



IGS SpA Transition Plan

2025



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1 Executive summary

IGS has been pursuing for years the reduction of its carbon footprint and the elimination of its emission impact, which is linked to the exercise of the natural gas storage activity by the Company.

First, the Cornegliano Laudense storage facility was designed and built to minimize its carbon footprint: its compressors are equipped with electric motors and not gas turbines (as is the case in most other Italian storage facilities) and a dedicated compressor has been installed to recover methane emissions from the main compressor seals.

IGS, in pursuit of its emission reduction objectives, calculates its carbon footprint starting from the first year of commercial operation, i.e. from the beginning of the natural gas storage activity, i.e. **2019** (the so-called “*baseline*” year).

Since *the baseline year* to date, IGS has adopted a series of **actions aimed at reducing its carbon footprint**, as required by the regulatory *frameworks* aimed at assessing the achievement of carbon neutrality and net zero emissions.

The IGS GHG inventory includes emissions directly generated within its perimeter (**Scope 1**), indirect emissions associated with the purchase of electricity consumed (**Scope 2**) and indirect emissions produced along the Company's value chain (**Scope 3**). The calculation is carried out in accordance with the *GHG Protocol* and certified in accordance with the **ISO 14064-1 standard**¹.

From 2019 to today, the **reduction of IGS's carbon footprint** has been significant, i.e., equal to -18,497 tCO_{2e} (-**81.2%**). IGS's carbon footprint as of December 31, 2024 is negligible, amounting to approximately **4,281 tCO_{2e}** (according to the *Market-based* approach)².

The future elimination of IGS's emission balance therefore does not present any critical issues and, in particular, it is perfectly compatible with the continuity of the storage activity and with the Company's financial plans.

The **emission intensity**, calculated with respect to the gas moved for each year, also appears to be **decreasing** and equal to 0.5 ktCO_{2e}/MSmc in 2023 and 0.3 ktCO_{2e}/MSmc in 2024, compared to 1.73 ktCO_{2e}/MSmc in 2019.

Since IGS has already adopted the possible actions to reduce its carbon footprint and, certainly, all those with the greatest impact, the zeroing of the residual carbon footprint will also be achieved thanks to the purchase of certified carbon credits, as it is not technically possible to achieve further significant reductions in climate-altering emissions.

This path is based on solid technical and regulatory foundations.

As illustrated in the following graph, compared to the 2019 *baseline*, IGS has identified **emission reduction trajectories** in line with the criteria defined by the *Science Based Targets initiative (SBTI)* to which the **ISO 14068-1 2023 standard refers**, setting the **objectives** which the Company aims to achieve both in the period (2029) and in the long term (2039-2050), always in compliance with the main regulatory frameworks.

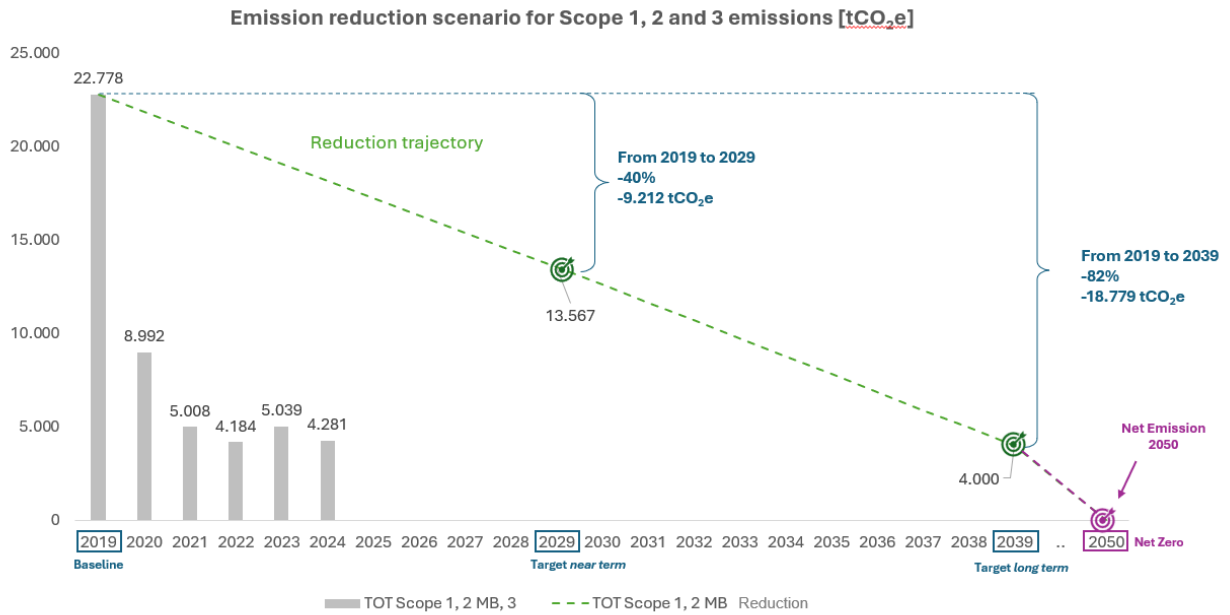
It is precisely in compliance with these standards that the **compensation of IGS's carbon footprint** (i.e., the footprint that remains after having implemented every reasonably possible action aimed at effectively

¹The main difference between the two methodologies is the need to present the *Location-based calculation* of *Scope 2* emissions according to the ISO standard, while the *GHG protocol* allows for the *market-based calculation*, i.e. considering whether the electricity consumed by the company comes from renewable sources.

² According to estimates published by ISPRA in May 2025, **total greenhouse gas emissions in Italy** in 2024 amount to approximately **373 million** tonnes of CO₂ equivalent (MtCO_{2e})
<https://www.isprambiente.gov.it/files2024/pubblicazioni/rapporti/rapporto-399-24-le-emissioni-di-gas-serra-in-italia.pdf>



reducing climate-altering emissions) can occur through the purchase of **certified carbon credits** and, given the smallness of the carbon footprint to be eliminated, this would not entail significant costs for the Company.





2 Introduction

2.1 Reference context

Since 2019, with the approval of the *Green Deal*³, the European Union has embarked on a path to build a low-carbon economy, with the ultimate goal of achieving climate neutrality by 2050. To support this transition, the European Commission has launched a series of legislative initiatives, aimed at guiding Europe towards the ambitious climate objectives for 2030 and 2050.

2.2 IGS's contribution to reducing GHG emissions

The fight against climate change represents one of the greatest global challenges for both governments and companies that - to mitigate the impacts of climate change - are called upon to reduce greenhouse gas (GHG) emissions in order to limit global warming. Hence the need to carry out a progressive transition of the energy system. In this context, IGS represents an actor in the transition process, ensuring the security of the energy system through its natural gas storage services.

To date, IGS has implemented several **initiatives** that have had a positive and significant impact on the emission profile of its activities (*Carbon Footprint*), drastically reducing it; among these, the purchase of electricity produced from renewable sources and certified with Guarantees of Origin (GO) and monitoring aimed at countering fugitive emissions (for further details see: [4. Reduction initiatives](#)).

Looking to the future, in the time horizon being analyzed on the basis of the ISO 14068-1 standard (2019-2050), the Company is committed not only to making its systems and processes even more efficient, but also to pursuing a strategy of decarbonization of its business in line with internationally recognized standards.

In this context, the Company adopts (and periodically updates) its own **transition plan** , in line with the Paris Agreement,⁴ identifying carbon neutrality objectives within a broader path aimed at the “ **net zero** ” target on the basis of the most accredited standards and regulatory frameworks, such as the **Science Based Target initiative (SBTi)**.⁵ and the **ISO 14068-1 standard (ISO Climate change management — Transition to net zero — Carbon neutrality standard)**

2.3 The decarbonisation strategy

Carbon neutrality is a state in which an organization's GHG emissions, after being reduced through specific initiatives, are offset by an equal amount of emissions avoided⁶ and/or removed, within a given perimeter⁷. To date, the ISO 14068-1 standard specifically sets out the methodology and requirements needed to achieve *carbon neutrality*, which IGS intends to pursue in order to achieve the net-zero goal .

³Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - The European Green Deal, COM(2019) 640 final.

⁴Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change. The Paris Agreement is an international agreement which aims to limit the increase in global temperature to 2°C above pre-industrial levels and, preferably, to 1.5°C.

⁵The *Science Based Targets initiative (SBTi)* is a collaboration between CDP, the United Nations Global Compact (UNGC), the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The initiative aims to encourage companies to set *targets* in line with science, ensuring a competitive advantage in the transition to a decarbonizing economy.

⁶Projects that allow the development of compensation credits, useful exclusively for the purpose of a *Carbon Neutrality strategy* , are developed in order to avoid (hence the term “ *avoidance* ”) the generation of greenhouse gas emissions, respecting certain requirements, including additionality.

⁷ISO 14068-1 – Climate change management – Transition to net zero – Carbon neutrality



Science Based Targets initiative (hereinafter also SBTi) provides criteria, guidelines and recommendations to support companies in defining a *net-zero strategy*. Achieving *net-zero emissions* implies a reduction in greenhouse gas emissions, consistent with an emissions reduction that allows the limitation of the increase in global average temperatures below +1.5°C. The SBTi approach provides, by the *target year*, the removal⁸ of residual emissions from the atmosphere.

The Company is pursuing the objective of neutralizing its carbon footprint in accordance with the ISO 14068-1 framework, which in turn refers to the SBTi criteria⁹. IGS will therefore pursue its carbon footprint zeroing objectives in accordance with the aforementioned regulatory frameworks and considers, for the future, to request “validation” of the achievement of these objectives in accordance with the ISO 14068-1 standard through a certification process.

According to the aforementioned regulations, once the possible actions to effectively reduce the carbon footprint have been adopted, the initiatives to be adopted to offset and/or remove residual emissions include the purchase of certified carbon credits. With this tool, each credit confirms that a ton of CO₂ has been avoided and/or removed from the atmosphere¹⁰. The credits are generated by specific projects and are calculated according to internationally defined standards; they are managed within a specific register in which each operator has an *account* that guarantees their unique assignment. Each credit is certified by bodies that are responsible for verifying and certifying that the reduction in CO₂ brought about by the related project is real and that it satisfies specific requirements¹¹, including:

- *additionality* - the project allows a benefit in terms of reduction and/or absorption of emissions that otherwise would not have been generated;
- *reality* – the reduction results from a concrete activity that leads to an absolute net reduction in emissions;
- *measurability* – reductions must be quantified and quantifiable (relative to *baseline*);
- *verifiability* – the result is verified by an independent, accredited and certified third party;
- *permanence* - the project guarantees the duration of the climate benefits over time.

The additionality requirement is one of the most complex to meet in order for a project to generate carbon credits certified according to the *Voluntary Carbon Markets* (VCM) standards¹². For example, a project can be

⁸Projects that allow the development of removal credits, necessary to comply with the requirements of a *Net Zero strategy*, are developed in order to remove (hence the term “removals”) greenhouse gas emissions from the atmosphere, respecting the different requirements listed in the standard.

⁹IGS pursues the objective of zeroing its emission balance according to the ISO 14068-1 framework, which in turn refers to the SBTi criteria. At the moment the SBTi framework does not allow companies belonging to the Oil & Gas sector to submit decarbonisation targets for validation: therefore, IGS could not formalise a Net-Zero “claim” within the SBTi framework⁹. For this reason, the same objective is pursued by IGS outside the SBTi “claim”, according to the international scheme ISO 14068-1.

Companies excluded from the possibility of submitting a so-called *submission* include companies with any level of direct involvement in the exploration, extraction, and/or production of petroleum, natural gas, coal or other fossil fuels, regardless of the percentage of revenues generated from these activities, i.e., but not limited to, oil and gas companies, pure-play exploration and production operators, refiners and marketers, petroleum product distributors, gas distributors and marketers, and oil and gas service companies: [Oil and Gas - Science Based Targets Initiative](#).

¹⁰The purchase of different types of carbon credits is based on the planned decarbonization strategy. However, each credit is certified according to the most important and recognized international standards (Gold Standard, VCS).

¹¹The requirements are set out in the framework of the *Paris Agreement Crediting Mechanism* (CMA) that enables international cooperation to address climate change and encourage financial support for developing countries. The modalities and procedures for a carbon crediting mechanism are described in Article 6, paragraph 4, of the Report of the Conference of the Parties of its third session, held in Glasgow from 31 October to 13 November 2021: <https://unfccc.int/documents/460950>.

¹²Voluntary Carbon Markets (VCMs) enable companies to reduce their climate-altering emissions: they allow them to offset - through the purchase of credits - emissions that cannot be avoided.



considered additional if it takes place in a country where it could not be financed/realized otherwise ¹³. It is therefore difficult to apply in Italy and Europe, where these projects are often provided for by current legislation or market practices ¹⁴, can be supported by subsidies or are incentivized in some way.

2.4 Carbon *neutrality* according to ISO 14068-1

The ISO 14068-1 -1 standard provides guidelines for achieving and verifying *Carbon Neutrality* , defining a series of principles to be respected so that the decarbonisation strategy is scientifically sound and the results are presented in an accurate and transparent manner.

Among the principles there is in fact the adoption of a "hierarchical approach", with respect to which neutrality is achieved through the reduction/removal of GHG emissions within the company perimeter and, only subsequently, through compensation activities ¹⁵.

In addition, there are also specific indications on the approach to be adopted, which must be “ *science-based*”, that is, based on scientific studies and knowledge shared at an international level. Commonly accepted reference models are provided, for example, by the *Intergovernmental Panel on Climate Change* (IPCC), the *International Energy Agency* (IEA), the *Assessing low-Carbon Transition* (ACT) and the *Science Based Targets initiative* (SBTi).

Therefore, to be in line with ISO 14068-1, a company must define a carbon neutrality path that aims to minimize its *Carbon Footprint* , with objectives in both the short term (5-10 years from the *baseline*) and the long term (at least 20 years from the *baseline*).

In accordance with the ISO 14068-1 standard, IGS has outlined a path for the effective reduction of its carbon footprint over a 20-year period from the baseline (i.e., by 2039), with additional years to reach net zero emissions by 2050 based on the tools that will be available at the time, it being understood that, as of today, IGS could achieve this goal by completing its action plan and offsetting the residual footprint with carbon credits without significant impacts on its operations and balance sheet.

The above mentioned path is reported below in greater detail.

¹³In the context of planting activities, the offset emissions associated with them are not certifiable with respect to the most recognized international schemes. In fact, one of the fundamental criteria underlying such certifications, namely the criterion of additionality, would be missing. In fact, the substantial difference between purchasing credits from the market and in-house planting/installations lies in the certification of the former, which would allow demonstrating the solidity and reliability of the projects with respect to objective and internationally recognized criteria.

¹⁴The additionality verification historically used and most considered is the one defined by the UNFCCC.

¹⁵The offsetting activity can be achieved through the purchase of different types of carbon credits, which therefore contribute to avoiding, reducing or removing CO₂ from the atmosphere.



3 IGS emission trajectories

IGS has considered 2019 as a reference year (*baseline*) with respect to which to define short- and long-term objectives: 2019 is in fact the first year in which IGS has carried out its storage activity for the entire calendar year. It is with reference to 2019 that IGS has therefore drawn up the first inventory of greenhouse gas emissions (GHG) and outlined commitments and initiatives that have evolved in a decarbonisation path ¹⁶.

Starting from 2019, in compliance with the principles of the standard, IGS has:

- measured GHG emissions generated directly and indirectly within its perimeter, in compliance with the ISO 14064-1 standard;
- identified the initiatives adopted that have contributed over the years to the reduction of its emission profile;
- estimated the emission trajectories resulting from the possible reduction actions to be implemented in line with the objectives defined by the SBTi;
- identified the share of residual emissions to be offset through the purchase of carbon credits (or through the most suitable alternatives that will be available in the future to achieve carbon neutrality and the *net zero target*).

IGS emission reduction trajectories and targets which the company aspires to in both the short and long term – identified in line with the criteria defined by the *Science Based Targets initiative* – are indicated below.

3.1 Objective 1 – Scope 1, 2 Market Based and 3 emissions

IGS plans to reduce **total emissions calculated according to the Market-Based (MB)** approach by 40% by 2029, by 82% by 2039 compared to the *baseline* (2019) and to reach net zero emissions by 2050. In particular, IGS has defined:

- **short-term goals** needed to keep the global temperature increase below 1.5°C compared to pre-industrial temperatures (-4.2% per year compared to 2019)¹⁷ (*Scope 1 and 2*) and well below 2°C above pre-industrial temperatures (-2.5% per year compared to 2019) ¹⁸(*Scope 3 only*);
- **long-term objectives** needed to keep the global temperature increase below 1.5°C above pre-industrial temperatures (-4.2% per year compared to 2019) (*Scope 1, 2 and 3*).

¹⁶ IGS waste consists mainly of deposit water (i.e. water that is necessarily extracted with the production of gas and which is currently transported by tankers and treated/disposed of at third-party sites authorized for this purpose. In the last quarter of 2025, a geological water treatment plant (*WTP*) that IGS has built at the gas storage site will come into operation and will allow IGS to reduce the main impacts deriving from the disposal of liquid waste.

The commissioning of the treatment plant – *WTP* – will change the Company's emissions, since the related process (the treatment of geological water), previously outsourced, will be carried out within the IGS emissions reporting perimeter.

The treatment process of this waste, which is functional to the optimization of the gas storage activity, currently contributes to determining the emission profile of third parties that carry out the water treatment activity. Without the system, as a whole, being impacted (the overall emissions do not undergo significant variations), the climate-altering emissions associated with the geological water treatment process with the *WTP* plant will be computed in the carbon footprint of IGS rather than in that of the third parties that currently treat the waste.

The entry into operation of the *WTP* could make it appropriate to recalculate the IGS baseline, in order to make the Company's emission data homogeneous and comparable downstream of the internalisation of the treatment process, making the impact of the *WTP* in terms of emissions retroactive.

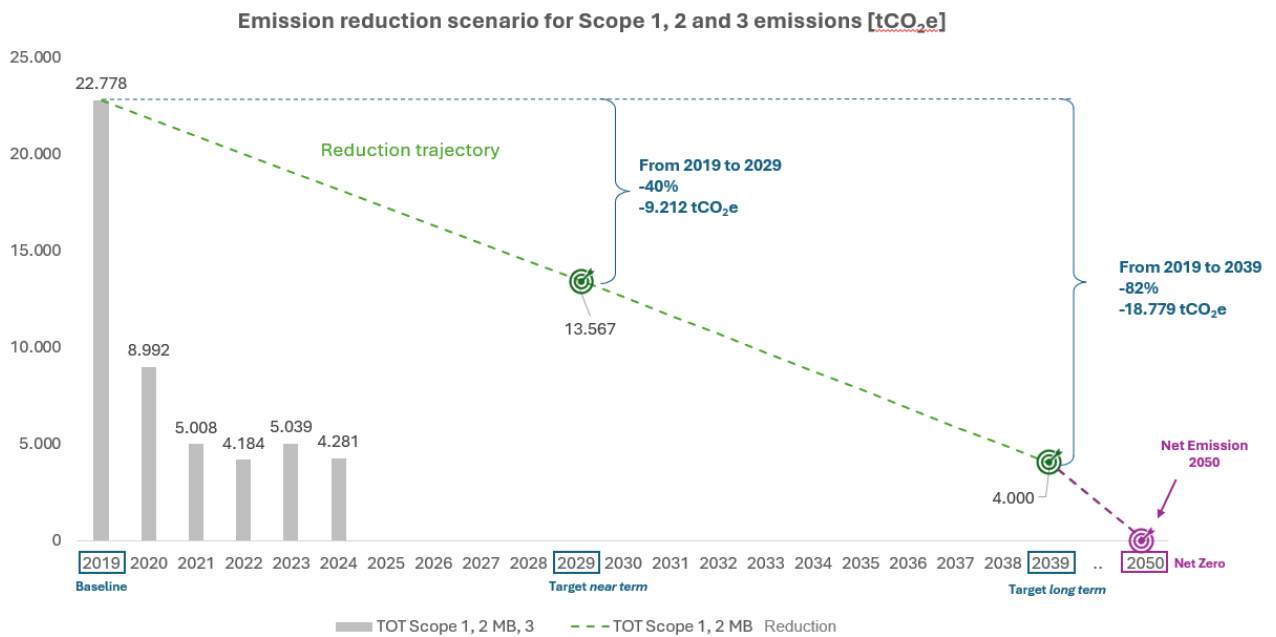
¹⁷Reduction indicated by the *Science Based Target initiative in order to ensure that* the global average temperature remains within +1.5°C compared to pre-industrial temperatures.

¹⁸Reduction indicated by the *Science Based Target initiative to ensure that* the global average temperature is kept well below 2°C compared to pre-industrial temperatures.



The initiatives implemented by IGS have led to an already significant reduction in *Scope 1 and 2 emissions (MB)* over the years, equal to 84% of the same from 2019 to 2024, perfectly in line with the defined *targets* . These are interventions on natural gas consumption (-60%), cold flare emissions (-54%) and diesel consumption (-88%).

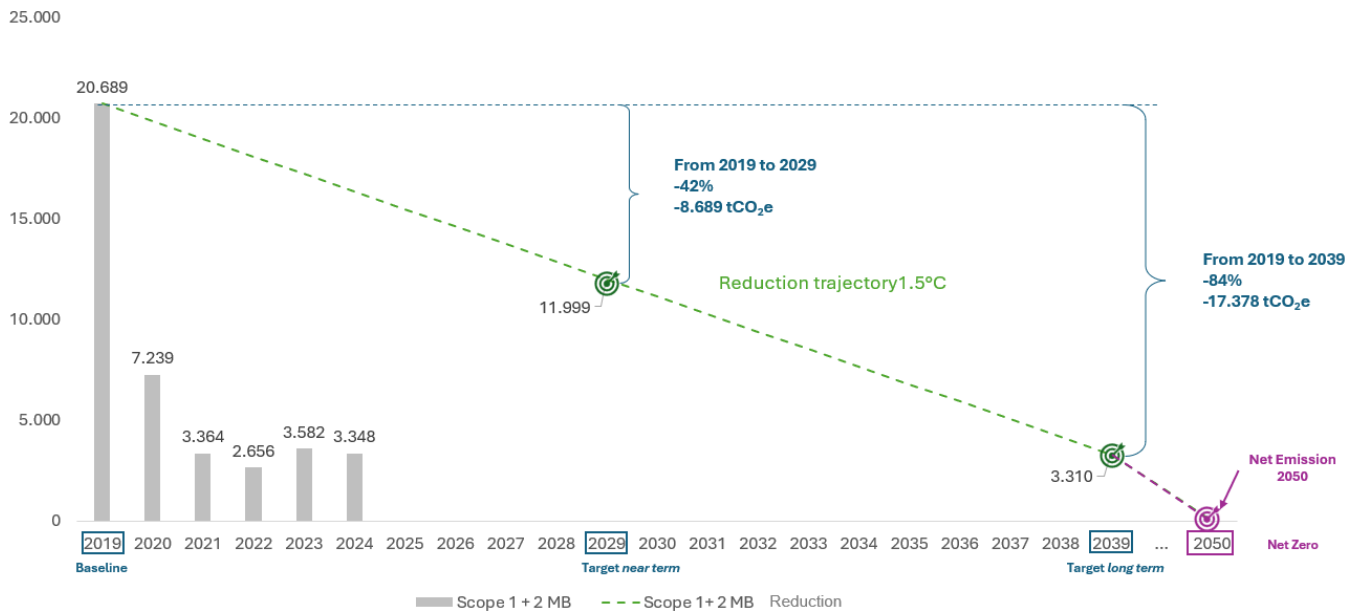
Scope 3 emissions calculation methodology has been improved over the years. First, since 2023, indirect emissions generated in relation to the purchase of spare parts for maintenance activities, capital goods, as well as expenditure on maintenance services, consultancy, and other categories of services have been included in the calculation. IGS has also applied this new methodology for the years prior to its introduction, recalculating scope 3 emissions, in order to provide data calculated uniformly for the entire reference period and thus allow a more correct analysis of its emission *trend* . In addition, starting from 2024, IGS has actively involved its main contractors in the calculation of its *Scope 3 emissions*, with an engagement activity aimed at verifying the actual emissions deriving from their activity carried out for IGS. This has allowed us to calculate a specific and timely emission factor for each of these suppliers, starting from the primary data (e.g., energy consumption and turnover attributable to services provided to IGS). ¹⁹In this way, the calculation adopted in 2024 allowed to minimize the use of literature emission factors, often conservative or related to different geographical areas and, as such, less reliable than the primary data.



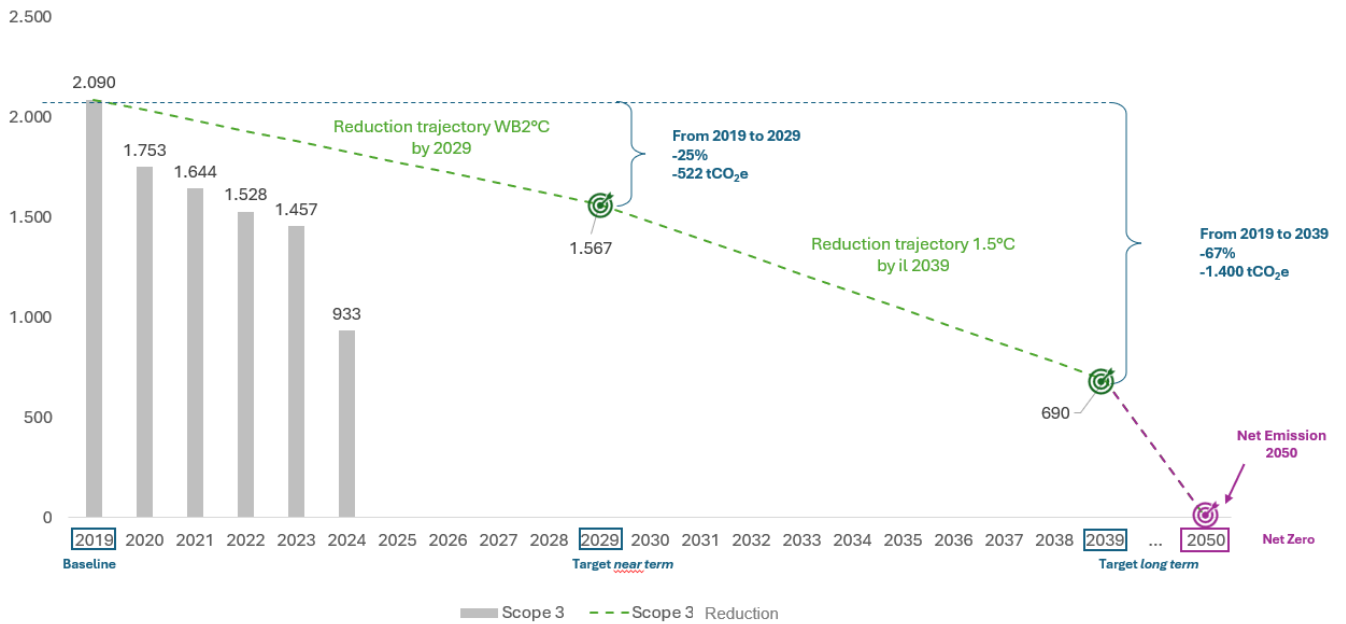
¹⁹The specific point emission factors (expressed in kgCO_{2e}/euro), for the main IGS suppliers (BakerHughes, MGS, Control Services and Impes), used to estimate the emissions associated with their maintenance services (compressor maintenance, mechanical, instrumental and electrical maintenance), have been calculated taking into account the energy consumption and the related *Scope 1 and 2 emissions*, and the revenues, of the suppliers in question.



Emission reduction scenario for Scope 1+2 [tCO_{2e}]



Emission reduction scenario for Scope 3 [tCO_{2e}]





Target Scope 1, 2 Market-Based and 3			
Period	Objective type	Emissions in the target year (tCO _{2e})	% reduction from <i>baseline</i>
Short term – 2029	<ul style="list-style-type: none"> 1.5°C Scope 1 and 2 MB WB ²⁰2°C Scope 3 	13,567	-40%
Long term – 2039	1.5°C	4,000	-82%
Long term – 2050	1.5°C	0	100%

3.2 Objective 2 – Scope 1, 2 Market Based and 3 emissions /gas moved

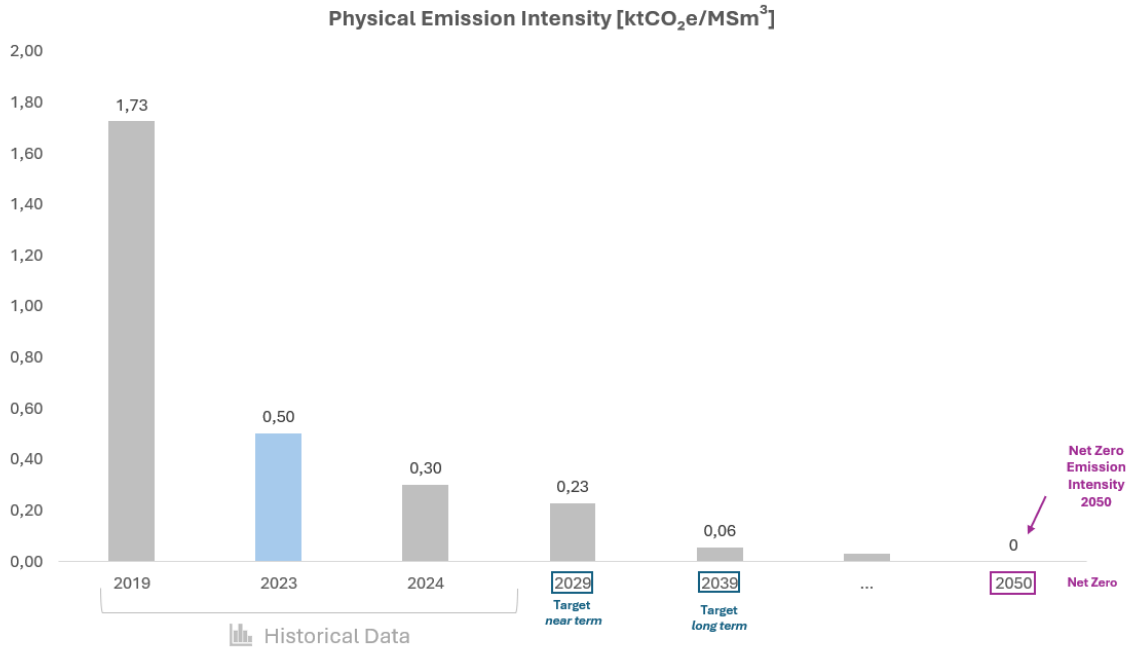
Emission reduction targets can also be defined in terms of physical emission intensity (ktCO_{2e} / MSmc) provided that an *absolute* reduction in emissions over time is guaranteed. In defining emission intensity targets:

- a denominator equal to the gas moved was assumed ²¹, which has been calculated to date - and estimated in the short term and in the long term - at 591 MSmc and 720 MSmc respectively ²².
- The numerator, instead, reports the absolute reduction of *Scope 1*, *Scope 2 MB* and *Scope 3* emissions over the years.

²⁰ WB-well below

²¹As a reference industrial KPI to be used for the various assessments, including that of emission intensity, it is believed that the natural gas actually moved by IGS during the reference year can be considered (instead of the space capacity allocated with the seasonal peak modulation product, used in the past). In fact, starting from 2023, following the use of mathematical models developed *specifically*, IGS has introduced into its commercial offer, in addition to the seasonal duration service, medium/short-term storage services with duration varying from a few months to a day (so-called additional services).

²²IGS will revise KPIs and estimates based on updated data throughout 2025.



<i>Intensity targets (Scope 1, 2 Market-Based and 3)/gas moved</i>		
Period	Intensity in the target year (ktCO ₂ e/MSmc)	% reduction from <i>baseline</i>
Short term – 2029	0.23	87% reduction compared to 2019
Long term – 2039	0.06	97% reduction compared to 2019
Long term – 2050	0	100%

4 Reduction initiatives

As anticipated, IGS constantly monitors ²³its emission impact, adopting consequent reduction actions. In particular, in relation to *Scope 1* and *2* emissions, IGS has already undertaken several initiatives which - starting from 2019 - have led to a reduction in electricity and natural gas consumption:

1. installation of the “ *stepless capacity control* ” system (*Hydrocom*) which increased the efficiency of the gas compressors at low flow rates, contributing substantially to reducing electricity consumption during the injection and extraction setup;
2. improvement and efficiency improvement intervention of the natural gas dehydration plant (*TEG regeneration plant*) which has allowed to reduce the consumption of natural gas, which feeds the burners of the dehydration plant;

²³IGS constantly monitors its emissions by calculating its carbon footprint, which occurs on a quarterly basis for the current year and is annually reviewed by a third-party body to maintain ISO 14064-1 Certification.



3. optimisation of maintenance sequences by minimising the quantity of natural gas emitted (“vented”) into the atmosphere through cold flares;
4. annual monitoring campaigns and immediate repair of leaks from all plant equipment;
5. improved auxiliary cooling system for compressors;
6. installation of a low-energy lighting system in the plant offices;
7. change company policy automobiles.

In addition, the Company has started and continues to purchase electricity produced exclusively from certified renewable sources for the Cornegliano plant , reducing ²⁴Scope 2 emissions calculated with a *Market-Based approach to a minimum* .

Also in relation to *Scope 3* emissions, a reduction of 55.3% has already been recorded from 2019 to 2024, mainly linked to a reduction in purchased services ²⁵(-55%), purchased chemical agents ²⁶(-93%), natural gas used for the TEG plant ²⁷(-51%), and purchased capital goods (-99% ²⁸).

Further actions that could lead to a marginal reduction in IGS's emissions profile will be assessed in a *carbon management plan* which could include among the initiatives:

- *engagement* process to map more accurately the emissions associated with the purchase of goods and services, reducing the use of literature conversion factors;
- forms of recovery of water treatment sludge, through research projects that allow the classification of saline sludge as by-products, avoiding its disposal as waste, in a circular economy perspective;
- greater use of low-consumption cars (electric/ *hybrid*) for their employees through incentives related to electric charging; and
- the optimised management of products used in water treatment, during the operation phase of the future geological water treatment plant, in order to evaluate a possible improvement in the use of these resources, which will contribute to *scope 3 emissions* .

5 Offsetting residual emissions

In 2024, compared to the *baseline* (2019), IGS has adopted several initiatives, described above, which have allowed it to reduce its overall carbon footprint by 81%.

Therefore, in order to achieve carbon neutrality in the future, IGS intends to offset the total residual emissions, equal to 4,281 tCO_{2e} in 2024, calculated according to the *Market-Based* approach (and which include what is reported in the table), with certified carbon credits. This investment could vary based on the type of project and the purchase period, remaining within an amount currently estimated at around 100,000 Euro per year.

²⁴In 2024, almost all of the electricity consumed was covered by Guarantee of Origin (GO) certificates.

²⁵*spend-based* emission factors for IGS service providers.

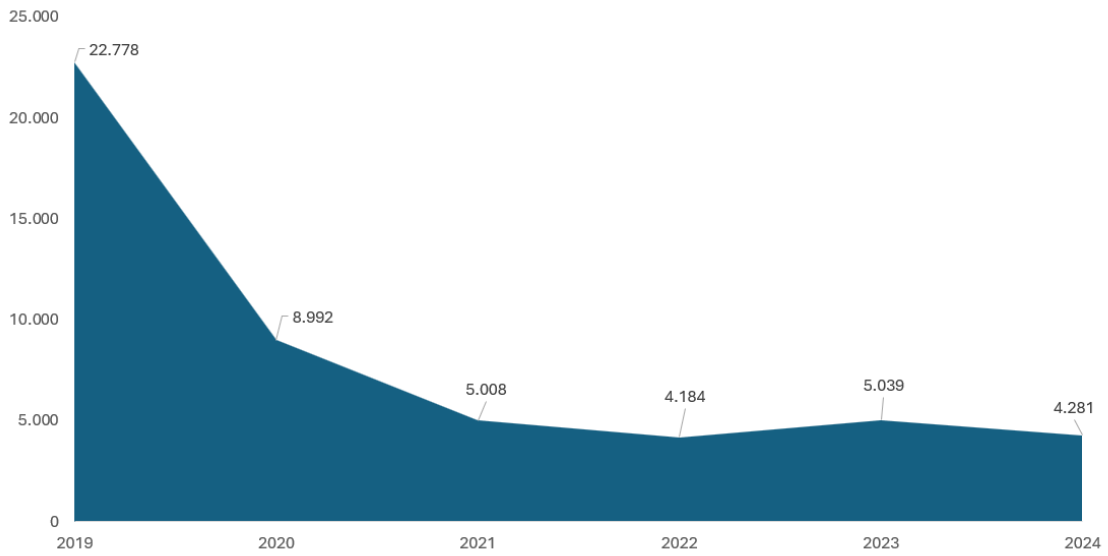
²⁶It should be noted that approximately once every 6-8 years it is necessary to completely replace the TEG, therefore, in the relevant year the data on chemical agents increases significantly.

²⁷*Scope 3* emissions also include those associated with the extraction and refining of fuels used by an organization within its own perimeter and which, occurring along the upstream chain, are not included among direct *Scope 1* emissions.

²⁸ In 2019, there were significant investments in compression and treatment plants.



Total emission reduction from 2019 to 2024 [tCO_{2e}]



Emission category	Residual emissions in 2024 [tCO _{2e}]
Scope 1	3.323
Scope 2 - MB	25
Scope 3	933
Total	4.281



6 Conclusions

The Company is constantly working to reduce its emission footprint, adopting initiatives and pursuing trajectories and targets in line with internationally recognized standards.

IGS has already reached an emission level considerably lower than the starting one (*baseline* 2019); the level achieved cannot be further compressed to a substantial extent, although further evaluations are underway to reduce it further.

The negligible residual carbon footprint that IGS presents downstream of the numerous reduction initiatives adopted and those that remain to be adopted, can be offset through the purchase of certified carbon credits, without critical issues or significant financial impacts, thus completing the path towards the neutrality of the Company's *carbon footprint* in line with the best internationally recognized standards and the *net-zero objective* .

