

Green Startup Monitor 2020

Selected Key Findings in English



Borderstep Institut für
Innovation und Nachhaltigkeit

 Bundesverband
**Deutsche
Startups e.V.**

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Borderstep Institut für
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Preface Federal Minister for the Environment **Svenja Schulze**

Dear Readers,

Times of transition such as those we are currently experiencing offer a wide range of opportunities for new business models, impulses, ideas and new forms of value creation. This changes our society for the long term and ensures economic, ecological and social progress. Green technology and sustainable, digital business models will be in increasing demand in the future.

The German economy can and must continue to develop these markets with its innovative power. The Federal Government is setting the framework for these efforts. With binding goals in climate and environmental protection, with targeted promotion of green innovations, with an investment-friendly environment and with the sustainable development of digitalization.

I will continue to work towards this goal. And I want to use digitalization even more as a lever for achieving greater environmental, climate, nature and resource protection. To this end, the Federal Ministry for the Environment has drawn up an Environmental Digital Agenda. I am very aware that times of transition require a particular level of political support. The green startups thus have my full backing.

(Translated excerpt of the original preface)

Svenja Schulze

*Federal Minister for the Environment, Nature
Conservation and Nuclear Safety*

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Preface Federal Minister for Economic Affairs **Peter Altmaier**

Dear Readers,

More than a third of all startups in Germany are already in the so-called green economy, and it becomes clear where young founders see a need for action and where their field of activity lies. Startups are important drivers of innovation and these in turn are central if we want to master our current challenges.

Sustainability is right at the top of our agenda here. This includes not only ecological but also economic and social goals. Economic growth, the preservation of prosperity and innovations are as much a part of sustainable development as climate and environmental protection or the fight against poverty.

We have already achieved a great deal in Germany: despite economic growth, the use of raw materials remains nearly stable, energy

consumption is declining and CO2 emissions are falling. But there is still a long way to go. Digitalization and the commitment of innovative green startups can give us a decisive boost.

I am pleased that we will continue to work together to promote Germany as a startup-country for a sustainable future!

(Translated excerpt of the original preface)

Peter Altmaier

*Federal Minister for Economic Affairs
and Energy*

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Foreword of **the Initiators**



Prof. Dr. Klaus Fichter

Founder and Director
Borderstep Institute for Innovation
and Sustainability

Foto: Jörg Frank/Borderstep



Christian Miele

President and Executive Member of the
Board
German Startups Association

Foto: e.ventures Managementgesellschaft mbH



With 21% of all young innovative companies in Germany, green startups are now a key economic factor. With their innovative products and services, they are striving to solve the major sustainability challenges of our time in an effective and entrepreneurial manner – including the energy transition, climate protection, the reduction of plastic in the world's oceans as well as the realization of a sustainable circular economy.

Green startups have a key function as an engine of structural change. While established companies are strong in improving existing products, it is startups that are pioneers in bringing fundamental environmental innovations to the market. The present Green Startup Monitor once again illustrates that green startups in many sectors have to struggle with considerable hurdles and are not always rewarded for their sustainability performance.

The most important political demand from green startups is to better promote their entrepreneurial commitment to protecting the environment and to societal sustainability. It is on this basis that the Green Startup Monitor 2020 formulates a series of recommendations for action for policy-makers. These include the establishment of a "Sustainability" funding line in the German startup support system and the promotion of a network of so-called "Sustainability Hubs", which are intended to improve the cooperation between green startups and established medium-sized companies as well as further players in the startup ecosystem.

We are pleased that with the Green Startup Monitor 2020 (GSM 2020), published jointly by the Borderstep Institute and the German Startups Association, we for the second time can provide a sound factual basis for the economic,

entrepreneurial and environmental policy debate. We would like to thank the German Federal Foundation for the Environment (DBU) for the financial support of the Green Startup Monitor.

(Translated excerpt of the original preface)

Prof. Dr. Klaus Fichter

Director, Borderstep Institute for Innovation and Sustainability

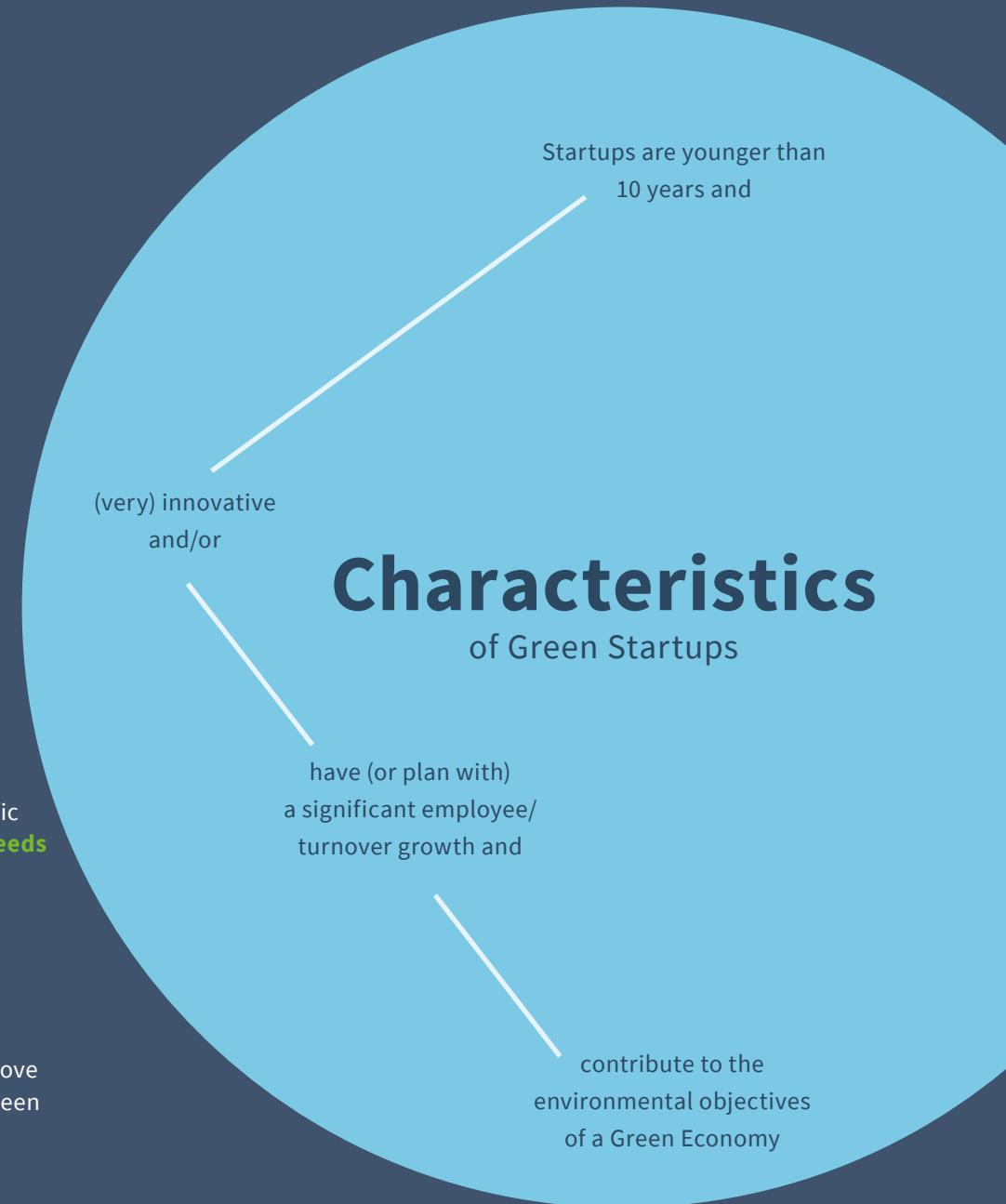
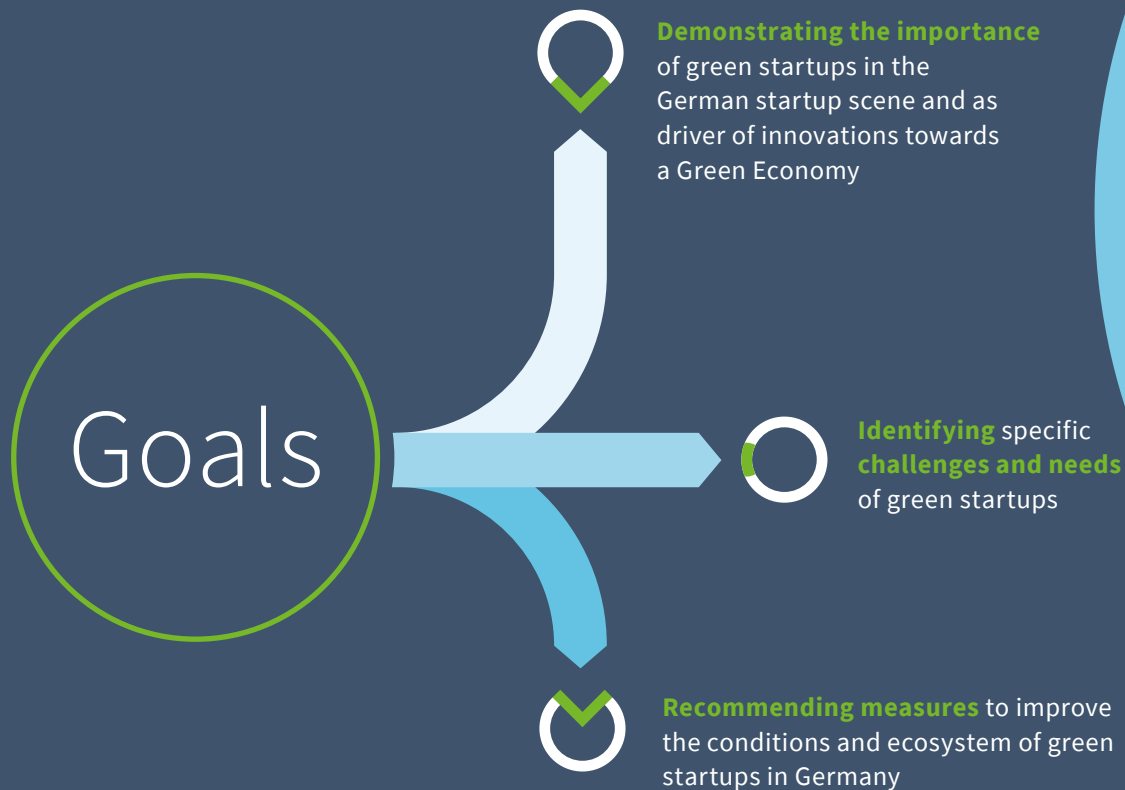
Christian Miele

President, German Startups Association



Spotlight

The GSM 2020





Key Facts of the GSM 2020

21% of all German startups can be classified as **green** since their products and services make a concrete **contribution to environmental and climate protection**.

Expectations for the **business climate** among green startups are **better** than among non-green ones and much better than in the established industry.

Green startups are **just as growth- and profit-oriented**, but they additionally create **social and ecological impact**.

At **22%**, green startups have a significantly **higher rate of female founders** than non-green startups (13%).

The **advancement and participation** of their **employees** is of much **greater importance** to green startups than to non-green startups.

The **raising of capital** is a much **greater challenge** for green startups, especially for *very innovative* green startups.

Very innovative green startups have a **strong interest** in obtaining capital from **business angels**.

1

Selected Key Findings



1.1

Two out of ten startups are green from corporate strategy to key performance indicators

37% of the startups in the dataset consider themselves to be part of the green economy, since their products or services make a targeted contribution to environmental, climate and resource protection. Compared with 2018 (Fichter & Olteanu, 2019), this proportion has risen by four percentage points. Founders are thus increasingly devoting themselves to entrepreneurial solutions for global ecological challenges.

The strong attention the topic of sustainability has received in the media owing to various social movements (such as Fridays4Future) in the past year has led to numerous significant changes in market and society. Sustainability in business has become noticeably more important. The Green Startup Monitor has therefore applied stricter criteria for the analysis than last year when classifying companies into the category "green startups". The aim was to avoid any dilution caused by socially desirable responses from participants. The classification is described in the section „Research Design“.

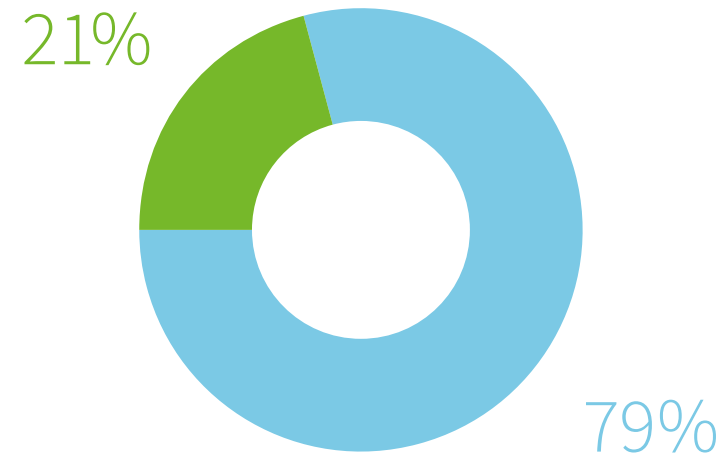
The assessment results in 338 of the 1,620 startups (21%) being classified as *green*. These 21% of all German startups consider themselves to be part of the green economy owed to their products and/or services, rate the corporate strategy "creating social and/or ecological impact" as important and have already integrated corresponding key performance indicators (KPIs) into their management guidelines. This means that the management KPIs for every fifth startup in Germany already include impact-relevant indicators (such as CO2 savings) in addition to the classic parameters (such as turnover).

The Green Startup Monitor 2020 thus examines and compares the responses of 338 green startups, founded by 816 entrepreneurs and with currently (according to their own statements) 2,413 employees, with the responses of 1,282 startups that do not belong to the green economy and are here categorized as "non-green".

➔ Distribution green / non-green startups

based on responses of 1.620 startups

■ green startups ■ non-green startups



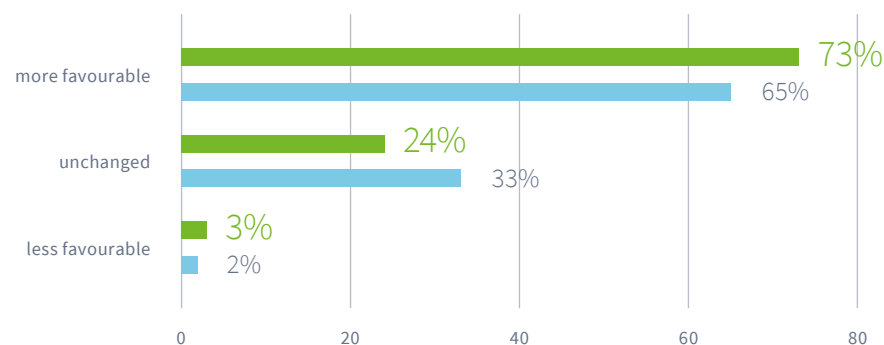
1.2 Significantly better business sentiment among green startups

Green startups look to the future with confidence. Three out of four expect their business outlook to improve in the next six months. Compared to non-green ones, green startups thus more frequently anticipate promising business opportunities in future market developments. With this positive sentiment, green startups stand out not only from non-green startups, but also from the wider German economy, which is currently dominated by negative expectations for the business climate (ifo Institut, 2019).

➔ Expected business situation in the next 6 months

based on responses of 308 green and 1.187 non-green startups

■ green startups ■ non-green startups



1.3 Higher share of female founders

The share of female green founders has increased to

22%

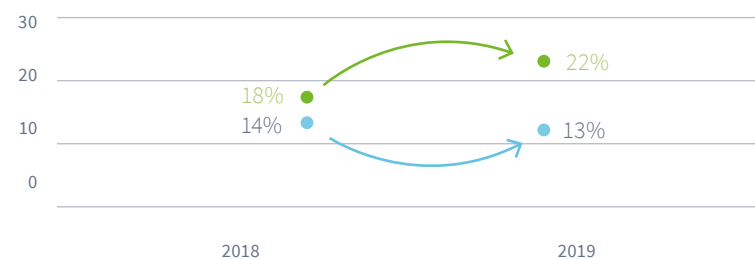
The proportion of female green founders has risen by four percentage points compared to the previous year and now is at 22%. This increase is more than six times higher than the 0.6 percentage points recorded for all German startups (Kollmann et al., 2019). The proportion is also significantly above the average of all German startups of 15.1% (Hirschfeld et al., 2019). Among the non-green startups, by contrast, a slight reduction to 13% can be observed for the same period.

➔ Share of female startup founders

2018: based on responses of 295 green and 863 non-green startups

2019: based on responses of 338 green and 1.282 non-green startups

■ green startups ■ non-green startups

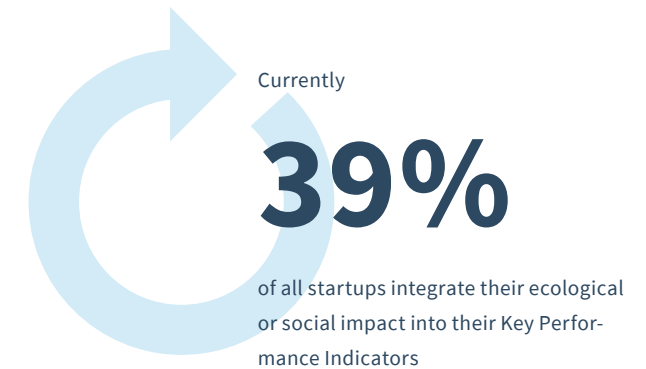


1.4

Corporate strategies: Just as profit-oriented, with a high weighting of ecological and social impact

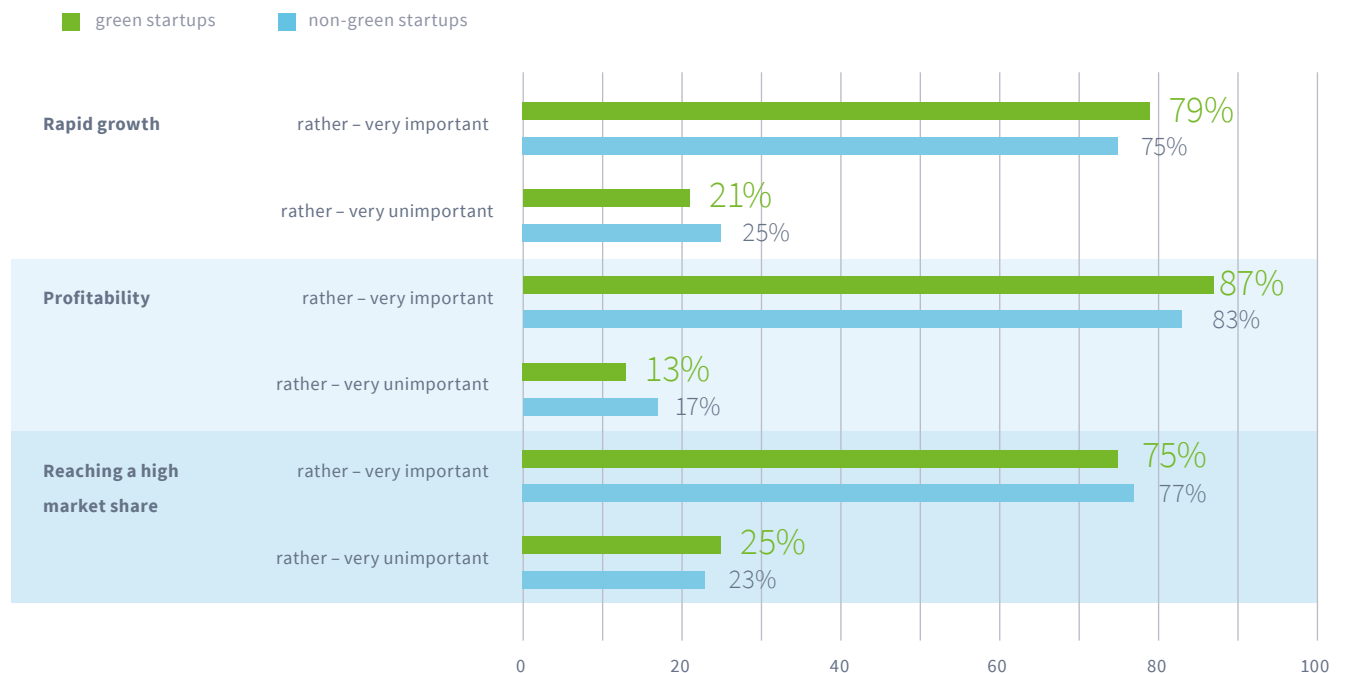
Green startups are no different from non-green startups in terms of traditional business strategies. For almost eight out of ten green startups, rapid growth is rather to very important. Almost nine out of ten green startups attribute a rather to very important role to profitability in their current corporate strategy. Three out of four green startups rate the corporate strategy of "achieving a high market share" as currently important or very important for their young company. Green startups are thus clearly high potentials in terms of important economic aspects, but in addition offer solutions to our environmental and social challenges.

These sustainable strategies are also a high priority for green startups: While *all* green startups in the data set attach great strategic importance to their social and environmental impact, this is true for only two out of three of the non-green startups. This difference becomes even clearer when it comes to converting the sustainability strategy into concrete management guidelines: While *all* green startups integrate social and environmental impact into their key performance indicators, this is true for only 23% of the non-green startups.



➔ Which corporate strategies are currently important for your startup?

based on responses of 336/337/335 green and 1.281/1.280/1.277 non-green startups



1.5 Stronger prioritization of staff development, motivation and participation

Their employees are a high priority for green startups and in some aspects significantly higher than for non-green startups. For two-thirds of the green startups, the strengthening of the development of their employees and their motivation is currently important or very important. Among the non-green startups, this applies to only one in two.

Four out of ten green founding teams have their employees also participate in their com-

pany as shareholders (vs. only a quarter of the non-green startups). Also the scope of employee participation differs significantly: Green startups more frequently adopt the approach of involving not only selected groups (such as top managers) but *all* employees.

This much stronger emphasis on the motivation, development and participation of their team members indicates a holistic sustainability approach of green startups: They not

only pursue a positive external impact with their products and services, but also integrate ecological and social sustainability internally into their corporate culture and policy.

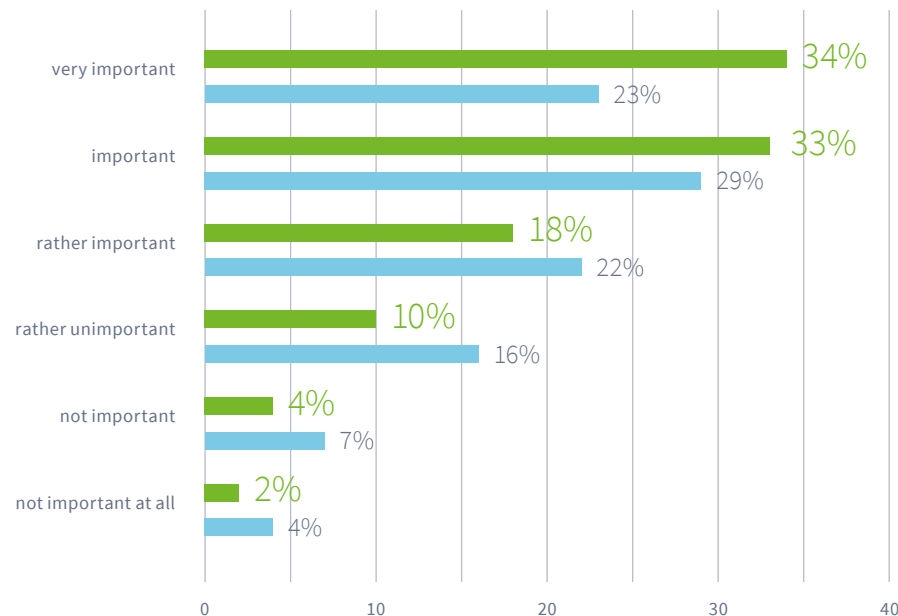
The results of the Green Startup Monitor 2020 show that this philosophy also has a positive effect on the Human Resource planning and recruitment of green startups: they clearly report less of such challenges.

➔ Strengthening of employee motivation and development

based on responses of 331 green and 1.263 non-green startups

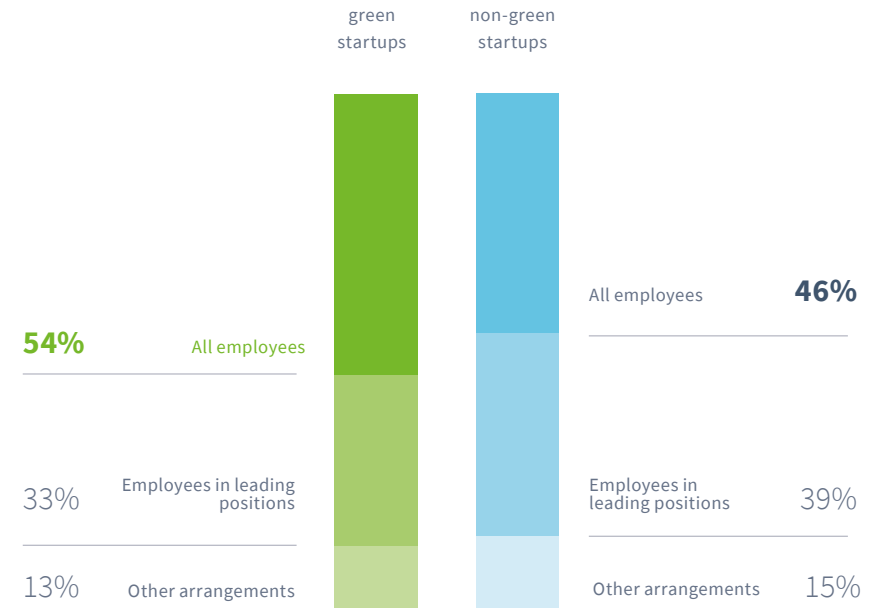
■ green startups

■ non-green startups



➔ Scope of employee participation

based on responses of 107 green and 410 non-green startups



1.6 More challenges with raising capital

When asked about the biggest challenges currently faced by their startup, the ranking of green startups is led jointly by two: *Procuring capital* and *sales/customer acquisition*. These are followed by *product development* and the *growth* of their young company. The challenge of raising capital, last year still in third place, has thus become much more important for the green startup scene this year, not only in terms of ranking, but also in terms of the proportion of green startups that see it as a major challenge. Moreover, green startups are again expressing it significantly more often than non-green startups.

This difference is particularly striking in the subgroup of the *very innovative* startups: the majority of them name it as one of their most important current challenges. This applies to only four out of ten of the non-green startups. The *very innovative* green growth companies whose ability to make an impact on the economy and society has particular potential consequently cannot exploit this potential due to a limited access to important seed and growth finance.

46%
of green startups rate procuring
capital and sales/ customer acquisition as important challenge.

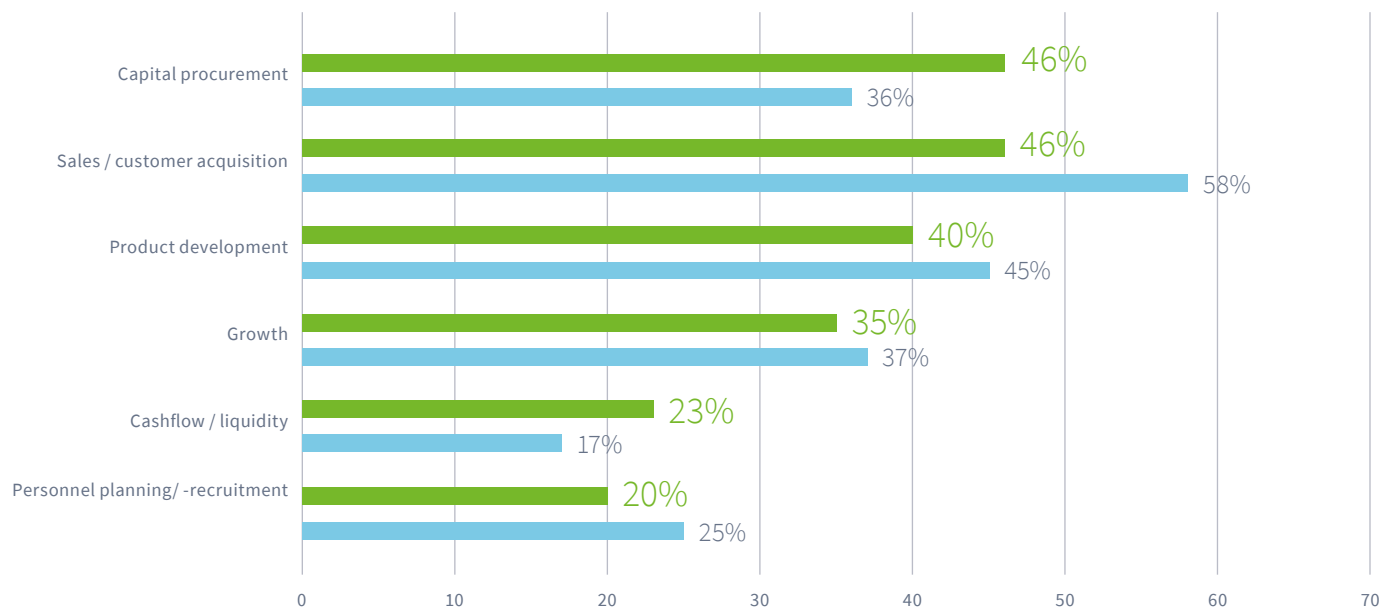
Just 20%

of the green startups name personnel
planning and recruitment as important
challenge.

➔ Which are currently the 3 biggest challenges for your startup?

based on responses of 317 green and 1.209 non-green startups

■ green startups ■ non-green startups



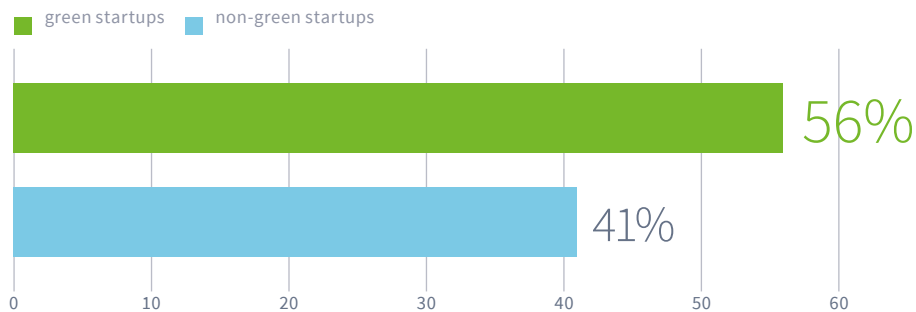
➔ Share of green startups with the challenge *capital procurement*: year-on-year comparison

based on responses of 285 (2018) / 312 (2019) green startups



➔ Share of startups with the challenge *capital procurement*: subgroup of the *very innovative* startups

based on responses of 105 green and 232 non-green startups



1.7 Preferred sources of finance: Government funding and business angels

Asked about their preferred sources of finance, six out of ten green startups name government funding programs (vs. five out of ten of the non-green ones). Four out of ten prefer an investment by one or more business angels. Especially the *very innovative* green startups show a strong interest in financing by business angels: 46% (versus 35% of the very innovative non-green ones) would prefer such an investment into their startup. Green startups also more frequently have an interest in financing through incubators, company builders and/or accelerators, the crowd and bank loans.

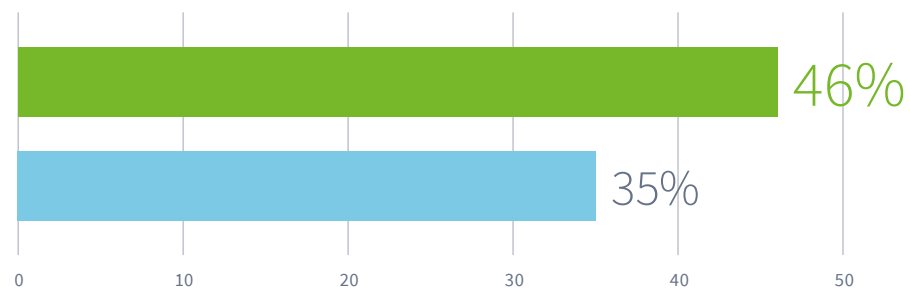
36%

of the green startups have been or are currently receiving government funding.

➔ Preferred source of finance: business angel(s) (subgroup of the very innovative startups)

based on responses 111 green and 239 non-green startups

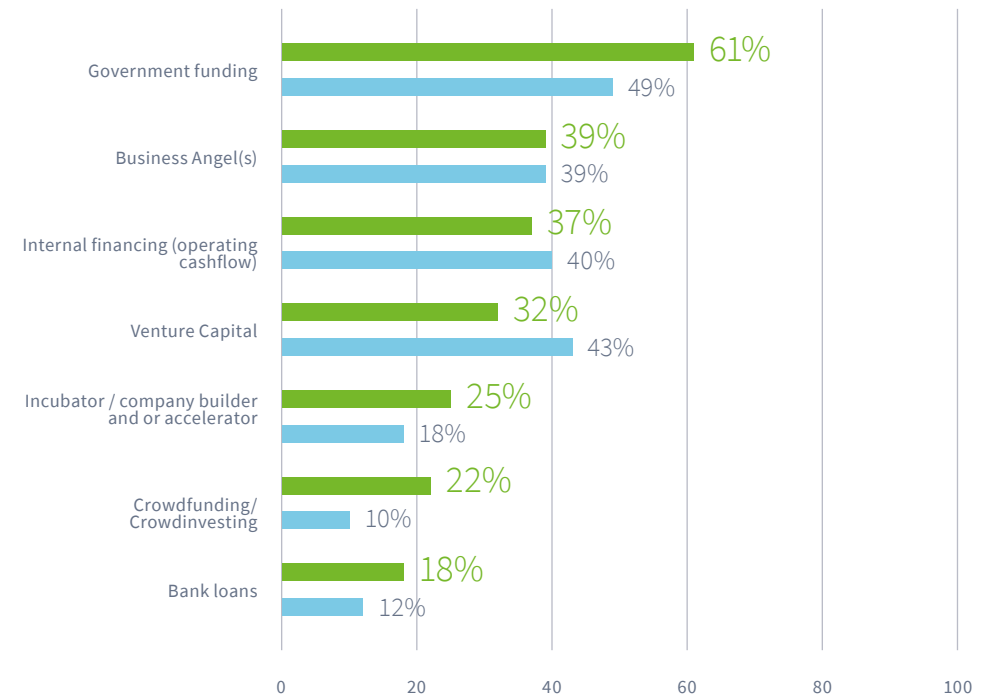
■ green startups ■ non-green startups



➔ Preferred sources of finance

based on responses of 328 green and 1.247 non-green startups

■ green startups ■ non-green startups



2

Research Design





Research Design

The database for the findings is the German Startup Monitor 2019 (DSM), a study conducted by the German Startups Association in cooperation with the University of Duisburg-Essen and its partner PwC Germany.

For the DSM, quantitative data was collected in the period 13.05.-23.06.2019 via an online questionnaire. This raw data set was subsequently revised: The examined database contains 1,620 startups aged zero to ten years with (planned) growth or (high) innovativeness and a clear differentiation between *green* and *non-green*. The GSM 2020 thus benefits from a significantly larger dataset than the previous year's GSM, for which the responses of 1,158 startups were analyzed.

Since the sample is composed of self-selected startup founders and executives, the results can only be generalized to a limited extent to the population of all startups in Germany. However, due to the widespread distribution via a multitude of network partners and the high number of participating startups, an important snapshot of green startups in Germany, their specific challenges and expectations of politics is generated.

Green startups were identified in three steps based on their self-assessment. Only those startups which (i) assign themselves to the green economy (filter question), for which (ii) the company strategy “positive social or ecological impact” is rather to very impor-

tant (plausibility check 1) and which (iii) agree or fully agree to integrate the ecological and/or social impact into their key performance indicators (plausibility check 2) were assigned to the group of green startups. Of the original 1,933 startups in the dataset, 1,620 provided answers to all three classification-relevant questions and could thus be included in the analysis.

The scientific analysis of the data was carried out by the Borderstep Institute. The listed differences between green and non-green startups were tested with appropriate significance tests and can therefore be generalized with a high probability (95%).

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