

Green Bond Investor Report

Vattenfall issued its first green bond in June 2019 and by year-end 2023, Vattenfall had a total of SEK 25.2 billion in outstanding green bonds, whilst having invested a total of SEK 43.6 billion.

Vattenfall has decided to use green financing in its funding activities, and we expect all future long-term financing to be made under the Green Bond framework¹.

Green bond framework in brief

The [current green bond framework](#) consists of four eligible categories: Renewable energy, transmission and distribution of electricity, energy efficiency, and clean transportation. The climate research institute CICERO has provided a second opinion on the framework and issued the highest rating, “Dark Green”.

Outstanding bonds

Our outstanding green bonds issued up to 2022 were emitted under the [previous framework](#) where the eligible categories were: Renewable energy and related infrastructure, energy efficiency, electrification of transport and heating, and industry projects. Our latest hybrid bond issued in 2023 was issued under our new green bond framework.

Investments under Vattenfall’s Green Bond Framework^{3, 4}

Category / project / country	Type	Capacity (MW)	Est. CO ₂ reduction ² (ktonnes)	Vattenfall's interest (%)	Start/ compl.	Total investment	2023	-2022	Total
Renewable energy and related infrastructure									
Hollandse Kust Zuid 1-4 / Netherlands	Wind offshore	1,509	1,563	51	2020/2024	2,600 MEUR	7,814	17,935	25,750 MSEK
Kriegers Flak / Denmark	Wind offshore	604	345	100	2019/2021	7,600 MDKK	0	9,694	9,694 MSEK
Vesterhav projects / Denmark	Wind offshore	344	196	100	2022/2023	657 MEUR	4,262	1,806	6,068 MSEK
Princess Ariane (retained) / Netherlands	Wind onshore	180	139	100	2018/2020	220 MEUR	0	1,348	1,348 MSEK
Bruzaholm / Sweden	Wind onshore	139	3	100	2023/2025	2,124 MSEK	226	0	226 MSEK
Velinga / Sweden	Wind onshore	67	1	100	2024/2026	1,200 MSEK	0	0	0 MSEK
Industry projects									
HYBRIT / Sweden	Fossil-free steel	Pilot project	–	33	2019/2021	858 MSEK	20	460	480 MSEK
Total							12,322	31,243	43,565 MSEK
Outstanding green bonds									25,217 MSEK



Bruzaholm

Vattenfall has started the construction of the onshore wind farm project in Bruzaholm, Sweden. The 21 wind turbines will upon completion produce 460 GWh, which corresponds to the annual electricity consumption of approximately 91,500 households. The wind farm is expected to be commissioned in 2025.



Velinga

During 2023, Vattenfall took the final investment decision to start the construction of the onshore wind farm in Velinga, Sweden. The project will have an annual production of approximately 173 GWh and an output of 67 MW. Construction started during the year and the wind farm is expected to be commissioned in early 2026.

¹ All external borrowing is done at corporate level with bonds issued by the parent company, Vattenfall AB, for general corporate purposes. Our bonds have a balanced maturity profile and Vattenfall does not refinance any particular bond maturities but rather takes into consideration the total financing need, i.e. cash from operations, existing liquidity, capex needs, and maturing financial payments such as bond repayments.

² Production from onshore wind estimated to 2.6 GWh/MW installed, from offshore wind to 3.5 GWh/MW installed, and from solar to 1.0 GWh/MW installed. Resulting production is compared against grid average emission factors which will decline over time as the energy system decarbonises. Actual production emission factors and savings will vary. Other projects are compared to project-specific reference cases.

³ All numbers in the table reflect the status as per 31 December 2023.

⁴ The reporting of spend relating to green bonds has been updated from 2023 with the aim to be fully comparable with other financial reporting of the projects. This is reflected in all active projects above, including for historic investments, i.e. accrued expenses and not cash flow.