



GREEN BONDS REPORT 2017



Hydro power is by far the most important source for renewable energy in Norway. Agder Energi is the fourth largest producer of hydro power in Norway. In 2017 Agder Energi produced 8.8 TWh, corresponding to approximately 6 % of annual hydro power production in Norway. The production creates considerable value for the community, among other dividends to public owners.

Agder Energi established in October 2017 a Green Bonds Framework for the issuance of green bonds earmarked for funding of renewable power production. The independent research institute CICERO provided a Second Opinion of the framework, awarding the highest rating *dark green*. In November 2017, Agder Energi issued its first green bond of NOK 750 mill with a maturity of 10 years. The bond was well received by the investors and was fully subscribed within a short period of time. Green bonds support Agder Energi's environmental strategy and our ambition to increase the capacity of renewable hydro power production.

Invested amounts funded by green bonds as at 31.12.2017¹:

Projects	Project cost (NOK mill)	Amount 31.12.17 (NOK mill)	Increased production (GWh)	Reduced CO2 (tons) ²
Skjerkevatn Dams	550	320	35	13 300
Skjerka power station turbine II	300	145	18	6 840
Iveland II (refinancing)	700	285	140	53 200
Total	1 550	750	193	73 340
Share green bond			93	35 487

Financing of new projects according to the framework has been used for the projects Skjerkevatn Dams and Skjerka power station turbine II with a total amount of NOK 465 mill. The construction of two embankment dams at Skjerkevatn in Åseral municipality is completed and the reservoir is now in operation. The project contributes to increase the power production by 35 GWh per year in sense of increased reservoir capacity and pressure height. The expansion of Skjerka power station with a second turbine is in full progress. In addition to increase the production by 18 GWh per year caused by reduced loss from flooding, the turbine adds value to the existing production by offering the a more flexible production scheme. Skjerka turbine has expected completion the first half of 2019.

The rest NOK 285 mill of the green bond has been used for refinancing parts of Iveland II, which was put in operation in 2016. The new power station increased Agder Energi's renewable hydro power production by 140 GWh per year.

All our projects are expansion of existing plants, and to a small degree demands new ground. Thus, requirement for new ground is avoided, one of the largest environmental challenges internationally. In addition, Agder Energi is constantly committed to reduce negative environmental impacts of its power production. In 2017 it was established a new spawning area for salmon and mapping of smolt behavior in the Arendal water course. E.g. the spawning area for salmon was directly financed by customers of Agder Energi in Scandinavia and Central Europe purchasing high quality green power products ("Bra Miljøval", "Nature Made Star"). Those experiences show that it is possible to produce large amounts of hydro power in combination with environmental additionality. By interdisciplinary cooperation with leading research institutes, we have succeeded in developing knowledge based solutions for the mutual benefit to both public and private interests.

¹ Company controller confirms that the amounts in this report have been used for funding projects according to Agder Energi's Green Bonds Framework.

² Emission factor for electricity: Combined margin 380 g CO2/KWh. Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting, October 2017.