Often, green/clean tech is capital intensive and requires policy stability to inspire investors' confidence. Frequent changes and unclear direction are not helpful in growing investment in this area.
- In summary, this was an initial study to understand how angel investors evaluate green/clean tech opportunities. The result provides rich insight on investors views about this space; however, the study provides limited insights on other dimensions of angel research (investment criteria, value added, returns, business models, etc...). Hence, future angel research should focus on other areas to understand how the specificities of green/clean tech impact business angel decision-making.