

A scenic view of a lake and forest with solar panels in the foreground. The solar panels are dark blue and arranged in rows on a roof. The background shows a large body of water surrounded by lush green trees under a clear blue sky. The overall atmosphere is bright and natural.

SEPTEMBER 2022

# Green Bond Investor Report

**caruna** | Positive energy.

# Table of Contents

1 Executive summary.....	3
2 Caruna in brief.....	4
3 Sustainability in Caruna .....	5
4 Green Finance Framework.....	6
5 Allocation of proceeds (assured).....	7
6 Impact report .....	8
6.1 Caruna's network and examples of specific projects .....	8
6.2 Impacts of the eligible project portfolios .....	8
6.2.1 High voltage investment projects.....	8
6.2.2 Medium and low voltage investment projects.....	9
6.2.3 Automated meters replacement investments.....	10
7 Independent Limited Assurance Report.....	11

# 1 Executive summary

Finland aims to be carbon-neutral by 2035 and requires the energy system transition - replacement of fossil energy sources by clean, renewable electricity, electrification of energy system and smart and flexible solutions to distribute, store and use energy. Caruna's updated mission is to help customers and the society through the energy system transition. Caruna has established a Green Finance Framework to help it accomplish its mission.

Caruna's Green Finance Framework has received a medium green shading from CICERO Shades of Green (a second opinion). Caruna's Green Finance Framework provides the basis for the allocation of proceeds and impact reporting.

In June 2021, Transmission Finance DAC has issued a EUR 300 million green bond under the company's Euro Medium Term Note (EMTN) programme on Euronext Dublin and in accordance with Caruna's Green Finance Framework. Caruna has borrowed the funds through IBLA, where Caruna Networks Oy is the borrower and Transmission Finance DAC is the lender.

Caruna has allocated EUR 305.2 million in 2017-2019 to various energy efficiency investments that will enable the energy system transition and therefore mitigate climate change as well as adapt to its impacts. Green bond proceeds were allocated to eligible project portfolios in city of Espoo and in Southern Finland, Southwest, Ostrobothnia, Northern and Western Finland.



## 2 Caruna in brief

Caruna is Finland's largest electricity distribution company with 20% market share of electricity distributed in Finland. Caruna Group includes two network companies operating under different circumstances: Caruna Oy, which operates mainly in rural areas, and Caruna Espoo Oy, which operates in urban areas. The total length of Caruna's electricity network was nearly 88,350 kilometres at the end of 2021. Caruna Networks Oy is the Group's parent company.

Caruna takes care of electricity distribution and is maintaining, repairing and building a weatherproof electricity network for more than 714,000 customers in South, Southwest and West Finland, the city of Joensuu and the regions of Koillismaa and Satakunta. Caruna's customers are consumer, corporate and municipal customers.

Caruna has continued its projects to improve the electricity network in our network areas. Caruna has

upgraded approximately 1,200 kilometres of the electricity network by building underground cables to make the network more weatherproof. The total investments were EUR 140,1 million in 2021.

In addition to the electricity grid, Caruna develops new innovative solution for electrifying society and adding flexibility to electricity system. These solutions can be electric transport, electricity generated by consumers, electronic services and ultra-fast network connection.

Finland aims to be carbon-neutral by 2035. It requires the energy system transition - replacement of fossil energy sources by clean, renewable electricity, electrification of the energy consumption and smart and flexible solutions to distribute, store and use energy. Caruna's updated its mission is to help customers and the society through the energy system transition.



### 3 Sustainability in Caruna

Sustainability is integrated to Caruna’s strategy and therefore, to all its operations. Caruna’s mission is to help its customers and the society through the energy transition. Caruna recognises the importance of all 17 UN Sustainable Development Goals but has a specific focus on six of them. Caruna’s electricity network is a part of critical infrastructure. Sustainable electricity distribution is a prerequisite for a functional society and a viable business sector. Caruna enables sustainable increase of renewable energy and helps the customers through the essential energy system disruption. Caruna is

committed to mitigate climate change by improving its carbon handprint and reducing its carbon footprint as well as to adapt to the impacts of climate change without compromising the security of supply. (SDG’s 7, 9, 11, 13) Caruna works with an extensive network of partners and generates wellbeing to all its interest groups. Caruna provides safe and motivating work environment to its employees and partners and ensures that their competences are up-to-date and develop together with the company. (SDG’s 4, 8)



## 4 Green Finance Framework

As part of Caruna's continued commitment to sustainability and to integrate its climate objectives to its financing, Caruna established a Green Finance Framework in June 2021. Energy system transition is necessary to meet ambitious climate targets. Caruna as an electricity distribution operator has an essential role in the society to enable climate change mitigation and adaptation activities.

The net proceeds of the Green Bonds are used to finance or re-finance Eligible Projects that are in accordance with the Green Finance Framework. Eligible Projects expand network capacity, upgrade the network, and add network smartness. This enables increase in variable renewable energy production and development of flexibility markets without compromising the security of supply.

CICERO has provided a Second-Party Opinion on the framework and rated Caruna's Green Finance Framework CICERO Medium Green. SEB acted as a sole advisor for Caruna's Green Finance Framework.

The Green Finance Framework and the Second-Party Opinion can be found in full at: [caruna.fi/en/financialinformation](https://caruna.fi/en/financialinformation).



## 5 Allocation of proceeds

The net proceeds of Caruna's Green Bond have been used to re-finance Eligible Projects during 2017-2019 that have been evaluated and selected by Caruna in accordance with the Green Finance Framework. The look-back period is five years, starting from the date of issuance.

The proceeds of EUR 300 million from the Green Bond have been allocated in accordance with the criteria and decision-making process for eligible projects defined by Caruna's Green Finance Framework. Caruna's Green Finance Committee (GFC) has evaluated and selected the eligible investments of EUR 305.2 million. The Green Finance Committee (GFC) is comprised of Sustainability Manager, Business Controller of Electricity Network Management and Operations function and Treasury Manager.

Investment projects have been divided into three categories: High voltage investment projects, Medium and low voltage investment projects and Automated meters replacement investments.

TABLE 1. ALLOCATION OF GREEN FINANCING FOR COMPLETED INVESTMENTS, EUR MILLION

ISIN	Bond type	Face value, EUR million	Coupon, %	Issue date	Maturity	Net proceeds, EUR million	Total allocated proceeds, EUR million	Unallocated proceeds, EUR million
XS2352405216	Senior	300.0	0.375	18 Jun 2021	18 Jun 2028	300.0	305.2	0

TABLE 2. ALLOCATION OF PROCEEDS, BY THE PROJECT PORTFOLIOS

ISIN	Bond	Project portfolio	2017, EUR million	2018, EUR million	2019, EUR million	Total allocation 2017-2019
XS2352405216	Green bond EUR 300 million, issued 2021	High-voltage ( $\geq 110$ kV) investment projects	11.0	11.2	11.6	33.9
		Medium and low voltage (0.4-20 kV) investment projects	106.9	78.2	80.6	265.8
		Automated meters replacement investments	2.1	1.0	2.4	5.5
<b>TOTAL</b>			<b>120.1</b>	<b>90.4</b>	<b>94.6</b>	<b>305.2</b>



# 6 Impact report

## 6.1 Caruna's network and examples of specific projects

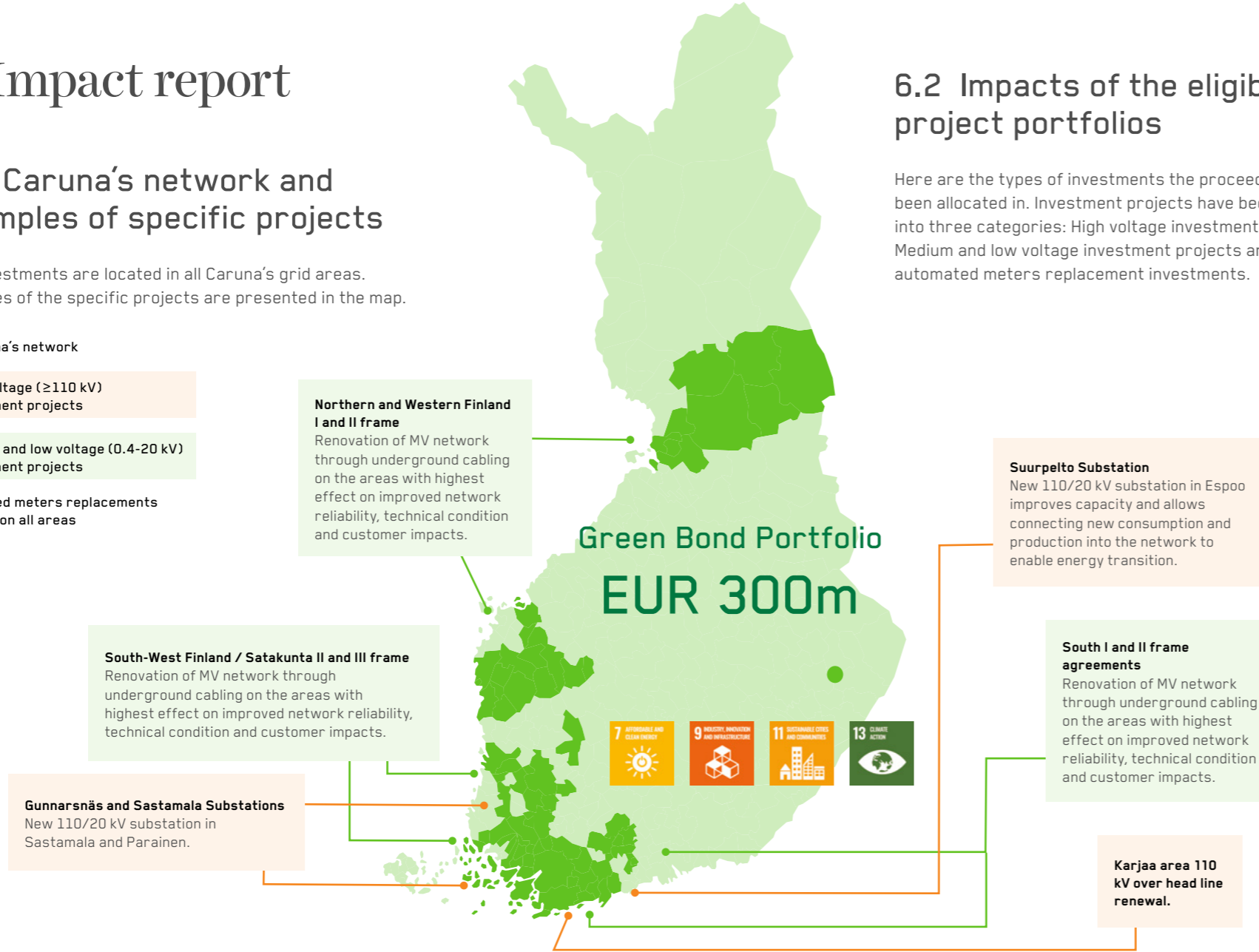
The investments are located in all Caruna's grid areas. Examples of the specific projects are presented in the map.

**Caruna's network**

High-voltage (≥110 kV) investment projects

Medium and low voltage (0.4-20 kV) investment projects

Automated meters replacements are done on all areas



## 6.2 Impacts of the eligible project portfolios

Here are the types of investments the proceeds have been allocated in. Investment projects have been divided into three categories: High voltage investment projects, Medium and low voltage investment projects and automated meters replacement investments.

### 6.2.1 High voltage investment projects

High-voltage electricity network projects increase load capacity in the network and enable energy transition: increase in fossil-free electricity production as well as a change in production structure as fossil energy sources are replaced by clean electricity. Projects can include e.g., windfarm connections, building new primary substations and high-voltage power lines.

Examples of the projects are the primary substation project Suurpelto and the high voltage underground cable project Kivenlahti. The projects are part of the strategic cooperation agreement with the City of Espoo and essential in expanding the load capacity to the area and therefore in enabling the transition from fossil-fueled heating technology to technologies based on electricity such as air-to-water heat pumps and electric boilers.



## 6.2.2 Medium and low voltage investment projects

Medium (20kV) and low voltage (0.4kV) projects are made to better ensure the reliability of electricity distribution and thus adapt into the climate change impacts such as storms, heatwaves, floods, and landslides. Caruna's network is upgraded by cabling, securing overhead lines by locating them to woodless areas and clearing trees for power line corridors, and by increasing network automation. The projects enable energy transition and development of flexibility markets by e.g., smart grid installations and adding remote controlled device. The projects also increase capacity directly or create possibilities to increase capacity later. They improve energy efficiency by decreasing relative electricity distribution losses.

In the projects located on dense or growing geographical areas, the remaining overhead lines are cabled underground or replaced with new overhead lines. The purpose is to develop a weatherproof distribution network and renew aging network assets to secure security of supply

and to meet the legal reliability requirements within 6 hours by the end of 2028 for Caruna Espoo Oy and 2036 for Caruna Oy. Joint construction with municipalities and telecom companies is preferred when possible.

In sparsely populated areas the target is to improve network resistance to weather conditions and to upgrade or replace the network in a cost-efficient way. Purpose is to meet the legal reliability requirements within 36 hours by the end of 2028 or 2036.

Part of the projects are initiated by municipalities. The purpose is to enable towns to develop and to meet their climate targets. Land use planning and city plans are important instruments to direct the inhabitants, business sector and other stakeholders to carbon-free energy consumption and energy efficient operations in the municipality.



## 6.2.3 Automated meters replacement investments

New automated meters enable the development of the flexibility market. New automated meters include more smart grid components which will increase the remote functioning and add possibilities to customers to monitor and direct their electricity consumption and chances to impact their electricity consumption habits.

TABLE 3. IMPACT INDICATORS

IMPACT INDICATOR	PROJECT PORTFOLIO	2017	2018	2019	TOTAL
Increase in network load capacity <sup>1)</sup> (MW)	Aggregated	41.0	45.0	117	203.0
Renewable production capacity, new HV connections to the grid <sup>2)</sup> (MW)	HV	78.0	0.0	25.9	103.9
Renewable production capacity, new MV and LV connections to the grid <sup>3)</sup> (MW)	MV/LV	41.0	12.8	53.1	106.9
Network length, new underground cables <sup>4)</sup> (km)	MV/LV	6,200	6,300	3,800	16,300
Cabling rate <sup>5)</sup> (%)	MV/LV	45	52	56	56
Automated meter investments <sup>6)</sup> (amount)	AMM	14,452	14,689	15,429	44,570
Energy efficiency impacts of the network renewal <sup>7)</sup>	MV/LV	1.0	1.6	2.0	4.6

1) Increase in network load capacity (MW), based on primary and secondary transformer capacities. 2) Renewable production capacity, new high voltage ( $\geq 110$  kV) connections to the grid (MW). 3) Renewable production capacity, new medium and low voltage (0,4-20kV) connections to the grid (MW). 4) Increase in underground cabling (km), medium and low voltage levels. 5) Total underground cabling rate (%), medium and low voltage levels. 6) Number of new and replaced automated meters. 7) Energy efficiency improvements (GWh), based on dismantled and invested network and transformer amounts.



## 7 Independent Limited Assurance Report

### Scope of engagement

Deloitte Oy ("Deloitte") has been engaged by the management of Caruna Networks Oy ("Caruna"), to provide a limited assurance statement in relation to information set out in the table "Allocation of proceeds, by the project portfolios" in the report "Green Bond Investor Report September 2022" ("Investor Letter"). The reporting criteria against which it was assessed are described in section 5 "External Review" included in the Caruna Green Finance Framework. The scope of our work was limited to conclude whether as:

- the Green Bond's net proceeds have been allocated to the Eligible Projects as communicated in the table "Allocation of proceeds, by the project portfolios" line "Total" in the Investor Letter and
- the Eligible Projects comply with the criteria as communicated in Caruna's Green Finance Framework, chapter "1. Use of Proceeds".

### Responsibilities of the Group Management

The management of Caruna is responsible for:

- ensuring that the Use of Proceeds follows the Caruna's Green Finance Framework;
- ensuring that the project evaluation and selection, management of proceeds and reporting described in the Investor Letter are in accordance with the purpose defined within the Caruna's Green Finance Framework and
- establishing appropriate internal controls relevant for the collection, preparation and presentation of the Reporting to ensure that it is free from material misstatements, whether due to fraud or error.



## Responsibilities of Deloitte

Our role is to provide a limited assurance statement in relation to the information set out in the table "Allocation of proceeds, by the project portfolios" in the Investor Letter to conclude whether as:

- the Green Bond's net proceeds have been allocated to the Eligible Projects as communicated in the table "Allocation of proceeds, by the project portfolios" line "Total" in the Investor Letter and
- the Eligible Projects comply with the criteria as communicated in Caruna's Green Finance Framework, chapter "1. Use of Proceeds".

Our Assurance does not extend to any other information included in the Investor Letter. We have not reviewed and do not provide any assurance over the other financial information for the individual projects included in the table "Allocation of proceeds, by the project portfolios". Deloitte will have no responsibility for, nor will have matters to report on

- challenging the eligibility of Applicable Criteria,
- forming an opinion on the effectiveness and performance of the Caruna Green Finance Framework,
- forming an opinion of the Caruna Green Finance Framework alignment to the requirements of the Green Bond Principles nor
- forming an opinion of the use of the funds allocated to Eligible Projects after the funds have been allocated.

## Basis of work

We have conducted our limited assurance engagement in accordance with the International Standard of Assurance Engagement (ISAE) 3000 Revised, Assurance Engagement Other Than Audits or Review of Historic Financial Information. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Investor letter 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 IAASB's Standards on Auditing and other generally accepted auditing standards in Finland.

The firm applies ISQC 1 (International Standards on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with the ethical requirements, professional standards and applicable legal and regulatory requirements.

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

## Our independence

We have complied with Deloitte's independence policies which address and, in certain cases, exceed the requirements of the Code of Ethics for professional accountants issued by the International Ethics Standards Board for Accountants. We have maintained our independence and objectivity throughout the year, and there were no events or prohibited services provided, which could impair our independence and objectivity.

## Conclusions

Subject to the limitations of our work, nothing has come to our attention that causes us to believe that the Green Bond's net proceeds have not been allocated to the Eligible Projects as communicated in the table "Allocation of proceeds, by the project portfolios" line "Total" in the Investor Letter and that the Eligible Projects do not comply with criteria as communicated in Caruna's Green Finance Framework, chapter "1. Use of Proceeds".

**Helsinki, September 6, 2022**

**Deloitte Oy**

Reeta Virolainen

Authorized Public Accountant

