



EM-Power Europe EM-Power Europe Conference München, 10.–13. Mai 2022

EM-POWER EUROPE TREND PAPER: Climate-Neutral Companies

München/Pforzheim, 07.04.2022 – The German government's climate targets are ambitious. They require real action on the part of businesses if they are to be met. Awareness of the issue of climate change is constantly increasing: Both the EU Taxonomy Regulation and social changes are contributing to this trend. This all boils down to one thing: The time when businesses could shirk the task of climate protection and achieving climate neutrality is well and truly over. Studies have shown that many companies have already set out on the path to climate neutrality, buoyed up by the fact that they also see the transition as a business opportunity. The process of becoming a climate-neutral business consists of various steps, and there are clearly defined standards for each. Businesses can engage the support of external partners to help them meet these standards. The latest trends in climate neutrality include power purchase agreements (PPAs), i.e. direct purchase agreements between electricity producers and consumers, and contracting agreements, which are a good way for small and medium-sized enterprises (SMEs) in particular to achieve their climate targets.

Greenhouse gas emissions in Germany did not fall last year – in fact they rose by 4.5 percent. This sobering figure was published by the German Federal Ministry for Economic Affairs and Climate Action on March 15. This makes two things very clear in terms of how we can achieve a successful energy transition. Firstly, efforts that have been made thus far are insufficient – to put it mildly. Secondly, every private individual, every company, every municipality, every city, every district and every federal state is needed to help implement the energy transition. And they need to do it today. Not tomorrow. Not the next day. Today. That means the no one can ignore the issue of climate protection any longer. And that includes companies.

"We firmly believe that in the future, the only businesses that will be successful on the market will be climate-neutral ones. Due to the many drivers behind this, businesses need to develop the necessary awareness to start to move towards their own climate neutrality," said Thilo Brückner, Managing Director of VDMA Electronics, Micro and New Energy Production Technologies (EMINT), in an expert interview with EM-Power Europe. A survey of 285 SMEs conducted by the Handelsblatt Research Institute (HRI) in cooperation with the German Association for Small and Medium-sized Businesses (BVMW) in November 2021 showed that achieving carbon neutrality is a high priority for two-thirds of businesses. Almost half of the businesses surveyed had calculated the carbon footprint of their value chain or were planning to do so, which means they know (or will know) how their business is doing in terms of climate protection. The fact that businesses are taking action in this way not only reflects their desire to protect the climate, but also reflects the fact that the majority (63 percent) of the businesses surveyed also see this historic challenge as a business opportunity. In March, the energy efficiency index, for which the University of Stuttgart surveys hundreds of companies from many different industries twice a year, found the following: 70 percent of the businesses surveyed wanted to make their products climate-neutral. Three-quarters of the almost 900 companies that were surveyed from across 25 different industries have already started on the path towards decarbonization. A particularly popular approach is switching to carbon-neutral energy sources (78 percent opted for this approach) because this is easy to achieve. However, 75 percent of the companies surveyed have also set out to decarbonize their upstream and downstream supply chains - a much greater challenge.

The path to climate neutrality

Climate neutrality is the term used to describe the path taken by a business, organization, city or state to reach a stage in which no more greenhouse gases are emitted than can be absorbed naturally by carbon sinks (such as forests and peatlands). The process that businesses go through to achieve climate neutrality has clearly defined rules and standards. This is vital because it ensures that the various steps in the process are verifiable, comparable and transparent. The most widely used standard is the Greenhouse Gas Protocol, which is used to prepare greenhouse gas calculations. Other standards, such as ISO 14064 – Greenhouse gases, build on this standard.

Achieving climate neutrality is a step-by-step process. First of all, emissions are identified and calculated. The Greenhouse Gas Protocol divides emissions into three scopes. The first is direct GHG emissions – emissions that result directly from the company's activities (Scope 1). The second is indirect GHG emissions – emissions that result indirectly from the company's activities, for example from the supply of electricity and district heating (Scope 2). The third scope (Scope 3) covers all other emissions that are caused in other ways, for example through the manufacture of upstream products or the extraction of raw materials. Once all climate-damaging emissions have been calculated, a climate protection plan is drawn up. This plan contains specific measures aimed at reducing CO2 emissions in subsequent years. For example, a company might source electricity from its own photovoltaic system in the future. The remaining, unavoidable CO2 emissions are ultimately offset in other ways, usually by supporting climate protection projects. Certificates are issued to prove the amount of climate-damaging emissions that are saved in this way. This means that the company's overall CO2 emissions are balanced out, making them carbon-neutral.

Climate neutrality for companies focuses on different areas depending on the sector in question. In the case of SMEs, it mainly focuses on utilities (such as electricity, heating, cooling, compressed air and steam) and the energy efficiency of business operations, production processes and buildings. These emissions are accounted for in the Corporate Carbon Footprint (CCF). Companies that manufacture products also need to calculate a Product Carbon Footprint (PCF) for each of their products. Other industries produce outputs and services that are recorded in a Project Carbon Footprint (PrCF). "The machine and plant construction sector creates climate-friendly, low-emission solutions to combat climate change, such as photovoltaics or batteries. Machinery and production plants determine the size of the carbon footprint of the individual products that they are used to produce. The more energy-efficient and advanced machinery and production plants become, the easier it will be for other industries to transform themselves into climate-neutral businesses," said Thilo Brückner.

Trends: external support, PPAs and contracting

There is a range of service providers, associations and research institutes that are all addressing the issue of making companies climate-neutral. They offer support on the path to climate neutrality, identify the status quo, point out opportunities and challenges, and draw up climate roadmaps. Calling in external experts can be particularly helpful for SMEs. 53 percent of the SMEs surveyed by the Handelsblatt Research Institute said they lacked personnel and skills in this area. When giving an expert interview with EM-Power in his former role as Managing Director of Verband Klimaschutz Unternehmen e.V. (Association of German Companies for Climate Protection), Wolfgang Saam warned companies not to try to buy their way out of the situation with a quick certificate. "As we're currently seeing, that often backfires later on because NGOs are quite justifiably scrutinizing them in detail. They are asking: Is this really a greenhouse gas emission saving measure or is it just pure greenwashing?" According to Saam, it is important that companies achieve climate neutrality through their own investments.

One key pillar of climate neutrality is securing a renewable electricity supply. Power purchase agreements (PPA) – direct contracts between electricity producers and consumers – could be a solution to the problem of securing a reliable, cost-efficient renewable energy supply. Contracting agreements are also becoming increasingly popular. With these agreements, the contractor offers the contracting customer a service package for energy supply or energy savings. The contractor can then take on all the necessary elements of the process, from planning to construction and financing, and they bear all the risks. The contracting customer pays an agreed rate for this over a specified contract term. Contracting is an effective way for medium-sized companies in particular to achieve their climate targets. The study by the Handelsblatt Research Institute (HRI) has demonstrated this.

Climate neutrality at EM-Power Europe

EM-Power Europe, which will be held in Munich from May 11–13, will provide a wealth of in-depth information, focusing on the topic of "Climate-neutral Companies". The Special Area for Climate-Neutral Companies should be the first port of call for anyone looking to find out how to calculate, reduce and offset emissions. Detailed advice on relevant products, services and solutions will be available both here and from many of the exhibitors at the event.

Special Area "The path to a climate-neutral company"; B5.550

Exhibitors at EM-Power Europe 2022:

- energielenker Unternehmensgruppe; B5.236
- Enviria Energy, B5.550E
- Falck Next srl, B5.130
- FutureCamp Climate GmbH; B5.455
- GLS Bank; A4.331
- Hanwha Q CELLS GmbH; A1.180, A1.270
- IBC Solar AG; A4.470, A4.670
- Initiative Energieeffizienz- und Klimaschutz-Netzwerke, B5.550G
- Schneider Electric GmbH; B6.250
- Siemens AG / Smart Infrastructure; B5.550A, B3.110
- Smart-Red; B5.160E
- Stadtwerke München; B5.230 / B5.550C
- Statkraft Markets GmbH; A4.535
- STEAG Solar Energy Solutions GmbH; A4.280

EM-Power Forum:

 <u>Exit Strategies - How Companies Can Become Climate-Neutral</u>, daily, May 12, 2022, in English

You will find an overview of the program for the EM-Power Forum by clicking here <u>https://www.em-power.eu/exhibition-program</u>

For more information, please visit: <u>www.em-power.eu</u> <u>https://www.thesmartere.de/home?lang=en</u>