

## Impact Reporting 2021 VERBUND's Green Bond 2014

The proceeds from the issue of VERBUND's Green Bond 2014 have been used to finance several projects for the generation of electricity from wind power and hydropower. Since the power is generated from renewable energy sources, these projects help to avoid  $CO_2$  emissions.

The construction of wind farms in Austria and Germany plus the Reißeck II pumped storage power plant has been partly or completely financed from these funds, as have measures to increase efficiency at the Ybbs-Persenbeug power plant (Project 2020). (For more information see the 2014 Second Party Opinion.) Further technical details on the individual projects can be found on the VERBUND website.

The impact reporting states the volume of electricity generated and emissions avoided each year as quantitative indicators. The method for calculating emissions avoided has been confirmed in accordance with the annual verification by ISS-ESG:

Year	Generation* [GWh]	Emissions avoided [t CO <sub>2</sub> ]
2015	330	274,132
2016	340	262,297
2017	399	303,222
2018	366	278,983
2019	411	313,198
2020	394	297,755
Total 2015-2020	2,240	1,729,817

<sup>\*</sup> Total electricity generated or additional generation through the projects referred to above

## Calculation of emissions avoided:

The following figures are used to calculate the avoidance factor: eeElectricity generated with fossil fuels (coal, oil, natural gas) according to on IEA (International Energy Agency) in TWh and the direct  $CO_2$  emissions for the contribution to the greenhouse effect based on energy sources in the year 2019 (source: World Energy Outlook 2020 – Europe: total electricity generation coal, oil and natural gas (TWh);  $CO_2$  emissions power sector (Mt). The annual update of the factor also

considers the shift to lower-emission production technologies such as natural gas. For 2020, the data available at the time of the update (status 10/2020) were used.

The amount of electricity generated in the Green Bond projects is multiplied by this factor for the theoretical emission avoidance in tonnes of  $CO_2$  per GWh. The result is the amount of avoided emissions..