

RWE Generation NL & RWE Renewables Benelux

Sector	Revenue	Emissions	Pledge	Transparency	Integrity
Utilities - electricity and gas	€ 38.4 bn (RWE AG)	114.5 MtCO ₂ e (2022, RWE AG) 7.0 MtCO ₂ e (S1 NL)	Climate neutral by 2040	Low	Low
1. Tracking & disclosure of emissions				Transparency & Integrity	
114.5 MtCO ₂ e in 2022 7.0 MtCO ₂ (S1 NL, 2022)		● Subsidiaries are covered.			
Major emissions sources	Incomplete disclosure for NL subsidiary: only 7.0 MtCO ₂ reported (S1), primarily from the Eemshaven power plant according to national GHG registries. RWE AG's main emission sources are its power plants for electricity generation (S1) and use of gas by its customers (S3, cat. 11).				
Disclosure	For S2 emissions, only a location-based estimate is provided. S3 may be a lower bound (some categories excl.).				
2. Setting emission reduction targets				Transparency	Integrity
Headline target or pledge	Ambition to be climate neutral by 2040				
Short- & medium-term targets (up to 2030)	- S1 & S2: 50% per kWh reduction by 2030 (base 2019) - S3: 30% absolute reduction by 2030 (base 2019)				
Scope coverage	1 2 3	The targets are most likely not in line with 1.5°C-compatible trajectories or benchmarks for the sector.	High		
Own emission reductions (compared to full value chain in 2019)	? by 2030				
Long-term vision (beyond 2030)	Climate neutral by 2040 across S1, S2 and S3.				
Scope coverage	1 2 3	RWE mentions that it is currently (31 May 2023) working on getting its 2040 targets certified by SBTi.	Low		
Own emission reductions (compared to full value chain in 2019)	? by 2040				
3. Reducing own emissions				Transparency	Integrity
Emissions reduction measures	Expanding its green electricity portfolio (incl. offshore and onshore wind and solar), repurposing coal-fired plants for biomass. No commitment to phase out gas.		Moderate		
Renewable electricity procurement	No information provided on the nature of renewable electricity procured from third-party generators for either own consumption or for reselling to customers.		Low		
4. Climate contributions & offsetting				Transparency	Integrity
Responsibility for unabated emissions	No information identified on how the company takes responsibility for unabated emissions		Low		
Climate contributions	- No climate contributions identified.		N/A		
Offsetting claims today	- Since 2022, RWE AG stresses the role of VER certificates, particularly for hard-to-abate emissions, "according to strict criteria" and of the "highest quality". Includes reforestation, sustainable agriculture, energy-efficient cooking, and RE investments. Extent defined by RWE along with customers. Precise scale and principles not detailed.		Low		
Offsetting plans for the future	For neither RWE AG nor its Dutch subsidiaries has information been identified on the extent or principles of neutralisation measures to achieve climate neutrality.		Low		

RATINGS **Transparency** refers to the disclosure of information. **Integrity** refers to the quality and credibility of the approach.

Overall Average of sections 1-4 ■ High ■ Reasonable ■ Moderate ■ Low ■ Very Low;

Sections 1-4 Average of criteria in each section ■ ■ ■ ■ ■; **Rating criteria** See methodology for rating criteria ■ ■ ■ ■ ■.

Source: SEO Amsterdam Economics' interpretation of identified public documentation from RWE AG

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RWE AG is a German multinational energy company headquartered in Essen, that operates in the field of energy generation, distribution and trading. RWE AG has established two subsidiaries in the Netherlands: RWE Generation NL and RWE Renewables Benelux. RWE AG aims to be climate neutral by 2040 and has set interim targets for 2030. While the company has outlined various measures and neutralisation strategies to reach these targets, the specific extent of their contributions remains unclear.

With 78 percent, most of RWE AG's emissions are from power generation (S1), while the use of fuels such as gas sold to customers accounts for another 11 percent (S3, cat. 11). According to RWE AG's most recent annual report, the company's S1 emissions for 2022 amount to 89.6 MtCO_{2e}, while S2 emissions (only reported with a location-based approach) are 2.8 MtCO_{2e} (RWE AG, 2023a, p. 82). The report also indicates that the remaining 22.1 MtCO₂ is attributed to S3 (RWE, 2023). With 5.9 and 12.8 MtCO_{2e}, respectively, fuel- and energy-related activities (S3, cat. 3) and the use of products, such as gas, sold to customers (S3, cat. 11) account for virtually all reported S3 emissions. The total emissions reported by RWE AG (2023a, p. 82) add up to 114.5 MtCO_{2e}.

Potential omissions in RWE AG's reported S3 emissions might impact the overall total. The total amount of emissions reported by RWE AG (2023a, p. 82), as stated in its most recent annual report, is a conservative estimate. The calculation of S3 emissions excludes, for example, category 8 (upstream leased assets) and category 15 (investments), as also outlined in RWE AG's Greenhouse Gas Emission Inventory & Calculation Methodology (RWE AG, 2022a, pp. 10-13).¹ The reason for excluding investments is that "external data availability has proven insufficient to calculate emissions from equity investments of RWE" (RWE AG, 2022a, p. 8). Notably, according to RWE AG's most recent CDP Disclosure, S3 category 15 alone accounted for an additional 1.2 MtCO_{2e} in 2019 (RWE AG, 2021, C5.2). At the same time, the very same CDP Disclosure as well as the 2022 sustainability performance report by RWE AG (2023c, p. 7) state that the categories not reported are "deemed irrelevant" for its business. These two findings seem to be contradictory.

RWE AG aims to be climate neutral by 2040, but it is unclear to what extent it relies on neutralisation. RWE AG (2023b, p. 25) aims to be climate neutral across its full value chain (S1, S2 and S3) by 2040. However, neither the holding company nor its Dutch subsidiaries (RWE Generation NL and RWE Renewables Benelux) specify the actual long-term reduction targets, or whether and to what extent they may intend to rely on neutralisation measures to bring these scopes to net zero by the target year. To illustrate this, RWE AG (2022a, p. 3) states: "The main factor will be actual reductions, e.g. through the phaseout of carbon intense assets or the switch to green hydrogen from natural gas. To a much lesser extent we expect to deploy high-quality offsets to neutralise any remaining and non-abatable emissions." The nature of "the main factor" and "much lesser extent" is not clearly defined, making it impossible to determine the exact percentage of reduction of its own emissions.

RWE AG establishes multiple interim targets, including an intensity-based target per kWh for major S1 and S2 emissions and an absolute target for S3. At a holding company level, RWE AG has set short- and medium-term emission reduction targets towards 2025 and 2030 in order to reach its climate-neutrality goal for 2040. Specifically, RWE AG has a target of reducing S1 and S2 emissions by 50 percent per unit of electricity generated (measured in kWh), as well as a 30 percent reduction in S3 emissions, in each case relative to a base year of 2019 (RWE, 2023a, p.

¹ S3 cat. 8, 12, 13, 14 are excluded, because RWE could not identify any emission sources in these categories.

82). RWE AG's intensity target for S1 and S2 translates to a reduction from 0.616 tCO₂/MWh in 2019 to 0.308 tCO₂/MWh in 2030 (RWE, 2022b, C4.1b). However, this falls short of the average carbon intensity of 0.046 tCO₂/MWh that the Transition Pathway Initiative (TPI) has illustrated to be indispensable for a 1.5°C scenario in the European Union (Dietz, Gardiner, Jahn, et al., 2021, p. 10). RWE AG (2022a, p. 5) itself presents its 2030 targets as "well below 2°C" as approved by the Science Based Targets initiative (SBTi) in 2020. We should further note that the base year intensity in terms of emissions per unit of energy produced is not transparently disclosed in RWE's sustainability reports and fluctuates from one year's CDP disclosure to the next (0.590 tCO₂/MWh in RWE, 2021, C4.1b; 0.616 tCO₂/MWh in RWE, 2022, C4.1b).

While showing some good practices, RWE AG measures to reach its interim and long-term targets fall short by not committing to phasing out gas and new gas-fired power plants. In its publications, RWE AG mentions several actions taken to reach its interim target, such as "rapidly expanding renewable energy", to "retrofit or close existing fossil-fuelled and conventional generation assets by 2030" and emphasising the importance of research on hydrogen conversion and carbon capture and storage (CCS) technologies. RWE AG also relies on biomass-fired power plants, talks about the role of voluntary emissions reductions (VERs), and does not commit to phasing out gas and plans for new gas-fired plants (RWE AG, 2023b, pp. 5, 21, 26). Specifically for the Netherlands, in the previous edition of this monitor, NCI (2023a) discussed most of these measures extensively and discussed that they may have adverse sustainability impacts.

Sources:

- Dietz, S., Gardiner, D., Jahn, V., et al. (2021, November) Carbon performance assessment of electricity utilities: Note on methodology. *Transition Pathway Initiative (TPI)*. Available at: <https://www.transitionpathwayinitiative.org/publications/94.pdf?type=Publication>
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Low

Integrity assessment for short- and medium-term target(s) towards 2030

What do the short- and medium-term targets actually mean?

What are the targets for the short to medium term?

S1 and S2 intensity emissions reduction:

- 27 percent reduction per kWh by 2025 (2019 baseline of 0.616 tCO₂e/MWh)
- 50 percent reduction per kWh by 2030 (2019 baseline of 0.616 tCO₂e/MWh)

S3 absolute emission reduction:

- 15 percent reduction by 2025 (2019 baseline)
- 30 percent reduction by 2030 (2019 baseline)

How do these targets equate to emission reductions across the value chain (compared to a 2019 baseline)?

Given that the majority of the total emissions are attributed to S1, the absolute emission reduction targets for S3 only account for a small portion of the overall emissions. There is no overall target (compared to a 2019 baseline) to reduce absolute emissions as the intensity targets are not quantifiable. Given an intensity of 0.616 tCO₂e/MWh in 2019 (RWE, 2022b, C4.1b), the intensity reduction targets for S1 and S2 translate to the following targeted intensities:

- 0.450 tCO₂e/MWh (S1 and S2) by 2025
- 0.308 tCO₂e/MWh (S1 and S2) by 2030

Do these targets cover both the short term (within 5 years) and medium term (up to 2030)?

RWE AG (2023b, p. 25) has also set short-term targets for 2025, which use similar terminology as the medium-term targets for 2030.

Do these emission reduction commitments align with a 1.5°C trajectory for the sector according to available literature?

Global benchmarks: The IPCC's Sixth Assessment Report stresses that global CO₂ emissions must be reduced by net 48 percent by 2030, compared to 2019 levels, to stand a reasonable chance of limiting global warming to 1.5°C (IPCC, 2022). In the same period, global GHG emissions must decrease by 43 percent. The Sixth Assessment Report thus reaffirms the findings of the IPCC's Special Report on 1.5°C (IPCC, 2018). Based on the scientific insights from the latter report, the Hague District Court ordered Shell to reduce CO₂ emissions across all emission scopes by net 45 percent by 2030 below a 2019 baseline (The Hague District Court, 2021). It is not possible to compare the emission reduction targets of RWE AG to the global 1.5°C trajectory. However, given that the company has not set absolute reduction targets for its major S1 and S2 emission sources and that the target for S3 does not contain all emissions, it is likely that the targets fall short.

Sector-level benchmarks: The ambition level of RWE AG's interim targets for 2030 likely misses specific 1.5°C Paris Agreement-aligned milestones for energy utilities identified in existing literature. The IEA (2021, p. 20) specifies that in advanced economies all unabated coal plants need to be phased out by 2030 for the global energy sector to be 1.5°C compatible. While RWE AG (2022c) will replace its coal-fired power plants in the Netherlands with biomass, it plans to continue coal plant operations in Germany. RWE AG's interim targets very likely miss existing milestones identified by the Transition Pathway Initiative (TPI) for European energy utilities' operational emissions under both the TPI's definition of a '1.5°C Scenario' (0.046 tCO₂e/MWh in 2030, an 82 percent emission intensity reduction below 2019) as well as its definition of a 'Below 2°C Scenario' (0.063 tCO₂e/MWh in 2030, an 81 percent emission intensity reduction below 2019; Dietz, Gardiner, Jahn, et al., 2021).

Low**Integrity assessment for long-term target(s) (post-2030)****What do the long-term targets actually mean?****What are the targets for the long term beyond 2030?**

Across scope 1, 2 and 3 emissions:

- Net zero by 2040.

No specific absolute reduction targets have been identified alongside the climate-neutrality pledge.

How do these targets equate to emission reductions across the value chain (compared to a 2019 baseline)?

Due to the absence of long-term absolute reduction targets in the 2022 sustainability reports (strategy, management, and performance) and annual report, alongside the headline pledge, it is not possible to determine the extent to which emissions will be reduced compared to a 2019 baseline.

Do these emission reduction commitments align with a 1.5°C trajectory for the sector according to available literature?

Sector-level benchmarks: Existing literature identifies a 1.5°C Paris Agreement-compatible carbon intensity for energy utilities and the global electricity systems of below zero (i.e., negative) emissions for 2050 and reaching close to zero emissions by around 2040 (CAT, 2020; SBTi, 2020, 2021e, 2021c, 2021a; Boehm et al., 2021; Dietz, Gardiner, Jahn, et al., 2021). For developed countries, the full decarbonisation of electricity systems must be achieved even earlier, by around 2035 (IEA, 2021, pp. 20, 117). As an energy utility provider, RWE AG would need to reduce its operational S1 and S2 emissions by 100 percent by around 2035 in the European Union. Therefore, RWE is required to have a zero-emissions target or even a negative emissions target for the year 2035, rather than a 'climate-neutrality' target for 2040.