

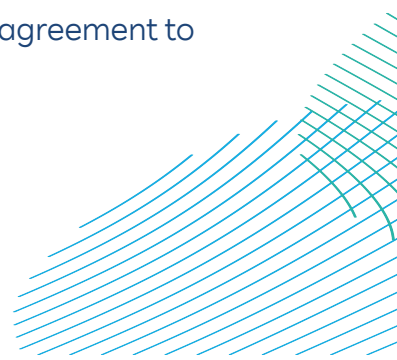
# RWE and SolarDuck accelerate technology development and commercialisation of offshore floating solar at scale



- RWE invests in the deployment of SolarDuck’s full-scale offshore pilot in the North Sea
- SolarDuck was selected as exclusive provider for offshore floating solar technology with integrated storage in RWE’s bid for the offshore wind farm Hollandse Kust West, Netherlands
- RWE and SolarDuck agree to explore and develop offshore floating solar parks globally

Essen / Nijmegen, 19 July 2022

RWE and the Dutch-Norwegian company SolarDuck signed a collaboration agreement to



# RWE

develop the use of floating solar parks at sea. To accelerate the learnings on SolarDuck's floating solar technology, RWE will invest in a first offshore pilot in the North Sea. The project is a first step in the collaboration and lays the foundation for a larger demonstration project at the Dutch offshore wind farm Hollandse Kust West (HKW). RWE is tendering for this project, and has included SolarDuck into its bid with a highly innovative combination of offshore floating solar with integrated storage solutions.

## **Unique Offshore Floating Solar technology by SolarDuck**

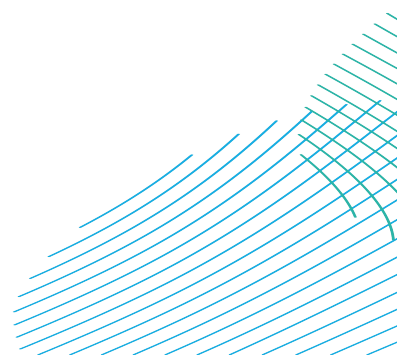
The offshore floating solar technology, as developed by SolarDuck, establishes a new frontier for solar energy and provides an answer to increasing land scarcity for the generation of renewable energy. The integration of offshore floating solar into an offshore wind farm is a more efficient use of ocean space for energy generation (using the space between the wind turbines) and allows for synergies with regards to the construction and maintenance of the multi-source renewable energy plant. The result is a more balanced production profile due to the complementary nature of wind and solar resources.

Taking solar farms offshore requires a technology which is able to withstand rough offshore conditions, including high waves, strong winds and a corrosive environment. SolarDuck's unique, triangular-shaped platform, which has received the world's first certification for offshore floating solar by Bureau Veritas, is designed to float several meters above the water, following the waves like a carpet. Therefore, keeping critical electrical components dry, clean and stable, as well as securing the integrity of the semi-submersible structure while enabling safe operations and minimal maintenance.

Sven Utermöhlen, CEO Wind Offshore of RWE Renewables states: "RWE is constantly looking for innovative ways to further improve the production of renewable energy offshore. We are very keen to further explore the potential of offshore floating solar together with our partner SolarDuck. For countries with lower mean wind speeds but high solar irradiation, this opens up attractive opportunities. With the SolarDuck pilot we are gaining experience with a highly innovative offshore floating solar technology. We want to contribute to accelerate the energy transition, have a positive impact on marine ecology and help to integrate energy systems. Together we can make a real difference using tomorrow's technology for today's projects."

SolarDuck's CEO Koen Burgers states: "The need for secure, sustainable and affordable energy demands new and immediate answers from the industry in Europe and also globally. SolarDuck is part of this answer, bringing solar energy into its next frontier, the oceans. Showcasing SolarDuck's robust technology in rough North Sea conditions will enable us to deploy the technology practically anywhere in the world. We are very pleased that we found in RWE a strong partner who shares our vision of electrifying the world with offshore floating solar. I look forward to our organisations working together to achieve just that."

## **RWE to invest in full-scale, offshore pilot in the North Sea**





To accelerate the development of the technology, RWE will invest in SolarDuck's full-scale offshore pilot called 'Merganser' with a nameplate capacity of 0.5 MWp in 2023. 'Merganser' is expected to be installed off the coast of Ostend in the Belgian North Sea and will be SolarDuck's first offshore pilot following the successful deployment of an inland pilot in the Netherlands last year. 'Merganser' will provide RWE and SolarDuck with important first-hand experience in one of the most challenging offshore environments in the world. These learnings will enable a faster commercialisation of the technology from 2023 onwards.

### **SolarDuck selected to deliver innovative solution for RWE's Hollandse Kust West bid**

SolarDuck's technology opens a new door for solar energy, also in the harsh North Sea environment. RWE has therefore selected SolarDuck in its bid for the Dutch tender for HKW VII (system integration). A winning bid will realize the integration of an offshore floating solar plant at pre-commercial scale with 5 MWp combined with innovative energy storage solutions into the offshore wind farm.

Further building on the collaboration with project 'Merganser' and HKW, RWE and SolarDuck will explore new opportunities with the objective to develop commercial offshore floating solar parks, both stand-alone and hybrid. The combination of RWE's leading global market position and SolarDuck's technological and commercial ingenuity sets the perfect base for accelerating the deployment of this high-potential technology.

### **RWE as a leading player in sustainable energy with a strong position in the Netherlands**

RWE is a leading global player in renewable energy and number 2 worldwide in offshore wind. The company currently has 18 offshore wind farms in operation; it is constructing the Sofia (1.4 GW off the UK coast) and Kaskasi (342 MW off the German coast) wind farms, and has a total of more than 10 GW of offshore wind farms under development. For many years, RWE has been a partner of the Dutch government to advance the energy transition by investing in clean energy solutions. The Netherlands is one of the key markets where RWE aims to further expand its renewable energy portfolio. RWE currently operates seven onshore wind farms in the Netherlands with a total installed capacity of over 330 MW (RWE's pro-rata share), with new ones under development and construction as well as solar farms including the floating PV project in Amer. RWE is also working on the expansion of CO<sub>2</sub>-free flexible production capacity and the development of onshore and offshore hydrogen projects, such as H<sub>2</sub>opZee, NorthH<sub>2</sub> and FUREC to help industry reduce CO<sub>2</sub>.

### **SolarDuck powers the world with clean solar energy by using state-of-the-art technology**

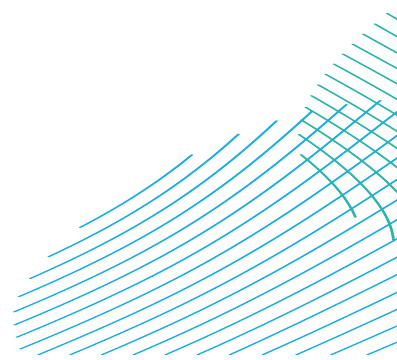
SolarDuck is a Dutch-Norwegian OFPV company with strong roots from the maritime industry. The company was established following a spin-off from Damen Shipyards (the largest shipbuilder in the Netherlands). Since then SolarDuck has worked relentlessly towards the vision to 'Electrify the world with OFPV'. SolarDuck generates offshore solar energy using its unique,





state-of-the-art technology, which is fully scalable to match specific local requirements, worldwide. The company offers a sustainable solution to meet the world's rising demand for energy, especially where the need for decarbonization and limited land space means the solution lies in the ocean space. SolarDuck's technology offers an attractive value proposition in a wide array of user cases, ranging from islands in the sunbelt to hybrid offshore parks in the North Sea, including the Netherlands.

**Image material for media purposes** is available in the [RWE multimedia library](#) (image rights: Solar Duck).





**For further enquiries:** Sarah Knauber  
Renewables  
**T** [+49 \(0\) 201 5179-5404](tel:+49020151795404)  
**E** [sarah.knauber@rwe.com](mailto:sarah.knauber@rwe.com)

Marjanne van Ginkel  
**E** [marjanne.ginkel.extern@rwe.com](mailto:marjanne.ginkel.extern@rwe.com)

### **Tender Hollandse Kust West (HKW)**

RWE is participating in the Dutch offshore wind tender for Hollandse Kust West (HKW). The company has submitted bids for both HKW site VI and HKW site VII, with a combined capacity of over 1.4 gigawatts (GW), to contribute to the Dutch government's ambitious build out target of 21 gigawatts for offshore wind by around 2030. The areas are located in the North Sea, about 53 kilometres off the Dutch coast. RWE's proposed design for HKW site VI is committed to have a positive net impact for the North Sea ecosystem, whereas RWE's concept for HKW site VII is a blueprint for the perfect integration of offshore wind farms into the Dutch energy system including 600 MW electrolyser capacity with access to storage capacity in the planned onshore hydrogen backbone.

The extensive solutions on system integration and ecology measures, research and knowledge sharing will be implemented together with more than 40 partners. This includes start-ups and innovators that RWE will support in demonstrating their innovation in an operational environment, as well as clients and industrial partners that the company will support in decarbonising their businesses with new flexible demand investments. Furthermore, RWE will cooperate with universities, educational centres of applied science and vocational schools with regard to knowledge sharing and dissemination.

