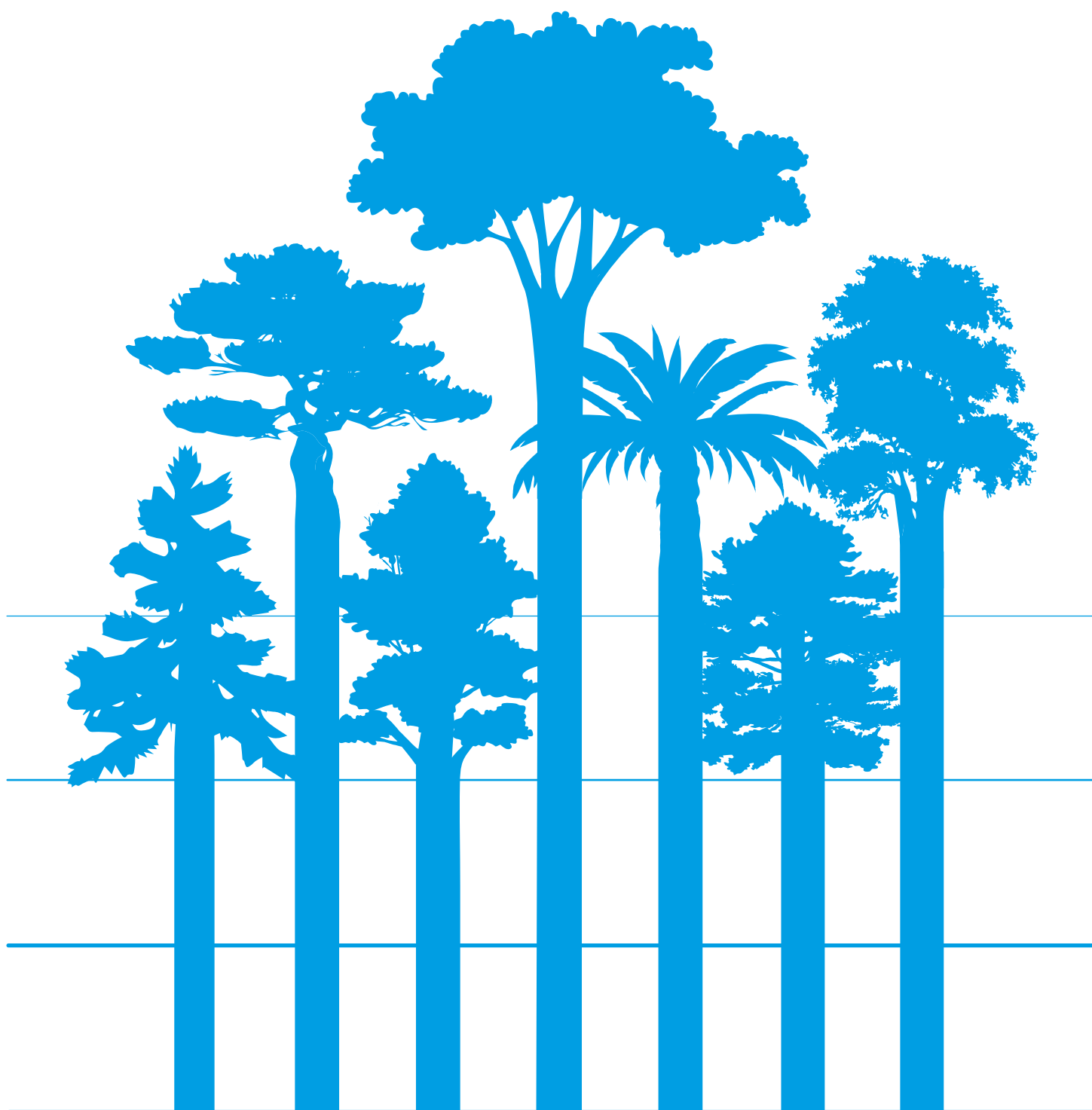


Green Bond Report 2024

Issuances 2022-2024



a2a
LIFE COMPANY

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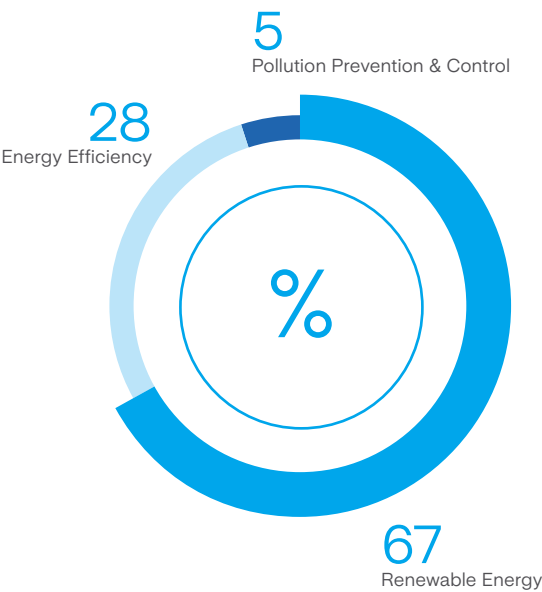
Green Bonds Details

ISIN code	Face value, M€	Tenor, years	Issue date	Maturity	Total Net proceeds, M€	Total allocated net proceeds, M€	% of Total Net proceeds	Net proceeds allocated in 2024, M€	Mid Swap (%)	Landing Spread (bps)	Re-offer Yield (%)	Coupon (%)	Issue Price (%)
XS2491189408	600	4	15/06/2022	15/06/2026	597	597	24%	125	1.682	93	2.612	2.500	99.580
XS2534976886	650	8	19/09/2022	19/09/2030	647	647	26%	308	2.399	215	4.549	4.500	99.677
XS2583205906	500	11	03/02/2023	03/02/2034	493	257	10%	257	2.843	167	4.513	4.375	98.824
XS2830327446	750	-	11/06/2024	Perpetual (PNC5.25) ¹	742	197	8%	197	Interpolated mid swap rate: 2.867 ²	255.8	5.125	5.000	99.460
Total	2,500				2,479	1,698	68%	887					

Allocation Summary

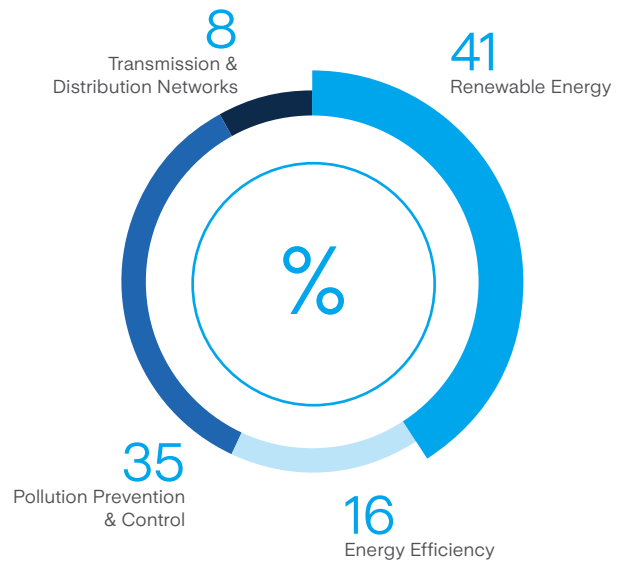
Green Bond XS2491189408

Use of Proceeds Categories	Amount, M€
Renewable Energy	84
Energy Efficiency	35
Pollution Prevention & Control	6
Total	125



Green Bond XS2534976886

Use of Proceeds Categories	Amount, M€
Renewable Energy	127
Energy Efficiency	50
Pollution Prevention & Control	106
Transmission & Distribution Networks	25
Total	308

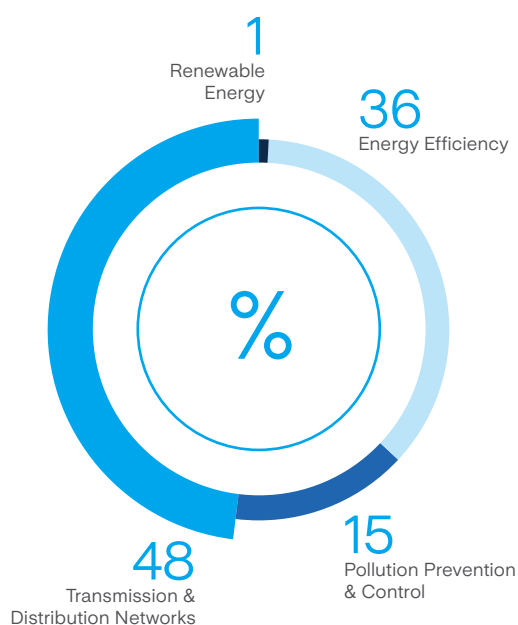


¹ Note callable on First Call Date at 11/06/2029

² 5 year mid-swap rate: 2.880% and 6 year mid-swap rate: 2.831%

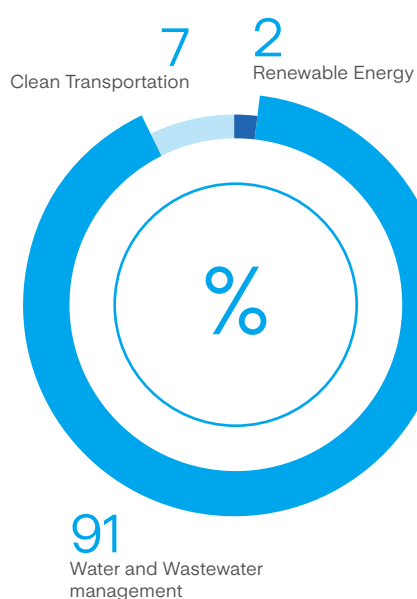
Green Bond XS2583205906

Use of Proceeds Categories	Amount, M€
Renewable Energy	1.6
Energy Efficiency	93
Pollution Prevention & Control	38
Transmission & Distribution Networks	124
Total	257

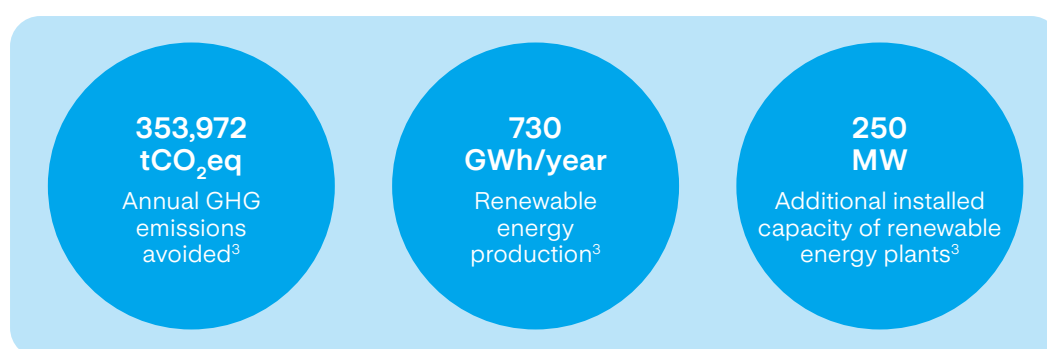


Green Bond XS2830327446

Use of Proceeds Categories	Amount, M€
Renewable Energy	4
Water and Wastewater management	180
Clean Transportation	13
Total	197


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Main Impact KPIs



³ The KPI value refers to the sum of both 2023 and expected data and includes only project specific KPIs.

A2A's Path in Sustainable Finance

Sustainable Finance Framework

Sustainable Finance is one of the main enabling levers of A2A's Strategic Plan 2024-2035.

To reinforce the link between the Group's financial and sustainable strategy, A2A has developed in May 2021 a new Sustainable Finance Framework (SFF), following its first Green Financing Framework published in July 2019. The Framework was then updated in 2022 and recently, in July 2024⁴.

A2A's SFF is fully aligned with ICMA and LMA's latest principles and combines both Green and Sustainability-Linked approaches. Under this

Framework, in fact, A2A is able to issue Use of Proceeds or KPI-linked instruments, such as bonds, loans, project financings and/or any other financing instrument.

The combined use of Green Bonds and Sustainability-Linked Bonds shows the holistic nature of A2A as issuer, ensuring to the investors: on one hand, the transparency to better allocate their funds and measure their contribution to climate change adaption and mitigation through an identifiable use of proceeds; on the other hand, the strong engagement of A2A in ESG management at corporate level.

**S&P Global
Ratings**

Standard & Poor's has issued a Second Party Opinion (SPO) confirming the solidity of the Sustainable Finance Framework, attesting its alignment with the ICMA and LMA principles. For the Use-of-Proceeds section, the agency has also assigned a "Medium Green" shading on a scale from "Red" to "Dark Green".

The SFF covers the following six Green Eligible Project categories contributing to several Sustainable Development Goals (SDGs):

Green Eligible Project Categories and Related SDGs

Category	SDG	Category	SDG
 Renewable Energy	 	 Water and Wastewater Management	 
 Energy Efficiency	  	 Pollution Prevention and Control	  
 Transmission and Distribution Networks	  	 Clean Transportation	  

⁴ The SFF is available on A2A's website: [Sustainable finance programme | A2A \(gruppoa2a.it\)](https://www.a2a.it/en/sustainable-finance-programme)

Latest Relevant Transactions

Recently A2A structured the following main sustainable finance transactions:

March 2022	The second Sustainability-Linked Bond, after the inaugural one of July 2021, with a size of 500 million euro, maturity 6 years and linked to the achievement of 2024 target of Renewable Energy Installed Capacity.
June 2022	- The third Green Bond with a size of 600 million euro and 4-year maturity, whose proceeds, on the same line of the Green Bond issued in October 2021, will be used to finance Eligible Green Projects aligned to EU Taxonomy Regulation. - The new Sustainability-Linked RCF of 410 million euro and 5-year maturity targeting Social & Governance KPIs and including a donation mechanism with Banco dell'Energia.
July 2022	The civil and general liability insurance policy linked to Social targets.
September 2022	The fourth Green Bond for 650 million euro and 8-year maturity, whose proceeds will be used to finance Green Projects aligned to EU Taxonomy.
January 2023	The fifth Green Bond for 500 million euro and 11-year maturity, whose proceeds will be used to finance Green Projects eligible to EU Taxonomy.
December 2023	The Green Loan for 200 million euro from EIB to support A2A's electrification works and to promote renewable energy use.
June 2024	The first Green Hybrid Bond for 750 million euro. The net proceeds from the issuance will be used to finance and/or refinance strategic projects in the fields of circular economy and energy transition: the so-called Eligible Green Projects mainly related to renewable energy, transmission and distribution networks, water cycle and pollution prevention and control, as defined in A2A's Sustainable Finance Framework.
July 2024	The Green Loan for 600 million euro to support the transaction for acquiring the electricity networks in a number of areas of Lombardy, in the provinces of Milan and Brescia.

Sustainable Finance Framework

Latest Relevant Transactions

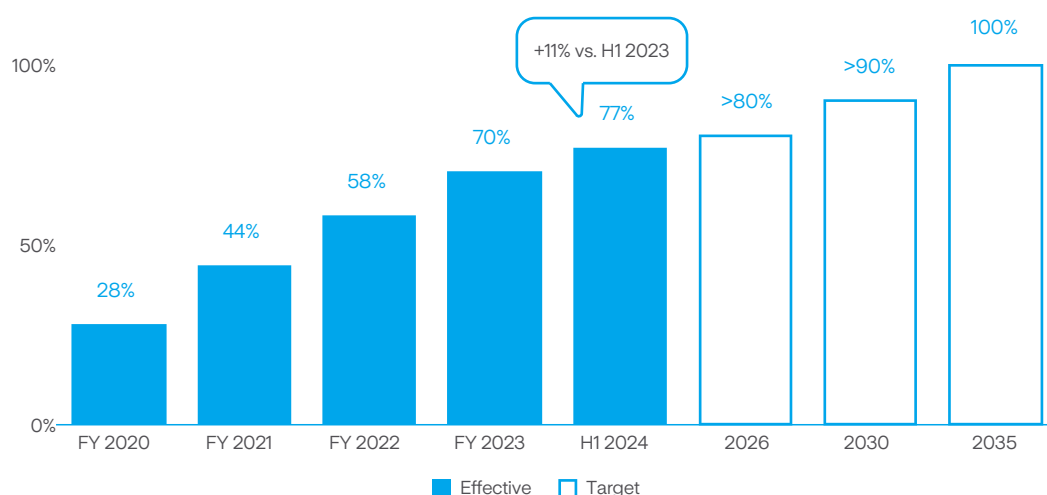
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Thanks to the actions taken during the last years, A2A's share of sustainable debt has reached 77% of total debt as of 30 June 2024. The A2A's Strategic Plan envisages even more ambitious targets: over 90% of the sustainable debt by 2030 and 100% of the sustainable debt by 2035.



Allocation Reporting

A2A's Green Bonds Summary

A2A has issued the following six bonds in a green format:

A2A's Green Bonds Summary

ISIN code	Face value, M€	Tenor, years	Issue date	Maturity	Total Net proceeds, M€	Total allocated net proceeds, M€	Net proceeds allocated in 2024, M€	Not allocated net proceeds, M€
XS2026150313	400	10	16/07/2019	16/07/2029	394	394	0	Fully allocated
XS2403533263	500	12	02/11/2021	02/11/2033	495	495	0	Fully allocated
XS2491189408	600	4	15/06/2022	15/06/2026	597	597	125	Fully allocated
XS2534976886	650	8	19/09/2022	19/09/2030	647	647	308	Fully allocated
XS2583205906	500	11	03/02/2023	03/02/2034	493	257	257	236
XS2830327446	750	Perpetual (PNC5.25)	11/06/2024	-	742	197	197	545
Total	3,400				3,368	2,587	887	781

In the previous years, A2A already fully allocated the first two Green Bonds of 2019 and 2021 and partially allocated the two Green Bonds of 2022⁵. This report is providing the details on the allocation of:

- the two Green Bonds issued in 2022 (to fully complete the allocation)
- the Green Bond issued in 2023 (partial allocation) and
- the Green Hybrid Bond issued in 2024 (partial allocation).

Pending the allocation of the net proceeds and in line with its Sustainable Finance Framework, A2A invests the balance of the net unallocated proceeds in cash and/ or cash equivalents and/or other liquid marketable instruments which will not include GHG intensive activities as per the company's financial policy.



⁵ The details of the Green Bonds allocation are available in "Sustainable Financing" section of A2A's website here: [Sustainable finance programme | A2A \(gruppoa2a.it\)](#)

Green Bonds Allocation 2024 by project

Here below the details of each Bond allocation with indication of the related EU Taxonomy activities and the alignment percentage for each project/activity. The details of the related Taxonomy alignment analysis are reported further in this document.

Green Bond XS2491189408 EUR 600 m issued in 2022

Project	Total, M€	Amount 2022, M€	Amount 2023, M€	EU Taxonomy Activity	% EU Taxonomy Alignment
Renewable Energy	84	28	56		
Mazara	3	0	3	4.1	100%
Cerveteri	1	0	1	4.1	100%
Ciampino	2	0	2	4.1	100%
Juwi	5	0	5	4.1	100%
Other Minor Solar	7	0	7	4.1	100%
Matarocco	23	0	23	4.3	100%
Other Minor Wind	2	0	2	4.3	100%
Storage Famagosta	1	0	1	4.11	100%
Corteolona Sludge Plant	5	0	5	5.6	100%
Lacchiarella OFMSW Plant	16	15	1	5.7	100%
Cavaglià OFMSW Plant	14	13	1	5.7	100%
Opex	3	0	3	4.1	100%
Energy Efficiency	35	2	33		
AES Solar Panels	4	0	4	4.1	100%
Energy Efficiency Services	6	2	4	7.3, 7.5, 7.6	100%
Heat Energy Efficiency	14	0	14	7.3	100%
Public Lighting	10	0	10	7.3	100%
Heat Pumps	0.7	0	0.6	4.16	100%
Pollution Prevention & Control	6	0	6		
Bedizzole Plant	0.6	0	0.5	5.8	100%
Road Sweeper Waste Recycling Plant Silla	2	0	2	5.9	100%
Asti Glass Plant	1	0	1	5.9	100%
A2A Recycling	0.5	0	0.5	5.9	100%
Opex	2	0	2	5.9	100%
Total	125	30	95		100%

The share of financing⁶ (vs refinancing) of this Green Bond is 99%.

⁶ The share of financing is here defined as the ratio between the amount related to the financed projects pertaining to the year of the issuance date or the year following the issuance date and the total amount of the funded projects considered under this allocation.

Green Bond XS2534976886 EUR 650 m issued in 2022

Project	Total, M€	Amount 2022, M€	Amount 2023, M€	EU Taxonomy Activity	% EU Taxonomy Alignment
Renewable Energy	127	31	96		
Fiera Milano	4	0	4	4.1	100%
Santo Stefano	25	0	25	4.1	100%
Hydro	31	7	24	4.5	100%
Agripower - Bioenergy	8	0.3	8	4.8	100%
Biofor - Bioenergy	7	0	7	4.8	100%
Biomass - Bioenergy	10	5	5	4.8	100%
Other Bioenergy	0.7	0.2	0.5	4.20	100%
Opex	41	18	23	4.1, 4.3, 4.5, 4.8, 4.11, 4.20, 5.6, 5.7	100%
Energy Efficiency	50	1	49		
District Heating	49	0.04	49	4.15	100%
Opex	0.7	0.7	0	4.15	100%
Pollution Prevention & Control	106	41	65		
Urban Waste Management	44	12	32	5.5	100%
Heat/Cool Production from Waste Heat	3	0.9	2	4.25	100%
Landfill Gas Capture	0.04	0.01	0.02	5.10	100%
Opex	58	28	30	5.5	100%
Transmission & Distribution Networks	25	11	14		
Opex	25	11	14	4.9	100%
Total	308	83	225		100%

The share of financing (vs refinancing) of this Green Bond is 78%.

Green Bond XS2583205906 EUR 500 m issued in 2023

Project	Total, M€	Amount 2022, M€	Amount 2023, M€	EU Taxonomy Activity	% EU Taxonomy Alignment
Renewable Energy	2	0.5	1		
Solar	1	0	1	4.1	0%
Opex	0.7	0.5	0.2	4.8, 5.6	26%
Energy Efficiency	93	20	73		
Torre Faro	48	6	42	7.1	100%
District Heating	2	0	2	4.15	0%
Opex	43	13	30	4.15, 4.16, 7.3, 7.4, 7.6	99.95%
Transmission & Distribution Networks	124	5	119		
Electricity distribution network	117	0	117	4.9	79%
Data Centers	0.2	0	0.2	8.1	0%
Opex	7	5	2	4.9, 8.1	66%
Pollution Prevention & Control	38	7	31		
Hazardous Waste	16	0	16	2.2_PPC	0%
Landfill Gas Capture	0.031	0.02	0.009	5.10	0%
Material Recovery	6	2	4	5.9	0%
Opex	16	5	11	2.2_PPC ⁷ , 4.25, 5.10, 5.8, 5.9	44%
Total	257	32	225		76%

The share of financing (vs refinancing)⁸ of this Green Bond is 88%.

⁷ The activity 2.2_PPC refers to the Treatment of hazardous waste in the category of Pollution prevention and control.

⁸ For this Bond and the following Hybrid Bond the share of financing is calculated considering the partial allocation reported in this report.

Hybrid Green Bond XS2830327446 EUR 750 m issued in 2024

Project	Total, M€	Amount 2022, M€	Amount 2023, M€	EU Taxonomy Activity	% EU Taxonomy Alignment
Water and Wastewater management	180	90	90		
Water	69	29	39	5.1	85%
Wastewater	99	55	44	5.3	23%
Opex	12	6	6	5.1, 5.3	53%
Clean Transportation	13	5	8		
Charging Stations	11	4	8	6.15	100%
Opex	1	0.7	0.6	6.15	100%
Renewable Energy	4	0	4		
Opex	4	0	4	4.3	100%
Total	197	95	102		53%

Considering the partial allocation of this bond reported in this report, the share of refinancing (vs financing) of this Green Bond is 100%.

Risk management

Regarding A2A's risk management strategy for its projects, it is deeply embedded in the company's business processes through the Enterprise Risk Management (ERM) framework, which systematically identifies, assesses, and mitigates risks across the organization. The ERM process considers all potential risks, including socio-environmental factors, and evaluates their impact on both the financial and reputational aspects of the company.

For example, potential risks related to wind and photovoltaic plants include those related to the climate change-related events (both chronic and acute), such as: high temperature, wind, heavy precipitation, and solid mass changes/events. Specifically:

- heavy and prolonged rainfall could result in landslides with potential impacts on PV and wind assets; hail and lightning can damage the plants causing outages;
- abnormal winds/tornadoes could cause outages and/or damage to wind plants and the detachment of panels from photovoltaic plants;
- fires in the uncultivated areas surrounding the assets could spread to the plants causing production interruptions and/or direct damage;
- changes in the historical wind and solar radiation patterns of the Italian regions.

With reference to the above mentioned risks, the following mitigation measures are applied:

- stability of the slopes and geotechnical aspects are taken into consideration and, where appropriate, land consolidation works are carried out;
- the wind turbines are certified with reference to different classes of wind resistance and chosen according to wind statistics of the location where they are to be installed. The supplier of the wind plants is responsible for the design and construction of the foundations;
- the PV panels and plants are equipped with technical certifications;
- in areas at risk of fire, vegetation is cleared in the surrounding areas of the plant to function as a firebreak.

Additionally, the risk assessment related to the EU Taxonomy includes a thorough evaluation of relevant environmental aspects and the corresponding mitigation measures.

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Category: Renewable Energy

Wind and Solar

The proceeds were allocated to finance a variety of solar and wind projects, including the start-up of the Matarocco wind farm in Sicily (30 MW installed capacity) and the construction of the “Santo Stefano” photovoltaic plant in Friuli. The Santo Stefano plant, located in the area bordering the municipalities of Santa Maria la Longa (UD) and Pavia di Udine (UD), is expected to be completed by the first quarter of 2025 and will have a peak capacity of approximately 60 MW. In addition, the photovoltaic plant at Fiera Milano (8.2 MW) underwent its first expansion, increasing the total installed power to 12 MW. Construction for the second phase of the project, which will add an additional 5.8 MW, is already underway. Construction has also commenced for new photovoltaic plants at Ciampino, Tarsia 1, Tarsia 7, and Mazara. Furthermore, the high-voltage substation for the Tosti and Cilea plants, which will later be sold to Terna, is currently under construction.

Hydro

The investments were dedicated mainly to the maintenance of numerous Group hydroelectric plants, including the plants located in Calabria, Lombardia, Friuli-Venezia Giulia regions. The performed interventions covered the revamping of the facilities and security systems, earthquake-protection and also automation of the plants. One of the most significant considered projects was deployed in Valtellina and related to the extraordinary maintenance of the mechanical components, the automations and protections of Grosio and Premadio, Mese and Prestone hydropower plants.

Agripower

The 19 biogas power plants, located across 9 regions in Italy, are powered by livestock effluents, agricultural and agro-industrial by-products, as well as energy crops, used for anaerobic digestion. These plants, which have a capacity of 999 kW, became operational between 2011 and 2012.

The proceeds of the Bonds were allocated to projects aiming to convert some of these biogas plants to biomethane production. Biomethane, a renewable gas, is obtained through an upgrading (purification) process that gives it properties equivalent to fossil methane. This renewable molecule plays a key role in the energy transition, contributing to the decarbonization of the country by reducing the fossil footprint of the national energy system (CO₂, CH₄, N₂O, NH₃). It also supports efforts to strengthen our energy independence.

From a circular economy perspective, biomethane production enables the reuse of waste and by-

products. This allows organic matter to be repurposed into new fertilizers, improving agricultural productivity on nearby lands while reducing environmental impacts.

The 2023 investments focused on design activities, installing filtration systems, gasometrical membranes, storage tanks for by-product treatment, piping systems, and acquiring land for plant development.

Biofor Castelleone

The proceeds were primarily allocated to the upgrade and conversion of the Biofor Castelleone plant for biomethane production. By processing 40,000 tons of livestock effluents, 2,500 tons of agro-food by-products, and 60,000 tons of organic fraction of municipal solid waste (OFMSW) through anaerobic digestion, the plant will produce 5.2 million cubic meters of biomethane annually — enough to meet the energy needs of approximately 5,000 households. The plant offers a sustainable solution for managing animal waste, significantly reducing the environmental impact that would occur if such waste were left to decompose in the atmosphere or spread across fields. Additionally, the biomethane production process generates 95,000 tons of digestate, a natural fertilizer that returns organic matter and nutrients to the soil, helping reduce the reliance on chemical fertilizers such as urea.

Biomass

The Bonds financed projects related to the following biomass plants: Sant'Agata di Puglia and Rodengo Saiano. The Sant'Agata di Puglia (FG) plant, which became operational in January 2017, is a 25.2 MWe (gross power - fully electric) solid biomass thermo-electric power plant. It features a boiler powered by solid biomass with a thermal capacity of approximately 80 MWt, and a 31.5 MVA turbine-generator set connected to the national transmission network (RTN) via a cable duct.

Investments made in 2023 for this plant included boiler efficiency improvements, the installation of new grids and wind mitigators with cover panels, design work for a heat recovery system, interventions to improve biomass storage coverage, and design activities related to the ash extraction system.

The Rodengo Saiano site includes two plants:

- A plant for the treatment and recovery of wood waste from forestry activities, virgin wood processing, and ornamental green maintenance. The final product is virgin wood biomass for energy recovery in the group's facilities and green compost used in organic farming, primarily in the nearby Franciacorta area.
- A plant for the energy recovery of wood biomass from waste treatment, with a thermal capacity of 5,999 kW and a gross electrical capacity of 1,000 kW.

Investments made in 2023 at this site included the installation of a mobile chipper, the revamping of the boiler, and the installation of a new generator.

Other Bioenergy

The proceeds of the Bonds were also allocated to projects related to the Cremona and Lodi bioenergy plants.

The Cremona wood biomass plant, operational since 2012, produces electricity and heat from waste wood biomass, such as old furniture, packaging, and pruning branches, sourced from separate waste collection. By generating energy from biomass, the plant not only eliminates waste from human activities but also reduces dependence on fossil fuels like oil, completing a virtuous cycle where wood is recovered and returned as a renewable energy source.

Investments made in 2023 at the Cremona plant focused on improving the BM/MT line and installing a ventilation and dust measurement system.

The Lodi wood biomass plant, also operational since 2012, produces electricity and heat from virgin wood biomass, with a thermal capacity of 5,980 kW and a gross electrical power of 999 kW. Investments made in 2023 at the Lodi plant were centered on upgrading the ash treatment system.

Corteolona Sludge Plant

The proceeds of the Bonds were used to complete a project at the Corteolona Integrated Waste Treatment Centre, integrating the existing sludge drying plant with a biomethane production section through anaerobic digestion, installed upstream of the dryers.

The storage tanks and pulper from the old plant, previously used for sludge treatment and agricultural recovery, were repurposed alongside new components. These include a centrifuge, an upgrading module (which purifies biogas and converts it into biomethane), and connecting pipes to harness the methanogenic potential of the sludge before drying. The project reactivates biological reactions by mixing the dewatered sludge with water, then sending the mixture to tanks where the anaerobic digestion process occurs.

Once fully operational, the facility will be able to process 100,000 tons of sludge annually, producing approximately 4 million cubic meters of biogas. This will be converted into 2 million cubic meters of biomethane, with the remaining biogas used for electricity generation. The digested sludge will be directed to the drying plant, and a portion will be utilized for waste-to-energy conversion.

This initiative maximizes the energy potential of sludge, contributing to both renewable energy production and reducing waste, further advancing the facility's sustainability goals.

OFMSW

The OFMSW treatment and recovery plants process biodegradable waste from kitchens and canteens, as well as green waste such as grass clippings and prunings. This enables the production of high-quality compost for agricultural and horticultural applications, serving as a substitute for chemical fertilizers, and facilitates the production of biomethane suitable for grid injection as a replacement for fossil-based methane. Biomethane derived from the anaerobic digestion of OFMSW is a renewable energy source that is chemically and physically identical to natural gas (methane).

The proceeds on the Bonds covered the investments focused on optimizing and enhancing the efficiency of plant operations. Specifically, these investments included new machinery, such as compressors and screw presses, as well as hydraulic and electrical upgrades, along with a portion allocated for civil works.

Category: Pollution Prevention and Control

Material Recovery from Non-hazardous Waste (Recycling, Material Recovery, Urban Waste Management)

Circular economy is one of the two pillars of A2A's Industrial Plan. As the national leader in the collection, treatment, and recovery of urban waste, the Group views differentiated waste collection as a primary source of raw materials rather than a secondary one. In 2023, the differentiated waste collection rate in our serviced territories reached 69.5%. Despite only offering partial differentiated collection services in some municipalities, the total urban waste collected remained nearly constant at 1,742,671 tons. This waste was primarily directed toward material recovery (69.6%) and energy recovery (29.9%).

Regarding urban waste management, the proceeds were allocated to projects aimed at optimizing our fleet and enhancing the equipment necessary for collection and street cleaning activities.

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As for the recycling and material recovery plants, the Bonds proceeds covered the numerous projects aiming mainly to enhance processing efficiency, improve the plant section capacity, construction activities, and enhancements to security-dedicated systems.

Key Projects:

1. Paper Recycling Plants:

- In *Buccinasco*, A2A upgraded the polypropylene (PP) recycling plant by installing an additional iron remover.
- In *Coccaglio*, a new continuous baler press was installed to produce higher-density bales, improving transportation efficiency.
- In *Cernusco sul Naviglio*, A2A introduced an innovative machine for processing spent coffee capsules, enabling the recycling of aluminum, plastic, and coffee grounds. This initiative is part of a pilot project conducted in collaboration with Esselunga and the Municipality of Milan.
- In *Novate Milanese*, the first robopicking system for selecting Tetra Pak materials was installed.

2. Composting Plant in Bedizzole:

- This facility has a treatment capacity of approximately 80,000 tons/year of green waste (such as grass clippings and prunings) collected through separate waste streams (ecological islands, street containers, door-to-door collection) or sourced from gardening and floriculture businesses. Major interventions in 2023 included resurfacing works and investments in operational optimization equipment, such as a wheel loader.

3. Silla Road Sweeper Plant:

- This plant processes incoming waste through screening, filtration, and washing operations, separating materials for recovery. The recovered materials include an inert fraction sent for reuse in the construction sector (aggregates, bituminous and cementitious conglomerates) and are categorized by size (sand, fine gravel, coarse gravel), along with sludge, organic fractions, and metals.
- In 2023, upgrades began on the plant's biological section, and a second sludge management line was created to enhance operational performance.

4. Glass Sorting Plant in Asti:

- Operational since 2014, this plant has an authorized treatment capacity of 180,000 tons/year of glass-based waste. In 2023, revamping works commenced on the drying line (replacing the main dryer installed in 2014, now obsolete) and a new "scrap reprocessing line" was introduced. These improvements aim to enhance performance by increasing yield, specifically optimizing the recovery of dark/black glass. Key activities

included the procurement and installation of main equipment, testing of sorters, and construction interventions related to security systems.

5. Plastic Sorting Plants in Cavaglià and Muggiano:

- Significant upgrades are underway at both plants, scheduled for completion between 2024 and 2025. These modifications are essential to meet the technical specifications outlined in the Selection Contract signed in 2023 with Producer Responsibility Organizations (PROs) such as Corepla, CORIPET, and CONIP. The contract mandates improvements in separation yields for specific polymers and requires the ability to sort a wider variety of products.

Hazardous Waste

The proceeds were allocated to various interventions in the field of hazardous waste, including:

- *Crotone Multifunctional Center for Waste Treatment and Energy Recovery*: Investments focused on adapting the inertization plant to Best Available Techniques (BAT), with most necessary works completed. Additionally, the waste-to-energy plant underwent BAT adaptation and layout remodeling, which involved the dismantling of existing equipment and the preparation of general design documentation for authorization requests.
- *Giussago Site*: Major investments were made in the maintenance of the lighting system and machinery, including sensors and small equipment.
- *Robassomero Platform*: Enhancements were made to the inertization plant to improve operational efficiency.
- *Castegnato Inertization Plant*: The office area was expanded to optimize operational activities, and the fire prevention system was upgraded for enhanced safety.
- *Filago Waste-to-Energy Plant*: The primary intervention involved applying a protective coating (Inconel) to the boiler tubes to prolong their lifespan and operational availability. Additionally, the production line was equipped with a mercury measurement system for emissions monitoring.

Landfill Gas Capture

The proceeds were utilized for maintenance purposes. When waste is placed in landfills, it undergoes mechanical compaction and stabilization processes, along with the biological degradation of its organic components. This degradation results in the formation of leachate and biogas. The biogas produced by the landfill (or bioreactor) is captured to:

- Ensure safety within the landfill and surrounding areas.
- Minimize atmospheric emissions.

A2A plants utilize biogas for energy recovery through combustion in cogeneration engines, as the biogas meets the characteristics outlined in Ministerial Decree 05/02/1998. The electricity generated can be used for self-consumption within the plant or, when in surplus, fed into the grid.

Category: Energy Efficiency

District Heating, Heat pumps, Heat/Cool Production from Waste Heat and Storage

The Group develops and manages plants and district heating networks in the cities of Milan, Sesto San Giovanni (MI), Novate (MI), Cassano d’Adda (MI), Cologno Monzese (MI), Brescia, Bovezzo (BS), Concesio (BS), Bergamo, Crema (CR), Cremona, Lodi, Rho (MI), Seregno (MB), Giussano (MB), Cinisello Balsamo (MI), Varese, Como, and Monza.

In 2023, the thermal and cooling energy distributed by all Group companies amounted to 3,328 GWh. The A2A Group’s district heating network spans over 1,382 km, serving more than 460,000 equivalent apartments and a total volume of 110 million cubic meters (considering the perimeter excluding the Acinque Group).

The proceeds from the Bonds were allocated to projects focused on extending the district heating systems in Milan and Bergamo, maintaining the historic system in Brescia, and enhancing the technological capabilities of production plants.

Heat Energy Efficiency

A2A has also provided energy efficiency solutions aimed at reducing energy consumption and enhancing building performance through various redevelopment projects. Among the main recently financed projects are those for the ALER Torri Russoli residential complex in the Barona district of Milan and the “Coppin-Bagarotti” ERP buildings within the municipality of Milan. These works were completed in December 2023.

AES Energy Efficiency

A2A Energy Solutions is one of the Group companies that offers energy efficiency solutions for industrial customers, condominiums, and tertiary companies. The proceeds were allocated with the aim of achieving a positive environmental impact by using high-efficiency innovative technologies and renewable sources to meet customer needs for consumption optimization and energy independence.

In the condominiums and tertiary sector, the proceeds from the bonds financed plant engineering projects carried out by A2A Energy Solutions. It is worth mentioning the following projects completed in 2023:

- 1. A project based on a contract signed with an accommodation/school facility through Servizio Energia Plus, which is an energy performance contract guaranteeing a reduction of the primary energy index for winter air-conditioning of at least 10%. This allows for a more rational use of the supplied heat, ensuring optimal comfort conditions.
- 2. A project related to the CERs (Renewable Energy Communities), which was approved and connected to the electricity grid. This project is among the first allowed at a residential condominium building in Tortona.

In the industrial sector, most interventions focused on the installation of photovoltaic systems. Taking into account both projects in the realization phase and those completed, more than 45 projects were managed in 2023, resulting in an estimated reduction of 10,140 tons of CO₂.

Public Lighting

Through its subsidiaries, the A2A Group deals with the design, construction and maintenance of public lighting systems, guaranteeing a reduction in energy consumption, limited light pollution and respect for the environment. The Bonds proceeds were used mainly to provide services to clients and acquiring lighting points.

In 2023, A2A continued its growth, building on the performance of 2022, through the consolidation of the volumes managed and the high quality of the service provided to customers. Tenders were won for the public lighting of the municipalities of Parabita (LE), Bareggio (MI), Arconate (MI) and Ceriano Laghetto (MB), for a total of almost 7,000 new lighting points to be managed, plus 51 traffic light posts in Bareggio. Thanks to this investment for the four Municipalities, CO₂ emissions are estimated to be reduced by around 78% compared to the previous management.

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Category: Transmission and Distribution Networks

Electricity distribution network

One of the main objectives of A2A Group is supporting the energy transition and enabling the electrification of consumption and, therefore, the investments identified in this category and financed through the Bonds fall mainly into the following categories:

- installation of 2G meters of new generation;
- modernization of existing primary substations;
- installation of new secondary substations;
- modernization of medium voltage grids;
- modernization and electrification of the company vehicle fleet.

Data Centers

The growing importance of data management makes it essential for companies to equip themselves with systems for storage, transmission, and data protection. A2A can rely on its own data centers, used by both external clients and internal structures. The financed investments in 2023 were particularly focused on the development and improvement of the software.

Category: Water and Wastewater management

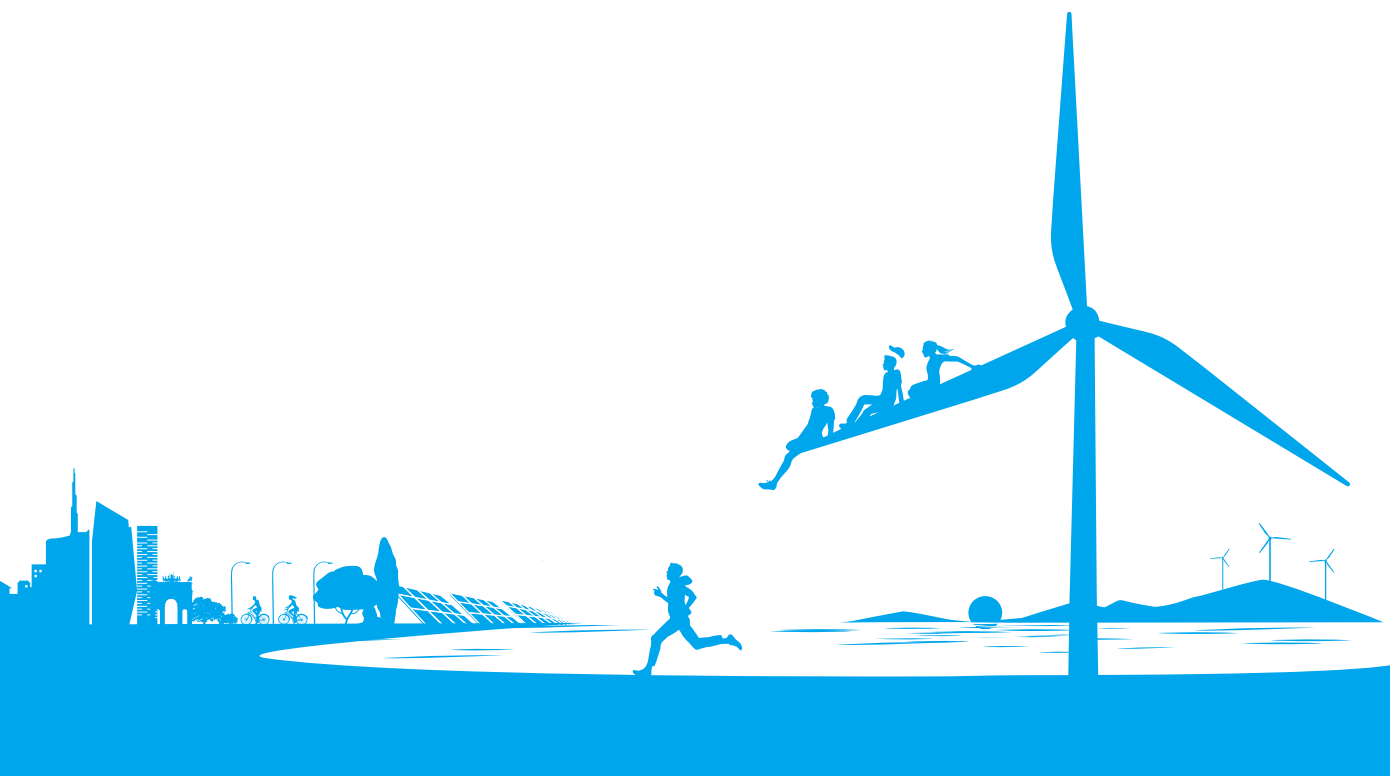
The A2A Group manages services connected to the integrated water cycle in almost the entire province of Brescia and in the provinces of Como and Varese. The proceeds were used to reduce water leakages and improve water management and wastewater treatment.

In all, in 2023, A2A distributed 66 million cubic metres of water in 2023. In the municipalities overseen for the sewage and treatment service as well, approximately 48 million cubic metres of wastewater were treated. In 2023, water leakage research and reduction activities continued: 920 km of network were inspected (of which 666 km with the support of external companies and 254 km with internal operators) and activities related to the Aquarius project continued, which involves the installation of sensors (noise loggers) capable of detecting in real time the “noise” of a leakage leaking from a pipe, changing the paradigm of water network management and ensuring active monitoring of the condition of the water infrastructure.

Category: Clean Transportation

The Bonds proceeds were allocated to improve the function of Charging Point Operator (CPO) that A2A performs.

The electric vehicle charging infrastructure network of A2A is constantly expanding, with more than 400 charging points managed and being installed throughout the country (considering the perimeter excluding the Acinque Group). The company has thus strengthened its presence nationwide, with a presence to date in 16 regions, with both DC and AC charging infrastructures with varying powers.



Impact Reporting

The impact KPIs were selected and calculated following, to the extent possible, the guidance provided by the ICMA Harmonised Framework for Impact Reporting.

The reported KPIs are quantified based on the internal methodologies used also for A2A Integrated Report⁹ and the official sources of the information¹⁰.

Green Bond XS2491189408 EUR 600 m issued in 2022

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Renewable Energy				
Mazara	Additional installed capacity (expected), MW	12.5	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (expected), GWh	251	Annual energy production based on expected working hours and installed capacity	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	10,617	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Juwi	Additional installed capacity (expected), MW	16.9	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (expected), GWh	25.6	Annual energy production based on expected working hours and installed capacity	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	10,829	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh IS-PRA, Terna)	Internal
Ciampino	Additional installed capacity (expected), MW	3.2	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (expected), GWh	5.1	Annual energy production based on expected working hours and installed capacity	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	2,157	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh IS-PRA, Terna)	Internal
Cerveteri	Additional installed capacity (expected), MW	6.1	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (expected), GWh	9	Annual energy production based on expected working hours and installed capacity	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	3,819	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh IS-PRA, Terna)	Internal
Other minor Solar	Additional installed capacity (expected), MW	10	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Additional installed capacity (2023), MW	28	Nominal installed capacity of the plant	Internal
	Annual energy production (expected), GWh	62.3	Annual energy production expected	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	26,353	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh IS-PRA, Terna)	Internal
Matarocco	Additional installed capacity (expected), MW	30	Nominal installed capacity of the plant forecasted upon full project realization	Integrated report 2023, p. 121
	Annual energy production (expected), GWh	78.6	Annual energy production based on expected working hours and installed capacity	Internal
	Annual energy production (2023), GWh	32.9	Annual energy production based on actual working hours and installed capacity	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	33,248	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh IS-PRA, Terna)	Internal

⁹ A2A Integrated Report 2023 is available here: <https://content.gruppoa2a.it/sites/default/files/2024-05/integrated-financial-statements-2023.pdf>

¹⁰ For KPI "Annual GHG emissions avoided" the sources of information for the emission factors include the reports of: ISPRA (Italian Institute for Environmental Protection and Research), Terna, GSE ("Gestore dei Servizi Energetici"), UNFCCC (United Nations Framework Convention on Climate Change), ENEA ("Agenzia Nazionale Efficienza Energetica").

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Renewable Energy				
Other Minor Wind	Additional installed capacity (expected), MW	29.4	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (expected), GWh	70.6	Annual energy production based on expected working hours and installed capacity	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	29,847	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Storage Famagosta	Heat accumulators: Number of plants (2023)	15		Integrated report 2023, p. 126
	Heat accumulators: Capacity (2023), m ³	27,805	Nominal installed capacity	Integrated report 2023, p. 126
Corteolona Sludge Plant	Sludge processed (expected when fully operational), t	100,000	Authorized waste treatment capacity	Integrated report 2023, p. 119
	Bio-methane produced (expected when fully operational), million m ³	2	Annual biomethane production based on installed waste treatment capacity and biomethane production factor	Integrated report 2023, p. 119
	GHG emissions avoided (expected), tCO ₂ eq	4,008	Biomethane produced *LHV standard *FdE standard *oxidation coefficient	Internal
Lacchiarella OFMSW Plant	Installed capacity (2023), kt	100	Authorized waste treatment capacity	Internal
	GHG emissions avoided (expected), tCO ₂ eq	15,711	Biomethane produced *LHV standard *FdE standard *oxidation coefficient	Internal
	Bio-methane produced (expected), million m ³	8	Annual biomethane production based on installed waste treatment capacity and biomethane production factor (105-110 Smc/t of ingested waste)	Internal
Cavaglià OFMSW Plant	Installed capacity (2023), kt	60	Authorized waste treatment capacity	Internal
	GHG emissions avoided (expected), tCO ₂ eq	9,819	Biomethane produced *LHV standard *FdE standard *oxidation coefficient	Internal
	Bio-methane produced (expected), million m ³	5	Annual biomethane production based on installed waste treatment capacity and biomethane production factor (105-110 Smc/t of ingested waste)	Internal
Energy Efficiency				
AES Energy Efficiency	Number of projects run on industrial sector (2023)	45		Integrated report 2023, p. 223
	Annual GHG emissions avoided on industrial sector (2023), tCO ₂ eq	10,140	Annual energy produced*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA)	Integrated report 2023, p. 223
	Number of projects run on the condominiums and tertiary sector (2022-2023)	8		Internal
	Annual GHG emissions avoided on condominiums and tertiary sector (2023), tCO ₂ eq	956.3	Data calculated with the methodology of the certified Software "Edilclima" or For electricity: Energy production*Italian average emission factor for thermoelectric production (423 gCO ₂ /KWh ISPRA, Terna) For thermal energy: Thermal energy saved*emission factor from UNFCCC (2,004 tCO ₂ /StdM3 ISPRA).	Internal
Heat Energy Efficiency	Energy savings (2023), GWh	1.5	The data are derived from the before-and-after differences reported in the Conventional Energy Performance Certificates (EPC) released by ENEA.	Internal
	GHG emissions avoided (2023), tCO ₂ eq	630		Internal
Heat Pumps	Plant capacity (2023), MWt	34	Nominal installed capacity	Integrated report 2023, p. 126
	Number of plants (2023)	5		Integrated report 2023, p. 126
Public Lighting	Annual energy savings of electricity (2023), M kWh	6.7	The difference between the energy consumption of the old public lighting and the energy consumption after the intervention run in 2023 in the concerned areas. The KPI includes data related to the A2A Group and the Acinque Group.	Internal
	Annual GHG emissions reduced/avoided (2023), tCO ₂ eq	1,931	Annual energy saving* Italian average emission factor for power consumption (289.2 or 245.7 g CO ₂ /KWh ISPRA) The KPI includes data related to the A2A Group and the Acinque Group.	Internal

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Pollution prevention & control				
Bedizzole Plant*	Treatment Capacity (2023), t	82,700	Authorized treatment capacity	Internal
	% of waste sent to material recovery	27	The ratio between: the waste decaying from the treatment sent to material recovery (excluding EoW) and: the total of the waste decaying from the treatment (sent to material recovery and EoW)	Internal
	Quantity of end-of-waste (2023), t	32,450	Quantity of produced EoW (including compost, composted organic soil improver and biomass)	Internal
Road Sweeper Silla Plant*	% of waste sent to material recovery (2023)	79	The ratio between: the waste decaying from the treatment sent to material recovery (excluding gravel and grit that cease to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Arial internal software
	Quantity of end-of-waste (2023), t (of gravel-sand)	5,204	Quantity of treated gravel-sand that ceases to be waste and becomes product after the recovery process	Arial internal software
Asti Glass Plant*	% of waste sent to material recovery (2023)	76	The ratio between: the waste decaying from the treatment sent to material recovery (excluding the PAF glass that ceases to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Arial internal software
	Quantity of end-of-waste (2023), t (of glass PAF)	95,143	Quantity of treated glass PAF that ceases to be waste and becomes product after the recovery process	Arial internal software
Buccinasco Plant*	% of waste sent to material recovery (2023)	36	The ratio between: the waste decaying from the treatment sent to material recovery (excluding paper and glass that cease to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Arial internal software
	Quantity of end-of-waste (2023), t (of paper and glass)	39,391	Quantity of treated paper and glass that ceases to be waste and becomes product after the recovery process	Arial internal software
Novate Beltrami Plant*	% of waste sent to material recovery (2023)	67	The ratio between: the waste decaying from the treatment sent to material recovery (excluding paper that ceases to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Arial internal software
	Quantity of end-of-waste (2023), t (of paper)	112,337	Quantity of treated paper that ceases to be waste and becomes product after the recovery process	Arial internal software
Cernusco Plant*	% of waste sent to material recovery (2023)	72	The ratio between: the waste decaying from the treatment sent to material recovery (excluding paper that ceases to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Arial internal software
	Quantity of end-of-waste (2023), t (of paper)	6,349	Quantity of treated paper that ceases to be waste and becomes product after the recovery process	Arial internal software
Liscate Plant*	% of waste sent to material recovery (2023)	90	The ratio between: the waste decaying from the treatment sent to material recovery (excluding paper that ceases to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Arial internal software
	Quantity of end-of-waste (2023), t (of paper)	26,805	Quantity of treated paper that ceases to be waste and becomes product after the recovery process	Arial internal software

* The KPIs are not project specific and refer to the plant in general or all Group plants of this type.

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Green Bond XS2534976886 EUR 650 m issued in 2022

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Renewable Energy				
Fiera Milano	Additional installed capacity (expected), MW	2	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual additional energy production (expected), GWh	3	Annual energy production based on expected working hours and installed capacity	Internal
	Annual energy production (2023), GWh	6.3	Annual energy production based on actual working hours and installed capacity	Internal
	Annual additional GHG emissions reduced/avoided (expected), tCO ₂ eq	1,117	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Santo Stefano	Additional installed capacity (expected), MW	61.3	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (expected), GWh	90	Annual energy production based on expected working hours and installed capacity	Internal
	Annual GHG emissions reduced/avoided (expected), tCO ₂ eq	38,070	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Hydroelectric Plants*	Plant capacity (2023), MWe	1,926	Nominal installed capacity of the plants	Integrated report 2023, p. 120
	Electricity production (2023), GWh	3,738	Annual energy production	Supplement to the Integrated report 2023, p. 36
	Annual GHG emissions reduced/avoided (2023), tCO ₂ eq	1,581,174	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Agripower (bioenergy)	Installed capacity (2023), MW	19	Nominal installed capacity of the plant	Internal
	Energy production (2023), GWh	143.6	Annual energy production	Internal
	GHG emissions avoided (2023), tCO ₂ eq	60,748	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Agripower - Biofor (bioenergy) Castelleone	Agro-food treatment capacity (2023), kt	448,052	Annual treatment capacity	Internal
	Energy production (2023), GWh	6.9	Annual energy production (measured)	Internal
	Bio-methane produced (2023), million m ³	5.2	Annual biomethane production based on installed waste treatment capacity and biomethane production factor (105-110 Smc/t of ingested waste)	Integrated report 2023, p. 119
	Digestate produced (2023), t	95,000	Annual production weighted	Integrated report 2023, p. 119
	GHG emissions avoided (2023), tCO ₂ eq	10,200	Biomethane produced *LHV standard *FdE standard *oxidation coefficient	Internal
Agripower - Biomass	Installed capacity (2023), MW	26.4	Nominal installed capacity of the plant	Internal
	Energy production (2023), GWh	158.8	Annual energy production	Internal
	GHG emissions avoided (2023), tCO ₂ eq	66,910	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Agripower - Other bioenergy (Co-generation from Biomass)	Installed capacity (2023), MW	2	Nominal installed capacity of the plant	Internal
	Energy production (2023), GWh	9.5	Annual energy production	Internal
	GHG emissions avoided (2023), tCO ₂ eq	11,188	For electricity: Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna) For thermal energy: Thermal energy produced*emission factor from UNFCCC (2,004 tCO ₂ /StdM ³ ISPRA).	Internal
	Heat production (2023), GJ	128,759	Annual energy production (measured)	Internal

* The KPIs are not project specific and refer to the plant in general or all Group plants of this type.

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Energy Efficiency				
District Heating*	GHG emissions avoided thanks to district heating (2023), tCO ₂ eq ¹²	287,171	CO ₂ emission avoided by client connected with district heating/cooling network - CO ₂ emission from A2A district heating/cooling power plant + CO ₂ emission from electricity energy balance. The KPI includes data related to the A2A Group and the Acinque Group. The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Integrated report 2023, p. 52-53
	NOx emissions avoided thanks to district heating (2023), t	760	NOx emission avoided by client connected with district heating/cooling network - NOx emission from A2A district heating/cooling power plant + NOx emission from electricity energy balance. The KPI includes data related to the A2A Group and the Acinque Group. The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Integrated report 2023, p. 52-53
	Service capacity (2023) in equivalent apartments, k equivalent apartments	445	Volume served in Mm ³ *1,000,000/240 (m ³) The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Internal
	Served volume (2023), million m ³	106	Volume of served buildings The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Internal
Pollution prevention & control				
Urban Waste Management*	Amount of municipal waste collected (2023), t	1,742,671	Annual amount of municipal waste collected from served municipalities. The KPI includes data related to the A2A Group and the Acinque Group.	Integrated report 2023, p. 147
	% of waste sent to material recovery (2023)	69.6	The ratio between: annual amount of municipal waste sent to material recovery and: the total amount of waste collected from served municipalities. The KPI includes data related to the A2A Group and the Acinque Group.	Integrated report 2023, p. 147
	Amount of special waste collected (2023), kt	414	Annual amount of special waste collected The KPI includes data related to the A2A Group and the Acinque Group.	Integrated report 2023, p. 229
Heat/Cool Production from Waste Heat*	Energy recovered from waste (minus any support fuel) of net energy generated (2023), GWh	1.4	Annual energy production	Internal
Landfill Gas Capture*	Energy production from landfill disposal gas (2023), GWh	10	Annual Energy production from disposal gas in landfills The KPI is calculated taking into account all plants except the ones considered for the Bond issued in 2023.	Supplement to the Integrated report 2023, p. 42

* The KPIs are not project specific and refer to the plant in general or all Group plants of this type.

¹² The KPI is calculated considering also Heat pumps, Heat/Cool production from waste heat and Storage projects.

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Green Bond XS2583205906 EUR 500 m issued in 2023

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Renewable Energy				
Brindisi	Installed capacity (expected), MW	0.7	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (2023), GWh	0.4	Annual energy production based on actual working hours and installed capacity	Arial internal software
	Annual GHG emissions reduced/avoided (2023), tCO ₂ eq	162	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
Sermide	Installed capacity (expected), MW	0.9	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (2023), GWh	2	Annual energy production based on actual working hours and installed capacity	Arial internal software
	Annual GHG emissions reduced/avoided (2023), tCO ₂ eq	958.5	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal
San Filippo	Installed capacity (expected), MW	1.6	Nominal installed capacity of the plant forecasted upon full project realization	Internal
	Annual energy production (2023), GWh	0.5	Annual energy production based on actual working hours and installed capacity	Arial internal software
	Annual GHG emissions reduced/avoided (2023), tCO ₂ eq	222	Energy production*Italian average emission factor for thermoelectric production (423 g CO ₂ /KWh ISPRA, Terna)	Internal

* The KPIs are not project specific and refer to the plant in general or all Group plants of this type.

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Energy Efficiency				
Torre Faro	Energy performance ¹³	Primary energy consumption 10% below NZEB limit		Internal
	GHG emissions avoided thanks to district heating (2023), tCO ₂ eq	9,929	CO ₂ emission avoided by client connected with district heating/cooling network - CO ₂ emission from A2A district heating/cooling power plant + CO ₂ emission from electricity energy balance The KPI includes data related to the A2A Group and the Acinque Group. The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Integrated report 2023, p. 52-53
District Heating*	Nox emissions avoided thanks to district heating (2023), t	26	NOx emission avoided by client connected with district heating/cooling network - NOx emission from A2A district heating/cooling power plant + NOx emission from electricity energy balance The KPI includes data related to the A2A Group and the Acinque Group. The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Integrated report 2023, p. 52-53
	Service capacity (2023) in equivalent apartments, k equivalent apartments	15	Volume served in Mm ³ *1,000,000/240 (m ³) The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Internal
	Served volume (2023), million m ³	4	Volume of served buildings The KPI is calculated in proportion to the split of the capex for this project type between this Bond and the Bond issued in 2023.	Internal
Transmission & Distribution networks				
	Installed capacity of the electric network (2023), MVA	5,016	Nominal installed capacity of the network.	Supplement to the Integrated report 2023, p. 7
Electricity distribution network*	Distributed energy (2023), GWh	10,882	Annual energy distributed	Integrated report 2023, p. 122
	Additional km of electricity network vs 2022, km	142	Based on actual measurement (the difference between the km of electricity network in 2023 and in 2022)	Supplement to the Integrated report 2023, p. 37

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* The KPIs are not project specific and refer to the plant in general or all Group plants of this type.

¹³ NZEB stands for Nearly Zero Energy Building. The other environmental KPIs will be calculated when the energetic model of the building will have been finalised.

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Pollution prevention & control				
Hazardous Waste*	Total hazardous waste generated (2023), t	142,317	Annual amount of waste produced by the company throughout its activity, according to GRI standards (306)	Supplement to the Integrated report 2023, p. 46
	% of hazardous waste recovered (2023)	34	The ratio between: the amount of hazardous waste sent to recovery (material or energy recovery) and: the total amount of waste produced by the company throughout its activity.	Supplement to the Integrated report 2023, p. 46
Landfill Gas capture*	Energy production from landfill disposal gas (2023), GWh	4.3	Annual Energy production from disposal gas in landfills The KPI is calculated considering the plants: Cascina Maggiore and Villafalletto.	Supplement to the Integrated report 2023, p. 42
Cavaglià Plant*	% of waste sent to material recovery (2023)	98	The ratio between: the waste decaying from the treatment sent to material recovery (including plastics sent to subsequent recycling and other waste, plasmix and metals, sent to material recovery) and: the total waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Internal
Muggiano Plant*	% of waste sent to material recovery (2023)	96		Internal
Coccaglio Plant*	% of waste sent to material recovery (2023)	98	The ratio between: the waste decaying from the treatment sent to material recovery (excluding paper that ceases to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Internal
	Quantity of end-of-waste (2023), t (of paper)	11,599		Internal
Castendolo Plant*	% of waste sent to material recovery (2023)	61	The ratio between: the waste decaying from the treatment sent to material recovery (excluding paper that ceases to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Internal
	Quantity of end-of-waste (2023), t (of paper)	45,956		Internal
Fombio Plant*	% of waste sent to material recovery (2023)	80	The ratio between: the waste decaying from the treatment sent to material recovery (excluding paper that ceases to qualify as waste) and: the total of the waste decaying from the treatment (sent to material recovery, energy recovery and disposal)	Internal
	Quantity of end-of-waste (2023), t (of paper)	8,782		Internal



* The KPIs are not project specific and refer to the plant in general or all Group plants of this type.

Hybrid Green Bond XS2830327446 EUR 750 m issued in 2024

Project	Impact KPI	Value 2023	Calculation Method/ Note	Source
Water and Wastewater Management				
Water*	Decrease in the water consumption, compared to 2022, million m ³	79	Volume measured. Baseline year: 2022	Integrated report 2023, p. 152
	Water supplied to consumers (2023), million m ³	41	Volume measured	Supplement to the Integrated report 2023, p. 38
Wastewater*	Treated wastewater (2023), million m ³	48	Volume measured	Integrated report 2023, p. 124 Supplement to the Integrated report 2023, p. 38
	Sewer wastewater discharged (2023), k m ³	1,043	Volume measured	Supplement to the Integrated report 2023, p. 45
Clean Transportation				
E-mobility (Charging Stations)	GHG emissions avoided (2023), tCO ₂ eq	4,332	Energy distributed (5,920,000 kWh)*applicable emission factor (730 gCO ₂ /Kwhe). The coefficient was estimated based on UNRAE (Unione Nazionale Rappresentanti Autoveicoli Esteri) measurements regarding the average CO ₂ emissions of light vehicles	Internal
	Charging stations operated or under construction	402		Internal

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* The KPIs are not project specific and refer to the plant in general or all Group plants of this type.

EU Taxonomy Alignment

The complete analysis of all the reported projects with regards to the alignment to EU Taxonomy was performed, including the verification of compliance with all technical screening criteria for Substantial

Contribution and DNSH and also with minimum social safeguards.

The details and the results of the alignment analysis are disclosed hereunder.

Minimum Safeguards

A2A, as a company operating under EU legislation, has ensured the respect of minimum safeguards criteria according to Article 18 of the EU Taxonomy Regulation (OECD guidelines for Multinational Enterprises (MNE), United Nations Guiding Principles on Business and Human Rights (UNGPs), the eight ILO conventions on fundamental principles and rights at work, and the international bill of human rights).

The effort of A2A in ensuring these criteria application could be summarized in the following points:

- A2A is a member of Global Compact, the United Nations initiative for promoting the culture of business citizenship, which encourages companies throughout the world to create an economic, social and environmental framework in order to ensure a sound and sustainable economy.
- The A2A Group's Code of Ethics is an integral part of the Model pursuant to Legislative Decree

no. 231/01 with regards to members of the Board of Directors, members of the control body, managers and executives, employees, suppliers and business partners. 39 subsidiaries adopted their own Organization, Management and Control Models in accordance with Legislative Decree no. 231/01.

- A2A's Code of Ethics makes explicit reference to the UN Universal Declaration of Human Rights, the ILO Fundamental Conventions, the OECD Guidelines and the principles of the Global Compact to which the Group adheres.
- In 2021 A2A issued its Human Rights Policy, adopted by the Board of Directors of A2A S.p.A., in addition to and as a complement of the Group's Code of Ethics, in order to reaffirm the commitment of the Group to promote and support all the values and principles established by international human rights institutions of which A2A is a member.

4.1 "Electricity generation using solar photovoltaic technology"

Substantial Contribution to Climate Change Mitigation

CONFIRMED. Every project and existing plants in A2A's portfolio are potentially and/or actually contributing substantially to climate change mitigation.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	CONFIRMED. Plants are equipped with components of high durability and recyclability, and so they can be easy decommissioned and renovated.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verification were carried out, addressing interference with protected areas.

4.3 “Electricity generation from wind power”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. The Matarocco, Terzo di Banzi and the other wind power plants in A2A's portfolio are contributing substantially to climate change mitigation.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. A2A's plants are not off-shore and though they do not harm sustainable use and protection of water and marine resources.
Transition to a circular economy	CONFIRMED. Plants are equipped with highly durable and recyclable components so that they can be easy decommissioned and renovated.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

4.4 “Electricity generation from hydropower”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. All hydropower plants in A2A's portfolio are contributing substantially to climate change mitigation. In particular, in all those plants with an artificial reservoir the power density of the electricity generation facility is above 5 W/m².

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
The sustainable use and protection of water and marine resources	CONFIRMED. A2A's plants meet the criteria set out by Taxonomy regulation in terms of sustainable use and protection of water and marine resources.
The transition to a circular economy	N.A.
Pollution prevention and control	N.A.
The protection and restoration of biodiversity	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

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4.8 “Electricity generation from bioenergy”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. A2A's distribution bioenergy production plants meet the screening criteria set out by Taxonomy regulations. In particular:

- Agricultural biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.
- The greenhouse gas emission savings from the use of biomass are at least 80 % in relation to the GHG saving methodology and the relative fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001.
- Where the installations rely on anaerobic digestion of organic material, the production of the digestate meets the criteria in Sections 5.6 and criteria 1 and 2 of Section 5.7 of this Annex, as applicable.
- For electricity generation installations with a total rated thermal input from 50 to 100 MW, the activity applies high-efficiency cogeneration technology, or, for electricity-only installations, the activity meets an energy efficiency level associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for large combustion plants.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. Infrastructure potentially exposed to acute risk such as high temperatures and heavy rainfalls or floods. All the assets are equipped with fire prevention systems. All underground machineries are designed with construction of embankments on any access hatches to underground parts and installation of waterproof components.
Sustainable use and protection of water and marine resources	CONFIRMED. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential in accordance with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. Energy distribution networks respect pollution and prevention norms set out by the commission.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

4.9 “Transmission and distribution of electricity”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. A2A's distribution network is an interconnected European system compliant with the point 1a) of taxonomy regulation.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. Infrastructure potentially exposed to acute risk such as high temperatures and heavy rainfalls or floods. All the assets are equipped with fire prevention systems. All underground machineries are designed with construction of embankments on any access hatches to underground parts and installation of waterproof components.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	CONFIRMED. A waste management plan is in place and ensures maximal reuse or recycling at end of life (e.g. replacement activity of the smart meters).
Pollution prevention and control	CONFIRMED. Energy distribution networks respect pollution and prevention norms set out by the commission.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. A GIS verification was carried out, addressing interference with protected areas. The Salò network does not meet the DNSH, therefore it has been excluded from the Eligible Green Projects.

4.11 “Storage of thermal energy”

Substantial Contribution to Climate Change Mitigation	
CONFIRMED. The Famagosta and Canavese plants store thermal energy with Underground Thermal Energy Storage (UTES) technologies.	
Do No Significant Harm (DNSH)	
Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. The DNSH criteria does not apply to A2A's storage systems because they are not Aquifer-based technologies (ATES).
Transition to a circular economy	CONFIRMED. A waste management plan is in place and ensures maximal reuse or recycling at end of life.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. All assets are located in urban areas.

4.15 “District heating / cooling distribution”

Substantial Contribution to Climate Change Mitigation	
CONFIRMED. All selected pipelines meet the definition of efficient district heating and cooling systems (laid down in Article 2, point 41, of Directive 2012/27/EU) and are contributing substantially to climate change mitigation. All aligned assets have been verified by GSE ¹⁴ .	
Do No Significant Harm (DNSH)	
Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. Water consumptions do not affect the drinking water supply system. Any leaks of additives do not alter the chemical status of groundwater, based on the considerations made on its biodegradability.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. Potential presence of fans, compressors, pumps equipped with BAT in minor pipelines.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. All assets are located in urban areas.

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¹⁴ GSE (“Gestore dei Servizi Energetici”) is an Italian public company, owned by Italian Ministry for Economics and Finance, for the promotion of energy efficiency and renewable sources of energy.

4.16 “Installation and operation of electric Heat Pumps”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. The Famagosta, Santa Giulia, Technocity and Centrale Nord Brescia meet the screening criteria set out by Taxonomy regulations:

- Refrigerant threshold: Global Warming Potential does not exceed 675.
- Energy efficiency requirements, laid down in the implementing regulations under Directive 2009/125/EC, are met.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. The DNSH criteria does not apply to the majority of A2A's systems because they are not Acquirer-based technologies (ATES). For electric heat pumps using ATES the impact on water was specifically included in EIA considerations.
Transition to a circular economy	CONFIRMED. A waste management plan is in place and ensures maximal reuse or recycling at end of life.
Pollution prevention and control	CONFIRMED. For air to air heat pumps with rated capacity of 12kW or below, indoor and outdoor sound power levels are below the threshold set out in Commission Regulation (EU) No 206/2012.
Protection and restoration of biodiversity and ecosystems	N.A.

4.20 “Cogeneration of heat/cool and power from bioenergy”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. The Cremona and Lodi plants meet the screening criteria set out by Taxonomy regulations. In particular:

- Agricultural biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.
- The greenhouse gas emission savings from the use of biomass in cogeneration installations are at least 80 % in relation to the GHG emission saving methodology and fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. Infrastructure potentially exposed to acute risk such as high temperatures and heavy rainfalls or floods. All the assets are equipped with fire prevention systems. All underground machineries are designed with construction of embankments on any access hatches to underground parts and installation of waterproof components.
Sustainable use and protection of water and marine resources	CONFIRMED. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential in accordance with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. Air and water emissions are lower than the emission threshold associated with European techniques (BAT/AEL).
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.



4.25 “Production of Heat/cool using waste heat”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. A2A's plants are contributing substantially to climate change mitigation.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	CONFIRMED. Plants are equipped with highly durable and recyclable components so that they can be easy decommissioned and renovated.
Pollution prevention and control	CONFIRMED. Pumps are compliant with European norms and use the best available technology.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

5.1 “Construction, extension and operation of water collection, treatment and supply systems”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. All A2A's aligned water supply systems present a net average energy consumption for abstraction and treatment equal to or lower than 0.5 kWh per cubic meter produced water supply.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential in accordance with 2020/852 Taxonomy Regulation and with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.
Transition to a circular economy	N.A.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

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5.3 “Construction, extension and operation of water collection and treatment”

Substantial Contribution to Climate Change Mitigation	
CONFIRMED. For all A2A's aligned water treatment systems, energy consumption of the waste water treatment plant equals to or is lower than: (a) 35 kWh per population equivalent (p.e.) per annum for treatment plant capacity below 10 000 p.e.; (b) 25 kWh per population equivalent (p.e.) per annum for treatment plant capacity between 10 000 and 100 000 p.e.; (c) 20 kWh per population equivalent (p.e.) per annum for treatment plant capacity above 100 000 p.e.	
Do No Significant Harm (DNSH)	
Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential in accordance with 2020/852 Taxonomy Regulation and with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. Discharges to receiving waters meet the requirements laid down in Council Directive 91/271/EEC or as required by national provisions stating maximum permissible pollutant levels from discharges to receiving waters. Appropriate measures have been implemented to avoid and mitigate excessive storm water overflows from the wastewater collection system, which may include nature-based solutions, separate storm water collection systems, retention tanks and treatment of the first flush. Sewage sludge is used in accordance with Council Directive 86/278/EEC or as required by national law relating to the spreading of sludge on the soil or any other application of sludge on and in the soil.
Protection and restoration of biodiversity and ecosystems	CONFIRMED Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

5.5 “Collection and transport of non-hazardous waste in source segregated fractions”

Substantial Contribution to Climate Change Mitigation	
CONFIRMED. All separately collected and transported non-hazardous waste that is segregated at source is intended for preparation for reuse or recycling operations.	
Do No Significant Harm (DNSH)	
Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	CONFIRMED. Separately collected waste fractions are not mixed in waste storage and transfer facilities with other waste or materials with different properties.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	N.A.

5.6 “Anaerobic digestion of sewage sludge”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. The Corticolona plant meets the screening criteria set out by Taxonomy regulations. In particular:

- A monitoring and contingency plan is in place in order to minimise methane leakage at the facility.
- The produced biogas is used directly for the generation of electricity or heat or upgraded to bio-methane for injection in the natural gas grid, or used as vehicle fuel or as feedstock in chemical industry.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential in accordance with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. Air and water emissions are lower than the emission threshold associated with European techniques (BAT/AEL). The plants meet the requirements for fertilizing materials set out at national level.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

5.7 “Anaerobic digestion of bio-waste”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. The Lacchiarella and Cavaglià OFMSW (Organic Fraction of Municipal Solid Waste) plants meet the screening criteria set out by Taxonomy regulations. Both plants:

- Have a monitoring and contingency plan in order to minimize methane leakage at the facility.
- Use the biomethane produced for generation of electricity and/or heat.
- The bio-waste is source segregated and collected separately.
- The produced digestate is used as fertilizer or soil improver.
- The share of food and feed crops used as input feedstocks measure in weight (as an annual average) less or equal to 10% of the input feedstock.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. An Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU and includes an assessment of the impact on water in accordance with Directive 2000/60/EC.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. Air and water emissions are lower than the emission threshold associated with European techniques (BAT/AEL). The plants meet the requirements for fertilizing materials set out at national level.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

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5.8 “Composting of bio-waste”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. The Bedizzole plant meets the screening criteria set out by Taxonomy regulations. In particular:

- The bio-waste that is composted is source segregated and collected separately.
- The compost produced is used as fertiliser or soil improver and meets the requirements for fertilising materials set out in Component Material Category 3 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. Air and water emissions are lower than the emission threshold associated with European techniques (BAT/AEL). The plants meet the requirements for fertilising materials set out at national level.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

5.9 “Material recovery from non-hazardous waste”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. A2A Recycling, the Asti glass and road sweeper waste recycling plants contribute substantially to climate change mitigation, by converting at least 50 %, in terms of weight, of the processed separately collected non-hazardous waste into secondary raw materials that are suitable for the substitution of virgin materials in production processes.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	N.A.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

5.10 “Landfill gas capture and utilisation”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. The Gerenzano, Augusta and Castrezzato plants meet the screening criteria set out by Taxonomy regulations. In particular:

- The landfill has not been opened after 8 July 2020.
- The landfill or landfill cell where the gas capture system is newly installed, extended, or retrofitted is permanently closed and is not taking in further biodegradable waste.
- The produced landfill gas is used for the generation of electricity or heat as biogas, or upgraded to bio-methane for injection in the natural gas grid, or used as vehicle fuel or as feedstock in chemical industry.
- Methane emissions from the landfill and leakages from the landfill gas collection and utilisation facilities are subject to control and monitoring procedures set out in Annex III to Council Directive 1999/31/EC.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	N.A.
Pollution prevention and control	CONFIRMED. The permanent closure and remediation as well as the after-care of old landfills, where the landfill gas capture system is installed, are carried out in accordance with the following rules: • General requirements set out in Annex I to Directive 1999/31/EC. • Control and monitoring procedures set out in Annex III to that Directive.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Priority check on EIA. For every ground installation exempted from EIA and GIS verifications were carried out, addressing interference with protected areas.

6.15 “Infrastructure enabling low-carbon road transport and public transport”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. A2A installs electric charging points dedicated to the operation of vehicles with zero tailpipe CO₂ emissions.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential in accordance with 2020/852 Taxonomy Regulation and with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.
Transition to a circular economy	CONFIRMED. The process of construction of electric charging station is run by a third-part company. A2A directly manages the end of life decommissioning process through its subsidiary AMSA that operates in the waste management business and that ensures maximal reuse or recycling.
Pollution prevention and control	CONFIRMED. Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. Where relevant, mitigation measures have been implemented to avoid wildlife collisions.

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7.1 “Construction of new buildings”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. A2A's new building in “Piazza Trento” meets the screening criteria set out by Taxonomy regulations. In particular:

- The Primary Energy Demand (PED) will be at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national measures implementing Directive 2010/31/EU of the European Parliament and of the Council.
- Robust and traceable quality control processes are in place during the construction process, resulting in the activation process for LEED certification.
- The life-cycle Global Warming Potential (GWP) of the building resulting from the construction will be calculated for each stage in the life cycle and is disclosed to investors and clients on demand.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	CONFIRMED. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential in accordance with 2020/852 Taxonomy Regulation and with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.
Transition to a circular economy	CONFIRMED. At least 70 % (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC) generated on the construction site is prepared for reuse, recycling and other material recovery. A2A will guarantee this standard by gaining LEED certification.
Pollution prevention and control	CONFIRMED. Building components and materials used in the construction comply with the criteria set out in Appendix C to this Annex and controls over the materials emission are in place.
Protection and restoration of biodiversity and ecosystems	CONFIRMED. The building will be in urban areas.

7.3 “Installation, maintenance and repair of energy efficiency equipment”

Substantial Contribution to Climate Change Mitigation

CONFIRMED. All the operational efficiency projects on the tertiary sector and condominiums are contributing substantially to climate change mitigation.

Do No Significant Harm (DNSH)

Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	N.A.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	N.A.

7.4 “Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)”

Substantial Contribution to Climate Change Mitigation	
CONFIRMED. The activity consists in installation, maintenance and repair of charging stations for electric vehicles.	
Do No Significant Harm (DNSH)	
Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures are in place.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	N.A.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	N.A.

7.5 “Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings”

Substantial Contribution to Climate Change Mitigation	
CONFIRMED. A2A's activity consists in the installation, maintenance and repair of energy management Systems (EMS).	
Do No Significant Harm (DNSH)	
Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	N.A.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	N.A.

7.6 “Installation, maintenance and repair of renewable energy technologies”

Substantial Contribution to Climate Change Mitigation	
CONFIRMED. All the operational rental projects on the tertiary sector and condominiums (photovoltaic, energy storage, A/R micro-cogeneration etc.) are contributing substantially to climate change mitigation.	
Do No Significant Harm (DNSH)	
Climate change adaptation	CONFIRMED. A taxonomy aligned climate risk assessment has been carried out. Mitigation measures, such as maintenance plans and safeguards are in place. Those measures do not adversely affect the adaptation efforts of other people, nature and assets.
Sustainable use and protection of water and marine resources	N.A.
Transition to a circular economy	N.A.
Pollution prevention and control	N.A.
Protection and restoration of biodiversity and ecosystems	N.A.

Key Figures

A2A's Path in Sustainable Finance

Allocation Reporting

Impact Reporting

EU Taxonomy Alignment

External review – Post issuance verification

External review – Post issuance verification

A2A has appointed ISS Corporate Solutions to carry out an external verification of this report. The resulting verification report is attached hereto.



REPORT REVIEW

A2A

Green Bond Report

20 December 2024

VERIFICATION PARAMETERS

Type(s) of reporting

Relevant standard(s)

Scope of verification

Lifecycle

Validity

- Green Bond Allocation and Impact
- Harmonised Framework for Impact Reporting, ICMA, June 2024
- A2A's Green Bond Report (as of Dec. 17, 2024)
- A2A's Sustainable Finance Framework (as of Feb. 10, 2022)
- Bond(s) identification:

Issue date	ISIN	Maturity date	Amount raised (EUR)
Jun 15, 2022	XS2491189408	Jun 15, 2026	597 million
Sep 19, 2022	XS2534976886	Sep 19, 2030	647 million
Feb 3, 2023	XS2583205906	Feb 2, 2034	493 million
Jun 11, 2024	XS2830327446	Perpetual	742 million

- Post-issuance verification
- First post-issuance verification as of [Dec. 6, 2023](#)
- As long as no changes are undertaken by the Issuer to its Green Bond Report (as of Dec. 17, 2024)

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REPORT REVIEW

Green Bond Report 2024 A2A

ISS-CORPORATE

ASSESSMENT SUMMARY

REVIEW SECTION	SUMMARY	EVALUATION
Part I Alignment with the Issuer's commitments set forth in the Framework	A2A's Green Bond Report meets the commitments set forth in its Sustainable Finance Framework.	Aligned
Part II Alignment with the HFIR	The Green Bond Report is in line with the HFIR. The Issuer follows core principles and, where applicable, recommendations. The Issuer provides transparency on the level and frequency of expected reporting, in line with best practices. A2A has reported within the next fiscal year after issuance, illustrated the environmental impacts, and provided transparency on ESG risk management and transparency on the currency used. Following ICMA's recommendations, the Issuer reports at the project level,⁵ explains its approach to impact reporting, reports on at least a limited number of sector-specific core indicators, and discloses its own methodologies (where there is no single commonly used standard) and its conversion approach.	Aligned
Part III Disclosure of proceeds allocation and soundness of reporting indicators	The allocation of the bonds' proceeds has been disclosed, with a detailed breakdown across different eligible project categories as proposed in the Framework.⁶ A2A's 2024 Green Bond Report has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculation methodologies and granularity, reflecting best market practices.	Positive

⁵ Where the Issuer cannot report on impacts at the project level, the projects are clearly marked, and impact reporting refers to the plant in general or a group of plants of the same type.

⁶ The assessment is based on the information provided in the Issuer's report. The Issuer is responsible for the preparation of the report, including the application of methods and procedures designed to ensure that the subject matter is free from material misstatement.

Part IV A2A's project characteristics, due diligence processes
Alignment with and policies have been assessed against the
the EU requirements of the EU Taxonomy (Climate Delegated
Taxonomy Act of June 2023), on a best efforts basis.⁷ The
nominated project categories are considered to be:

- Aligned with the climate change mitigation criteria
- Aligned with the do no significant harm criteria
- Aligned with the minimum safeguards requirements

⁷ While the final delegated acts for mitigation and adaptation were published in June 2023, the technical screening criteria allow for discretion on the methodologies in determining alignment in certain cases. Therefore, at this stage, the alignment with the EU Taxonomy has been evaluated on a "best efforts basis."

Key Figures

A2A's Path in
Sustainable
Finance

Allocation
Reporting

Impact
Reporting

EU Taxonomy
Alignment

External review
– Post issuance
verification

