

Crowdfunding Cleantech Startups

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Cleantech startups often find it difficult to attract investments because of their long horizon development and commercialization, need for large upfront capital investment, high technological risks, and low exit opportunities provided by incumbent companies. In recent years, there is a growing interest for raising capital via a large number of diversified investors through online crowdfunding platforms. In our research, we explored what opportunities crowdfunding platforms provide for financing cleantech startups.

Through in-depth interviews and analysis of the cleantech, startups, and investment sectors, our research highlighted that crowdfunding comes at an earlier stage of financing than the usual risk-taker VC models. The advantages of crowdfunding included creating a community of investors around the business, testing out the market, and allowing citizens to directly benefit financially from green transition projects. Crowdfunding appears to be more suited for specific types of business models. Startups with business-to-consumers (B2C) models may find it easier to attract individual investors than startups with

business-to-business (B2B) models as these typically require a large upfront investment and long business Furthermore. development time. software cleantech may find it easier to get funded than hardware or deep clean technologies, whose value is mostly only captured by investors with technical expertise. Of all investors, the most motivated to invest in cleantech startups are often the large corporations or angel investors who have either strategic objectives for such innovation or the technical expertise to assess a new technology's value.

Our research shows that the biggest advantage of crowdfunding platforms is the introduction of non-financial motivation factors into the purely finance-based investment decisionmaking model, making it more likely for cleantech with environmental impacts to get funded. However, institutional investors are often skeptical of non-financial motivations within crowdfunding decisions. They perceive that the retail investors active on crowdfunding platforms are often not well-equipped to assess the risks of investing in cleantech startups since the existing platforms do not assume

responsibilities and functions like due diligence as traditional financial intermediaries would do. Typically, corporations that have high-risk appetites to invest in cleantech startups due to their strategic objectives are more interested in developing their own crowdfunding platforms than using an existing one. This way, corporations are directly engaged with their projects. Hence, important limitations of crowdfunding include its lack of appeal to B2B startups and professional investors as well as its need for significant time and resource commitments.

Our analysis gives nonetheless some insights on how to best synergize dynamics between investors and entrepreneurs on crowdfunding. This involves for instance increasing tangibility of the projects to the investor or securing technological patents prior to crowdfunding.

We also provide recommendations to governments on how to maximize the potential of crowdfunding into the cleantech startup sector. The key recommendations are:

- Increasing crowdfunding credibility: Currently we see minimal involvement of the government in providing support for crowdfunding and we believe there is scope for policy to lend credibility and awareness among the general public. Governments should associate themselves with crowdfunding platforms. This is already happening, as in the case of the Dubai Government which launched DubaiNext, a digital crowdfunding platform to support SMEs (The United Arab Emirate's Government Portal, 2021). Government projects that have public support but lack existing funding can be funded through crowdfunding, where governments can go as far as say that they will fund a percentage of their projects through crowdfunding. Overall, this can improve public awareness about crowdfunding and specific issues the projects are aiming to tackle and increase the reputation of crowdfunding.
- Progressive regulations: Governments play a key role in maturing the

- crowdfunding market through their policies, which leads to more investor confidence in it. Policies that would positively affect cleantech startup investments would progressively allow for more capital injection from crowdfunders to equity and lendingbased platforms. This can also be supported by supportive financial policies like tax reliefs and financial incentives for crowdfunding investors to invest in new companies. The increased capital flow of confident investors can support cleantech startups' need for large capital.
- Risk limiting: From a financial risk perspective, crowdfunding platforms operate with a lack of obligations towards their investors. One of the crowdfunding platforms we interviewed conduct for instance due diligence and risk assessments voluntarily. Governments can introduce some benchmark of obligations for platforms in order to filter out potential fraudulent or extremely risky investments and limit

financial risks for non-financially expert investors.

- Funding guarantee: B2B cleantech startups find it challenging to attract investment due to their high capital requirements and long-time development periods. So, governments can make funding available to crowdfunding platforms, with criteria for funding B2B companies spurring innovation. Such funding can be a quarantee for all crowdfunders that invest in the B2B project so that in case of failure, the primary investment would be returned. The government's own "skin in the game" would incentivize other investors' risk appetites and alleviate the financing challenges of capital-intensive B2B companies.

Overall, our research reveals that there is a viable potential for crowdfunding as a complementary financing tool for cleantech startups.

Read the full report here.

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