

The support system for green start-up companies in Germany



Strategies and recommendations for strengthening the start-up sector of the Green Economy

Summary of the main points

- Comprehensive investigation of the relevant support actors and support forms for green start-ups
- Insufficient knowledge and utilisation of the potentials of the Green Economy
- Opportunity for opening up great potentials through targeted and systematic support
- Existence of a few specialised services for green entrepreneurs by business incubators and start-up competitions
- Need for action for many support actors at different levels
- Six basic strategies with recommended actions for strengthening the start-up sector of the Green Economy

About the analysis:

The start-up initiative *StartUp4Climate* supported by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and the National Climate Initiative pursues the goal of significantly increasing the proportion of green start-ups in Germany. The initiative is organised by the Borderstep Institute for Innovation and Sustainability, the ADT German Association of Innovation, Technology and Business Incubation Centres and the University of Oldenburg, an EXIST entrepreneurial university. In one of the activities of this start-up initiative, the Borderstep Institute and the University of Oldenburg have carried out a comprehensive analysis of the support system for green start-ups in Germany (Fichter et al., 2014). For this purpose, support actors and activities of particular relevance for the integration of climate protection and sustainability requirements in the start-up support system were identified and examined in terms of their deficits and potentials in an in-depth analysis. On this basis, six basic strategies with recommended actions for strengthening the start-up sector of the green economy were developed.

The start-up sector Green Economy

The Green Economy is a powerful engine for young companies and start-ups. While on the one hand it is necessary for Germany to reduce the greenhouse gas emissions by up to 95 percent by 2050, the Green Economy, on the other hand, promises a huge future market, the global volume of which will double in the next ten years. According to the findings of the *Green Economy Start-Up Monitor* sponsored by the German Federal Ministry for the Environment (BMUB), the proportion of green start-ups in Germany is around 14 percent (Weiß & Fichter, 2013). Thus, young companies significantly contribute with their products and services to the Green Economy and a green transformation of the economy.

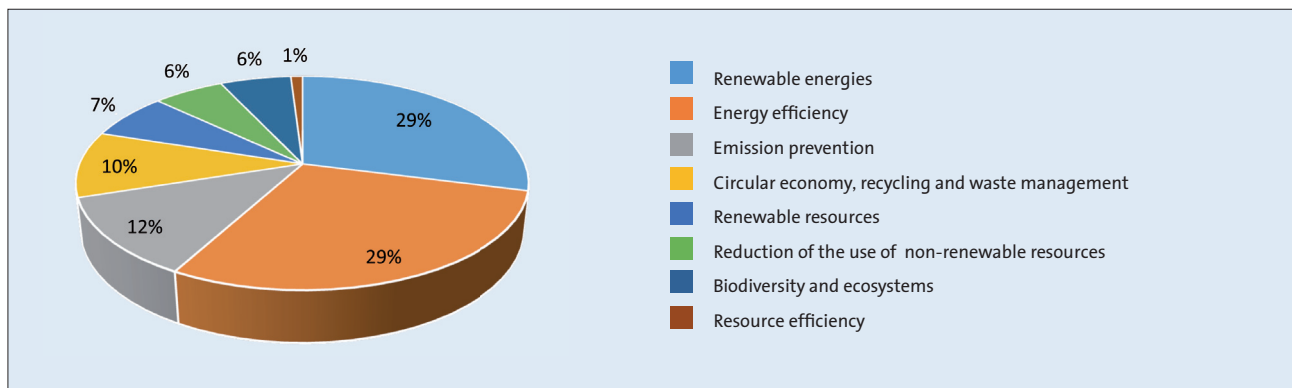


Figure 1: Contribution of green start-up companies to the objectives of the green economy

Support system for green start-up companies

The support system for start-ups can be divided into the market-based incentive system (market opportunities, market potentials, market demand, etc.) on the one hand, and the public and private support system for start-ups on the other hand. Both parts of the system are of great importance to the emergence and the success of start-ups. The present analysis deals exclusively with the public and private support system for company start-ups. The following support actors and forms of support were assessed as being particularly relevant for the integration of climate protection and sustainability requirements into the support system for start-ups:

- Start-up support programmes at federal level
 - Business development organizations
 - Cluster strategies
 - Start-up competitions
 - Entrepreneurship awards
 - Business incubators
 - Start-up support at universities
 - Private actors of entrepreneurial finance
 - Web offerings for entrepreneurs
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Key findings

The analysis shows that the requirements and potentials of environmental sustainability are hardly integrated in the German start-up support system at all. Only since recently it can be observed that there are individual approaches and efforts in considering climate protection and sustainability requirements and seizing the opportunities of start-ups in the area of the Green Economy. However, there are still substantial barriers and obstacles that interfere with a systematic and broad integration of the requirements and opportunities of sustainability in the start-up support system in Germany.

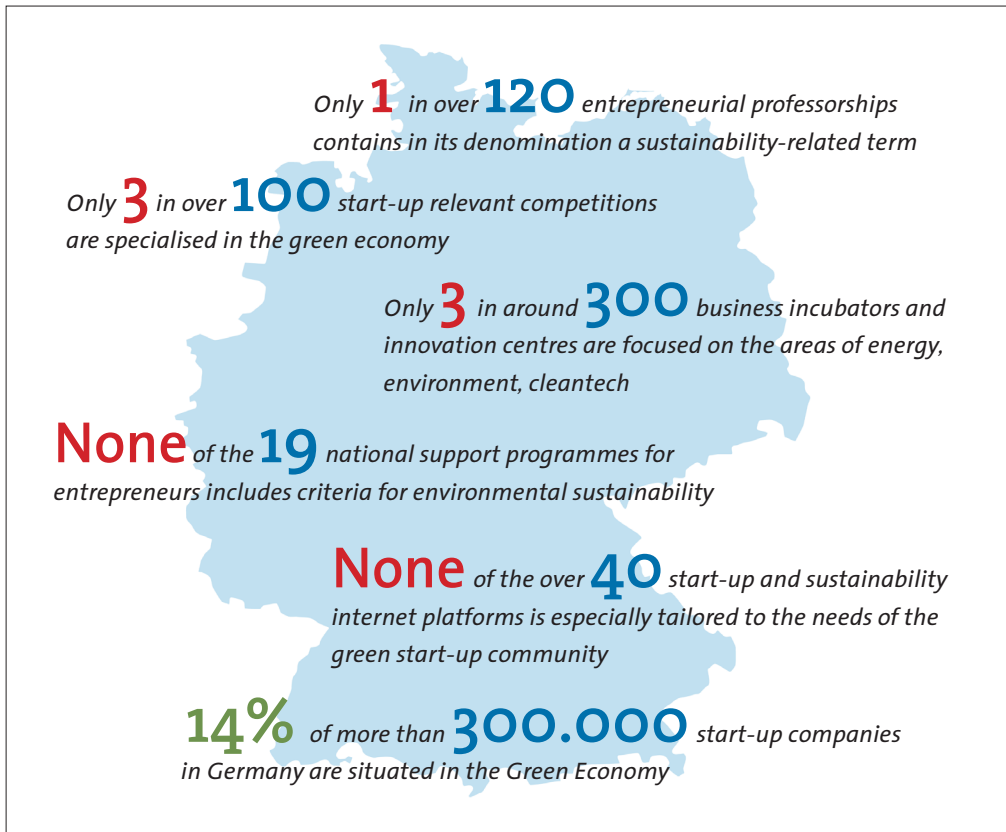


Figure 2: Minimal integration of environmental sustainability in the German start-up support system

Funding programmes: The funding database of the Federal Ministry for Economic Affairs and Energy lists 19 nationwide funding programmes for the founders of new businesses. None of these programmes includes environmental sustainability criteria. Furthermore, there are no specific funding programmes for start-ups in

the Green Economy. Some federal states, such as Berlin and Brandenburg, have already set priorities for sustainability innovation in their innovation strategies. As, amongst others, the Cluster Platform Germany shows, there are already numerous environmental and energy clusters. However, the analysis carried out by the University of Oldenburg and the Borderstep Institute illustrates that, in general, a systematic combination of cluster policy and start-up support is lacking.



For the environmental technology cluster Cluster Umwelttechnologien.NRW, start-ups are already an important issue. The website of the cluster provides information on both venture capital providers and start-up competitions.

Competitions: Although the number of start-up relevant competitions has increased since the mid-1990s to around 100 competitions today, there are only a few specialised start-up competitions in the area of the green economy, such as Karma Konsum or the newly launched competitions in 2014 «InnoWASTEon» and



The KUER start-up competition is the first sector-specific competition for the emerging business fields of climate, environment, energy saving and conservation of resources.

the sector-specific start-up competition «KUER». The Berlin Brandenburg Business Plan Competition and the «Startup-Impuls» competition by the Hanover business development organization have integrated the topics of sustainability and climate protection in the one case into their recommendations for the business plan and in the other in the form of a specific award. Start-ups and young companies are still not directly addressed by specific award categories in major start-up, innovation and sustainability competitions. Altogether, there is a lack in this field, compared to for example a total of 39 awards in the field of biotechnology, of both specific entrepreneurship awards in the area of the Green Economy and sustainability and award categories in existing competitions.

Business incubators: At the time of the analysis (2014), only nine (i.e. 3 percent) of around 300 business incubators had a focus related to the green economy (energy, environmental technologies, cleantech). As a survey by the Borderstep Institute shows, more than 95 percent of all business incubators in Germany consider the start-up sector of the Green Economy to have a growing or strongly growing importance. With the establishment of the new working group «Green Economy», ADT (the German Association of Innovation, Technology and Business Incubation Centres) aims to encourage business incubators to develop specific services for entrepreneurs as well as to build up a competence network in the area of the Green Economy.



Green Alley is a private business incubator in Berlin that aims to support entrepreneurs in the areas of the Green Economy, conservation of resources and recycling. image: Green Alley, photograph: Eike A. Jung-Wolff

Universities: Significant deficits were also found at German universities. Out of over 120 professorial chairs for entrepreneurship, which are registered by the German society for the promotion of entrepreneurship-research (FGF), only one professorship with a denomination related to «sustainability» could be identified. Furthermore, to date there are only a few universities throughout Germany, which explicitly and substantially take the aspects of environmental sustainability into account in their entrepreneurial education or start-up support. These include the inter-university networks «Climate KIC» and «Innoenergy» as well as, amongst others, the universities of Oldenburg («Eco-Venturing»), Lüneburg, Kiel, Hamburg-Harburg and the Flensburg University of Applied Sciences.



The project seminar «Eco-Venturing» at the University of Oldenburg - honoured with the Hans Sauer Award - is a worldwide unique course offered, where students develop sustainable business models together with entrepreneurs and business partners, with the objective of establishing real start-ups.

image: Universität Oldenburg, photograph: Christian Horneber

Financing: While many private financial actors have recognised green entrepreneurs as an explicit target group, the amounts invested to date in start-ups of the Green Economy are still very small. The money that is invested in Germany according to environmental and social sustainability criteria still only makes up around 10 percent of risk investments and direct investments. The latter, however, are of particular importance for entrepreneurs.

Web offerings: An analysis of over 40 start-up and sustainability portals has shown that there is no especially tailored web offering for the green entrepreneur crowd.

Six basic strategies and recommendations for action

Six basic strategies can be derived from the analysis for overcoming existing deficits and obstacles concerning the consideration of climate protection and sustainability in the German start-up support system. The study has developed numerous recommended actions for these strategies (Fichter et al. 2014), a selection of which is provided in the following.

	Basic strategy	Selected recommendations for actions
1	<p>Profiling:</p> <p>Highlighting the importance and needs of the Green Economy Sector</p>	<ul style="list-style-type: none"> → Conveying the potentials and economic importance of the Green Economy → Identifying and explicitly considering the specific needs of green entrepreneurs
2	<p>Mainstreaming:</p> <p>Broad integration of sustainability requirements in the start-up support system</p>	<ul style="list-style-type: none"> → Inclusion of the Green Economy as a distinct and independent start-up sector in the funding programmes of the Federal Government and the federal states → Integration of sustainability issues and criteria in business plan concepts and templates of the BMWi (Federal Ministry for Economic Affairs and Energy), KfW (German Promotional Bank), IHKs (Chambers of Industry and Commerce), etc. → Inclusion of sustainability criteria in the evaluation of business plans in start-up competitions → Evaluate possibility of sustainability bonus criteria for start-up and innovation support programmes by the Federal Government, federal states and local authorities
3	<p>Focusing:</p> <p>Targeted start-up support for green start-ups</p>	<ul style="list-style-type: none"> → Development of a sustainable start-up culture, amongst others by popularising the champions of green entrepreneurship and creation of role models → Evaluation of possibility of specific start-up support programmes for the Green Economy at federal and state level → Establishment of specialised start-up competitions and entrepreneurship awards with focus on the Green Economy
4	<p>Institutionalisation:</p> <p>Institutional innovations</p>	<ul style="list-style-type: none"> → Focal areas and specialisation of business incubators in the area or sub-areas of the Green Economy → Establishment of specific eco/green entrepreneurship professorships with teaching and course offerings at universities
5	<p>Integration:</p> <p>Systematic combination of cluster strategies and start-up support</p>	<ul style="list-style-type: none"> → Targeted integration of young companies and start-ups in energy and environmental clusters → Cooperation between cluster initiatives in the area of the Green Economy and regional start-up competitions in coaching programmes and competition categories
6	<p>Research:</p> <p>Closing knowledge gaps – promoting research</p>	<ul style="list-style-type: none"> → Investigation of systematic interplay between the innovation and start-up support systems in order to strengthen the support for green start-ups. → Collection of quantitative data on the financing situation for green start-ups

Interview with Prof. Dr. Klaus Fichter

Why do green entrepreneurs need special consideration and support?

The transition to a Green Economy is fundamental for both the achievement of environmental sustainability targets and the opening up of economic potentials in important emerging sustainable markets, such as renewable energies, the circular economy or sustainable mobility. Here, start-ups play a key role. While technology fields such as ICT and biotechnology have already been recognised as important and independent start-up sectors and are directly supported by specific funding programmes, this is not yet the case in the area of the Green Economy. At the same time, studies suggest that a number of specific features apply to the start-up sector of the Green Economy. For example, green start-ups are often technology-intensive and require a long development period and a specific infrastructure for R&D and demonstration projects. Additionally, they exhibit a high degree of innovation and are often situated in infrastructure-related markets such as «smart energy» or electromobility with their radical innovations, where they have to struggle with a high degree of regulation as well as compete with powerful and established companies. For this reasons, green start-ups require specialised support.

What conclusions do you draw from the findings of your investigation?

Our analysis has made it clear that climate protection and sustainability requirements are only rudimentarily integrated in the German start-up support system. Compared with the sustainability strategy of the German Federal Government, the objectives set therein and its indicators, this presents a clear deficit. In order

to eliminate this deficit, we have developed a total of six strategies and, based on these, defined concrete measures. For example, we think it is important, apart from a broad integration of sustainability requirements in the start-up support system («mainstreaming»), to provide targeted support for start-ups in the areas of energy, environment and cleantech («focusing»). It is now a question of implementing the relevant measures. In addition to specific start-up support programmes, the targeted promotion of «green» entrepreneurship and the development of Green Economy entrepreneurial communities are of particular importance. Also important are the establishment of specific consulting and coaching offers and the improvement of the financing conditions for green start-ups. Within the initiative of *StartUp4Climate*, we work together with specialised start-up competitions and plan to launch a specific entrepreneurship award.



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Sources:

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