Telefónica's Green Hybrid

January 2023

Use of proceeds

- Eligible investments: **Energy Efficiency** in the network transformation, from **copper to fibre optic** (fixed network) **and 5G deployment** (mobile network)**,** and also **self-generation of renewable** energy, according to Telefónica's SDG Framework (last updated January 2021).
- Investments for green projects consist of shutting down legacy units, deploying and upgrading network infrastructure, and placement optimisation.
- Eligible investments refer to new investments made after issuance as well as investments made 2 years prior to issuance.

Green projects' impact

- New **fibre optic and 5G infrastructure,** as part of the network's transformation, as well as **renewable energy**, are key contributors to Telefonica's emissions reduction target to **reduce scopes 1+2 GHG emissions by 90% in absolute terms in 2025 in our 3 main markets**.
- Telefonica has global **targets** on energy and climate change **aligned with the 1.5° scenario** (validated by **Science Based Target Initiative**[2]) and the electricity it consumes in its main markets is already **100% renewable**.
- **Migrating clients to fibre optic reduces the environmental impact of networks by reducing energy consumption** (85% more efficient per customer); as well as reducing the need for cooling systems; reducing the need for buildings by 50%; and reducing the overall maintenance needs of the networks – all of which result in GHG emissions reductions.
- 5G technology is expected to represent an unprecedented, disruptive, technological change in many different economic sectors and in society over the next decade. It is up to 90% more energy efficient than 4G in terms of energy consumption per traffic unit and has much more capacity, so it will be able to provide increased services with a lower energy consumption than 4G[3].

Annual reporting

- Telefonica will provide impact reporting metrics on Green Projects, such as:
  - energy consumption per data traffic (MWh/PB)
  - energy saved (MWh)
  - estimated GHG Emissions avoided (tCO2eq)
- Reporting will be made publicly available on our website, starting within a year after the issuance and on an annual basis until proceeds are fully allocated.
- Third-party auditors will ensure the allocation and impact reports are consistent with Telefónica's SDG Framework.

Impacts[1]

+115,000 tCo_2 avoided emissions

+470,000 MWh of energy saved

-86% consumption of energy/traffic (MWh/PB) in fixed network in Spain

SDG contribution

This issuance contributes to the achievement of the UN SDG

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.3 By 2030, double the global rate of improvement in energy efficiency

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes

1. Cumulative environmental impacts of the bonds issuances whose allocation report have already been published: green bond issued in February 2019, green hybrid issued in February 2020, sustainable hybrid issued in February 2021, and sustainable hybrid issued in November 2021.
2. The Science Based Targets Initiative is joint initiative of the UN Global Compact, Carbon Disclosure Project, World Resources Institute and WWF.
3. Based on several on-site research carried out with different vendors. https://www.nokia.com/about-us/news/releases/2020/12/02/nokia-confirms-5g-as-90-percent-more-energy-efficient/ or https://www.telefonica.com/en/communication-room/blog/telefonica-makes-progress-in-the-design-of-a-green-5g-network/

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