Version 3 Aug

SDG7 Energy Compact of RWE Generation SE

A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

[Please select all that apply

- Group level: Climate neutral by 2040
- Hydrogen specific: Current hydrogen funnel includes project ideas that shall result in a significant market share in our core markets Germany, the Netherlands and UK by 2030.

Time frame:

- Group level: By 2040
- Hydrogen specific: Until 2030

Context for the ambition(s):

- With the ‘GET H2PCEI_ ’ the partners aim to build-up large-scale electrolysis capacities of 300 MW (plus 100 MW at Salzgitter) until 2026 growing to potentially 2 GW until 2030. Furthermore, a public dedicated hydrogen grid, a hydrogen storage cavern as well as the scale-off-take in various industries shall be realized until 2030.
- The Dutch project Eemshydrogen (which is expected to operationally start in mid-2024) aims at 50 MW and has the potential for build out up to 1 GW at Z t Z • ‰ } Á Œ ‰ o v š o } š] (v] v] u s • Z l e x i b l e electrolyser operation in line with wind speed dependent electricity from the existing RWE Westereems offshore wind farm. Synergies with the power station site will be leveraged: a.o. demineralized water, sewer, I&C, O&M, etc. Furthermore, there are signed term sheets for off-take with two chemical companies in the port of Delfzijl. The TSO plans to repurpose its existing natural gas infrastructure to hydrogen transport to Delfzijl (northern part of the hydrogen backbone).
- HyTech Harbour Rostock is a large-scale hydrogen venture with a total capacity potential of 1 GW until 2030. Until 2025, 100 MW electrolyser capacity shall be realized. The first 100 MW shall be used to produce green ammonia to decarbonize the local fertilizer plant

currently in different development stages.

- AquaVentus
  - Offshore electrolysers with a first 300 MW capacity by 2028.
  - An overall capacity of 10 GW by 2035
- GETH2PCEI
  - 2024: 100 MW electrolyser at the RWE Lingen power plant site, a dedicated hydrogen infrastructure from Lingen to the Ruhr region and the supply to refineries
  - 2025: 2nd 100 MW electrolyser at Lingen, supply to refineries and pipeline connection to the Netherlands
  - 2026: 3rd 100 MW electrolyser at Lingen, the H2-storage cavern in Gronau-Epe as well as pipeline towards Salzgitter in the East and Duisburg in the South. At Salzgitter an additional 100 MW electrolyser, DRI plant and electric arc furnace.
  - 2030: Hydrogen pipeline connection to Salzgitter realised

		2024with the potential for build out up to 1GW. x HyTech Harbour Rostock 1 GW of onshore electrolysis capacity potential by 2030	
	Description of action (please specify for which ambition from Section 1)	Start and end date	
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3.1. Please add at least one measurable and time-based outcome for ____ of the actions from section 2. [Please add rows as needed].

Outcome

x General:As of July 2021, the hydrogen

In-Kind contribution	Description
Technical Support	Description
Other/Please specify	Description

5.1. Countries planned for implementation including number of people potentially impacted.

Focus on hydrogen projects in core countries DE/NL/UK and in a next step on European market (Shell between Netherlands (UKKR) and RWE)

5.2.

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how ____ of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050. [up to 500 words, please upload supporting strategy documents as needed]

II.3. Has the Energy Compact considered a timeframe aligned with the Decade of Action? Yes No

8.1. Title/name of the Energy Compact

RWE Generation SE - Green Hydrogen Energy Compact

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

RWE Generation SE
RWE Platz 3
45141 Essen, Germany

8.3. Lead entity type

Government	Local/Regional Government	Multilateral body /Intergovernmental Organization
Non-Governmental Organization (NGO)	Civil Society organization/Youth	Academic Institution /Scientific Community
Private Sector	Philanthropic Organization	Other relevant actor

8.4. Contact Information

Essen, 31.08.2021

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8.5. Please select the geographical coverage

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