

# Green Bond Investor Report

Vattenfall issued its first green bond in June 2019 and by year-end 2024, Vattenfall had a total of SEK 25.2 billion in outstanding green bonds, and with a total investment of SEK 34.2 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 framework<sup>1</sup>.

### Green bond framework in brief

Vattenfall's 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.

Table of Investments under Vattenfall's Green Bond Framework<sup>3,4</sup>

Category / project / country	Type	Capacity (MW)	Est. CO <sub>2</sub> reduction <sup>2</sup> (ktonnes)	Vattenfall's interest (%)	Start/ compl.	Total investment	2023	2024	Total in MSEK
Renewable energy and related infrastructure									
Kriegers flak / Denmark	Wind offshore	604	156	100	2019/2021	7,600 MDKK	9,694		9,694
Princess Ariane / The Netherlands	Wind onshore	180	113	100	2018/2020	220 MEUR	1348		1,348
Princess Ariane / The Netherlands	Wind onshore	118	74	0	2018/2020	0 MEUR	0		0
Hollandse Kust Zuid 1–4 / The Netherlands	Wind offshore	1,509	1,265	51	2020/2023	2,600 MEUR	13,004	410	13,413
Vesterhav-projects / Denmark	Wind offshore	344	89	100	2022/2023	657 MEUR	6,068	1,131	7,199
Bruzaholm / Sweden	Wind onshore	139	2	100	2023/2025	2,360 MSEK	226	1,256	1,482
Velinga / Sweden	Wind onshore	67	1	100	2024/2026	1,182 MSEK	0	330	330
Battery Toledo / Sweden	Battery	55		50	2024/2025	43 MEUR		206	206
Industry projects									
HYBRIT / Sweden	Fossil-free steel	Pilot project	—	33	2019/ 2021	858 MSEK	480		480 MSEK
Total						50,326	30,819	3,332	34,151
Outstanding green bonds									25,217
Difference									-8,934

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



Hjuleberg hybrid park

### Battery Toledo

In southern Sweden, Vattenfall, in partnership with pension fund Skandia, is constructing two large-scale battery storage systems at the Høge Våg and Hjuleberg wind farms, creating Sweden's largest hybrid renewable energy asset. These projects aim to maximize the use of renewable energy by integrating wind power with battery storage, ensuring grid stability and balanced electricity supply.



### 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 around 91,500 households. The wind farm is expected to be commissioned in 2025.