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[Dachzeile]

The German Government wants to „dare more progress": What does it mean for Green Tech in Germany?

As a major technology and industrial base, green technologies (green tech) and the companies producing them are important for Germany. Today, green tech accounts for 15% of the German gross domestic product. 'Green markets' have an enormous growth potential. Green tech can provide solutions to eliminate emissions, adapt to climate change, and reduce environmental impacts, and can offer multiple benefits including employment opportunities and reduced local air pollution. Thus, they can provide an important contribution to meet climate and sustainable development goals. Recent developments that drive the demand for green tech include the European Green Deal, Covid-19 recovery funds, and the amended German climate law to become climate neutral by 2045. The new German Government stated that it wants to "dare more progress" ("Mehr Fortschritt wagen"). But what does it mean for green tech in Germany? In short, the government wants to accelerate climate and digital innovations in particular and provide more support for start-ups that offer 'future technologies', thus creating positive prospects for the green tech scene in Germany.

Green Tech made in Germany: from established businesses to rising start-ups

In 2020, the value of the global market for environmental technology and resource efficiency exceeded the 4 trillion Euro mark for the first time. Germany accounts for about 9% of the global market volume for environmental and resource-efficient technology, with an expected annual growth rate of around 8% until 2030. However, international competition is growing.

The most important green tech segments in Germany are energy efficiency and sustainable mobility. The energy transition drives demand for energy-efficient production processes, appliances and buildings, as well as for sustainable energy production, storage, and distribution. For example, green hydrogen and power-to-X are potentially key technologies for decarbonizing the industry and heavy transport. Electric mobility solutions are also gaining importance, crucial for the decarbonization of the transport sector. In addition, technologies for a sustainable and efficient water economy are coming into focus, such as those developed and demonstrated in the project 'Digital Water City'. Energy and water technologies provide ample opportunities for R&D and industrial collaboration with countries such as Israel. As climate change progresses, so increases the importance of climate adaptation technologies and technologies for removing and utilizing emissions.

There are around 6,000[1] green start-ups in Germany – and their number is growing. According to the Green Start-up Monitor, about 30% of all German start-ups can be classified as green. The largest share of green start-ups is found in the information and communication technology sector, followed by food and nutrition and the consumer goods industry. Furthermore, green start-ups make up the majority of all start-ups in five sectors: agriculture, energy, textiles, consumer goods, and food and nutrition.

Yet green start-ups face challenges, especially when it comes to attracting customers, raising capital and developing their products. Initiatives and networks that promote green start-ups, bring them together with established companies, investors and customers, as well as those that make green tech more visible, such as the innovation and knowledge platforms EIT Climate-KIC and Greentech Alliance, are essential.

Prospects for Green Tech in Germany

"Daring more progress" is the title of the coalition agreement of the new Federal Government. Here is what it means for green tech.

First, climate protection is one of the top priorities for the new German Government, and in particular of the new Federal Ministry for Economic Affairs and Climate Action. This is good news. Now, the government needs to create the framework conditions to accelerate innovations and measures to achieve its climate goals. Companies need a policy framework that efficiently makes green tech market-ready and competitive. In a recent corporate offensive, 69 German companies have called on the new German Government to implement a program to achieve climate neutrality within its first 100 days in office. Such a program must provide sufficient capital for the expansion of important technologies and infrastructures, and for the necessary investments in the areas of energy, industry, building, and mobility.

Second, the Federal Government plans to accelerate the energy transition, to "ideally" phase-out coal by 2030 and to expand modern mobility solutions. This offers opportunities especially for the energy tech and mobility tech sectors, but also the building sector. Support mechanisms in the energy sector should be one of the focal points of government policy. They have underpinned the expansion of renewable electricity generation in Germany; and even as renewable energy prices fall, support mechanisms remain critical for driving investments and meeting national climate targets. In addition, the aim for 100% renewables creates a need for innovations such as electrolysers, battery cells and smart meters, areas where Germany could become an industry leader and transfer green tech to developing and emerging countries.

Thirdly, the German Government wants to strengthen the support for start-ups and founders and develop a start-up strategy for this purpose. The coalition agreement mentions the importance of 'future technologies' and the activation of capital especially for climate and digitalisation transformations of the economy and private households. To this end, the government wants to mobilize more private capital and provide the state-owned KfW bank as co-venture capitalist higher climate funding volumes. These developments are very promising for the green tech start-ups. To further improve the situation for green start-ups in Germany, the government could introduce a new 'Sustainability' funding line, or make sustainability a success criterion for governmental funding programs, which should also be anchored in the start-up strategy.

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[1] The number is based on estimates of the overall number of start-ups in 2018 and the share of green start-ups at the time; see Green Startup Monitor 2018 (p. 51).

Fourth, the Federal Government wants to support research in, transfer and uptake of technologies, by facilitating the market entrance and approval for innovative materials, technologies and start-ups. This provides opportunities for public-private partnerships as well as research and demonstration projects of green tech that have the potential to provide an import contribution to the decarbonization. In addition, the government wants to establish a German Agency for Transfer and Innovation (DATI). Since green tech often encounters specific barriers in being transferred from the lab to the market, DATI should place a specific focus on green tech. Furthermore, it is to be welcomed that the government wants to create secure markets for climate-friendly products through minimum quotas in public procurement.

Conclusion

It is time for Germany to dare more green progress and push green technologies because they both bring benefits to the German economy and support Germany's path to climate neutrality. The German Government's planned 'progress' gives the green light to green tech and start-ups. To accelerate innovation activity in green tech, the government should push for green infrastructure and increased R&D spending across sectors, and pursue an ambitious climate policy that includes an industry policy focused on green entrepreneurship and innovation.