Telefónica SDG Framework
November 2018

Introduction

Telefónica is one of the largest telecommunications and digital services Group in the world in terms of number of customers. The Telefonica Group (hereinafter, also referred to as „Telefónica") offers connectivity, digital servicies and technological solutions to help companies and individuals with their own digital transformations. Headquartered in Madrid, Telefónica's customer base exceeds 340 million accesses and is distributed between Spain, the United Kingdom, Germany and Latin America. Telefónica operates in 17 countries and generates 75% of its business outside of Spain.

Telefonica is committed to offering its customers the connectivity and digital services they need to enhance their lives and their businesses. Doing this in a responsible way and offering digital solutions which contribute to making the world a better place to live, are a strategic part of this business model.

Working in a sustainable way and helping our customers do the same makes the company more resilient and efficient, and ensures our products and services are not only contributing to the sustainable development of our society, but also help to tackle some of the most important challenges society is facing today.

Telefonica's sustainability strategy is systematic and target oriented. There are three value drivers of this strategy:

1. **Growth:** enabling people with the power of connectivity, either by enlarging our customer base to include everyone and by offering products and services that generate positive social and environmental change
2. **Productivity:** Optimizing our capabilities for a sustainable digital future, either reducing impact of operations on climate change, digitalizing networks and customer-oriented processes end-to-end and propeling human capital development
3. **Risk:** Ensure the utmost responsibility across all the organization, particularly regarding networks security and customers' data privacy

Growth: Enabling people with the power of connectivity

Connectivity and digital services are connecting society, which means anyone with access to the internet has increased access to information, educational content, employment opportunities, business development opportunities and even financial or medical services. Digital inclusion and the opportunity to thrive through digital is all about having access to connectivity and having the skills to take advantage of digital tools. In addition, in a business environment, SMEs need access to fibre optic infrastructure, cloud connectivity and other digital services in order to survive and compete in the digital world, and many employees need to learn new skills so as not to be left behind in the digital transformation.

Telefonica believes connectivity and digital services should be available for all. That is why it is actively addressing the needs of those who have been left out of the digital world, deploying networks in uncovered areas, developing new access technologies that extend operational reach and offering products and services for clients with specific needs. As of 1Q2018, Telefonica had 46 million Ultra-Broadband premises passed in its European footprint (Germany, Spain and United Kingdom), already covering more than 92% of the population with LTE. By then it already had 11

million Ultra-Broadband connected homes in the Lat Am region, while reaching 66% of the population with LTE.

In addition, Telefonica helps its customers reducing their carbon and environmental footprints, by offering them digital services which allow for more efficient resource consumption (smart metering, smart energy, smart cities, smart agro, smart mobility, smart industry, etc.) and the monitoring and mitigation of environmental impacts (waste management, monitoring of pollution, etc.).

Productivity: Optimizing our capabilities for a sustainable digital future

Telefónica is reducing its impact on climate change by decarbonising its operations and committing to the decoupling of its business growth from its greenhouse gas emissions. The company's objective is to align its efforts with the level of decarbonisation required to limit global warming to under 2ºC and its targets have been validated by the Science Based Targets Initiative (https://sciencebasedtargets.org/). As a result, Telefónica will reduce its greenhouse gas emissions by 30% in 2020 and by 50% in 2030.

Demand for data traffic is predicted to increase exponentially, which means our network is expected to grow. In order to reach its environmental goals, we are engaged in an ambitious transformation plan aimed at innovating our networks to reduce their energy consumption per data unit and implement energy efficiency projects which will contribute to keeping our need for energy as low as possible. Simultaneously, the company is rolling out an ambitious renewable energy plan which will help it disconnect carbon footprint from growth. Telefonica has committed to ensuring its electricity consumption is 100% renewable by 2030.

Besides, in order to become a pure digital company Telefónica is making great efforts to digitalize its networks and its customer oriented processes. Derived from that, the new infrastructure deployment of fiber, the virtualization of the whole networks and the IT backbone end up in a better and more efficient use of energy and natural resources.

Human capital development is also one of the key issues for the profitability and sustainability of the business. Telefónica firmly believes that employees are its most important asset, and therefore, works every day to encourage development of their capabilities

Risk: Ensure the utmost responsibility across all the organization

Through its Responsible Business Principles, Telefonica constitutes its code of ethics reflecting the company's commitment to ethics and compliance, as well as to three values on which it bases all actions: Integrity, Commitment, Transparency.

Telefónica is leading the AI revolution in the telco sector as we aim to enhance the relationship with our customers through it. This is why we data privacy and security of our customers are one of our main priorities.

In addition, to its own business activity, Telefonica annually donates funds to the Telefonica Foundation, the mission of which is to improve people's development opportunities through educational, social and cultural projects adapted to the challenges of the digital world.

Given the nature of our business, we have identified Goal 9 (industry, innovation and infrastructure) as the Goal we provide most value to. However, we have also identified impacts of our activity on

the other 16 Goals - in particular those related to economic growth, the environment, education, the development of sustainable societies, diversity and gender equality.

Telefonica has decided to consider issuing green, social and or sustainable bonds because it wishes to demonstrate to investors and society at large that it understands its responsibility to contributing to society's well-being while generating long term value for its shareholders. By linking its financing to business- relevant projects and the sustainability targets and/or kpi's by which they are evaluated, the company is going a step further in integrating its sustainability strategy into its business strategy.

As part of this continued commitment to sustainability, Telefónica has elected to create an SDG Framework which is in accordance with the Green Bond Principles 2018, Social Bond Principles 2018, and Sustainability Bond Guidelines 2018[1], and under which Telefónica can issue Green, Social, or Sustainability Bond(s). It is our intention to follow best practices in the market as the standards develop.

1. **Use of Proceeds**

Under this Framework, Telefónica can issue three types of bonds (the "Bonds"):

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1. Green Bonds – for which the funds raised are exclusively allocated to Green Projects Categories;
2. Social Bonds – for which the funds raised are exclusively allocated to Social Projects Categories; and
3. Sustainability Bonds – whereby the funds raised are allocated to Green Projects Categories and to Social Projects Categories.

The Use of Proceeds of any Telefónica Green, Social, or Sustainability Bond under this Framework will be subject to the following eligibility criteria, to be applied to new or existing projects[2]. This list may be further updated as technologies and other circumstances evolve.

Eligibility Criteria for **Green Bond**:

Project Category	Eligibility Criteria	Sustainability objective
Energy Efficiency of Telefonica Network Infrastructure	• Network transformation (both mobile and fixed) with a view to making it more energy-efficient (including but not limited to modernisation of broadband network moving from copper to fibre optic and retrofitting legacy networks) as well as supporting infrastructure with a view to making it more efficient (including but not limited to free cooling systems, cooling optimization, power modernization, smart management, intelligent lighting or optimization of power storage). This also includes digital process transformation, like automatization of maintenance processes. • Software aimed at reducing power consumption, such as, but not limited to, power saving features, servers virtualisation, remote and data management applications, machine learning and artificial intelligence applications.	SDG 7.3: By 2030, **double the global rate of improvement in energy efficiency.** SDG 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, with all countries taking action in accordance with their respective capabilities. Telefonica commits to substantially reducing its energy consumption per unit of data traffic by 2020. Between 2015 and 2017 energy consumption/traffic has decreased 52%. 50% GHG reduction by 2030 in line with the 2ºC increase limitation set in the Paris Agreement.
Renewable Energy	Implementation of Telefonica's renewable energy plan: • Self generation of electricity from renewable sources such as solar, wind, geothermal, and waste-to-energy.	SDG 7.2: By 2030, **increase substantially the share of renewable energy** in the global energy mix.

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[2] Existing assets refer to assets financed up to 36 months before the issuance of any Telefónica Green, Social or Sustainability Bond

	• Purchase of renewable energy for electricity consumption under medium and long term power purchase agreements (> 5 years), that will be project-specific to the extent possible (excluding large hydro over 25MW and geothermal with direct emissions > 100g CO2/kWh3).	SDG 8.4: **Improve progressively, through 2030, global resource efficiency in consumption and production** and endeavour to decouple economic growth from environmental degradation Telefonica commits to renewable energy sources for its business: 100% renewable electricity consumption by 2030 Telefonica commits to decoupling its growth from an increase in GHG emissions: 50% GHG reduction by 2030 in line with the 2°C increase limitation set in the Paris Agreement.

Energy Efficiency: Digital Solutions for the Environment	Development and implementation of digital products and services, like Internet of Things (IoT), Big data or Artificial Intelligence (AI), which aims at saving energy consumption.
	
	Including, but not limited to, hardware, software and innovation investments in:
	    o IoT Products and services: Telefónica is an E2E (End to End) IoT solution provider.
	    o IoT connectivity, connecting assets, devices, endpoints, in order to acquire real time behavioural information of remote equipment in order to enable operational efficiencies.
	    o Specific products like, but not limited to: Smart metering, Smart Energy; Smart cities Platform, Smart rural environment (with efficient management of resources), Smart Mobility, Smart Industry, Smart Retail or Consumer IoT.[3]
	    o IoT Enabling capabilities:
	    o New IOT connectivities, such as but not limited to: NB-IoT and LTE-M, belong to the LPWA family, that stands for Low Power Wide Access.
		SDG 7.3: By 2030, **double the global rate of improvement in energy efficiency.**
		
		SDG 8.4: **Improve progressively, through 2030, global resource efficiency in consumption and production** and endeavour to decouple economic growth from environmental degradation
		
		SDG 11.6: By 2030, **reduce the adverse per capita environmental impact of cities**, including by paying special attention to air quality and municipal and other waste management.
		
		SDG 12.6: Encourage companies, especially large and transnational companies, **to adopt sustainable practices and to integrate sustainability information into their reporting cycle**
		
		SDG 6.4: By 2030, **substantially increase water-use efficiency across all sectors** and ensure

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[3] Telefonica excludes products and solutions developed specifically to support the fossil fuel industry/infrastructure

	Such technologies are a foundational efficiency, for example large duration of batteries and indoor coverage. ○ IoT analytics: Data processing mechanisms oriented to process data obtained from IoT devices, increasing efficiencies and decreasing impacts due to outages, refurbishing or maintenance.	**sustainable** withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity SDG 13.1: **Strengthen resilience and adaptive capacity to climate-related hazards** and natural disasters in all countries Telefonica commits to contributing to avoiding emissions through customer services in a substantial proportion with respect to our own emissions of scope 1+2 by 2025.

Eligibility criteria for **Social Bonds:**

Digital Inclusion, Access for all through an Affordable Infrastructure	Deployment of connectivity infrastructure in areas at risk of digital exclusion in Latin America. Areas at risk of digital inclusion are defined as areas which are either unconnected or underserved.	SDG 9.1: **Develop quality, reliable, sustainable and resilient infrastructure**, including regional and transborder infrastructure, **to support economic development and human well-being**, with a focus on affordable and equitable access for all. SDG 9.c **Significantly increase access to information and communications technology** and strive to provide universal and affordable access to the Internet in least developed countries by 2020 **Target population**: unconnected or underserved population[4].

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[4] Telefonica definitions:
- Unconnected: no service exists (fixed or mobile) by any operator.
- Underserved communities: There is at least mobile service by one operator with 2G EDGE or 3G service. The backhaul or access capacity of the given site does not allow for a quality Internet experience. For the avoidance of doubt, a quality Internet experience is defined as more than 1,5 Mbps per user measured on average over a given period of time on the user device. Usually (but not necessarily) involves disperse population (at least 10 km from a relevant municipality and/or less than 3000 inhabitants).

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		Telefonica commits to contributing to bringing connectivity to 100 million people who still do not have access to internet in the regions in which it operates.
Employment Generation and Economic Growth	SME and start-up funding and investments.	**SDG 8.3.**: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services. Telefonica commits to supporting, financing and/or investing in start-ups and/or small and medium-sized companies with a view to supporting entrepreneurship, creativity, innovation and job creation. [5]

2. Project Selection and Evaluation Process

A SDG Bond committee / working group will monitor the project selection and evaluation allocation process as per the eligibility criteria defined in the Use of Proceeds section.

This committee will be composed of senior management representatives from Telefónica's:

- ❖ Finance department
- ❖ Sustainability department
- ❖ Control department

Other technical areas

The SDG Bond committee / working group will be responsible for the following:

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[5] Telefonica defines small and medium-sized companies as companies with less than 250 employees and a turnover equal or under 50 million €.

Telefonica applies exclusion criteria to these support and investment projects which include not investing or supporting:

- Production or activities involving harmful or exploitative forms of **forced labour or child labour** as defined in the ILO core labour standards.
- Production or trade in **controversial weapons** or important components for the production of controversial weapons (anti-personnel mines, biological and chemical weapons, cluster bombs, radioactive ammunition, nuclear weapons).
- Any business activity involving **child pornography**.
- Production or distribution of **racist or anti-democratic media**.

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- Review and validate the selection of Eligible Projects based on the defined Eligible Categories listed by the Use of Proceeds.
- Monitor the Eligible Projects portfolio, during the life of the transaction. Specifically, during the life of each Bond, the SDG Bond committee can decide to replace some Eligible Projects if an Eligible Project no longer meets the eligibility criteria.
- To manage any future updates of the Framework

3. Management of Proceeds

It is Telefonica intention to manage the proceeds of the Telefónica Green, Social or Sustainability Bond(s), establishing an SDG Bond Register. The proceeds of each Telefónica Green, Social or Sustainability Bond(s) will be deposited in the general funding accounts and earmarked for allocation using the SDG Bond Register. Until they are allocated to eligible projects, proceeds will be invested according to Telefónica's normal liquidity policy.

The SDG Bond Register will be reviewed annually.

The SDG Bond Register will contain relevant information including:

(1) Details of the Bond(s): ISIN, pricing date, maturity date, etc

(2) Per Green, Social and Sustainability Bond issued, details of Eligible Use of Proceeds, including:
- Project Categories and Eligibility Categories
- Amount of allocation made
- Estimate of impact of the Eligible Use of Proceeds

4. Reporting

On an annual basis and until the proceeds have been fully allocated, it is Telefónica intention to publish annually an allocation report and an impact report, as detailed below.
If, after completion of the allocation period, some Eligible Projects are replaced Telefónica will publish an updated allocation report and an updated impact report

4.1 Allocation Reporting

Telefónica will provide information on the allocation of the net proceeds of its Green, Social or Sustainability Bond(s) on Telefónica website. The information will contain at least the following details:
   I.   A list of Eligible Projects financed through Telefónica's Green, Social, or Sustainability Bond(s), including amounts allocated; and
   II. Bond proceeds allocated per eligibility category; and
   III. The remaining balance of unallocated proceeds.

4.2. Impact Reporting

Impact reporting will be provided at the level of each eligibility criteria and may include the following estimated Impact Reporting Metrics:

Green Project Categories	Impact Reporting Metrics
Energy Efficiency of Telefonica Network Infrastructure	• Energy consumption per data traffic • Estimated GHG Emissions reduced (tCO2eq) • Expected energy saved (in MWh)
Renewable Energy	• Renewable MWh generated or purchased • % of electricity consumption from renewable sources • Estimated avoided GHG Emissions (tCO2eq)
Energy Efficiency: Digital Solutions for the Environment	• Estimated avoided GHG Emissions through services (tCO2eq) • Expected energy savings (in MWh) • Service-related kpi's such as number of smart meters. • Qualitative reporting on new innovations
Social Projects Categories	
Digital Inclusion through an Affordable Infrastructure	• % of population connected as a result of the Telefonica network • % of population with access to fibre • Number of people with access in regions defined as "at risk of exclusion" • Qualitative reporting of SME development as a result of access to fibre.
Employment Generation and Economic Growth	• Number of SMEs supported or funded • Number of employees of SMEs supported or funded • Number of jobs generated

5. External Review

5.1 Second Party opinion

Telefónica has appointed Sustainalytics SARL to provide a Second Party Opinion on this SDG Framework. This Second Party Opinion document is already available on Telefónica's website and also via https://www.sustainalytics.com/wp-content/uploads/2018/11/Telefonica-SDG-Framework-Second-Party-Opinion_Final.pdf.

5.2 Post issuance external verification

External independent auditors appointed by Telefónica will ensure that the Allocation Report is consistent with Telefónica's SDG Framework, on an annual basis until full allocation.

Auditors will in particular review the compliance of the selected Eligible Projects and reporting metrics, with the Framework.