

Acea Green Bond Allocation & Impact Report

Green Bond Allocation & Impact Report Acea

25 September 2024

VERIFICATION PARAMETERS

Type(s) of reporting	■ Green Bond Allocation & Impact Report
Relevant standard(s)	 Harmonised Framework for Impact Reporting (HFIR), updated June 2023, as administered by International Capital Market Association (ICMA)
	 Acea's Green Bond Allocation & Impact Report (as of Sep. 25, 2024)
Scope of verification	 Acea's Green Financing Framework (as of Jan. 16, 2021)
	 Bond(s) identification: ISIN XS2579284469 / bond maturity Jan. 24, 2031 (bond issuance amount EUR 700m)
Lifecycle	 Post-issuance verification
Validity	 As long as no changes are undertaken by the Issuer to its Green Bond Report as of Sep. 09, 2024

Green Bond Report Acea



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SCOPE OF WORK

Acea ("the Issuer") commissioned ISS-Corporate to provide a Report Review¹ on its Green Bond Allocation & Impact Report by assessing:

- 1. The alignment of Acea's Green Bond Allocation & Impact Report with the commitments set forth in Acea Green Financing Framework (as of Jan. 16, 2021).²
- 2. Acea's Green Bond Allocation & Impact Report benchmarked against the Harmonised Framework for Impact Reporting (HFIR), updated June 2023, as administered by International Capital Market Association (ICMA).
- 3. The disclosure of proceeds allocation and soundness of reporting indicators whether the impact metrics align with best market practices and are relevant to the Green Bond issued.

¹ A limited or reasonable assurance is not provided on the information presented in Acea Green Bond Allocation & Impact Report. A review of the use of proceeds' allocation and impact reporting is solely conducted against ICMA's Standards (Green Bond Principles) core principles and recommendations where applicable, and the criteria outlined in the underlying Framework. The assessment is solely based on the information provided in the allocation and impact reporting. The Issuer is responsible for the preparation of the report including the application of methods and internal control procedures designed to ensure that the subject matter information is free from material misstatement.

² The Framework was assessed as aligned with the Green Bond Principles as of Jan. 16, 2021.



ASSESSMENT SUMMARY

REVIEW SECTION	SUMMARY EVALUATION	
Part 1. Alignment with the Issuer's commitments set forth in the Framework	Acea's Green Bond Allocation & Impact Report meets the Issuer's commitments set forth in the Green Financing Framework. The proceeds have been used to (re)finance: Water Management, Energy Efficiency, Circular Economy, and Green Energy, in accordance with the eligibility criteria defined in the Framework.	Aligned
Part 2. Alignment with the HFIR	The Green Bond Allocation & Impact Report is in line with ICMA's HFIR. The Issuer follows core principles and where applicable key recommendations. The Issuer reports on an annual basis, illustrates the environmental impacts, reports the ESG Risk Management measures in place, and is transparent on the currency used.	Aligned
Part 3. Disclosure of proceeds allocation and soundness of reporting indicators	The allocation of the bond's proceeds has been disclosed, with a detailed breakdown across different eligible project categories as proposed in the Framework. ³ Acea's Green Bond Allocation & Impact Report has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculations methodologies and granularity reflecting best market practices.	Positive

³ 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 information is free from material misstatement.



REPORT REVIEW ASSESSMENT

PART I: ALIGNMENT WITH COMMITMENTS SET FORTH IN THE GREEN FINANCING FRAMEWORK⁴

The following table evaluates the Green Bond Allocation & Impact Report against the commitments set forth in Acea's Green Financing Framework, which are based on the core requirements of the Green Bond Principles as well as best market practices.

GBP	OPINION	ALIGNMENT WITH COMMITME NT
1. Use of Proceeds	Acea confirms to follow the Use of Proceeds' description provided by Acea's Green Financing Framework. The report is in line with the initial commitments set in Acea's Green Financing Framework: the net proceeds are allocated to Water Management, Energy Efficiency, Circular Economy, and Green Energy projects in accordance with the Eligibility Criteria established. The Issuer's green categories align with the project	✓
	categories and are in accordance with the eligibility criteria set in Acea's Green Financing Framework. Environmental benefits at the project level are described and quantified.	
	The Issuer defines the percentage of assets that are refinanced or financed, in line with best market practice.	
2. Process for Project Evaluation and Selection	Acea confirms to follow the Process for Project Evaluation and Selection description provided by Acea's Green Financing Framework. The report is in line with the initial commitments set in the Acea's Green Financing Framework: Acea formed a Green Finance Working Group (GFWG), a cross-department table led by the Chief Financial Officer (CFO). It includes representatives from Finance, Sustainability Planning & Reporting and Planning & Control holding	✓

⁴ Acea's Green Financing Framework was assessed as aligned with the GBP (as of Jun., 2020) as of Jan. 16, 2021.



departments, each covering responsibility according to its own expertise, and works in harmony with representatives of the Issuer's operating subsidiaries. The GFWG is responsible for creating and updating the Green Finance Framework in line with the sustainability objectives of Acea, and dives deep into the eligibility criteria for potential green projects.

The projects selected are defined and structured in a congruous manner. The Issuer ensures compliance with the Eligibility Criteria. ESG risks associated with the project categories are identified and managed through an appropriate process.

3. Management of Proceeds

Acea confirms to follow the Process for Management of Proceeds description provided by Acea's Green Financing Framework. The report is in line with the initial commitments set in the Acea's Green Financing Framework: proceeds are managed by the Green Finance Working Group.

The proceeds collected represent 49.6% of the amount allocated to eligible projects, with no exceptions. 34.5% of this latter amount has been allocated to refinance eligible projects (investments made in 2022), 65.5% has been allocated to finance eligible projects (investments made in 2023). The proceeds are tracked in an appropriate manner and attested in a formal internal process.

The Issuer discloses information regarding the allocation to individual or portfolio disbursements.

4. Reporting

Acea's Green Bond Allocation & Impact Report is coherent with the Reporting description provided by Acea's Green Financing Framework. The report is in line with the initial commitments set in the Acea's Green Financing Framework: to publish annually an Allocation and Impact Report until full allocation. Allocation reporting will include the amount of net proceeds allocated per eligible green project category, the percentage of refinancing in existing projects, and the location and status of the projects. Acea also intends to report on relevant impact indicators.



The sections "Allocation reporting" and "Impact Reporting" of the Green Bond Report comply with the pre-issuance commitment expressed in the Framework. The report is intended to be publicly available to the investors.⁵

The Issuer is transparent on the level of impact reporting, as well as on the information reported, and the frequency and duration of impact reporting, in line with best market practice.

Further analysis of this section is available in Part III of this report.

5. Verification

ISS-Corporate has provided a Second Party Opinion (SPO) on Acea's Green Financing Framework.

⁵ Acea's Green Bond Report: https://www.gruppo.acea.it/en/investors/financial-structure/green-bond



PART II: ASSESSMENT AGAINST THE ICMA HFIR

Reporting is a core component of the Green Bond Principles and transparency is of particular value in communicating the expected and/or achieved impact of projects in the form of an annual reporting. Green bond Issuers are required to report on both the use of green bond proceeds, as well as the environmental impacts at least on an annual basis until full allocation or maturity of the bond. The HFIR has been chosen as benchmark for this analysis as it represents the most widely adopted standard.

The table below evaluates Acea's Green Bond Allocation & Impact Report against ICMA HFIR.

CORE PRINCIPLES		
ICMA HFIR	GREEN BOND REPORT	ASSESSMENT
Reporting on an annual basis	Acea has reported within one year from issuance and EUR 345.93 million have been allocated. 34.5% of proceeds has been allocated to refinance eligible projects (investments made in 2022), and 65.5% has been allocated to finance eligible projects (investments made in 2023). The report will be available on Acea's website. ⁶	✓
Illustrating the environmental impacts or outcomes	The assessment and measurement of the impacts generated by Acea Green Allocation & Impact Bond covered the following areas: Water management – water resource protection Water losses reduction Reduction of water volume lost (over 2019) (%). Flow and pressure meters installed during the year (n.). Reclaimed water network during the year (km). Districted water network during the year (km). Interventions to increment the water system resilience and the security of water supply Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water"	

⁶ Acea's website: <u>https://www.gruppo.acea.it/en/investors/financial-structure/green-bond</u>



- system" Sub-project "New Marcio water system, lot #1" (%).
- Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water system"- Sub-project "Doubling Siphon VIII – segment Casa Valieria – exit Galleria Ripoli" (%).
- Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water system" Sub-project "Monte Castellone conduct Colle Sant'Angelo (Valmontone)" (%).
- Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water system" – Sub-project "Ottavia-Trionfale adducer" (%).
- Interventions in pipeline /interventions in the ATO2 scope (%).
- Interventions in process /interventions in the ATO2 scope (%).
- Interventions completed/ interventions in the ATO2 scope (%).

Energy Efficiency - Resilience of electricity distribution Infrastructure

- Energy efficiency in the electricity distribution networks' management
 - Saved electricity/Distributed electricity (MWh).
 - Avoided emissions (tCO₂).
 - Ton of Oil Equivalent (TOE) saved.
- Increased resilience in the electricity distribution network thanks to development, modernization, connectivity and telematic control interventions
 - Annual % variation of the IRI (Intervention Risk Index) = after intervention value/before intervention value).



- Activation/Upgrade of Secondary Substations' automation and telematic control (n.).
- Broadband linked Primary Substations / 70 Primary Substations (n.).
- Number of pylons removed (n.).
- Recovered soil in highly biodiverse areas (m²).

Energy Efficiency - Clean Transportation and Infrastructure for Low Carbon Transport

- Electric mobility and related services
 - Installed charging column during the year (n.).
 - Supplied certified electricity through Acea charging columns (MWh).
 - Avoided emissions (tCO₂).
 - Acea clients using the platform during the year (n.).
- Environmental impact reduction from the vehicles of the company's fleet
 - Avoided emissions (tCO₂).
 - Total number of electric vehicles from Areti (n.).

Energy Efficiency - Smart Meters

- Substituion of 2G meters in the electricity distribution service
 - Number of 2G meters installed during the year (n.).
 - Installed 2G smart meters/total meters (%)

Circular Economy - Wastewater Treatment

- Efficiency and modernization of the purification sector (sludge reduction, centralization and processing capacity increase, energy efficiency).
 - Total sludge (solid and liquid) (t).
 - Reduction with respect to base year (2019) (%).
 - Percentage increase of the purifying capacity with respect to base year (2019) (%).
 - Dismissed-centralized plants (n.).



- Population Equivalent interested in the centralization of purifiers (PE).
- Avoided emissions thanks to energy savings in the purifying compartment (tCO₂).

Circular Economy - Anaerobic Digestion of Biowaste and/or Sewage Sludge

- Biomethane production from purification plants
 - % upgrading intervention advancement upgrading for North and East Rome.
 - Biomethane introduced in the network (sm³).
 - Avoided emissions (tCO₂).
- Production of renewable energy through composting plants
 - Biogas based electric energy produced and served in the network (MWh).
 - Installed power (MW).
 - Gross electric energy produced/waste sent to treatment to the Aprilia, Monterotondo Marittimo, Orvieto plants (MWh/t).
 - Avoided emissions to produce electric energy (tCO₂).

Circular Economy - Waste Management

- Increase in the waste treatment capacity
 - Overall waste treatment capacity in the year (t).
 - Treated waste for the year (t).
 - Compost produced/waste sent to composting plants (%).
 - Secondary raw materials out of treatment plants/Waste coming in plants (t).
- Acea Smart Comp
 - Number of Smart Comp installed (n.).
 - Organic waste treated by Smart Comp (t).
 - Produced compost by Smart Comp (t).
 - Avoided emissions (tCO₂).



	 Green Energy - Renewable Energy Production of electric energy from photovoltaic sources Installed power/Expected power (MW). Gross production of electric energy (GWh). Avoided emissions (tCO₂). 	
ESG Risk Management	The Issuer confirms that it has managed associated ESG risks of the invested projects. Acea has established a governance system including processes for designing, planning, executing and monitoring all the sustainable finance activities in the Group. Furthermore, the company formed a Green Finance Working Group (GFWG) as part of the governance system. All potential eligible Green Projects comply with local laws and regulations, including any applicable regulatory environmental requirements, and Acea's internal standards for managing ethical and governance risks following the current Code of Ethics and different Management Systems, which are publicly available on the Acea website.	~
Allocation of proceeds - Transparency on the currency	The proceeds allocated so far have been reported in a single currency (EUR). Projects on which proceeds have been allocated have been disclosed.	✓

RECOMMENDATIONS		
ICMA HFIR	GREEN BOND REPORT	ASSESSMENT
Define and disclose period and process for Project Evaluation and Selection	The entirety of proceeds has been allocated to Green Assets. No modification (removal or additional projects) of the portfolio is planned. The Issuer followed a transparent process for selection and evaluation of eligible Green Projects. Projects financed and/or refinanced through the Green Bond issued under Green Financing Framework were evaluated and	✓



	selected based on compliance with the Eligibility Criteria as laid out in the Framework.	
Disclose total amount of proceeds allocated to eligible disbursements	The Issuer discloses in the Green Bond Allocation & Impact Report that a net total of EUR 698.1 million has been raised through the Green Bond. 49.6% of the total amount has been allocated to eligible projects. 34.5% of this latter amount has been allocated to refinance eligible projects (investments made in 2022), 65.5% has been allocated to finance eligible projects (investments made in 2023).	✓
Formal internal process for the allocation of proceeds and to report on the allocation of proceeds	The Issuer followed a transparent process for the allocation of proceeds. Acea formed a Green Finance Working Group (GFWG), a cross-department committee led by the Chief Financial Officer (CFO). It includes representatives from Finance, Sustainability Planning & Reporting and Planning & Control holding departments, each covering responsibility according to its own expertise, and works with representatives of the Issuer's operating subsidiaries. The GFWG is responsible for creating and updating the Green Finance Framework in line with the sustainability objectives of Acea, and dives deep into the eligibility criteria for potential green projects.	
Report at project or portfolio level	The Green Bond Allocation & Impact Report includes the total amount of proceeds allocated per eligible project category, type within categories, and per geographical breakdown (region and country level).	✓
Describe the approach to impact reporting	The Issuer identifies the specific eligible projects and clearly defines, for each project, the total project's allocated proceeds. Impact is reflected at the project level.	✓
Report the estimated lifetime results and/or project economic life (in years)	The Issuer reports on the average portfolio lifetime results or economic life (in years) for both the eligible project category and the subcategories.	✓



Acea estimates the following economic life for its projects:

- Water resource protection:
 - Investment aiming at reducing at least by 20% water losses and installation of gauges for pressure and flow rate management (include Production and installation of water smart meters on the network): 10 and 22 years.
 - Water supply system aimed at increasing the resiliency of the water supply system: 40 years.
- Energy efficiency:
 - Investments in digital technologies to improve the management and increase the efficiency of the electric grid: 30-35 and 10-20 years.
 - Installation of charging stations for electric vehicles and related services:
 8.
 - Acquisition of zero emissions vehicles: 10-15 years.
 - Production and installation of energy smart meters on the network: 15 years.
- Circular economy:
 - Operation of wastewater collection and treatment aiming at reducing sewage sludge: 20 years.
 - New and revamping of the Anaerobic digestion facilities: 20 years.
 - Infrastructure to increase the total waste management capacity: 10-20 years.
 - Installation of Smart composting systems: 10 years.
- Renewable energy:



	 Construction, acquisitions and development of photovoltaic plants and development of greenfield photovoltaic plants: 20 years.
Ex-post verification of specific projects	There is no ex-post verification planned.
Report on at least a limited number of sector specific core indicators	Acea reports on projects' impacts using sector specific indicators, as per the HFIR: Water management – water resource protection * Water losses reduction * Reduction of water volume lost (over 2019) (%). * Flow and pressure meters installed during the year (n.). * Reclaimed water network during the year (km). * Districted water network during the year (km). * Interventions to increment the water system resilience and the security of water supply * Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water system"- Sub-project "New Marcio water system, lot #1" (%). * Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water system"- Sub-project "Doubling Siphon VIII – segment Casa Valieria – exit Galleria Ripoli" (%). * Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water system" – Sub-project "Monte Castellone conduct – Colle Sant'Angelo (Valmontone)" (%).



- Advancement of the design/authorization phase of the longer-term interventions "Securing and modernization of the Peschiera water system" – Sub-project "Ottavia-Trionfale adducer" (%).
- Interventions in pipeline /interventions in the ATO2 scope (%).
- Interventions in process /interventions in the ATO2 scope (%).
- Interventions completed/ interventions in the ATO2 scope (%).

Energy Efficiency - Resilience of electricity distribution Infrastructure

- Energy efficiency in the electricity distribution networks' management
 - Saved electricity/Distributed electricity (MWh).
 - Avoided emissions (tCO₂).
 - Ton of Oil Equivalent (TOE) saved.
- Increased resilience in the electricity distribution network thanks to development, modernization, connectivity and telematic control interventions
 - Annual % variation of the IRI (Intervention Risk Index) = after intervention value/before intervention value).
 - Activation/Upgrade of Secondary Cabins' automation and telematic control (n.).
 - Broadband linked Primary Cabins / 70
 Primary Cabins (n.).
 - Number of pylons removed (n.).
 - Recovered soil in highly biodiverse areas (m²).

Energy Efficiency - Clean Transportation and Infrastructure for Low Carbon Transport

- Electric mobility and related services
 - Installed charging column during the year (n.).
 - Supplied certified electricity through Acea charging columns (MWh).



- Avoided emissions (tCO₂).
- Acea clients using the platform during the year (n.).
- Environmental impact reduction from the vehicles of the company's fleet
 - Avoided emissions (tCO₂).
 - Total number of electric vehicles from Areti (n.).

Energy Efficiency - Smart Meters

- Substituion of 2G meters in the electricity distribution service
 - Number of 2G meters installed during the year (n.).
 - Installed 2G smart meters/total meters (%).

Circular Economy - Wastewater Treatment

- Efficiency and modernization of the purification sector (sludge reduction, centralization and processing capacity increase, energy efficiency).
 - Total sludge (solid and liquid) (t).
 - Reduction with respect to base year (2019) (%).
 - Percentage increase of the purifying capacity with respect to base year (2019) (%).
 - Dismissed-centralized plants (n.).
 - Population Equivalent interested in the centralization of purifiers (PE).
 - Avoided emissions thanks to energy savings in the purifying compartment (tCO₂).

Circular Economy - Anaerobic Digestion of Biowaste and/or Sewage Sludge

- Biomethane production from purification plants
 - % upgrading intervention advancement upgrading for North and East Rome.
 - Biomethane introduced in the network (sm³).
 - Avoided emissions (tCO₂).



- Production of renewable energy through composting plants
 - Biogas based electric energy produced and served in the network (MWh).
 - Installed power (MW).
 - Gross electric energy produced/waste sent to treatment to the Aprilia, Monterotondo Marittimo, Orvieto plants (MWh/t).
 - Avoided emissions to produce electric energy (tCO₂).

Circular Economy - Waste Management

- Increase in the waste treatment capacity
 - Overall waste treatment capacity in the year (t).
 - Treated waste for the year (t).
 - Compost produced/waste sent to composting plants (%).
 - Secondary raw materials out of treatment plants/Waste coming in plants (t).
- Acea Smart Comp
 - Number of Smart Comp installed (n.).
 - Organic waste treated by Smart Comp (t).
 - Produced compost by Smart Comp (t).
 - Avoided emissions (tCO₂).

Green Energy - Renewable Energy

- Production of electric energy from photovoltaic sources
 - Installed power/Expected power (MW).
 - Gross production of electric energy (GWh).
 - Avoided emissions (tCO₂).

If there is no single commonlyused standard, Issuers may follow and disclose their own calculation methodologies

Water losses reduction:

% Reduction of water volume lost (over 2019) - The data is the difference between the volumes lost in the reference year (equal to 249 Mm³ in 2023) in relation to the same data in





2019 (308.5 Mm³). The water balance is calculated based on the methodology established by the Regulatory Authority for Energy, Networks and the Environment (ARERA) with Resolution 917/2017/R/idr.

Reclaimed water network during the year - The data is estimated based on the design length of the main pipeline, to which the incidence of user derivations is added, assumed to be equal to 22% of the length of the pipeline itself. The value of the incidence of user derivations associated with each pipeline laid is estimated based on the cross-analysis of data extracted from procurement accounting and user databases.

Interventions to increase the water system resilience and the security of water supply:

 Interventions completed/interventions in the ATO2 scope - Parametric estimate of the data based on the timetable of the planned activities.

Energy efficiency in the electricity distribution networks' management:

- Saved electricity/Distributed electricity -This is the ratio between the MWh of electricity saved and the MWh of electricity distributed in the year under review.
- Avoided emissions The calculation is carried out by multiplying the MWh saved in the year by the location-based conversion factor provided by Terna and available for the year 2019, the reference year for planning the interventions. In particular, the conversion factor 0 was used .36 tCO₂/MWh.
- TOE saved The calculation is carried out by multiplying the MWh saved in the year by the ratio between TOE and energy carrier, equal to 0.187 TOE/MWh.



Increased resilience in the electricity distribution network thanks to development, modernization, connectivity and telematic control interventions:

- Annual percentage change in IRI (postintervention value/pre-intervention value) - The IRI (pre and post) is calculated as the ratio between the number of BT customers benefiting from the intervention and the Return Time of the disservice connected to the specific risk factor. The indicator is consistent with the methodology shared with the Regulatory Authority for Energy, Networks and the Environment (ARERA) and with what was communicated to the latter.
- Activations/Upgrades of MV and/or BT Automation and Remote Control in CS -Each Secondary Cabin for which one of the following interventions is carried out is considered 1 for the purposes of the calculation.
- No. of CPs connected to broadband / 70 CPs - Ratio between the number of Primary Cabins connected to broadband and the number of total Primary Cabins subject to intervention in the intervention plan.
- Recovered soil in highly biodiverse areas
 The m² recovered are obtained from the sum of the footprints on the ground of the removed pylons.

Electric mobility and related services:

Avoided emissions - The calculation is carried out considering the MWh supplied by the electric charging stations and the hypothetical mileage in km of the consumers' cars with this electricity. From this hypothesis, the kilometers traveled are transformed into avoided emissions of CO₂, considering as the conversion factor the one provided by ISPRA (the database of average emission



- factors of road transport in Italy FE passenger cars), and then subtracting the emissions of CO₂ from the electricity that is used by vehicles.
- Acea customers who used the platform during the year - Count of the number of users who used the top-up service at least once in the year 2023.

Environmental impact reduction from the vehicles of the company's fleet

Avoided emissions - The calculation is carried out by multiplying the avoided diesel consumption in the year by the ISPRA 2019 conversion factor (3.169 tCO₂/t diesel) net of the electricity consumed valued with the location-based factor provided by Terna and available for the year 2019, reference year for planning the initiative. In particular, the conversion factor 0.315 tCO₂/MWh was used.

Replacement of 2G meters in the electricity distribution service:

• 2G smart meters installed / total meter park - Ratio between installed meters and the total number of meters covered by the massive plan (RARI). The indicator is consistent with what was communicated to the Regulatory Authority for Energy, Networks and the Environment (ARERA).

Efficiency and modernization of the purification sector (sludge reduction, centralization and processing capacity increase, energy efficiency)

Sludge reduction:

Reduction with respect to base year (2019) - The data is calculated as the percentage change applied to the production of sludge (solid+liquid) in the year in question compared to the base year 2019, such that for the year 2023 (year in question).

Rationalization of purifying plants:



% increase of the purifying capacity with respect to base year (2019) - The data is calculated, with reference to the upgrade perimeter (10 plants), as a percentage change between the purification potential in the year in question compared to the base year 2019.

Energy efficiency interventions:

Avoided emissions thanks to energy savings in the purifying compartment -The calculation is carried out by multiplying the MWh saved in the year by the location-based conversion factor provided by Terna and available for the year 2019, the reference year for the start of the project. In particular, the conversion factor of 0.36 tCO₂/MWh was used.

Biomethane production from purification plants:

- " wupgrading intervention advancement upgrading for North and East Rome -The data is estimated based on the expected times for the construction of the work starting from the start of the request for the process for the qualification of the project to the GSE.
- Avoided emissions The tons of CO₂ are calculated as the product of the cubic meters of biomethane produced and injected into the network by the emission factor of natural gas, if 1 Smc of biomethane is equivalent to 1 Smc of natural gas.

Production of renewable energy through composting plant:

 Biogas based electric energy produced and served in the network - This is the sum of the electricity produced and transferred to the network in the plants where biogas is produced.



- Installed power This is the sum of the installed power on the nameplate.
- Gross electric energy produced/waste sent to treatment to the Aprilia, Monterotondo Marittimo, Orvieto plants

 The data is calculated as the ratio between the gross energy produced and the waste sent for treatment in the plants where biogas is produced. The ratio is calculated between the sum of the energy produced at UL7, UL5, UL4 and the sum of the waste treated at the same sites.
- Avoided emissions to produce electric energy - The calculation is carried out by multiplying the MWh of electricity produced and sold to the network from biogas in the year by the location-based conversion factor provided by Terna and available for the year 2019, the reference year for defining the target. In particular, the conversion factor of 0.36 tCO₂/MWh was used.

Increase in the waste treatment facility:

- Overall waste treatment capacity in the year - This is the sum of the authorized quantities (official certifications) in waste treatment plants, the intermediated quantities and the budget of waste entering landfills in the reference year.
- Treated waste for the year Sum of all waste treated by Acea Ambiente's own plants and by the plants of its subsidiaries.
- Compost produced/waste sent to composting plants - Sum of compost produced by plants in the composting/waste supply chain managed by the same plants.
- Secondary raw materials out of treatment plants/Waste coming in plants
 Sum of selected waste leaving the selection/waste plants managed by the same plants.



Acea Smart Comp:

- Organic waste treated by Smart Comp-The maximum capacity, in terms of tonnes of waste, of each composter is taken into consideration and the values are added. The data on the maximum flow rate are provided by Acea Infrastructure (formerly (Acea Elabori), the Engineering Group company that designed the composter.
- Produced compost by Smart Comp The calculation takes into consideration the value of organic waste treated by composters, 20% of which is transformed into compost. The data is provided by Acea Infrastructure. The percentage is the estimate of a study/analysis by Acea Infrastructure.
- Avoided emissions Ratio of 1:2: one ton of waste treated with Smart Comp corresponds to 2 t of CO₂ not emitted.

Production of electric energy from photovoltaic sources:

- Installed power/Expected power Sum of the installed power (in the year in question) of the PV systems of Acea Produzione, its affiliates and the fully owned and not fully consolidated company AE Sun Capital (whose systems are managed by Acea), compared to the installed power envisaged by the Industrial Plan 2020-2024.
- Gross production of electric energy -Production meter remote reading system.
- Avoided emissions The calculation is carried out by multiplying the GWh of gross energy produced by PV for the year by the emission factor from Acea Produzione's fossil sources in 2019, equal to 533.1 tCO₂/GWh, considering that that additional energy could have been produced from non-renewable.



Disclosure on the conversion approach (if applicable)	The Issuer elects to convert units reported for individual projects based on a standard conversion factor and includes appropriate disclosure of the conversion approach in the report. In particular, the Issuer uses conversion factors for the calculation of avoided CO ₂ emissions indicator.	✓
Projects with partial eligibility	The Issuer does not include projects with partial eligibility.	-
When the expected impacts of different project components may not be reported separately, Issuers may use (and disclose) the attribution approach	The impact of Acea's projects is reported separately per category and sub category on an aggregated basis.	✓

OPINION

Acea follows the HFIR's core principles and key recommendations. The Issuer provides transparency on the level of expected reporting as well as on the frequency, aligned with best practices. Acea has reported within the next fiscal year after issuance, illustrated the environmental impacts, provided transparency on ESG risk management and transparency on the currency used.



PART III: DISCLOSURE OF PROCEEDS ALLOCATION AND SOUNDNESS OF THE IMPACT REPORTING INDICATORS

Use of Proceeds Allocation

Use of Proceeds allocation reporting is key to put the impacts into perspective with the number of investments allocated to the respective Use of Proceeds' categories.

The Use of Proceeds allocation reporting occurred within 1 year from the bond issuance.

This is the second year of allocation reporting and 49.6% of allocation in 2023. The Use of Proceeds allocation reporting occurred within the regular annual cycle from the issuance.

The Issuer also disclosed transparently the amount of unallocated proceeds and the temporary investments. Proceeds that have not been allocated have been temporarily used for cash, deposits and money market instruments.

Proceeds allocated to eligible projects/assets

The proceeds' allocation is broken down by the type of project. The Issuer has provided details about the type of projects included in the portfolio, including the location of the project, project status, project description and relevant environmental performance indicators. The allocation reporting of Acea's Green Bond Allocation and Impact Report provides further information on:

- The number of projects (re-)financed.
- The total amount of proceeds in EUR million.
- The total financed amount for each eligible project.
- The environmental performance indicators as relevant to each project.



Impact Reporting Indicators

The table below presents an independent assessment of the Issuer's report and disclosure on the output, outcome, and/or impact of projects/assets using impact indicators.

ELEMENT	ASSESSMENT	
Relevance	The impact indicator chosen by the Issuer for this bond is the following: Water losses reduction: No. of flow and pressure meters installed during the year. Reclaimed water network during the year. District water network. Interventions to increase the water system resilience and the security of water supply: Interventions completed/interventions in the ATO2 scope. Energy efficiency in the electricity distribution networks' management: Saved electricity/Distributed electricity. Avoided emissions. TOE saved. Electric mobility and related services: Installed charging columns. Supplied certified electricity through Acea charging columns. Avoided emissions. Acea customers who used the platform during the year. Environmental impact reduction from the vehicles of the company's fleet Avoided emissions. No. electric vehicles. Substitution of 2G meters in the electricity distribution service: No. of 2G meters installed.	



2G smart meters installed / total meter park.

Efficiency and modernization of the purification sector (sludge reduction, centralization and processing capacity increase, energy efficiency)

Sludge reduction:

- Total sludge (solid and liquid).
- Reduction with respect to base year (2019).

Rationalization of purifying plants:

- % increase of the purifying capacity with respect to base year (2019).
- Decommissioned-centralized purifiers.
- Population equivalent interested in the centralization of purifiers.

Energy efficiency interventions:

 Avoided emissions thanks to energy savings in the purifying compartment.

Biomethane production from purification plants:

Avoided emissions.

Production of renewable energy through composting plant:

- Biogas based electric energy produced and served in the network.
- Installed power.
- Avoided emissions to produce electric energy.

Increase in the waste treatment facility:

- Overall waste treatment capacity in the year.
- Treated waste for the year.
- Compost produced/waste sent to composting plants.
- Secondary raw materials out of treatment plants/Waste coming in plants.



Acea Smart Comp:

- No. structures installed.
- Organic waste treated by Smart Comp.
- Produced compost by Smart Comp.
- Avoided emissions.

Production of electric energy from photovoltaic sources:

- Installed power/Expected power.
- Gross production of electric energy.
- Avoided emissions.

These indicators are qualitative, quantitative and material to the Use of Proceeds categories financed through this bond and in line with the Suggested Impact Reporting metrics by the ICMA Harmonized Framework for Impact Report for Environmental Bonds. This aligns with best market practices.

The list below are impact indicators not aligned with the ICMA HFIR:

Increased resilience in the electricity distribution network thanks to development, modernisation, connectivity and telematic control interventions:

- Annual percentage change in IRI (post-intervention value/pre-intervention value).
- Activations/Upgrades of MV and/or BT Automation and Remote Control in CS.
- No. of CPs connected to broadband / 70 CPs.
- No. pylons removed.
- Recovered soil in highly biodiverse areas.

Biomethane production from purification plants:

- % upgrading intervention advancement upgrading for North and East Rome.
- Biomethane introduced in the network.

Production of renewable energy through composting plant:



	Gross electric energy produced/waste sent to treatment to the Aprilia, Monterotondo Marittimo, Orvieto plants.
Data sourcing and methodologies of quantitative assessment	 Water volume in 2019 - The data is extracted from the management system for determining the water balance. No. of flow and pressure meters installed during the year - The data is extracted from the management system (Scada). Reclaimed water network during the year - The data is estimated by the process owner unit based on data extracted from the procurement accounting systems and invoiced users' database. District water network - The data is extracted from the GIS georeferencing system. To calculate interventions to increase the water system resilience and the security of water supply: Interventions completed/interventions in the ATO2 scope - The data is estimated by the process owner unit based on the progress of the order and the status of the project authorization process. To calculate energy efficiency in the electricity distribution networks' management: Saved electricity/Distributed electricity - The data is calculated by the process owner unit considering as primary data the electrical energy saved (data estimated by the Company's energy manager) and the MWh distributed (measured and provided by the Electricity Resource Protection Unit - Balance sheet and process measurements). Avoided emissions - The data is calculated by the process owner unit considering the electricity saved as primary data (data estimated by the Company's energy manager). TOE saved - The data is calculated by the process owner unit considering the electricity saved as primary data (data estimated by the Company's energy manager). The data is then stored privately on a database.



To calculate the increased resilience in the electricity distribution network thanks to development, modernization, connectivity and telematic control interventions:

- Annual percentage change in IRI (post-intervention value/pre-intervention value) The data is calculated by the process owner unit using simulations conducted on the DIgSILENT software.
- Activations/Upgrades of MV and/or BT Automation and Remote Control in CS - The data is extracted from the Appian Software and possibly integrated by the process owner unit with final management files external to the software.
- No. of CPs connected to broadband / 70 CPs Data calculated and provided by the function that performs the activity.
- No. pylons removed Data provided by the activity representative based on the finalized works.
- Recovered soil in highly biodiverse areas Data Calculated by the process owner unit based on the pylons removed and the area occupied by them.

To calculate electric mobility and related services:

- Installed charging column Data present in the Acea Innovation management files. The column is considered installed from the moment it is connected to the network and can supply electricity.
- Supplied certified electricity through Acea charging columns -Data obtained from the electricity meters relating to the electrical columns that supply it.
- Avoided emissions Data calculated by the process owner unit considering as primary data the MWh supplied by the electrical columns (obtained from the electricity meters pertaining to the electrical columns that supply it).
- Acea customers who used the platform during the year E-Mobility Platform – BOMTS.

To calculate the environmental impact reduction from the vehicles of the company's fleet:



- Avoided emissions Data calculated by the process owner unit. The data relating to diesel consumption saved are estimated by the Company's fleet manager, considering the km traveled by the electric cars (data recorded) and the hypothetical diesel consumption for such journeys (17.5 km/l).
- No. electric vehicles The data derives from the census database of company cars circulating in the year in question held by the process owner unit.

To calculate the replacement of 2G meters in the electricity distribution service:

- No. of 2G meters installed The data is extracted from the Qlik Application and possibly integrated with data from the process owner.
- 2G smart meters installed / total meter park The data is calculated by the process owner unit considering the number of meters installed and the total number of meters considered in the meter replacement plan communicated to the Regulatory Authority for Energy, Networks and the Environment (ARERA).

To calculate sludge reduction:

- Total sludge (solid and liquid) The data is extracted from the waste/declaration management system of the MUD - Single Environmental Declaration Model.
- Reduction with respect to base year (2019) The data is calculated by the process owner unit based on data extracted from the waste management/declaration of the MUD - Single Environmental Declaration Model.

To calculate the rationalization of purifying plants:

- % increase of the purifying capacity with respect to base year (2019) - The data is calculated by the process owner unit based on the increase in the new purification potential indicated by the discharge authorization.
- Decommissioned-centralized purifiers The data is calculated by the process owner unit based on the official communications of plant decommissioning made to the Metropolitan City of Rome.



 AE affected by the centralization of purifiers - The data is calculated by the process owner unit based on the potential in terms of equivalent inhabitants from the authorization to discharge the decommissioned purifiers.

To calculate energy efficiency interventions:

Avoided emissions thanks to energy savings in the purifying compartment - The data is calculated by the process owner unit considering the electrical energy saved as primary data. Energy saving is obtained by calculating the difference between the specific energy consumption (volumetric EnPI) of the reference year and the volumetric EnPi of the previous year, multiplied by the volume in cubic meters of water treated in the reference year.

To calculate the biomethane production from purification plants:

- % upgrading intervention advancement upgrading for North and East Rome - The data is estimated by the process owner unit.
- Biomethane introduced in the network The data is detected by the biomethane meters injected into the network.
- Avoided emissions The data is calculated by the process owner unit considering the biomethane injected into the network as primary data.

To calculate the production of renewable energy through composting plant:

- Biogas based electric energy produced and served in the network - The data is measured and comes from the technical administration data collected by the plants/companies.
- Installed power The data comes from the CENSIMP certifications of TERNA, the Italian TSO.
- Gross electric energy produced/waste sent to treatment to the Aprilia, Monterotondo Marittimo, Orvieto plants - The data is calculated using as primary data the electricity produced and sold to the network from biogas and the waste sent for treatment in the plants where biogas is produced (technical administration data collected by the plants/companies).



 Avoided emissions to produce electric energy - The data is calculated using as primary data the electricity produced and sold to the network from biogas (technical administration data collected by the plants/companies).

To calculate the increase in the waste treatment facility:

- Overall waste treatment capacity in the year The data derives from the authorizations/technical administration data collected by the controlled plants/companies.
- Treated waste for the year The data derives from the technical administration data collected from the plants/companies.
- Compost produced/waste sent to composting plants The data is calculated considering as primary data the compost produced by plants in the composting supply chain and the waste managed by the same plants; these data derive from the technical administration data collected by the plants/companies.
- Secondary raw materials out of treatment plants/Waste coming in plants - The data is calculated considering the selected waste leaving the selection plants and the waste managed by the same plants; these data derive from the technical administration data collected by the plants/companies.

To calculate Acea Smart Comp:

- No. structures installed The data present is in the Acea Innovation management files.
- Organic waste treated by Smart Comp The data is calculated using an internal database provided by Acea Infrastructure based on the maximum capacity, in tonnes, of the devices.
- Produced compost by Smart Comp The data is calculated by Acea Infrastructure based on the organic waste treated measured by the composters.
- Avoided emissions The data is calculated using an internal database, using the treated organic waste measured by the composters as primary data.

To calculate the production of electric energy from photovoltaic sources:



	 Installed power/Expected power - Sum of the installed power (in the year in question) of the PV systems of Acea Produzione, its affiliates and the fully owned and not fully consolidated company AE Sun Capital (whose systems are managed by Acea), compared to the installed power envisaged by the Industrial Plan 2020-2024. Gross production of electric energy - Data extracted from the production meter remote reading system. Avoided emissions - Calculated data using an internal database.
Baseline selection	The impact data is compared with relevant baseline, where needed as relevant internal data were used.
Scale and granularity	The impact data is presented at the project type level within each Use of Proceed category for the indicators.

High-level mapping of the impact indicators with the UN Sustainable Development Goals

Based on the project categories financed and refinanced by the bonds as disclosed in the Issuer's Green Bond Allocation & Impact Report, the impact indicator(s) adopted by Acea for its Green Bond can be mapped to the following SDGs, according to the ICMA "A High -Level Mapping to the Sustainable Development Goals".⁷

IMPACT INDICATORS	SUSTAINABLE DEVELOPMENT GOALS
Water losses reduction:	
 % Reduction of water volume lost (over 2019). 	G CLEAN WATER AND SANITATION
 No. of pressure and flow meters installed during the year. Reclaimed water network during the year. District water network. 	
Interventions to increment the water system resilience and the security of water supply:	6 CLEAN WATER AND SANITATION

⁷ ICMA's Mapping-SDGs-to-Green-Social-and-Sustainability-Bonds



 Interventions completed/interventions in the ATO2 scope.

Energy efficiency in the electricity distribution networks' management:

- Saved electricity/Distributed electricity.
- Avoided emissions.
- TOE saved.

Increased resilience in the electricity distribution network thanks to development, modernisation, connectivity and telematic control interventions:

Recovered soil in highly biodiverse areas.

Increased resilience in the electricity distribution network thanks to development, modernisation, connectivity and telematic control interventions:

- Annual percentage change in IRI (postintervention value/pre-intervention value).
- Activations/Upgrades of MV and/or BT Automation and Remote Control in CS.
- No. of CPs connected to broadband / 70 CPs.
- No pylons removed.

Electric mobility and related services:

- Installed charging columns.
- Supplied certified electricity through Acea charging columns.
- Avoided emissions.
- Acea customers who used the platform during the year.









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Environmental impact reduction from the vehicles of the company's fleet

- Avoided emissions.
- No. electric vehicles.



Replacement of 2G meters in the electricity distribution service:

- No. of 2G meters installed.
- 2G smart meters installed / total meter park.



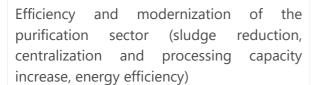
Efficiency and modernization of the purification sector (sludge reduction, centralization and processing capacity increase, energy efficiency)

Sludge reduction:

- Total sludge (solid and liquid).
- Reduction with respect to base year (2019).

Rationalization of purifying plants:

- % increase of the purifying capacity with respect to base year (2019).
- Decommissioned-centralized purifiers.
- AE affected by the centralization of purifiers.



Energy efficiency interventions:

 Avoided emissions thanks to energy savings in the purifying compartment.





Green Bond Report Acea



Biomethane production from purification plants:

- % upgrading intervention advancement upgrading for North and East Rome.
- Biomethane introduced in the network.
- Avoided emissions.



- Biogas based electric energy produced and served in the network.
- Installed power.
- Gross electric energy produced/waste sent to treatment to the Aprilia, Monterotondo Marittimo, Orvieto plants.
- Avoided emissions to produce electric energy.





Increase in the waste treatment facility:

- Overall waste treatment capacity in the year.
- Treated waste for the year.
- Compost produced/waste sent to composting plants.
- Secondary raw materials out of treatment plants/Waste coming in plants.



Acea Smart Comp:

Avoided emissions.

Acea Smart Comp:

- No. structures installed.
- Organic waste treated by Smart Comp.
- Produced compost by Smart Comp.





Green Bond Report Acea



Production of electric energy from photovoltaic sources:

- Installed power/Expected power.
- Gross production of electric energy.
- Avoided emissions.



OPINION

The allocation of the bond's proceeds has been disclosed, with a detailed breakdown across different eligible project categories as proposed in the Framework, and the Green Bond Allocation and Impact Report has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculations methodologies and granularity reflecting best market practices. Besides, the impact indicators used align with best market practices using ICMA's HFIR recommended metrics, apart from some indicators used for the Increased resilience in the electricity distribution networks, Biomethane production from purification plants, and Production of renewable energy through composting plants.

Green Bond Report Acea



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ANNEX 1: Methodology

Review of the post-issuance Reports

The ISS-Corporate Report Review provides an assessment of labelled transactions reporting against international standards using ISS-Corporate proprietary <u>methodology</u>.

High-level mapping to the SDG

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary method based on ICMAs Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals, the extent to the Issuers reporting and project categories contribute to related SDGs is identified.



ANNEX 2: Quality management processes

ISSUER'S RESPONSIBILITY

Issuer's responsibility was to provide information and documentation on:

- Green Bond Allocation & Impact Report
- Green Financing Framework
- Proceeds Allocation
- Reporting Impact Indicators
- Methodologies, and assumptions for data gathering and calculation
- ESG Risk Management

ISS-CORPORATE'S VERIFICATION PROCESS

Since 2014, ISS Group, of which ISS-Corporate is part, has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

This independent Report Review has been conducted by following the ICMA Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews, and its methodology, considering, when relevant, the ISAE 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information.

The engagement with Issuer Name took place in August and September 2024.

ISS-CORPORATE'S BUSINESS PRACTICES

ISS-Corporate has conducted this verification in strict compliance with the ISS Group Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.



About this Report Review

Companies turn to ISS-Corporate for expertise in designing and managing governance, compensation, sustainability and cyber risk programs that align with company goals, reduce risk, and manage the needs of a diverse shareholder base by delivering best-in-class data, tools, and advisory services.

We assess the alignment of the Issuer's report with external principles (e.g., ICMA Green / Social Bond Principles, ICMA Green Bond Principles, Social Bond Principles and Sustainable Bond Guidelines), analyze the alignment of the Issuer's Report against the commitments in the respective Framework, and analyze the disclosure of proceeds allocation, the data source, and calculation methodologies of the reporting indicators against best market practices. Following these guidelines, we draw up an independent Report Review so investors are as well as informed as possible about the proceeds allocation and the impact of the sustainability finance instrument(s).

Learn more: https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/

For information on Report Review services, contact: SPOsales@isscorporatesolutions.com

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