RWE
Our energy for a sustainable life

OEUK Share Fair 2024

Patrick Rainey

Energising the future. For 125 years.
Now, RWE is shaping the new energy era.

1898
The future starts today – 125 years ago.

1905
Commissioning of RWE's first hydropower plant

1928
RWE builds the first cross-regional high-voltage transmission line.

1914
Lignite is the key to affordable electricity.

1970s
Security of supply thanks to nuclear power.

1950s
Powering the economic miracle.

1976
RWE researches, develops and tests renewables.

2004
RWE commissions North Hoyle in the UK – one of the world's first commercial offshore wind farms

2016
Stock market launch for retail and grid business and foundation as generation-only company.

2019
The transaction with E.ON.

RWE becomes one of the world's leading generators of renewable electricity

2023
Combination of RWE Renewables Americas and Con Edison CEB into RWE Clean Energy

125 years RWE

Business model fully aligned with our strategic focus on the energy transition.

Core business

Offshore Wind

- Global offshore activities

Onshore Wind/Solar

- Onshore, solar and storage activities in
  - Europe & Australia
  - Americas

Flexible Generation

- Hydro, biomass and gas-fired power plants in Germany, UK, NL
- Hydrogen projects

Supply & Trading

- Trading/origination
- Gas & LNG
- Commodity solutions
- Gas storage

Non-core business

Coal & Nuclear

- German lignite operations (planned exit by 2030)
- German nuclear power plants (exit 04/2023, now dismantling)

~35 GW Installed green capacity[1]

[1] Installed green capacity in pro-rata view // Note: Figures as of 30 Sep 2023.

RWE is one of the world's leading renewable energy companies.

Note: Offshore market excluding China.

Our business is integrated along the entire project value chain to allow maximum value to be captured.

Origination & Development

Proven greenfield and brownfield project development capability

Engineering & Procurement

Global engineering backbone with strong LCOE* optimisation and innovation focus

Construction

Management and delivery of complex projects on time and within budget

Commercialisation

Ability to ensure long-term income stability via a broad range of tailor-made offtake solutions

Operation

Experienced self-performing operator

*Levelised Cost of Energy

Highlights of
our renewable projects

TetraSpar – ~ 4 MW
Floating wind pilot plant

Agri-PV – R & D
Solar power and agriculture

Sofia – 1.4 GW
RWE's biggest offshore project

Limondale – 249 MWac
872,000 modules on 770 hectares

Hickory Park – 196 MWac
30-year power purchase agreement

Megabattery 117+ – 117 MW
Virtual coupling with run-of-river power plants

Selinus – 25 MW
Blade lift technology used for transportation

Baron Winds – 122 MW
32 wind turbines in New York state

RWE indeland solar farm – 13 MWac
Use of open-cast mining area

Thor – 1.1 GW
Towers made from CO_2-reduced steel

220MW battery storage system – 220 MW
Innovative technology coupling

Legend

- Global Leader projects
- Innovation projects
- Hybrid projects
- Transformation projects


RWE
A global leader in
Offshore Wind
Offshore
Video
OEUK Share Fair 2024

We are a leading Offshore player globally with vast experience in the business.

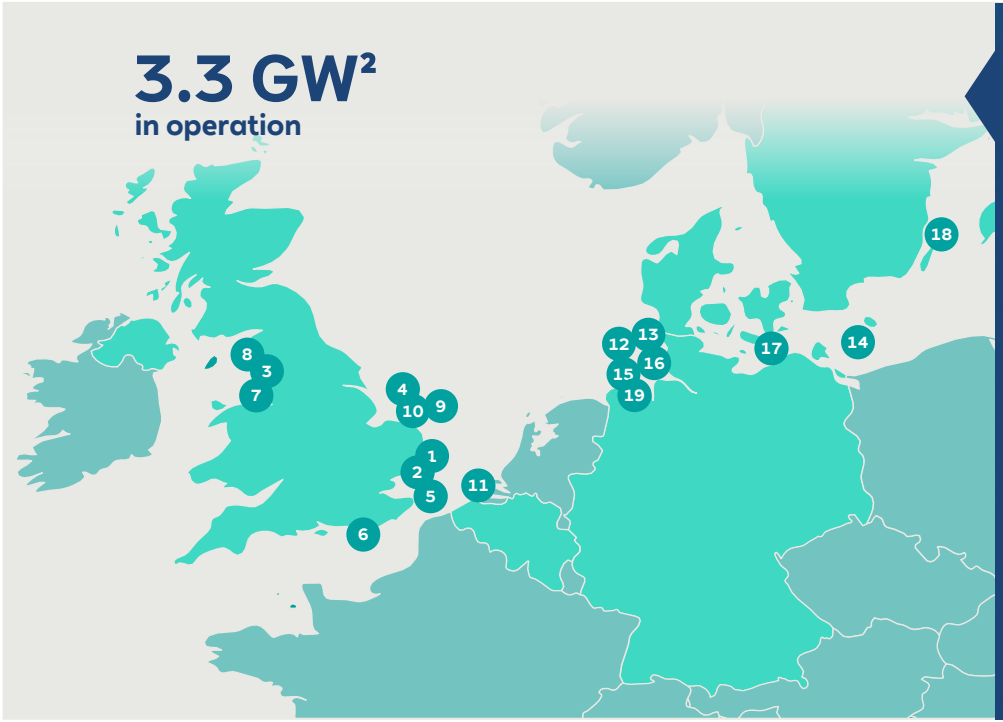
- **~ 20 years in the Offshore business**
- **110 years runtime** of operating fleet
- **3.3 GW net Offshore wind portfolio** at the end of 2022
- **Unique commercialization capabilities**
- **High-class partnerships**
- **Excellent track record of** delivering complex projects
- **>1,000 turbines** operated and maintained at sea
- **Expertise** along the **whole value chain**
- **>10.000 man years** of experience
- **Cutting edge technical capabilities**

Evolution of RWE's Offshore Wind Farms

Project	Scroby Sands	Rhyl Flats	Amrumbank	Galloper	Arkona	Triton Knoll	Sofia
COD	2004	2010	2015	2018	2018	2022	2026 (expected)
Capacity	60 MW	90 MW	288 MW	353 MW	385 MW	857 MW	~1,400 MW
Turbines	30 × 2.0 MW	25 × 3.6 MW	80 × 3.6 MW	56 × 6.3 MW	60 × 6.4 MW	90 × 9.5 MW	100 × 14 MW
Water depth	1 – 11 m	10 – 15 m	19 – 24 m	27 – 36 m	21 – 27 m	15 – 24 m	20 – 35 m
Distance to shore	2 – 3 km	8 km	35 km	30 km	35 km	32 km	195 km

Our leading projects have always utilised state-of-the-art technology and have grown is scale setting market trends

Our offshore assets
In operation



In operation

1. **Galloper** UK, 353 MW[1] (88 MW[2])
2. **Greater Gabbard** UK, 504 MW[1] (252 MW[2])
3. **Gwynt y Môr** UK, 576 MW[1] (288 MW[2])
4. **Humber** UK, 219 MW[1] (112 MW[2])
5. **London Array** UK, 630 MW[1] (189 MW[2])
6. **Rampion** UK, 400 MW[1] (200 MW[2])
7. **Rhyl Flats** UK, 90 MW[1] (45 MW[2])
8. **Robin Rigg** UK, 174 MW[1]
9. **Scroby Sands** UK, 60 MW[1]
10. **Triton Knoll** UK, 857 MW[1] (506 MW[2])
11. **Thornton Bank** BE, 325 MW[1] (87 MW[2])
12. **Alpha Ventus** DE, 60 MW[1] (16 MW[2])
13. **Amrumbank West** DE, 302 MW[1]
14. **Arkona** DE, 385 MW[1] (193 MW[2])
15. **Nordsee One** DE, 332 MW[1] (50 MW[2])
16. **Nordsee Ost** DE, 295 MW[1]
17. **Rødsand 2** DK, 207 MW[1] (41 MW[2])
18. **Kårehamn** SE, 48 MW[1]
19. **Kaskasi** DE, 342 MW[1,2]

[1] Total installed capacity | [2] Net pro-rata capacity as of 03/23 | World map not set to size and proportion

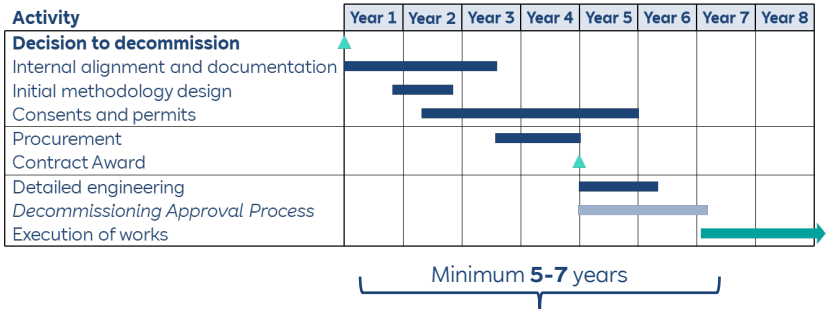
End of Life & Decommissioning

The offshore renewables sector is only just starting to have to manage end of life and decommissioning projects – we have a lot to learn!

Our Challenge

- RWE has some of the oldest wind farms in the world.
- We expect full commercial scale decommissioning projects to commence offshore works around the turn of the decade [c.2030].
- Before the commencement of decommissioning works, life extension, repowering, and reuse works are/will be completed.
- There is significant experience and knowledge available from the offshore O&G sector to support offshore renewables as we enter into this project lifecycle phase.

Our Timeline



Critical path is driven by consenting, permitting, approval process and supply chain availability.

Decommissioning methodology approval process can only commence fully when main contact for decommissioning works is in place and methodology is known.

Recent successes in auctions, projects in development and under construction.

Norfolk

Acquisition of **4.2 GW development portfolio**[1]: Norfolk Vanguard West, Norfolk Vanguard East and Norfolk Boreas. **COD in this decade**.

Murakami-Tainai

684 MW project secured in a consortium with Mitsui and Osaka Gas. **COD** expected in **2029.**

Nordseecluster

Nordseecluster A and B secured with a total of **1.6 GW** off the German North Sea coast. **COD** expected in **2027** and **2029.**

New York Bight

Winning seabed lease auction & CfD with **~2.4 GW. COD** expected at the **end of the decade.**

Canopy California

Winning seabed lease in floating offshore auction with **~1.6 GW. COD ~ mid of 2030s.**

Gulf of Mexico

2 GW lease area secured with **COD ~ mid of 2030s**.

Dublin Array

824 MW site awarded a Contract for Difference. COD expected in **2028.**

OranjeWind

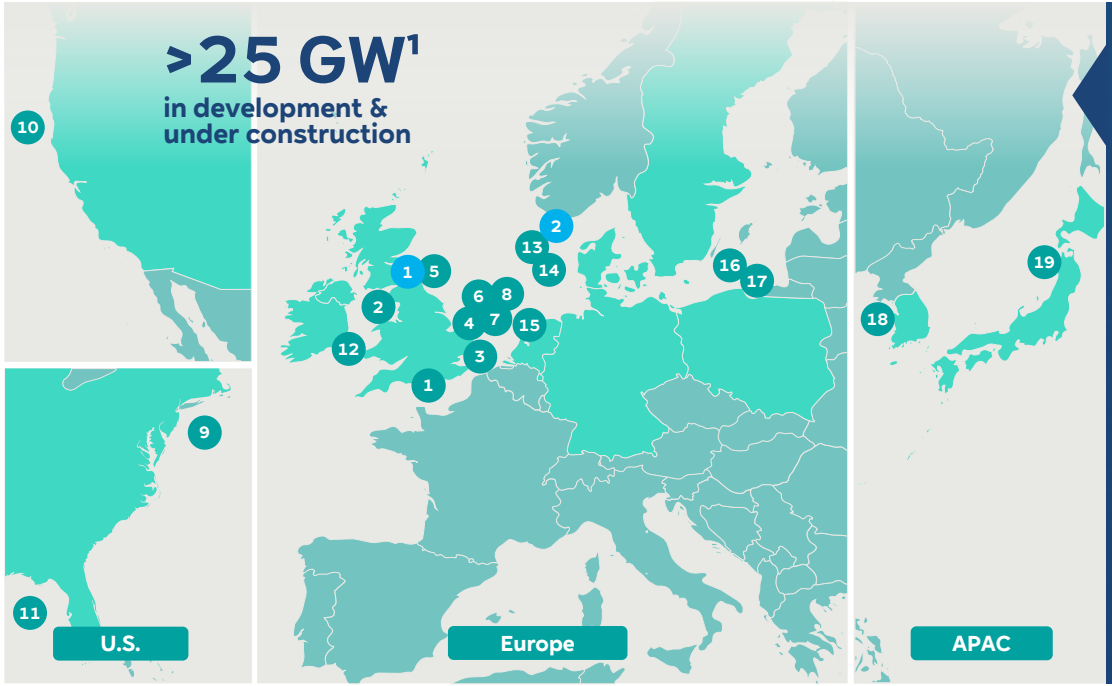
760 MW site awarded. **Innovative solution** for **full system integration** offered, incl. electrolyser, floating PV. **COD** expected in **2027.**

Thor

Concession for **1.1 GW** wind farm **secured** off the Danish coast. **Full commissioning** expected in **2027.**

[1] Acquisition subject to completion in the course of Q1 2024 | Figures as of 12/23.

Our offshore assets
In development (rights secured) & under construction



In development (rights secured)

1. **Rampion 2** — UK, 1,200 MW[1] (601 MW[2])
2. **Awel y Môr** — UK, 576 MW[1] (346 MW[2])
3. **Five Estuaries** — UK, 353 MW[1] (88 MW[2])
4. **North Falls** — UK, 504 MW[1] (252 MW[2])
5. **Dogger Bank South** — UK, 3,000 MW[1] (1,530 MW[2])
6. **Norfolk Vanguard West**[3] — UK, 1,400 MW[1]
7. **Norfolk Vanguard East**[3] — UK, 1,400 MW[1]
8. **Norfolk Boreas**[3] — UK, 1,400 MW[1]
9. **Community Offshore Wind (NY Bight)** — US, ~3,000 MW[1] (2,400 MW[2])
10. **Canopy California** — US, ~1,600 MW[1]
11. **Gulf of Mexico** — US, 2,000 MW[1]
12. **Dublin Array** — IE, 824 MW[1]
13. **Nordseecluster A** — DE, 658 MW[1]
14. **Nordseecluster B** — DE, 900 MW[1]
15. **OranjeWind** — NL, ~760 MW[1]
16. **Södra Victoria** — SE, 1,600 MW[1]
17. **Baltic II** — PL, 350 MW[1]
18. **Seohae** — KOR, ~500 MW[1]
19. **RWE Offshore Wind Japan Murakami-Tainai K.K**[4] — JP, 684 MW[1]

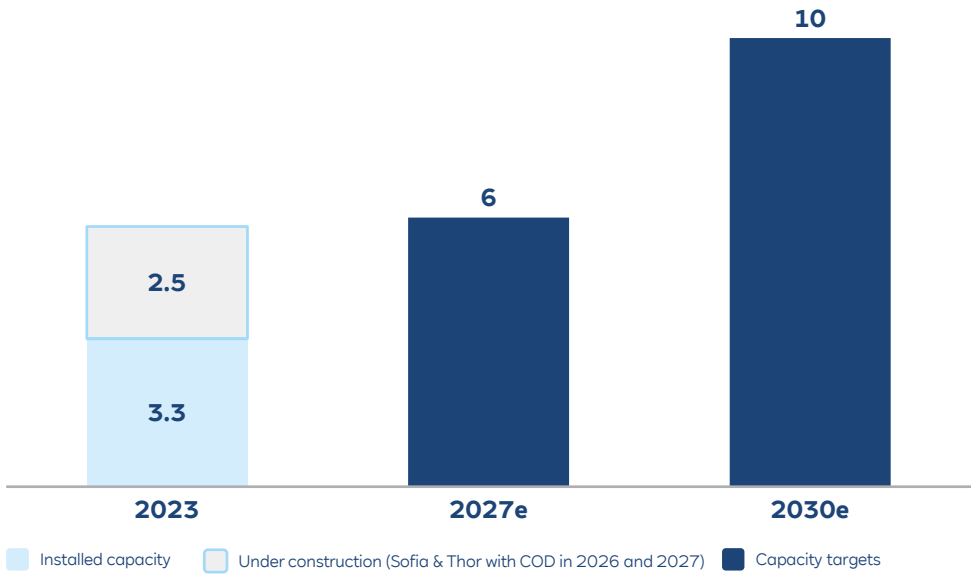
Under construction

1. **Sofia** — UK, 1,400 MW[1]
2. **Thor** — DK, 1,080 MW[1]

[1] Total capacity | [2] Pro-rata capacity as of 11/23 | [3] Acquisition subject to completion in the course of Q1 2024 | [4] Consortium with Mitsui and Osaka Gas | World map not set to size and proportion

We will triple our Offshore Wind capacity by 2030.

Offshore wind targets
GW, pro rata



[1] Acquisition subject to completion in the course of Q1 2024 | Figures as of 12/23

Development pipeline with COD until 2030
GW, pro rata

2027	Nordseecluster A	0.7 GW
	OranjeWind	0.8 GW
2028	Dublin Array	0.8 GW
2029	Murakami-Tainai	0.7 GW
	Nordseecluster B	0.9 GW
2030	Baltic II	0.4 GW
	Rampion 2	0.6 GW
	Community Offshore Wind	1.0 GW
	Södra Victoria	1.5 GW
	Awel y Môr	0.3 GW
	Norfolk Vanguard West[1]	1.4 GW
	Norfolk Vanguard East[1]	1.4 GW
	Norfolk Boreas[1]	1.4 GW

Offshore Technologies
Fixed bottom

→ **RWE has a broad experience base in fixed bottom foundations, including:**

Gravity foundation

Monopile foundation

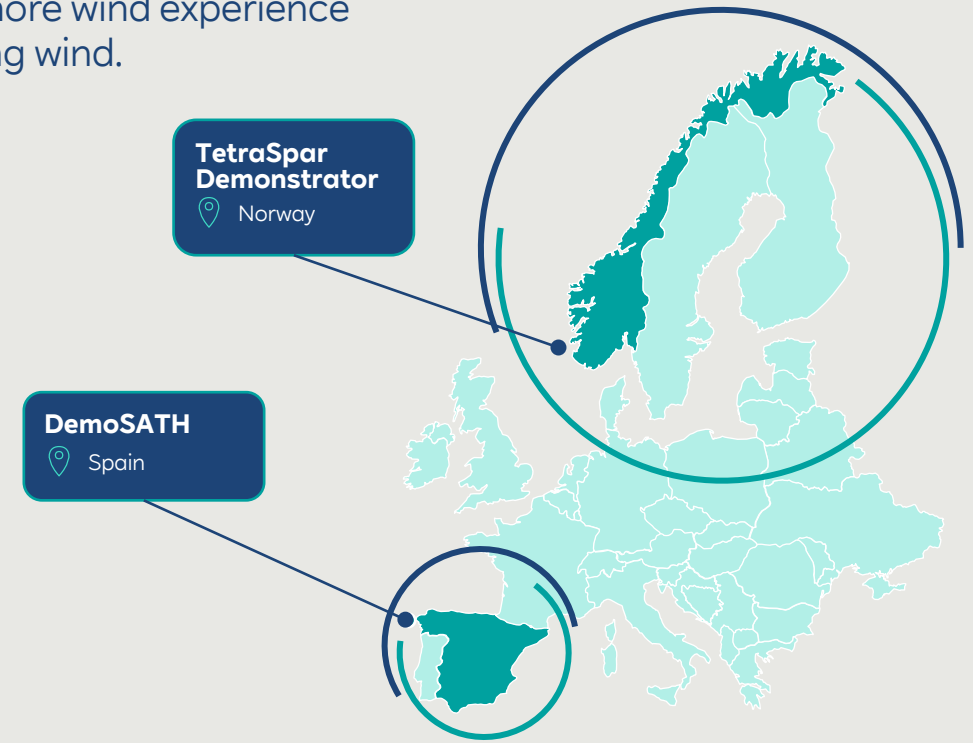
Tripod foundation

Jacket foundation

Floating Wind

RWE is building on its extensive offshore wind experience to become a market leader in floating wind.

- RWE aims to have up to **1 GW** of floating capacity deployed or under construction **by 2030**
- RWE is also developing a multi-gigawatt **global pipeline** of activity to deploy in the 2030s and beyond
- We have a global approach & **international growth strategy** with activities planned globally



World's first recyclable wind turbine blades
Kaskasi, Sofia & Thor

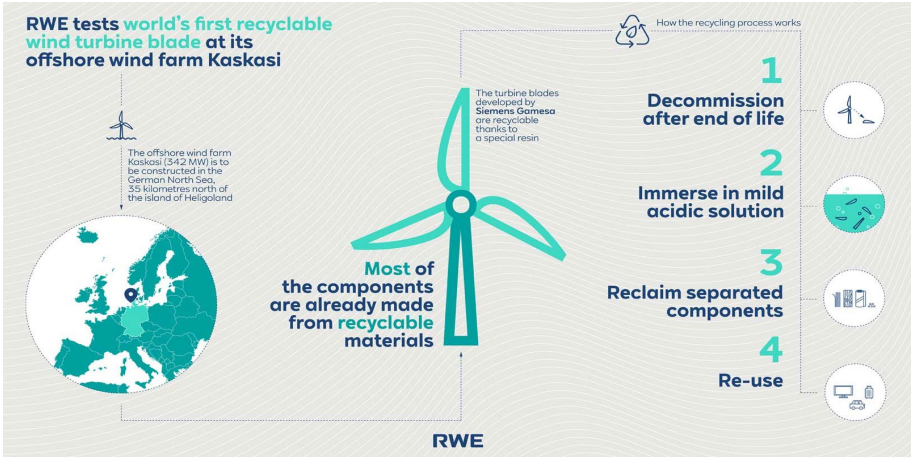
Closing Material Loops

Why?

The projects aim to

- Close **knowledge gaps**
- **Avoid** landfill **waste**
- Close **material loops**
- Position **RWE** as a **pioneer** by being the **world's first** to install **recyclable blades**

How?



Following the **successful piloting** at **Kaskasi** in late **2022, 44** of Sofia's 100 **turbines** will be installed with **recyclable blades, 50%** of which are **produced** in the **UK**

Where?

Piloted at **Kaskasi, Germany**

To be installed at **Sofia, UK & Thor, Denmark**

Sofia's and Thor's **installation** is planned to be **completed** by **2026**

CO_2 reduced towers – Thor, Denmark
Greener steel for offshore wind parks

Net-Zero Transition

Why?

The project enables RWE to

- **Commit** to the **net-zero emission goals**
- **Contribute** to **circularity** by **recycling** resources
- Demonstrating **leadership** by being the 1st developer globally utilizing GreenTowers
- **Continue partnership** with Siemens Gamesa

How?

RWE will install CO_2-reduced towers at Thor offshore wind farm

What makes Siemens Gamesa's GreenerTower greener?

The steel used in the towers emits a maximum of 0.7 tons of CO_2-equivalent emissions per ton of steel for the steel plate.

This will ensure a CO_2 reduction of at least 63 percent in the tower steel plates compared to conventional steel.

How the CO_2 reductions are achieved:

- Less energy intensive steel manufacturing process
- Increased use of scrap steel in the steel production
- Increased use of renewable energy sources

By using **green steel** for its turbine tower plates, RWE will **reduce** its **CO_2 emissions** by at least **63%,** compared to conventional steel

Where?

36 turbines are planned to be installed at **Thor**

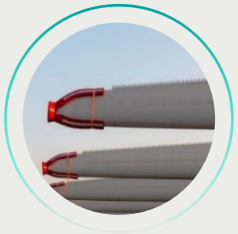
Installation is expected to be **completed** by **2026**

We are at the forefront of technological innovation.

Our offshore innovation projects support our sustainability strategy …

Recyclable blades

We are using the **world's first recyclable wind turbine blades**, made by Siemens Gamesa



Vibratory pile driving

We are investigating new installation techniques for offshore foundations to **reduce noise emissions**

… and go beyond conventional applications

Offshore hydrogen

We are part of the AquaVentus project family driving the production of hydrogen on offshore wind farms in the North Sea

Floating wind

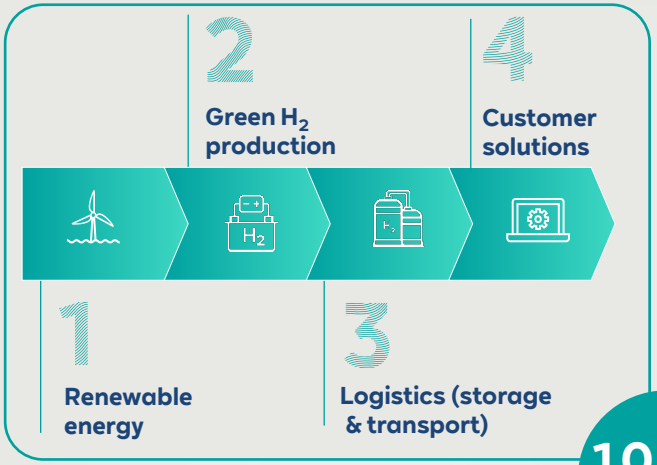
Our ambition is to safely develop, build and operate cost-competitive, commercial-scale floating projects around the world

Picture sources: Siemens Gamesa, AquaVentus.

Photo credit: University of Maine

We are ideally positioned for the hydrogen economy with extensive expertise along the value chain.

For more information, visit our Hydrogen theme page



Note: 10GW pro rata mostly early-stage development projects + 2GW RWE by 2030 Graphic represents selected hydrogen development projects

10 GW pro rata

Hot Topics | Key Challenges

Where do we need your help?

- **Supply chain constraint** || global demand for offshore renewables projects expected to continue to grow.
- **Supply chain growth** || challenges [teething problems] associated with new factories, facilities and infrastructure. Management of this external risk within projects.
- **Development of decommissioning market** || new [for renewables] market with many unknowns and challenges.
- **Vessel availability** || growth of WTGs and projects is stretching vessel capabilities. Along with global demand in construction, O&M and soon decommissioning continuing to grow we see ongoing market constraint.
- **Innovation & technology** || the [only] way to solve the challenges, and continue to deliver low carbon energy, is to be smart, to innovate and to manage the inclusion of novel solutions into projects efficiently.

In short, we need you.


RWE
Our approach to Offshore supplier engagement

How does RWE work with the Supply Chain?

- Aware of our **roles and responsibilities**
- Work to **understand the challenges**
- Are **open to conversation**
- Facilitate and **participate** in engagement
- Build **better and broader relationships**
- Review internal processes and **improve access to developers & major contractors**
- Increase awareness of **timelines, breadth & pipeline of opportunities**
- Improve **across and between-tier** engagement
- Utilise **Supply Chain Managers** and **regional clusters**
- **Work together** to achieve the end goal, recognising the prizes along the way

RWE

Our approach to offshore supplier engagement

Programme
an active approach to delivery

Engagement
opportunities to communicate

Transparency
providing accessible information

Supplier
working in partnership

STEP
Our approach to offshore supplier engagement

UK & Ireland Supplier Transparency & Engagement Programme

Objectives

- Visibility and transparency
- Supply chain awareness
- Proactive relationship building

Step 1

Dedicated project websites that provide up to date and relevant information for suppliers regarding project timescales and other key aspects

Step 2

The rollout of new and easy to register/use Supplier Engagement Platforms with 'open search' functionality

Step 3

Regular themed Supplier Engagement Days to raise awareness of supplier capabilities and solutions with a view to solving industry challenges

Step 4

A new Supplier Engagement Booking Tool that enables managed but regular calls with relevant RWE teams and team members

Difference between STEP Engagement Platform & RWE's Procurement Portal

Supplier Transparency & Engagement Programme (UK & Ireland)

- Early, ongoing and proactive engagement across the supplier tiers
- Helps us keep up to date on supplier capabilities, innovative solutions etc
- Takes place regardless of procurement/tender bid activity
- Implemented with the previously mentioned 4 steps.

RWE's global procurement portal

- Suppliers must complete pre-qualification process
- Used to search for suppliers when tenders are live and process tenders
- Complimented by STEP to funnel relevant suppliers
- Works alongside STEP to raise awareness to procurement of potential new suppliers out there

Please ask, understand the difference and register for both!

Register to STEP

https://rwe.supplierengagementplatform.com/


Leading the
way to a green
energy world

Thank you

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Please note:

This document contains statements that are oriented towards the future. They reflect the current opinions, expectations and assumptions of management and are based on the information available to management at this time. Statements that are oriented towards the future do not guarantee the occurrence of future results and developments and are connected to known and unknown risks and uncertainties. Various factors may therefore cause actual future events and developments to deviate considerably from the expectations and assumptions voiced herein.

In particular, these factors include changes in general economic and competitor situations. Other factors may also impact the Group's future results and development, including, but not limited to: developments on the financial markets; fluctuations in exchange rates; and national and international legislative amendments, particularly with regard to tax-related regulations. Neither the Group nor any associated companies assume the obligation to update the statements made in this notification.

Our core business is leading
the way to a green energy world.

Offshore wind

Strongest growth in Europe, significant potential in global markets

Onshore wind/solar

Decarbonisation pledges accelerate growth momentum in US and Europe

Battery storage & flexible generation

RWE's European core markets require new, low-carbon flexible capacity

Hydrogen

Hydrogen is quickly gaining traction with Europe at the forefront

Energy trading & customer solutions

Decarbonisation of industry drives demand for tailored solutions

Floating Wind

RWE is actively participating in several high-profile floating demo projects for detailed insight and experience.

- Floating offshore wind has great potential and **opens attractive market opportunities** not accessible via fixed bottom installations.
- The demonstration projects are providing **unique insights** into the particular challenges and opportunities of different structure types, materials, mooring systems, and installation methodologies.
- RWE was successful in securing a **1.6GW floating wind lease area** off the California coast.
- RWE has also **pre-qualified to bid** for two upcoming floating wind auctions in **France**, will participate in an upcoming tenders with our partners in **Norway** will take part in the Celtic Sea auction in the **UK** and is exploring floating wind in further markets as well

Demo project **TetraSpar Demonstrator**

- **Location:** Norwegian coast
- **Water depth:** 200 metres
- **Distance to shore:** 10 km
- **Capacity:** 3.6 MW
- **Platform type:** Suspended counterweight
- **Platform material:** Steel
- **Achieved in:** 2021

Demo project **DemoSATH**

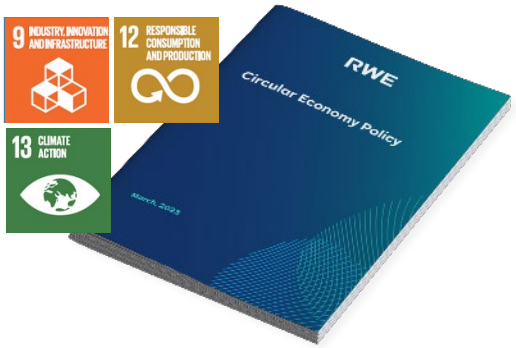
- **Location: Bay of Biscay, Spain**
- **Water depth:** 80 metres
- **Distance to shore:** 3 km
- **Capacity:** 2 MW
- **Platform type:** Barge
- **Platform material:** Concrete
- **Achieved in:** September 2023

Sustainability – core element of our Corporate strategy "Growing Green".

Biodiversity Policy
December 2022

We protect and enhance biodiversity within the scope of our business. We adhere to the mitigation hierarchy principles and aim to have a net-positive impact for new assets by 2030[1].

Circular Economy Policy
March 2023



We reduce natural resources consumption, minimize waste and design our assets in ways that promote material reuse and recycle. Our goal is to be fully circular by 2050[1].

Updated Climate Targets
May 2023

We set ourself more ambitious climate targets. Our 2030 CO_2 reduction target and 2040 net-zero target are now in line with the 1.5-degree pathway[2].

[1] https://www.rwe.com/en/responsibility-and-sustainability/corporate-governance/certifications-and-guidelines/.
[2] Targets to be validated by Science Based Target Initiative; https://www.rwe.com/-/media/RWE/documents/07-presse/rwe-ag/2023/2023-05-31-rwe-sets-itself-more-ambitious-climate-targets.pdf