



**TELIA COMPANY**  
**GREEN BOND REPORT**  
**FEBRUARY 2021**

## Executive summary

Telia Company (OMXS:TELIA, ISIN:SE0000667925) is the leading provider of telecommunication services in the Nordics and Baltics, with over 24 million subscriptions in total in mobile, IoT/M2M, fixed voice, fixed and mobile broadband, and TV. In 2020, Telia Company had net sales of SEK 89 billion and an adjusted EBITDA of SEK 31 billion.

In February 2020 Telia Company successfully issued its inaugural Green Bond, a EUR 500 million Green Hybrid (ISIN: XS2082429890), the first Green Hybrid by a Nordic Telco. Telia Company followed up the successful transaction with another SEK 750 million Green Bond (ISIN: XS2187605030) in senior bond format.

Telia Company will publish a Green Bond Report on an annual basis containing the status of the allocation of proceeds and, on a best effort basis, the environmental impacts of these investments. In this first Green Bond Report, Telia Company reports on the status of the allocation of proceeds and their environmental impacts as of year-end 2020. The Company actively follows the developments in the Green Bond market and is committed to develop reporting practices in line with best practice and established guidance.

### Summary table

Bond	Issue month and year	Use of proceeds allocation	Allocation status	Refinancing part	Impact - GHG emissions avoided*
Green Hybrid EUR 500M	February 2020	Energy Efficiency: 97% Green Digital Solutions: 3%	100%	70%	38.29 tons CO <sub>2</sub> e/MEUR
Green Senior SEK 750M	June 2020	Energy Efficiency: 100%	100%	100%	33,87 tons CO <sub>2</sub> e/MEUR**

\*Cumulative 2018-2020

\*\* Equivalent to 3.20 tons CO<sub>2</sub>e per SEK million investment, by using the 2019 Bloomberg FX conversion rate as specified in the Appendix.

For more information see detailed tables in the report below.

## 1. Telia Company's environmental goals

To forcefully address the climate crisis and the unsustainable use of natural resources, Telia Company adopted two ambitious environmental goals in 2019, to be reached by 2030.

### 2030 goals:

- Zero CO<sub>2</sub> throughout the value chain
- Zero waste in own and network operations

The zero CO<sub>2</sub> goal focuses on creating a climate-neutral value chain by 2030 while enabling its customers to reduce their emissions. The work on zero waste focuses on own operations while contributing to a circular economy through its offerings.

To further concretize the 2030 goals, in 2019 the Company set more detailed goals to be reached by 2022.

### 2022 goals\*:

- Climate neutrality in own operations (energy and business travel)
- 100 percent renewable electricity use
- 5 percent lower energy consumption per subscription equivalent
- Engage with all suppliers to have a plan in place by 2022 to reach zero CO<sub>2</sub> by 2030, including their suppliers
- Significant increase in re-use of customer and network equipment
- Comprehensive green offerings in all markets

*\* Base year 2018*

In December 2020, [the Company announced Science Based Targets](#) to be reached by 2025. The SBTs, which cover the full value chain (scopes 1-3), are based on the 1.5° C-aligned ICT industry sector pathway.

### 2025 Science Based Targets\*:

- Halve emission from own operations (scopes 1+2)
- Reduce the emissions related to use of sold and leased products by 29 percent
- Engaged with suppliers so that 72 percent of suppliers by emissions will have set science-based targets

*\* Base year 2018*

Reaching the goals requires working across the value chain to promote rapid transformation. The Company is committed to collaborate and co-create with suppliers, customers and other partners and to be transparent about achievements and learnings along the way.

Telia Company sees green financing instruments as important tools to support the realization of its environmental goals. The general development of sustainable finance is of great interest and the company aims to expand its sustainable funding activities going forward with the aim of being acknowledged as a sustainable credit.

More information is available at [Telia Company's website](#).

## 2. Summary of the Green Bond Framework

In October 2019, Telia Company published its Green Bond Framework and stated its intention to fund investment needs associated with its environmental goals via Green Bonds going forward. The Framework has been prepared in line with the four pillars of the 2018 Green Bond Principles administered by ICMA. It received an independent second party opinion from Sustainalytics, stating that the Framework is credible, impactful and aligns with the four core components of the Green Bond Principles 2018.

### 2.1 Use of Proceeds categories

The Framework defines the following four categories as eligible green projects:

#### 1. Renewable Energy

Investments in the development, construction, maintenance and/or operation of facilities, equipment or systems that generate or transmit renewable energy (wind or solar).

#### 2. Green Digital Solutions

Research, development and deployment of systems, products and technology that increase energy efficiency and/or mitigate greenhouse gas (GHG) emissions of Telia Company's customers and/or network users, such as:

- 5G or other high-speed mobile networks
- Internet of Things ("IoT") products and solutions
- Data analytics products and solutions
- Cloud products and solutions

#### 3. Energy Efficiency

Replacement and upgrade of network equipment and network technology for the purpose of increasing energy efficiency, such as:

- Fiber and high-speed mobile networks to replace copper-based telephony networks
- More energy-efficient network equipment or cooling solutions
- Consolidation and/or optimization of technical sites etc. for the purpose of increasing energy efficiency, reducing the need for fossil-fueled back-up power and/or reducing the overall physical network footprint

#### 4. Green Buildings

Development, acquisition, leasing and/or renovation of properties that have or will receive a design stage certification, post-construction certification and/or in-use certification in any of the following building certification schemes at the defined level or better:

- BREEAM "Excellent"
- LEED "Gold"
- National and/or international standards of an equivalent scope and level

## 2.2 Contribution to the UN SDGs

According to the Second Party Opinion, the green bond framework advances the following SDG goals and targets:

<b>Use of Proceeds Category</b>	<b>SDG</b>	<b>SDG target</b>
Renewable Energy, Energy Efficiency	7. Affordable and Clean Energy	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
Green Digital Solutions	9. Industry, Innovation and Infrastructure	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
Green Buildings	11. Sustainable Cities and Communities	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

## 2.3 Project selection and evaluation

The Framework states that funds can be allocated to new projects, or to refinance projects financed two years preceding the issue date of the Green Bond(s). The project selection and evaluation process are led by a Green Bond Committee comprised of representatives from the Treasury, Strategy, Technology, Innovation and Sustainability teams. The committee has met on several occasions during 2020 to discuss and decide on topics such as capex categorization and approval and reporting.

### 3. Green Bond transactions in 2020

	<b>Green Hybrid EUR 500M 61.25NC6.25</b>	<b>Green SEK 750M 1.125% 5-year bond</b>
<b>ISSUER</b>	Telia Company AB (publ)	Telia Company AB (publ)
<b>ISSUER RATING</b>	Baa1 / BBB+ (both stable) by Moody's / S&P	Baa1 / BBB+ (both stable) by Moody's / S&P
<b>TYPE OF DEBT</b>	Subordinated Fixed Rate Reset 6.25-year Non-Call Capital Securities due 2081	Senior Unsecured
<b>DOCUMENTATION</b>	Standalone Prospectus	EMTN Programme
<b>CURRENCY</b>	EUR	SEK
<b>ISSUE TYPE</b>	Fixed rate until the First Reset Date, payable annually in arrears	Fixed Rate
<b>PRINCIPAL AMOUNT</b>	EUR 500,000,000	SEK 750,000,000
<b>PRICING DATE</b>	4 February 2020	2 June 2020
<b>SETTLEMENT DATE</b>	11 February 2020	10 June 2020
<b>MATURITY</b>	11 May 2081	10 June 2025
<b>COUPON</b>	1.375% Fixed rate until the First Reset Date	1.125%
<b>USE OF PROCEEDS</b>	In accordance with the Issuer's Green Bond Framework	In accordance with the Issuer's Green Bond Framework
<b>SECOND PARTY OPINION</b>	Sustainalytics	Sustainalytics
<b>ISIN CODE</b>	XS2082429890	XS2187605030
<b>LISTING</b>	Luxembourg Stock Exchange	Luxembourg Stock Exchange

#### 3.1 Allocation of proceeds

##### Green Hybrid EUR 500 million

<b>Use of Proceeds category</b>	<b>Allocation (EUR million)</b>	<b>Refinancing (%)</b>
Energy Efficiency	486	70
Green Digital Solutions	14	49

##### Green Bond SEK 750 million

<b>Use of Proceeds category</b>	<b>Allocation (SEK million)</b>	<b>Refinancing (%)</b>
Energy Efficiency	750	100

#### Summary of allocation:

- 100 percent of the proceeds from both bonds are allocated.
- 97 percent is allocated to Energy efficiency, 3 percent to Green Digital Solutions.
- 100 percent of the allocation is considered capex.
- Refinancing is defined as capex spent during 2018-2019, new financing is defined as capex spent during 2020.
- Currency conversion is made based on yearly average EUR/SEK-rates from Bloomberg as specified in the appendix.

**Energy Efficiency** proceeds, EUR 556 million in total, have been allocated to fiber investments in Sweden. These investment represent 96 percent of the total fiber capex in Sweden during the period.

**Green Digital Solutions** proceeds, EUR 14 million in total, have been allocated to the following systems, products and technology that either directly enable customers to increase energy efficiency and/or reduce greenhouse gas emissions, or enable the delivery of such services:

- Connectivity: EUR 4 million
- IoT platforms: EUR 5 million
- Smart transportation: EUR 2 million
- Data/crowd insights: EUR 3 million

## 4. Impact reporting

This is Telia Company's first Green Bond impact report. The report provides details on the Green Bond investments as well as actual or estimated environmental impact based on available data. More information about definitions, assumptions and calculations can be found in the appendix.

### 4.1 Energy Efficiency: Network transformation through fiber development in Sweden

As part of its network transformation program, Telia Company has invested extensively into fiber deployment in Sweden to bring high-speed, reliable internet connections both to commercial and residential areas. The fiber network primarily replaces the legacy copper based (PSTN) network which is still used for both telephony and broadband. Fiber access is a prerequisite for development of high-speed mobile networks, 5G in particular, which are vital to the further digitalization of critical societal functions like healthcare.

The transformation to fiber brings significant environmental benefits:

- **Lower total electricity consumption despite capacity increase**

The network transformation, of which fiber development is a critical part, has drastically increased the fixed and core network capacity. Between 2018 and 2020, fixed and core network traffic has grown by approximately 25-30 percent per year. Despite this increase, total electricity consumption has remained and is projected to remain relatively flat in Telia Sweden. According to own research, approximately 25 percent of the total electricity consumption of Telia Company's operations in Sweden will be saved when the copper-based network is decommissioned.

- **More energy-efficient data transfer**

Based on own estimations, fiber-based broadband is more than 15 times more energy-efficient per unit of data transferred than copper-based broadband.

- **Lower supply chain GHG emissions**

The copper-based network requires extensive maintenance, which generates supply chain (scope 3) GHG emissions from travel and logistics from contractors. Therefore, as an indirect

positive environmental effect (not specified in the Green Bond Framework), decommissioning the copper-based network including the extensive network of telephone poles also helps reduce total value chain GHG emissions.

**Impact data: Energy efficiency**

KPI	Unit	2020	2019	2018
Electricity consumption, fixed and core network <sup>1</sup>	GWh	196	207	227
Data volume trend, fixed and core network <sup>2</sup>	Index	161	127	100
Electricity consumption intensity, fixed and core network <sup>3</sup>	kWh per subscription equivalent	33.9	35.5	36.9
Electricity savings from copper network shutdown, cumulative <sup>4</sup>	GWh	61	29	10
GHG emissions avoided from copper network shutdown, cumulative <sup>4,5</sup>	Tons CO <sub>2</sub> e	20,991	11,129	3,949
<b><u>500 MEUR Hybrid:</u></b> GHG emissions avoided, cumulative <sup>4,5</sup>	Tons CO <sub>2</sub> e avoided per EUR million investment	38.29		
<b><u>750 MSEK Hybrid:</u></b> GHG emissions avoided, cumulative <sup>4,5,6</sup>	Tons CO <sub>2</sub> e avoided per EUR million investment	33.87		

<sup>1</sup> Total electricity consumption by Telia Sweden in order to operate PSTN services including VoIP, broadband services (copper and fiber) and landline network. Jan 2018-Nov 2020.

<sup>2</sup> Yearly change in the data volume transmitted in the fixed and core network for Telia Sweden.

<sup>3</sup> VoIP, broadband services (copper and fiber), landline network communications services, fixed and mobile core network and datacenter operations for Telia Sweden. Jan 2018-Nov 2020.

<sup>4</sup> Figures have been adjusted based on the share of capex financed by green bond proceeds compared to total fiber capex investments. Copper networks are typically shut down throughout the year, whereby the full annual energy saving does not materialize until the following year. For reporting purposes, and in order to simplify, the estimated annual energy savings are recognized in the year the copper network is shut down.

<sup>5</sup> GHG emissions from electricity consumption are reported as location-based. Telia Company's operations in Sweden use 100 percent renewable electricity meaning there are zero market-based GHG emissions from electricity consumption.

<sup>6</sup> Equivalent to 3.20 tons CO<sub>2</sub>e per SEK million investment by using the 2019 Bloomberg FX conversion rate as specified in the Appendix.



#### 4.2 Green Digital Solutions: IoT solutions reducing customers' environmental impact

Digital solutions such as remote meetings, IoT services and crowd analytics have the potential of helping customers reduce their energy consumption, thereby enabling the reduction of GHG emissions. Such savings come in two forms:

##### Efficiency gains



##### Substitution



- **Efficiency gains:** energy savings and GHG emissions avoided through efficiency gains such as connected vehicles providing driver feedback for more fuel-efficient driving or connected sensors adjusting heating and lighting for lower energy consumption.
- **Substitution:** energy savings and GHG emissions avoided through substitution includes remote meetings replacing physical meetings leading to less travel.

In 2020, Telia Company developed a calculation model together with UK-based consultancy Carbon Trust, to quantify the GHG emissions reductions and energy savings that Telia Company enables through certain products and services. Read more about the model and Telia Company's total 2020 GHG emissions and energy enablement in the forthcoming 2020 Annual & Sustainability Report. While the calculation model allows us to report enabling effects, Telia Company is unable to specifically quantify the GHG emission reductions or energy savings of the Green Bond investments related to Green Digital Solutions.

Proceeds from the green bond have been allocated to the below capex areas. The investments contributed directly to customers' energy savings and avoided GHG emissions, or indirectly by enabling delivery of these services.

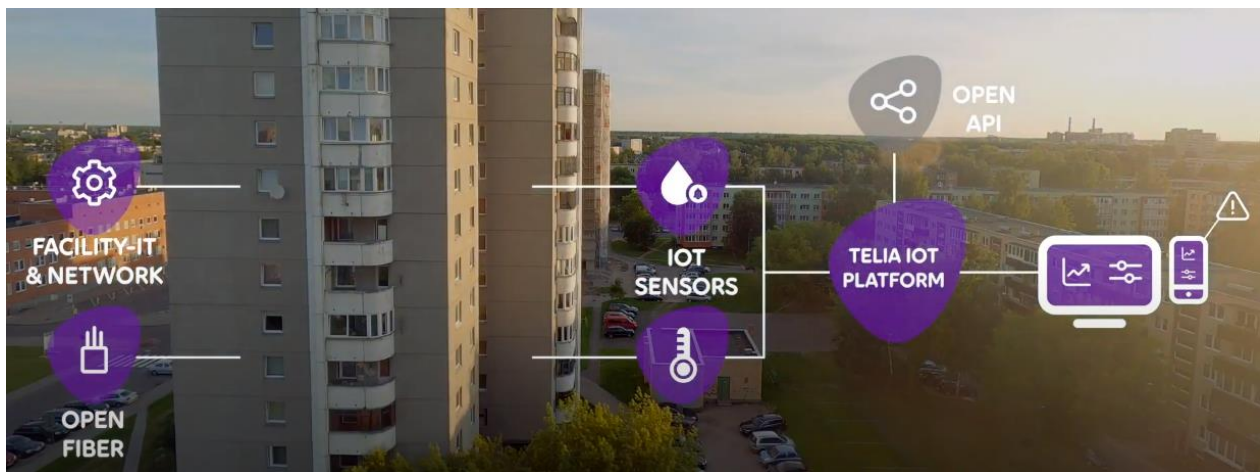
- [Connectivity](#), enabling data transfer between IoT devices using technology like Narrowband IoT (NB-IoT) or LTE-M.
- [IoT platforms](#), enabling collection and analysis of data from e.g. sensors.
- [Smart transportation](#), services for connected vehicles such as driver feedback and route planning.
- [Crowd insights](#), where large amounts of anonymized mobile network data is analyzed to for example predict movement patterns.

Below are customer cases highlighting the enabling effects of some of the above services. More cases are available on [Telia Company's website](#).

## Telia IoT Platform - Smart Buildings

Based on the Telia IoT Platform, [Telia Smart Buildings](#) lets the customer consolidate data from a building's systems onto one screen. Systems such as heating, ventilation and air-conditioning can be fine-tuned in real time. This not only enables a reduction in energy costs and GHG emissions footprint but also helps to deliver a better experience for the occupants of a building.

To streamline property management and provide a better experience for tenants, Rikshem, one of Sweden's largest real estate owners, is [digitalizing its buildings with connectivity and a new set of digitalization tools](#) from Telia Company. To provide better and more proactive services to its tenants, Rikshem is connecting all of their 30,000 apartments with sensors to monitor temperature and humidity. The data from these will be collected via the Telia IoT Platform and will give Rikshem dashboards and data for monitoring and insight.



## Smart transportation and Crowd insights – connected buses

Telia Company's [Smart Public Transport](#) is a comprehensive solution that delivers a range of onboard services that help transport operators become more efficient, profitable and sustainable. Services include, for example, eco-driving, vehicle climate management and positioning.

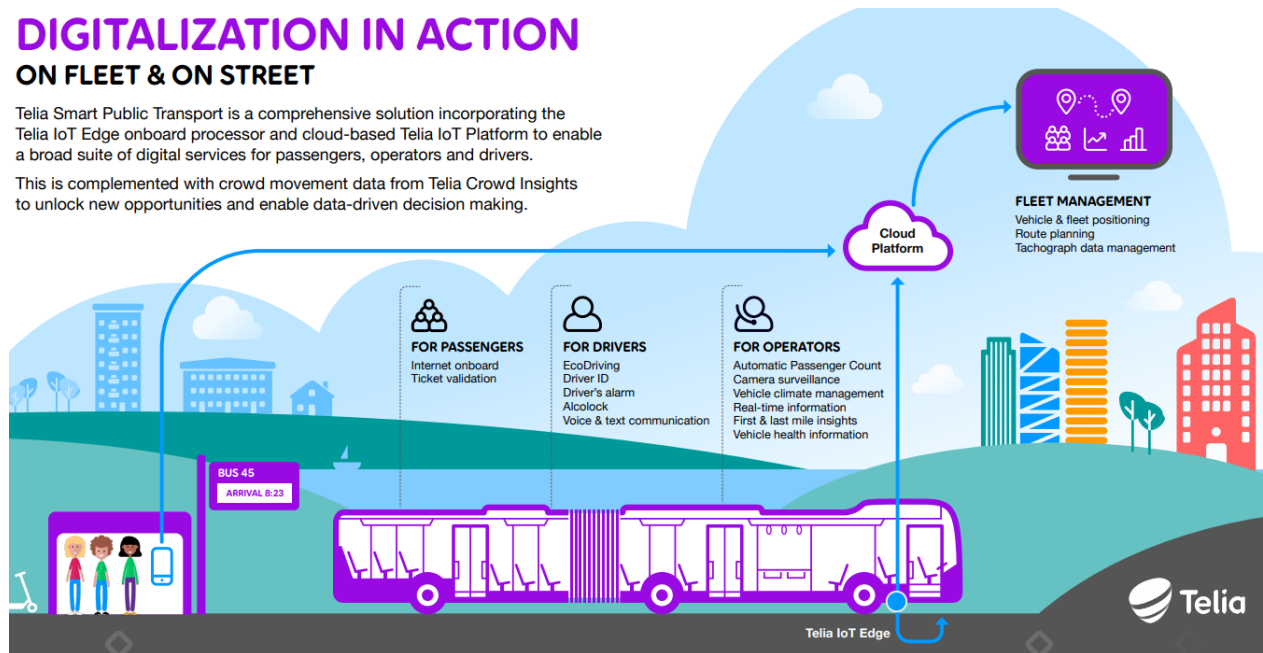
Nordic public transportation leader Nobina has connected over 3,000 buses in Sweden using Telia's solution. What started out already in 2010 with basic metrics such as fuel consumption and positioning has grown to include more advanced services such as real-time eco-driving feedback to the driver and smart depot heating and real-time fleet management information to manage the overall logistics. [As described in the Nobina case, the eco-driving service alone can deliver fuel savings of up to 15 percent.](#)

Smart Public Transport can be combined with Telia Company's [Crowd Insights](#) service to give operators an ever better view of the big picture - data can be visualized to show from which towns commuters start their journey, all the way down to the way to how commuters move within stations. User data is fully anonymized and cannot be traced to individuals.

## DIGITALIZATION IN ACTION ON FLEET & ON STREET

Telia Smart Public Transport is a comprehensive solution incorporating the Telia IoT Edge onboard processor and cloud-based Telia IoT Platform to enable a broad suite of digital services for passengers, operators and drivers.

This is complemented with crowd movement data from Telia Crowd Insights to unlock new opportunities and enable data-driven decision making.



Solna 4 February 2021

Telia Company AB

.....  
Per Christian Mørland  
Chief Financial Officer

.....  
Sara Nordbrand  
Head of Group Sustainability

## Appendix

### Estimations and adjustments

#### 2020 data - electricity consumption, data volume and subscriptions

As actual figures on electricity consumption, data volume and subscriptions were not available for December 2020 at the time of issuing this report, 2020 figures are based on data from December 2019 to November 2020. This should have no material impact.

#### Electricity savings from copper network shutdown

The electricity savings from copper network shutdown is based on the effect from closing down PSTN and xDSL-ports. Most of the reported energy savings are measured in Watts before and after closing the equipment. The remaining part are made as an estimation based on known average power consumption for specific equipment.

#### More energy-efficient data transfer

Based on own estimations, fiber-based broadband is more than 15 times more energy-efficient per unit of data transferred than copper-based broadband. The estimation is based on maximum transfer speeds for fiber and copper-based broadband, respectively, and assuming that delivery of these services has approximately the same electricity consumption.

### Definitions

#### Subscription equivalent

A broadband, mobile, IPTV, fixed and M2M subscription which has been adjusted to account for the energy intensity of delivering the product. Subscription numbers are taken from the operational data published as part of Telia Company's quarterly reports and slightly adjusted for some subscription categories that are not specified in those published figures.

### Conversion factors

#### GHG emission factors

Avoided GHG emissions from investments in Energy efficiency have been calculated using the "Combined Margin" emission factors as recommended in the Nordic Public Sector Issuers' [Position Paper on Green Bonds Impact Reporting 2020](#). This emission factor corresponds to the geographic area of EU25, the UK and Norway."

- 2018: 380 g CO<sub>2</sub>e/kWh
- 2019: 380 g CO<sub>2</sub>e/kWh
- 2020: 315 g CO<sub>2</sub>e/kWh

#### FX conversion rates

FX conversions have been made using Bloomberg annual averages for EUR/SEK:

- 2018: 10.2596
- 2019: 10.5846
- 2020: 10.4865

## Limited Assurance Report from the independent auditor

To Telia Company AB,  
corporate identity number 556103-4249

### *Introduction*

We have been engaged by Telia Company AB to undertake a limited assurance engagement of the Green Bond Impact reporting as of 31 December 2020 as set out in this document ("the Reporting").

### *Responsibilities of Telia Company AB Management*

Telia Company AB Management is responsible for the preparation of the Reporting in accordance with the applicable criteria, as explained in the Telia Company Green Bond Framework 2019 (available at

<http://www.teliacompany.com/en/investors/debt-financing/>) as well as the accounting and calculation principles that the Company has developed. This responsibility also includes the internal control relevant to the preparation of the Reporting that is free from material misstatements, whether due to fraud or error.

### *Responsibilities of the auditor*

Our responsibility is to express a conclusion on the Reporting based on the limited assurance procedures we have performed. Our engagement is limited to historical information presented and does therefore not cover future-oriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Reporting, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with International Standards on Auditing and other generally accepted auditing standards in Sweden.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of Telia Company AB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The procedures performed consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement.

Accordingly, the conclusion of the procedures performed do not express a reasonable assurance conclusion.

Our procedures are based on the criteria defined by Telia Company AB Management as described above. We consider these criteria suitable for the preparation of the Reporting.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

### *Conclusion*

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Green Bond Impact reporting as of 31 December as set out in this document, is not prepared, in all material respects, in accordance with the applicable criteria, as explained in the Telia Company Green Bond Framework 2019.

Stockholm 4 February 2021

Deloitte AB

Jan Nilsson  
Authorized Public Accountant

Lennart Nordqvist  
Expert Member of FAR