

Press release

Smart combination: RWE commissions innovative agrivoltaics demonstration plant

- **Three technical solutions integrate power generation and agriculture; Plant makes use of recultivated land at Garzweiler opencast mine**
- **Research activities to start in spring; crops such as alfalfa, broad beans and raspberries to be planted**
- **Forschungszentrum Jülich and Fraunhofer ISE contribute scientific expertise; state of NRW provides funding**

Essen, 19 January 2024

With crops below and solar power above, RWE's agrivoltaics (Agri-PV) plant in Germany has now started supplying green electricity into the grid after a construction period of just five months. The new demonstration plant was built on about seven hectares of recultivated land at the edge of the Garzweiler opencast mine, in North Rhine-Westphalia. In the years ahead, important application research will be carried out at this site to show how solar power generation and agriculture can go hand in hand.

The first seedlings are to be planted in spring. The research activities, which are set to last at least five years, will also start then. The project's goal is to develop suitable cultivation methods and value-adding operational concepts for Agri-PV systems. The Institute for Plant Sciences at Forschungszentrum Jülich and the Fraunhofer Institute for Solar Energy Systems are providing scientific expertise for the project. The project is funded by the state of North Rhine-Westphalia as part of the *progres.nrw* programme for climate protection and the energy transition.

Three technical solutions integrate power generation and agriculture

The demonstration plant has a peak capacity of 3.2 megawatts (approximately 2.5 MWac) and consists of three technical Agri-PV concepts, which allow for both agricultural and horticultural use of the land. In the first configuration, the solar modules are fixed and mounted vertically on the supporting structure. In the second concept, the modules are mounted on a movable axis which allows them to follow the course of the sun from east to west. This is designed to maximise the yield of the photovoltaic system. Alfalfa, broad beans* and forage grass are to be grown on these two areas during the first research year. In the following years, crops such as cereals, sugar beet, potatoes and other vegetables are to be cultivated. Between the module rows, there is enough space left for harvesting machines. In the third solution, the photovoltaic modules are elevated on a substructure similar to a pergola. Under these modules, plants such as raspberries are to be cultivated. Over the years, the interplay between plant growth and photovoltaic technology will be monitored under a variety of seasonal weather conditions.



For further enquiries: Sarah Knauber
RWE Renewables Europe & Australia GmbH
Spokesperson
T +49 (0) 162 25 444 89
E sarah.knauber@rwe.com

Images of the demonstration plant and a graphic for media use are available at the [RWE Media Centre](#) (Image credit: RWE).

Note for editors:

**Forschungszentrum Jülich has already started trialling broad beans at its Agri-PV research facility in Morschenich-Alt. These findings are to be incorporated into the application research in Bedburg.*

RWE

RWE is leading the way to a green energy world. With its investment and growth strategy Growing Green, RWE is contributing significantly to the success of the energy transition and the decarbonisation of the energy system. Around 20,000 employees work for the company in almost 30 countries worldwide. RWE is already one of the leading companies in the field of renewable energy. Between 2024 and 2030, RWE will invest 55 billion euros worldwide in offshore and onshore wind, solar energy, batteries, flexible generation, and hydrogen projects. By the end of the decade, the company's green portfolio will grow to more than 65 gigawatts of generation capacity, which will be perfectly complemented by global energy trading. RWE is decarbonising its business in line with the 1.5-degree reduction pathway and will phase out coal by 2030. RWE will be net-zero by 2040. Fully in line with the company's purpose - Our energy for a sustainable life.

Forward-looking statements

This press release contains forward-looking statements. These statements reflect the current views, expectations and assumptions of management, and are based on information currently available to management. Forward-looking statements do not guarantee the occurrence of future results and developments and are subject to known and unknown risks and uncertainties. Actual future results and developments may deviate materially from the expectations and assumptions expressed in this document due to various factors. These factors primarily include changes in the general economic and competitive environment. Furthermore, developments on financial markets and changes in currency exchange rates as well as changes in national and international laws, in particular in respect of fiscal regulation, and other factors influence the company's future results and developments. Neither the company nor any of its affiliates undertakes to update the statements contained in this press release.

Data Protection

The personal data processed in connection with the press releases will be processed in compliance with the legal data protection requirements. If you are not interested in continuing to receive the press release, please inform us at Datenschutz-kommunikation@rwe.com. Your data will then be deleted and you will not receive any further press releases from us in this regard. If you have any questions about our data protection policy or the exercise of your rights under the GDPR, please contact datenschutz@rwe.com.