

Cheap solar energy boosts the German economy

Solar farms lower the price of electricity

Photovoltaic installations provide cheap, reliable electricity for a number of decades. PV power plants in particular have the lowest levelized cost of electricity¹, which is why the use and production of solar energy also represents the most cost-effective form of climate change mitigation at federal, state and local government level, making it easier to achieve climate change mitigation goals and secure a resilient power supply. The expansion of solar farms continues apace, economically benefiting both SMEs² and local communities. Businesses are increasingly being supplied directly from PV power plants, enabling them to obtain cheap, clean electricity. The possibilities for municipal or private participation in solar farm projects have become more wide-ranging and attractive, which in turn means that social acceptance continues to increase.

Solar energy boosts Germany as a business location

Cheap solar power has a positive effect on the competitiveness of small to medium-sized enterprises (SMEs). Generating low-cost solar power for their own consumption or securing it through power purchase agreements (PPAs³) enables them to consolidate and improve their market position. In terms of climate change mitigation, solar energy makes it possible for businesses to achieve their sustainability goals cost-effectively.

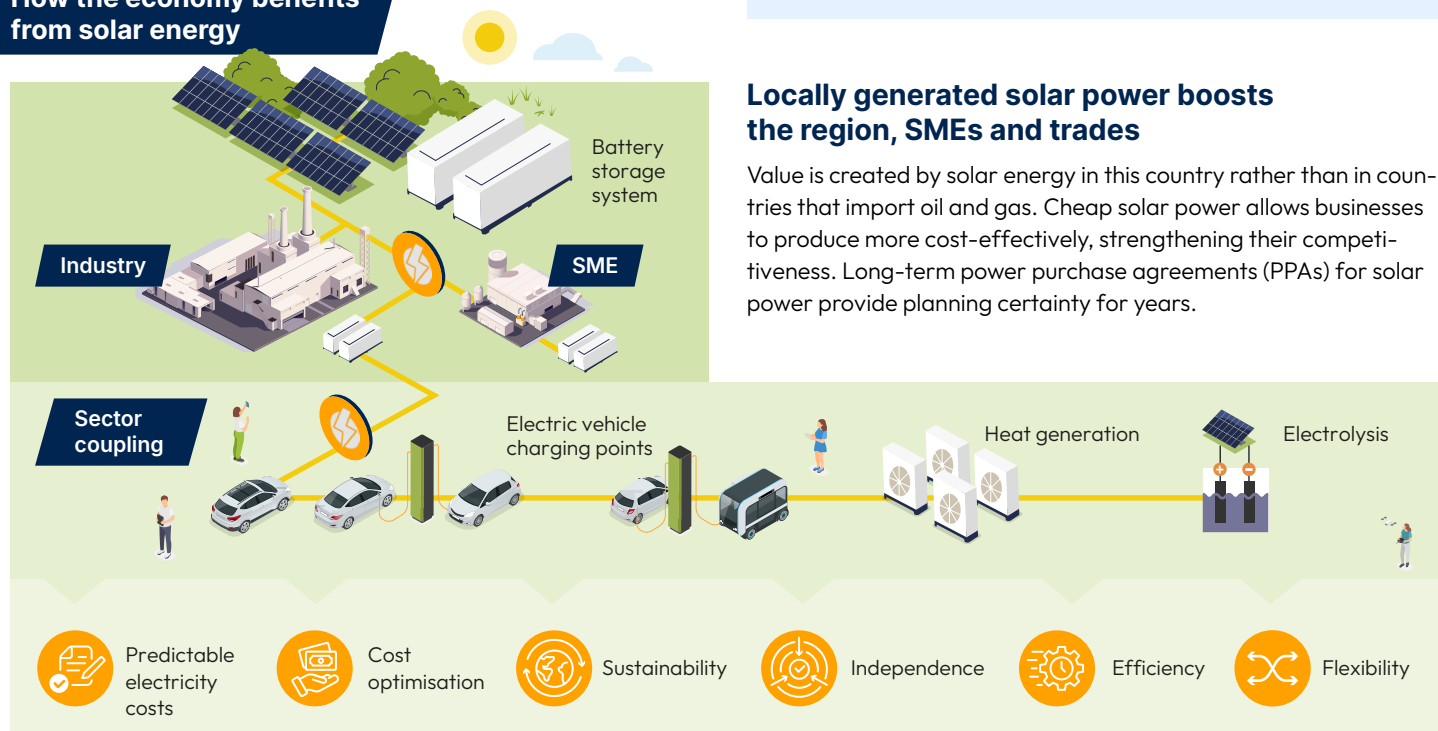
Solar energy combined with battery storage systems reduces dependence on energy imports and represents a fail-safe way of enhancing national energy security. This stabilises our economy in global crises and reduces geopolitical risks. Energy price fluctuations and energy price shocks can be absorbed. The stable cost of solar energy provides long-term planning certainty.

Solar farms are turning into solar battery power plants

Storage systems increase the value of solar power. They cut grid costs and businesses can be supplied with power as and when needed. The ongoing task of integrating battery energy storage systems is an important game changer for a successful energy transition. Storage systems are also useful for businesses. Commercial storage systems can be charged cheaply during generation peaks, enabling businesses to use this electricity at different times to avoid price peaks. That is why **solar power and battery energy storage systems are the new dream couple**.

With electricity from solar battery power plants, businesses can determine a suitable industrial electricity price for themselves. In summer, the power supply becomes very cheap. Yet also in winter, the photovoltaic storage systems help to optimise the electricity supply (by acting as a buffer during price peaks, for example).

How the economy benefits from solar energy



Continuing to ensure that solar projects can be financed

The EEG continues to play a key role in the expansion of PV capacity. It is the main safeguarding tool that makes it easier to finance the projects. Large businesses are already benefiting from cheap PPA electricity from solar farms outside the EEG because they can safeguard the financing themselves. However, more attractive PPA products are needed for small to medium-sized companies so that they can also keep pace with the market and increase their competitiveness. Such PPA products can currently be safeguarded with the EEG until an independent PPA market for SMEs emerges.

How communities benefit from solar farm participation

1. Financial benefits:

- Municipal revenue in line with Section 6 EEG of up to 0.2 cents for each kilowatt-hour fed into the grid⁴
- Business tax revenue from solar farm operators
- Regular leasing revenue for local authorities or farmers
- Potential discounted electricity tariffs for associated members of the public
- Stronger regional value creation and an increase in purchasing power in rural areas



2. Community development:

- Delivery of public (social) projects and improved public infrastructure
- Improved energy independence and security of supply



3. Public participation:

- An opportunity for members of the public to have a direct financial interest in a solar farm
- The public can put forward their own ideas and wishes as part of the participation process
- A stronger sense of community and the chance to identify with renewable energy
- Greater transparency and acceptance of the project



4. Image boost:

- Communities with solar farms are sustainable and forward-looking
- Solar farms play an active part in mitigating climate change and driving the energy transition



→ **Solar farms bring investment to rural areas, enhancing regional value creation while promoting sustainable development.**



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Allmendingen solar farm – a successful project

"We need clean, affordable and secure energy to deliver prosperity and jobs. The solar farm fits nicely into the landscape because it is surrounded by forests and is therefore not viewed as a foreign body in the area. The municipal coffers benefit because we can put this secure source of income to good use over the next 20 years."

Florian Teichmann, Mayor of Allmendingen

¹Source: <https://www.ise.fraunhofer.de/de/veroeffentlichungen/studien/studie-stromgestehungskosten-erneuerbare-energien.html>

²Abbreviation of "small to medium-sized enterprise"

³PPA stands for "power purchase agreement" and is an electricity supply contract between energy producers and consumers that sets out binding conditions for supplying electricity on a long-term basis (e.g. ten years). The agreement offers both sides planning certainty and supports the expansion of renewable energy capacity. PPAs enable businesses to purchase green electricity directly and transparently.

⁴The revenue in line with Section 6 EEG 2023 can run to as much as 2,000 euros per hectare for PV power plants. In addition, some federal states have already legislated for further forms of participation for their territories.

