

## ASSESSMENT

15 May 2023



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## ASTM S.p.A.

### Second Party Opinion – Sustainability-Linked Financing Framework Assigned SQS2 Sustainability Quality Score

#### Summary

We have assigned an SQS2 sustainability quality score (very good) to ASTM S.p.A.'s (ASTM) sustainability-linked financing framework dated 12 May 2023. ASTM has established its sustainability-linked financing framework with the aim of financing general corporate purposes and has selected three key performance indicators (KPIs). KPI 1 and 2 are related to reductions in greenhouse gas (GHG) emissions and KPI 3 is related to the share of service stations covered with electric vehicle charging along the network operated by ASTM. The framework is aligned with the five core components of the International Capital Market Association's (ICMA) Sustainability-Linked Bond Principles (SLBP) 2020 and the Loan Market Association, Asia-Pacific Loan Market Association and Loan Syndications & Trading Association's (LMA/APLMA/LSTA) Sustainability-Linked Loan Principles (SLLP) 2023. The company incorporates recommended practices under these principles, and all identified best practices. The framework also demonstrates a significant contribution to sustainability.

#### Sustainability quality score

**SQS2**



#### Alignment with principles SUSTAINABILITY-LINKED

##### Overall alignment



##### FACTORS

FACTORS	ALIGNMENT
Selection of KPIs	Aligned
Calibration of SPTs	Aligned
Instrument characteristics	Aligned
Reporting	Aligned
Verification	Aligned

#### Contribution to sustainability

##### Overall contribution



##### Expected impact Relevance and magnitude

ADJUSTMENTS	ADJUSTMENTS
ESG risk management	No adjustment
Coherence	No adjustment

## Scope

We have provided a second party opinion (SPO) on the sustainability credentials of ASTM's sustainability-linked financing framework, including the framework's alignment with the ICMA's SLBP 2020 and the LMA's SLLP 2023. Under its framework, the company plans to issue sustainability-linked bonds and sustainability-linked loans. The company has selected three sustainability key performance indicators (KPIs), as outlined in Appendix 2 of this report.

Our assessment is based on the last updated version of ASTM's framework on 12 May 2023, and our opinion reflects our point-in-time assessment of the details contained in this version of the framework, and other public and non-public information provided by the company.

We produced this SPO based on our [Framework to Provide Second Party Opinions on Sustainable Debt](#), published in October 2022.

## Issuer profile

ASTM S.p.A. (ASTM) is a motorway concession operator based in Italy, and was founded in 1928. It deals in motorway management, large infrastructure engineering and construction projects, and transport and mobility technology. The Group claims to be the second-largest toll road operator in the world with around 6,200 kilometres (km) of roads managed through concessions in Italy, Brazil and the UK. The company had total revenues of €3.4 billion in 2022 and over 17,000 employees<sup>1</sup>. ASTM is a private company since 4 June 2021, no longer listed on the Italian Stock Exchange. The Gavio Group, a global transport infrastructure operator, holds 50.5% of ASTM, and Ardian, a private investment company, holds 49.5%<sup>2</sup>. The overall environmental risk exposure is low for toll road operators. This is because of the increasing use of electric or hybrid cars, with new revenue likely to support toll road operators' investment in additional facilities such as charging stations, and the role of toll roads in diverting traffic from and improving the amenity of suburban arterial roads. Mitigating factors include insurance policies, regulations in some jurisdictions that allow for the recovery of unforeseen costs or losses, and state intervention.

## Strengths

- » KPIs related to GHG emissions reduction are based on absolute metrics, rather than intensity, which accurately reflects the carbon footprint of the company independent of its business growth.
- » The sustainability performance targets (SPTs) for both KPI 1 and 2 are set in accordance with international standards.
- » External verification conducted until maturity of the instruments
- » All KPIs have historical externally verified values covering at least the previous three years.

## Challenges

- » KPI 1 and 2 demonstrate an improvement, although a slower reduction rate in GHG reduction compared with the company's business-as-usual (BaU) rate in prior years.

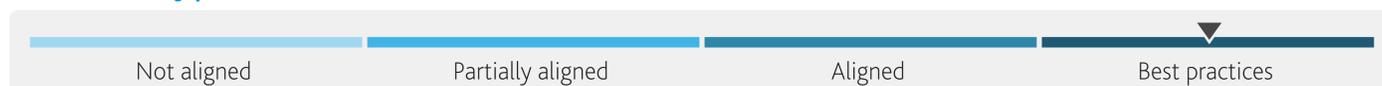
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## Alignment with principles

The sustainability-linked financing framework is aligned with the five core components of the SLBP 2020 and SLLP 2023, incorporates recommended practices under these principles and all identified best practices:

- Green Bond Principles (GBP)
- Social Bond Principles (SBP)
- Green Loan Principles (GLP)
- Social Loan Principles (SLP)
- Sustainability-Linked Bond Principles (SLBP)
- Sustainability Linked Loan Principles (SLLP)

## Selection of key performance indicators



### Definition – ALIGNED

ASTM has clearly defined the KPIs, including the units of measurement, the rationale and process to select the KPIs, the calculation methodologies and the scope (see Appendix 2 for details), and these are publicly disclosed in the framework. The company has selected three KPIs. KPI 1 aims at reducing absolute scope 1 and 2 emissions and KPI 2 aims at reducing absolute scope 3 emissions. Both KPIs are calculated in metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e). KPI 3 aims at increasing the percentage of service stations covered with electric vehicle charging stations along the networks operated by ASTM.

### Measurability, verifiability and benchmark – BEST PRACTICES

All KPIs selected by the company are measurable and externally verifiable by an independent auditor. The calculation methodologies are consistent, and in case of any future change, the issuer commits to informing investors about such changes. The KPI's definitions rely on external references, allowing them to be benchmarked. The methodology used for KPIs 1 and 2 is based on recognised metrics commonly used by the market to monitor and report on GHG emissions. KPI 3 refers to European regulations related to charging stations.

Historical performance data for all KPIs, for at least the last three years, has been disclosed and the data is externally verified.

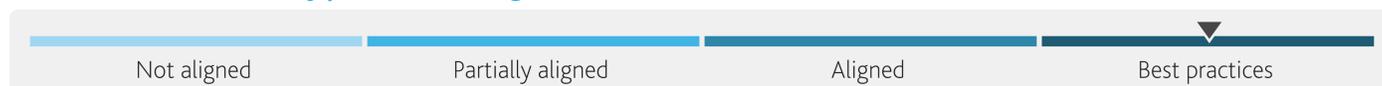
### Relevance and materiality – ALIGNED

The selected KPIs are relevant, core and material to ASTM's business strategy for its current and future operations, and reflect the relevant sustainability challenges for the issuer's sector. Energy consumption and GHG emission reduction have been identified as priorities in the company's materiality analysis within the company's sustainability report and related contribution to achieve the SDGs by 2030. The scope of coverage of KPI 1 was estimated at 6% on a stand-alone basis. Taken in isolation, KPI 1 partially addresses relevant sustainability issues for the company. The issuer, however, has committed to always use KPI 1 and KPI 2 together and they account for approximately 95% of ASTM's total carbon footprint. All 3 KPIs cover ASTM and all its fully consolidated subsidiaries included in the 2021 Consolidated Financial Statements. The level of relevance and the significance of the KPIs are analysed in detail in the "Contribution to sustainability" section.

### Best practices identified

- » There is continuity or traceability, with independent verifiers, in case of a change in the methodology used to measure KPIs
- » The KPI(s) definition(s) explicitly rely on external references, allowing them to be benchmarked
- » Disclosure of the externally verified historical performance of KPI(s); for example, over at least three years

## Calibration of sustainability performance targets



### Consistency and ambition – BEST PRACTICES

The company's sustainability performance targets (SPTs) are consistent with the issuers's sustainability strategy. The KPIs are related to ASTM's strategy guided by the Group's decarbonisation targets and energy efficiency initiatives.

The SPTs for KPI 1 and 2 demonstrate an improvement, although at a slower reduction rate compared with the company's business-as-usual (BaU), while the SPT for KPI 3 demonstrates a material improvement beyond BaU. The ambition of the SPTs for KPI 1 is overall in line with the top performing sector peers, while the ambition for the SPTs for KPI 3 appears aligned with those of its peers. The benchmark for KPI 2 has been challenging due to the lack of publicly available data in absolute targets corresponding to peers. KPI 1 and KPI 2 have been benchmarked against the science-based scenarios. In October 2021, scope 1 and 2 emissions were validated by the Science-based Targets Initiative (SBTi) in line with a well-below 2°C scenario. ASTM thereafter committed to more stringent GHG emission reduction targets and in April 2023 received SBTi validation in line with a 1.5°C scenario for scope 1 and 2. The level of ambition of the SPTs has been analysed in detail in the "Contribution to sustainability" section.

The means for achieving the SPTs have been disclosed in the framework in detail through their action plans and these are considered credible.

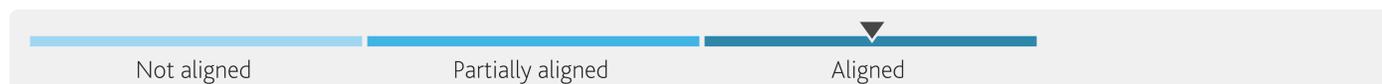
### Disclosure – BEST PRACTICES

The timeline, baseline and trigger events have been publicly disclosed in the framework. The issuer has set relevant intermediary targets allowing for sufficient visibility into the performance of KPI 1 and KPI 2 for which medium-term SPTs have been set. The selected baselines are considered relevant and reliable. The 2020 historical values were recalculated considering the new perimeter in which ASTM is including Ecorodovias Group and SITAF Group, whose control was acquired in 2021.

#### Best practices identified

- » Disclosure of the means for achieving the SPT(s) as well as their respective contribution in quantitative terms to the SPTs OR as well as any other key factors beyond the issuer/borrower's direct control that may affect the achievement of the SPT(s)
- » The means for achieving the SPT(s) are credible
- » Disclosure of the timeline, baseline and trigger events, including relevant intermediate targets
- » The selected baselines are relevant and reliable

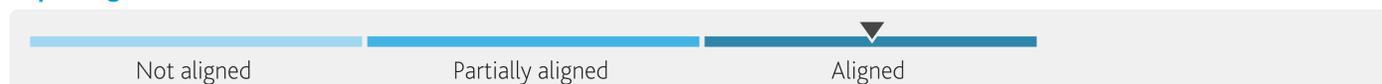
### Instrument characteristics



#### Variation of structural characteristics – ALIGNED

ASTM has confirmed that all instruments issued under its financing framework (e.g. bonds, loans, commercial paper, derivatives instruments or other forms of financial instruments available) will be subject to variations in their structural and financial characteristics depending on the achievement of the selected KPIs and applicable SPTs on the target observation dates. The relevant KPIs, SPTs, trigger events, step-up coupon or margin adjustment or premium payment amount, as applicable will be detailed for each instrument in the corresponding financing instrument documentation. The issuer commits to always using KPI 1 in conjunction with KPI 2.

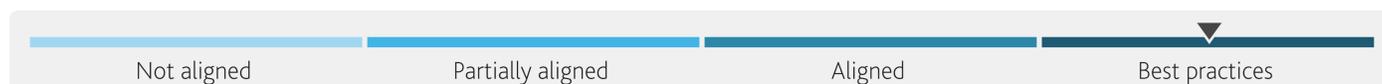
### Reporting



#### Transparency of reporting – ALIGNED

The issuer has committed to report annually, and in the event of any significant changes, on its website and in its annual sustainability reports. The intended scope and granularity of reporting are clear and cover information on the KPIs performance against the SPTs, any relevant information enabling investors to monitor the progress against the SPT, any reassessment of KPIs and restatement of the SPT, and pro forma adjustments of baselines or KPIs where relevant, as well as up-to-date information on the instrument's financial performance.

### Verification



#### Verification process – BEST PRACTICES

The performance of each KPI against the SPT will be externally verified on an annual basis and in case of significant changes that affect the sustainability-linked instrument's financial or structural characteristics, or both, until maturity of the instrument. The verification of the performance of the KPIs against their SPTs will be publicly disclosed on the company's website.

#### Best practices identified

- » Verification will be conducted until maturity of the bond or loan

## Contribution to sustainability

The framework demonstrates a significant overall contribution to sustainability.



### Expected impact

The expected impact of the environmental KPIs and SPTs on sustainability objectives is significant. The KPIs were weighted equally because there is no visibility into each of the issuances' financial structure. The issuer has committed to using KPI1 and 2 together on all issuances.

#### KPI 1 - Absolute Scope 1 and 2 GHG Emissions



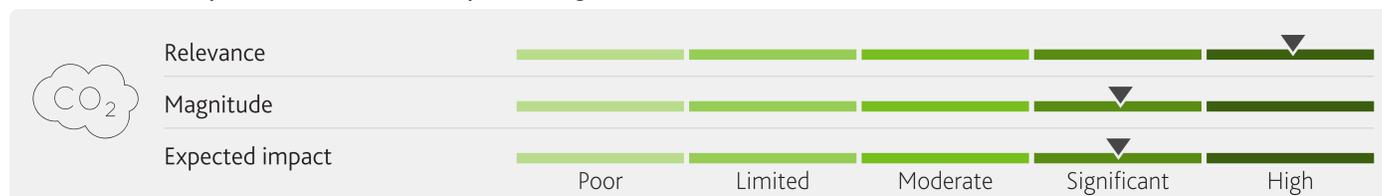
The relevance of KPI 1 is considered significant. Transport operations account for one-third of total energy consumed and around 23% of total direct GHG emissions in the EU, while construction, considering all sectors, is responsible for 40% of energy consumed and 36% of carbon emissions at the European level. According to the Italian Ministry of Infrastructure and Transport, there are around 6,000 km of toll roads in Italy, and Brazil's National Land Transportation Agency reports that there are around 9,000 km in Brazil, underscoring the importance of toll road operators in reducing carbon footprint in both countries. Moreover, energy consumption and GHG emissions have been identified as significant issues by the issuer in its materiality matrix. Despite the fact that scope 1 and 2 emissions account for only 6% (2021) of the Group's total GHG emissions, the relevance of KPI 1 is strengthened by the issuer's commitment to always use KPIs 1 and 2 together, accounting for 95% of ASTM's total carbon footprint. However, the issuer applies the market-based approach to calculate scope 2 emissions, where electricity purchased from renewable energy via guarantees of origin is accounted as zero. The market-based approach raises concerns as it allows companies to report scope 2 emissions based on a financial transaction that does not necessarily change the physical energy consumption and emissions associated with the company's operations and could lead to inflated estimates of the effectiveness of the mitigation measures<sup>3</sup>.

The magnitude of the SPTs related to KPI 1, which reflects their ambition, is high, based on a combination of benchmarking approaches. ASTM has set a target to reduce Scope 1 and 2 emissions by 41%, 46% and 54% by 2026, 2028 and 2030, respectively, from 2020 levels. The SPTs represent an improvement, although following a slower reduction rate compared with the issuer's BaU trajectory. The issuer reports that the steep decrease in the initial years (2020-2021) was mainly due to the purchase of renewable electricity. The period between 2018 and 2020 saw an average annual increase of 35%, followed by a decrease in emissions of 19% in 2020-22. However, the annual emissions reduction is projected to be 8% for the 2020 to 2026 period, 7% between 2020 and 2028 and 7% between 2020 and 2030. The increase in emissions from 2018 to 2020 can be explained by the change in the perimeter as ASTM acquired control over Ecorodovias Group and SITAF Group in 2021. The significant improvement in the 2020-22 period compared with 2018-20 was mainly due to a substantial increase in the percentage of electricity purchased from renewable sources (market-based scope 2 emissions).

The SPTs are overall in line with the top performing sector peers. The 2030 targets for the peers include Acciona with 60% (versus 2017), Vinci with 40% (versus 2018), Vinci concessions with 50% (versus 2018), Abertis with 50% (versus 2019), Bouygues Construction with 40% (versus 2019) and ASPI with 67.8% (versus 2019).

In April 2023, ASTM's Scope 1 and 2 targets were validated by the SBTi. Within the SBTi's ground transportation category, ASTM is one of the seven companies among a total of 21 whose targets were independently verified to be aligned with the 1.5°C scenario. Moreover, it is worth noting that ASTM is the first European motorway operator and the largest in terms of kilometers managed in the world to set science-based emission reduction targets approved by SBTi.

#### KPI 2 - Absolute Scope 3 GHG emissions from purchased goods and services



The selected KPI reflects the issuer's most significant sustainability issue for its current and future operations, as well as the most relevant sustainability challenges for its sector. The construction of roads and large infrastructure projects have a significant impact on climate change. Raw materials, including asphalt, concrete and steel, which are meant for use in pavements and excavation of materials for road maintenance, as well as their transportation during the construction phase, are the most energy-consuming portion of scope 3 emissions. KPI 2 (scope 3 emissions from purchased goods and services only) covered 89% of ASTM's total carbon footprint and 92% of total scope 3 emissions in 2021 and includes all its subsidiaries wholly consolidated, calculated on a pro forma basis. The following emission categories were included according to the GHG Protocol Scope 3 Standard: Purchased goods and services, Fuel-and-energy-related activities, Waste generated in operations, Capital goods, Upstream transportation and distribution, Employee commuting and Investment. The other emission categories of the GHG Protocol Scope 3 Standard were deemed not applicable or not relevant. KPI 2 is based on an absolute metric, rather than an intensity metric, which accurately reflects the carbon footprint of the company independent of its business growth.

The magnitude of the SPTs related to KPI 2, which reflects their ambition, is significant based on a combination of benchmarking approaches. ASTM has set a target to reduce Scope 3 emissions by 7% and 11% by 2028 (versus 2021) and 2030 (versus 2021), respectively. The period between 2018 and 2021 saw an average annual increase of 58% followed by a decrease of 3.56% in 2021-22, 1.03% in 2021-28 and 1.3% in 2021-30. The SPTs represent a small improvement compared with the issuer's BaU trajectory, which peaked in 2021 because of the aforementioned change in the perimeter of the KPI from 2020. The year of acquisition of Ecorodovias Group and SITAF Group by ASTM has been chosen as a baseline to demonstrate the normalized evolution of scope 3 emissions.

The SPTs sector peers benchmark has not been possible due to insufficient comparable sector peers' data including the clarity on the scope of coverage of the indicators, as well as disclosure of absolute emissions (tCO<sub>2</sub>e) numbers. With the exception of Eurovia, most sector peers disclose intensity rather than absolute emissions targets. ASTM's disclosure of scope and absolute emissions demonstrates a higher level of transparency than its peers and it is a best market practice to accurately reflect the climate change mitigation efforts and the carbon footprint of the company independent of its business growth. As for international standards, SBTi does not classify scope 3 targets by temperature. However, scope 3 targets are evaluated during the validation process to ensure they meet SBTi criteria, including that targets must be aligned with at least well-below 2°C pathways.

### KPI 3 - Percentage of service stations along the network operated by ASTM Group covered with electric vehicle charging stations



KPI 3 reflects a significantly relevant sustainability issue for ASTM's current and future operations, as well as a relevant sustainability challenge for its sector. According to the International Energy Agency (IEA), transport emissions have risen faster than emissions in any other end-use sector over the last 30 years. Carbon dioxide (CO<sub>2</sub>) emissions from the sector must fall by about 3% per year until 2030 for the sector to get on track with the net zero emission target by 2050.<sup>4</sup> In Italy, a recent national plan aims to expand the charging network by adding more than 20,000 fast-charging points on highways and urban centres by 2026<sup>5</sup>. Although Italy had fewer than 245,000 electric vehicles (EVs) as of January 2022<sup>6</sup>, to achieve European decarbonisation objectives, a fleet of six million EVs is required by 2030<sup>7</sup>. Moreover, from 2035, the European Union will only allow for sale of zero-emission vehicles<sup>8</sup>, adding to the importance of increasing the network of charging stations. In Brazil, the Rota 2030 plan was set to promote its automotive sector, biofuels, and the development of systems and components for electric, hybrid and fuel cell vehicles<sup>9</sup>. Brazil is the world's largest producer of ethanol, and the government has been supporting its production through market regulation and tax incentives. While ethanol and flex-fuel-powered vehicles account for most of the fleet on the road in Brazil<sup>10</sup>, the EV fleet in the country surpassed 100,000 units in 2022<sup>11</sup>. Considering that installation of electric vehicle charging points (EVCPs) is an enabling activity, with an indirect impact, the relevance is considered significant in terms of its substantial contribution to climate change mitigation.

The magnitude of the ambition of KPI 3 is moderate, based on a combination of benchmarking approaches. The SPT represents a material improvement compared with the BaU. The SPT appears to be overall in line with the sector average performance, however the sector peers benchmarking has been challenging. The issuer stated in its 2022 sustainability report that at year end in Italy 55 ultrafast charging units and a total of 71 charging points had been installed along ASTM's network. However, there is no visibility on the number of charging points that will be installed per station in the future, while most of the peers disclose this data. Some peers disclose the targets service areas coverage, including Vinci Autoroutes that aims to equip all its service areas with electric charging facilities by 2023<sup>12</sup>. ASPI targets to have all its service areas equipped with high-voltage service stations according to its business plan 2020-2024<sup>13</sup>. In terms of external benchmark, a provisional agreement on charging and fuelling stations for alternative fuels in Europe, seeks to require an EV charging pool with a power of at least 400 kW available every 60 km by 2026<sup>14</sup>, while currently the relevant regulation in Italy requires a power of at least 300 kW and include at least one recharging station with an individual power output of at least 150 kW every 60 km by 2025 along the TEN-T core network and by 2030 along the TEN-T comprehensive network<sup>15</sup>. ASTM is targeting to have one charging station every 30 km on average in Italy equipped with ultrafast EV charging points (greater than 100 kW) by 2026. In Brazil, there is no regulatory requirement in this regard. Nevertheless, ASTM has committed to install one charging station every 60 km on average and ASTM confirmed that the technology to be used in Brazil will be standard (11 kW/22 kW) in 2026.

#### ESG risk management

We have not applied a negative adjustment for ESG risk management to the expected impact score. The issuer seems to maintain robust internal policies and procurement processes addressing ESG matters.

#### Coherence

We have not applied a negative adjustment for coherence to the expected impact score because the issuer's policies were considered coherent with the selected KPIs and SPTs. The construction of roads and large infrastructure, and construction projects have a significant impact on climate change, particularly by generating large volumes of harmful GHG emissions directly through fossil fuel consumption, transportation, paving works, etc., and indirectly through the purchase of raw materials and emissions coming from the increase of vehicles on the road. In this sense, construction companies, including road toll operators, must define a comprehensive environmental strategy that minimises their impact on the climate and the environment through various sustainable practices that lead to a reduction in GHG emissions.

## Appendix 1 - Mapping KPIs to the United Nations' Sustainable Development Goals

The three KPIs included in ASTM's framework are likely to contribute to three of the United Nations' (UN) Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 9: Industry, Innovation and Infrastructure	KPI 3: Percentage of Service Stations along the network	9.4: Upgrade infrastructure and retrofit industries to make them sustainable, with all countries taking action
GOAL 11: Sustainable Cities and Communities	KPI 3: Percentage of Service Stations along the network	11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all
GOAL 13: Climate Action	KPI 1: Absolute Scope 1 and 2 GHG Emissions	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
	KPI 2: Absolute Scope 3 GHG Emissions from purchased	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
	KPI 3: Percentage of Service Stations along the network	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

The mapping of the UN's SDGs in this SPO considers the KPIs and associated sustainability objectives/benefits documented in the issuer/borrow/lender's financing framework, as well as resources and guidelines from public institutions, such as the ICMA's SDG Mapping Guidance and the UN's SDG targets and indicators.

## Appendix 2 - Summary of KPIs in ASTM's framework

Environmental KPI	Baselines			SPTs			Sustainability Objectives	Unit
	2020	2021	2022	2026	2028	2030		
Absolute Scope 1 and 2 GHG emissions, calculated in tonnes of carbon dioxide equivalent (tCO2eq)	145,439 (Baseline)	100,111	95,960	85,809	78,537	66,902	Climate Change Mitigation	tCO2eq
Absolute Scope 3 GHG emissions from purchased goods and services, calculated in tonnes of carbon dioxide equivalent (tCO2eq)	1,571,109	2,260,666 (Baseline)	2,180,218	N/A	2,102,419	2,009,732	Climate Change Mitigation	tCO2eq
Percentage of Service Stations along the network operated by ASTM covered with electric charging stations	6%	8% (Baseline)	21%	100%	N/A	N/A	Climate Change Mitigation	%

## Moody's related publications

### Second Party Opinion analytical framework:

» [Framework to Provide Second Party Opinions on Sustainable Debt](#), October 2022

### Topic page:

» [ESG Credit and Sustainable Finance](#)

## Endnotes

1 [ASTM website - Press release 23/03/2023](#), accessed April 2023

2 [ASTM website - History](#), accessed April 2023

3 [Renewable energy certificates threaten the integrity of corporate science-based targets](#), Bjorn et al., June 2022

4 [IEA, Transport - Sectoral Overview](#), September 2022.

5 [Italiadomani, Installation of electric charging infrastructure](#), accessed April 2023.

6 [Motus-e, Analisi di mercato, Gennaio 2022 - I primi segnali dell'assenza di incentivi](#), February 2022.

7 [Italiadomani, Installation of electric charging infrastructure](#), accessed April 2023.

8 [News, European Parliament - Fit for 55: zero CO2 emissions for new cars and vans in 2035](#), February 2023.

9 [Rota 2030 Fundep, Linha V - Biocombustíveis, Segurança e Propulsão Veicular](#), accessed April 2023.

10 [USDA Foreign Agricultural Service, Brazil Biofuels Annual 2019](#)

11 [The Rio Times: Electric vehicle market grows 47% in Brazil, surpassing 100,000 vehicles](#), August 2022

12 [Vinci website](#), accessed April 2023

13 [ASPI website](#), accessed April 2023

14 [News European Parliament, Fit for 55: deal on charging and fuelling stations for alternative fuels](#), March 2023.

15 [Proposal for a Regulation of the European Parliament and of the Council on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU of the European Parliament and of the Council](#)

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