Notes to the consolidated financial statements

COMPANY INFORMATION

The Snam Group, consisting of Snam S.p.A., the consolidating company, and its subsidiaries (hereafter referred to as "Snam", the "Snam Group" or the "Group"), is an integrated group at the forefront of the regulated gas sector and a major player in terms of its regulatory asset base (RAB) in the sector.
In Italy, Snam operates in the regulated natural gas transportation and dispatch business, the regasification of liquefied natural gas and the storage of natural gas. It also has a presence in the energy transition business: sustainable mobility, biomethane infrastructure for the generation of biomethane from organic waste and agricultural and agro-industrial waste, energy efficiency services for apartment buildings, the public administration and industry. Snam operates in Europe's major energy corridors through agreements with and equity investments in the leading industry players. It has a presence in Austria through its subsidiaries (TAG and GCA), France (Terēga), Greece (DESFA) and the United Kingdom (Interconnector UK) and is one of the main shareholders of TAP (Trans Adriatic Pipeline).
Snam S.p.A. is a joint-stock company incorporated under Italian law and listed on the Milan Stock Exchange, with registered offices at 7, Piazza Santa Barbara, San Donato Milanese (MI).
Through the resolution of 1 August 2019, the Board of Directors of CDP S.p.A. which, through the subsidiary CDP Reti S.p.A. owns a stake in Snam S.p.A. of 31.04%, reclassified its equity investment in the latter, already classified as de facto control pursuant to international accounting standard IFRS 10 – Consolidated financial statements from 2014, as de facto control pursuant to Article 2359, paragraphs 1 and 2 of the Italian Civil Code and Article 93 of the TUF.
No management or coordination activity of CDP S.p.A. has been formalised or exercised over Snam S.p.A.

1) BASIS OF PRESENTATION

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards issued by the International Accounting Standards Board (IASB) and adopted by the European Commission pursuant to Article 6 of (EC) Regulation No. 1606/2002 of the European Parliament and Council of 19 July 2002 and to Article 9 of Legislative Decree 38/2005. The IFRS also include the International Accounting Standards (IAS) and the currently applicable interpretations issued by the IFRS Interpretation Committee (IFRSIC), including those previously issued by the Financial Reporting Interpretations Committee (IFRIC) and the Standing Interpretations Committee (SIC) prior to that. For simplicity, all of the aforementioned standards and interpretations will hereafter be referred to as "IFRS" or "International Accounting Standards".
The consolidated financial statements are prepared in consideration of future business continuity using the historical cost method, taking into account value adjustments where appropriate, with the exception of the items which, according to IFRS, must be measured at fair value, as described in the measurement criteria.
The consolidated financial statements as at 31 December 2019, approved by the Board of Directors of in its meeting of 18 March 2020, are audited by PricewaterhouseCoopers S.p.A. (PwC). PWC has full responsibility for auditing the consolidated financial statements of the Snam Group; in the limited cases in which other auditors intervene, it assumes responsibility for the work carried out by the latter.
The consolidated financial statements are presented in euros. Given their size, amounts in the financial statements and respective notes are expressed in millions of euros, unless otherwise specified.

2) ACCOUNTING STANDARDS AND INTERPRETATIONS APPLICABLE FROM 2019

For the financial year ended 31 December 2019, the Group applied accounting standards in line with those of the previous year, with the exception of the accounting standards and interpretations which came into force in the year starting on 1 January 2019, which are described below.

IFRS 16 "Leasing"

Through regulation 2017/1986 issued on 31 October 2017, the European Commission adopted the regulatory provisions contained in the document "IFRS 16 Leasing", issued by the IASB on 13 January 2016, which defines a lease as a contract that attributes to an entity the right to use an asset for a specific period of time in exchange for consideration and eliminates, for the lessor, the distinction between the financial and the operating lease, introducing a single accounting model for leasing.

Definition of leasing

By applying this model, the entity recognises: (I) in its balance sheet, an asset representing the relative right to use the asset and a liability representing the obligation to make the payments contractually agreed upon, for all leases with a duration of more than 12 months

not considered material[1]; (ii) in its income statement, depreciation of the asset recognised and, separately, the debt income recorded.
The distinction between an operating and a financial lease continues to apply for preparation of the financial statements of lessors.
The provisions in IFRS 16 replace the provisions in IAS 17 "Leasing" and in IFRIC 4 "Determining whether an arrangement contains a lease", SIC 15 "Operating leases - Incentives" and SIC 27 "Evaluating the Substance of Transactions in the Legal Form of a Lease" and are effective for financial years before or after 1 January 2019.
The Group adopted IFRS 16 from 1 January 2019 amending its own accounting principle for reporting lease agreements as a result. Specifically, IFRS 16 was applied using the amended retroactive application method (IFRS 16.C5b and C7), by virtue of which the cumulative effect of the first time application is reported as an adjustment of the opening balance of the retained earnings from 1 January 2019 without restating the comparative information.
At the first time application date, the Group decided to adopt the practical expedient in the transition provisions of IFRS 16 that allows the principle to be applied to contracts previously classified as lease agreements by applying IAS 17 and IFRIC 4 and not applying this principle to agreements that were not identified as containing a lease by applying IAS 17 and IFRIC 4 (IFRS16.C3). Therefore, the definition of leasing contained in IFRS 16 was only applied to agreements signed or amended on 1 January 2019 or a later date.

Accounting model for the lessor

As a lessor, by applying the provisions of IAS 17 and IFRIC 4, the Group classified leases as operating or financial, assessing whether the agreement essentially transfers all the risks and benefits associated with the ownership of the underlying asset. From 1 January 2019, the Group applied IFRS 16 reporting assets as rights of use and liabilities for leases in its statement of financial position as illustrated below.
Specifically, lease liabilities were initially reported at an amount equal to the current value of the following payments due for the lease not yet made at the commencement date: (i) fixed (or essentially fixed) payments, net of any incentives to receive; (ii) variable payments that depend on rates or indices; (iii) an estimate of the payment, by the lessor, as a guarantee of the residual value; (iv) the payment of the exercise price of the purchase option, if the lessor is reasonably certain of exercising it; and lastly (v) the payment of contractual penalties for the termination of the lease if the lessor is reasonably certain of exercising this option.
The current value of the payments is calculated using a discount rate equal to the Group's incremental borrowing rate taking into account the frequency and duration of payments under the lease agreement. Following the initial reporting, lease liabilities are valued at the amortised cost and restated, to offset the recorded value of the related right-of-use asset if there is a change in payments due for lease following: (i) contractual renegotiations; (ii) changes in rates or indices; or (iii) changes in the assessments made with regard to the exercising of the contractually-required options (e.g. purchase of a leased asset, extension or termination of the contract).
The right-of-use asset is initially recorded at cost, calculated as the sum of the following components: (i) the initial amount of the lease liability; (ii) the initial direct costs incurred by the lessor; (iii) any payments made at the commencement date or before it, net of any incentives received by the lessor; and (iv) the best estimate of the costs that the lessor expects to incur for the dismantling and removal of the underlying assets as well as the possible restoration of the site (or the costs for restoring the asset to the conditions established in the contract).
After the initial recording, the right-of-use asset is adjusted to take into account (i) the shares of depreciation and amortisation, (ii) any losses in value and (iii) the related effects and any restatements of the lease liability.

During the first time application, the Group decided to avail itself of the following practical expedients and/or options set out in the accounting principle, with reference to leases previously classified as operating leases, pursuant to IAS 17:

- value the right-of-use asset at the amount equal to the amount equal to the initial liability of the lease net of any prepayments recorded in the statement of financial position immediately before the first time application date (IFRS 16.C8b) ii);
- not reporting assets and liabilities relating to leases which end within 12 months of the initial application date; these agreements will be recorded as short-term leases (IFRS 16.C10c);
- excluding the initial direct costs from the valuation of the right-to-use asset at the first time application date (IFRS 16.C10d);
- with reference to the extension and termination options, the Group based its own evaluations on the experience gained at the initial application date.

The contracts in which Snam is the lessor (or lessee) mainly refer to property rental and the long-term vehicle leasing.

1 Snam uses the waiver permitted for short-term leasing and for those of a moderate value, recording payments relating to these types of leases in the income statement as long-term operating costs of the lease agreement.

Leases previously classified as financial leases

With reference to leases previously classified as financial pursuant to IAS 17, the book value of the right-of-use asset and the lease liability at 1 January 2019 corresponds to the book value of the leased asset and the lease liabilities in accordance with IAS 17 immediately before this date.

Effects on the financial statements

The effects of the first time application of IFRS 16, also taking into account the practical expedients listed above, have led to an increase in financial liabilities of €20 million and an increase in assets for property, plant and equipment of €20 million. The impact on the Group's shareholders' equity, net of the related tax effect, was consequently zero.
During the valuation of lease liabilities, the Group discounted the payments due for leases using the weighted average of the marginal borrowing rate at 1 January 2019, equal to 1.33%. This value was calculated by weighting the market returns of the bond loans issued by Snam, diversified according to the duration of the various lease agreements.
At 1 January 2019, the existing differential between the increase in financial liabilities and the amount of commitments reported in the financial statements in connection with operating lease agreements that cannot be cancelled, stood at €14 million mainly attributable (over 90%) to the effect resulting from the inclusion of the definite reasonably renewable options in the minimum contractual term.

IFRIC 23 "Uncertainty over income tax treatments"

Regulation 2018/1595, issued by the European Commission on 23 October 2018 homologated the regulatory provisions contained in IFRIC 23 "Uncertainty over income tax treatments" issued by the IASB on 7 June 2017. The document provides guidelines on how to calculate current and deferred taxes if there are uncertainties over the application of tax regulations. In calculating the income taxes to be reported in the financial statements, the entity should consider the probability that the tax authority may or may not accept the tax treatment adopted by the entity. If the above acceptance is deemed unlikely, the entity should reflect the uncertainties in the calculation of current and deferred taxes, making use of one of the following methods: the most likely amount and the expected value; if this is not the case, the income taxes recorded in the financial statements will be consistent with the tax treatment adopted in the tax declaration. The entity should review the estimates of the uncertainties if new information becomes available or there are changes in circumstances. These provisions will take effect from financial years starting on or after 1 January 2019. No significant impacts were recorded in the financial statements resulting from the adoption of the new interpretation.

Other principles/interpretations in force from 1 January 2019

Regulation 2019/237 issued by the European Commission on 8 February 2019 approved the regulatory provisions in the document "Long-term interests in associate companies and joint ventures". Amendments to IAS 28 Investments in associate companies and joint ventures issued by the IASB on 12 October 2017. The document offers several clarifications for companies that have interests in financial projects mainly with loans advanced to associate companies and joint ventures rather than through equity funding. Specifically, for long-term loans, which essentially represent a further net investment of the entity, in the associate company or joint venture, to which the net equity method is not applied, the entity should: (i) carry out an impairment test applying the expected credit loss model of IFRS 9 "Financial Instruments", and later on (ii) applying the net equity method to the residual balance until zero is reached and then carrying out the impairment test governed by IAS 36 if the conditions of IAS 28.40-43 are complied with.
European Commission Regulation No. 2019/402 of 13 March 2019 officially endorsed the provisions of the document "Amending, reducing or extinguishing the plan". Amendments to IAS 19 "Employee benefits" issued by the IASB on 7 February 2018. The document specifies the accounting rules for cases in which an amendment, reduction or extinguishment of an existing defined-benefit plan takes place;, if one of the situations mentioned above occurs during the year,an entity is obliged to apply the updated actuarial theories in restating its net liability (asset) for the rest of the subsequent period.
Regulation 2019/412 issued by the European Commission on 14 March 2019 approved the regulatory provisions contained in the "Annual cycle of updates to IFRS 2015-2017" issued by the IASB on 12 December 2017. The document contains amendments to the following principles: (i) IFRS 3 "Business Combinations", defining that when an entity gains control of a business, that could previously be qualified as a joint options, it should remeasure the interest previously owned in that business, because the operation is configured as a business combination created in several stages; (ii) IFRS 11 "Joint Arrangements", clarifying that, when an entity that participates in a joint operation without having joint control, acquires joint control, it does not have to remeasure the interest previously held in that business; (iii) IAS 12 "Income taxes", clarifying that, irrespective of the fact that the dividends were reported as a reduction of shareholders' equity, an entity should report the physical effects of the dividends for purpose of tax on the income

in the income statement at the time of the liability relating to dividend to be paid; (iv) IAS 23 "Financial expense", clarifying that specific loans required for the construction and/or purchase of an asset, if they remain in existence even after the time at which the asset is available and ready for use or sale, should no longer be considered as specific and therefore should be included in the general loans in order to define the capitalisation rate. In addition, the document specifies how the amount of financial expense that an entity could capitalise during a financial year should not exceed the amount of financial expense incurred during that financial year.
European Commission Regulation 2018/498 of 22 March 2018 officially endorsed the following: the regulatory provisions contained in the document "Elements of early payment with negative compensation - Amendments to IFRS 9" issued by the IASB on 12 October 2017. The document allows the measurement at amortised cost or at the Fair Value Through Other Comprehensive Income (FVTOCI) of a financial asset featuring an early payment option through negative compensation. The document also clarified the accounting method of an amendment to or exchange of a financial liability at amortised cost that has not been subject to derecognition. The difference between original contractual cash flows and the modified cash flows, discounted at the effective interest rate, should be reported in the income state at the date of the amendment or exchange.
No impacts were identified as a result of the implementation of the above-mentioned arrangements.

3) CONSOLIDATION PRINCIPLES

The consolidated financial statements comprise the financial statements of Snam S.p.A. and of the companies over which the Company has the right to exercise direct or indirect control, as defined by IFRS 10 – "Consolidated Financial Statements". Specifically, control exists where the controlling entity simultaneously:

- has the power to make decisions concerning the investee entity;
- is entitled to receive a share of or is exposed to the variable profits and losses of the investee entity;
- is able to exercise power over the investee entity in such a way as to affect the amount of its economic returns.

The proof of control must be verified on an ongoing basis by the Company, with a view to identifying all the facts or circumstances that may imply a change in one or more of the elements on which the existence of control over an investee entity depends.
Consolidated companies, joint ventures, associates and other significant equity investments are indicated separately in the appendix "Subsidiaries, associates and equity investments of Snam S.p.A. at 31 December 2019", which is an integral part of these notes. The same appendix lists the changes that took place in the scope of consolidation between 31 December 2018 and 31 December 2019.
All financial statements of consolidated companies close at 31 December and are presented in euros.

Companies included in the scope of consolidation

Figures relating to subsidiaries are included in the consolidated financial statements, based on standardised accounting principles, from the date on which the Company assumes direct or indirect control over them until the date on which said control ceases to exist.
The assets, liabilities, income and expenses of the consolidated companies are consolidated line-by-line in the consolidated financial statements (full consolidation); the book value of the equity investments in each of the subsidiaries is derecognised against the corresponding portion of shareholders' equity of each of the investee entities, inclusive of any adjustments to the fair value of the assets and liabilities on the date of acquisition of control.
The portions of equity and profit or loss attributable to minority interests are recorded separately in the appropriate items of shareholders' equity, the income statement and the statement of comprehensive income.
Changes in the equity investments held directly or indirectly by the Company in subsidiaries that do not result in a change in the qualification of the investment as a subsidiary are recorded as equity transactions. The book value of the shareholders' equity pertaining to shareholders of the parent company and minority interests are adjusted to reflect the change in the equity investment. The difference between the book value of minority interests and the fair value of the consideration paid or received is recorded directly under equity pertaining to shareholders of the parent company.
Otherwise, the selling of interests entailing loss of control requires the posting to the income statement of: (i) any capital gains or losses calculated as the difference between the consideration received and the corresponding portion of consolidated shareholders' equity transferred; (ii) the effect of the alignment to the fair value of any residual equity investment maintained; (iii) any amounts posted to other components of comprehensive income relating to the former subsidiary which will be reversed to the income statement. The fair value of any equity investment maintained at the date of loss of control represents the new book value of the equity investment, and therefore the reference value for the successive valuation of the equity investment according to the applicable valuation criteria.

Equity investments in associates and joint ventures

An associate is an investee company in relation to which the investor holds significant influence or the power to participate in determining financial and operating policies, but does not have control or joint control[2]. It is assumed that the investor has significant influence (unless there is proof to the contrary) if it holds, directly or indirectly through subsidiaries, at least 20% of the exercisable voting rights.
A joint venture is a joint arrangement in which the parties that hold joint control have rights to the net assets subject to the arrangement and, therefore, have an interest in the jointly controlled corporate vehicle.
Equity investments in associates and joint ventures are measured using the equity method, as described under "Equity-accounted investments".

Business combinations

Business combinations are recorded using the acquisition method in accordance with IFRS 3 - "Business Combinations". Based on this standard, the consideration transferred in a business combination is determined at the date on which control is assumed, and equals the fair value of the assets transferred, the liabilities incurred or assumed, and any equity instruments issued by the acquirer. Costs directly attributable to the transaction are posted to the income statement when they are incurred.
The shareholders' equity of these investee companies is determined by attributing to each asset and liability its fair value at the date of acquisition of control. If positive, any difference from the acquisition or transfer cost is posted to the asset item "Goodwill"; if negative, it is posted to the income statement.
Where total control is not acquired, the share of equity attributable to minority interests is determined based on the share of the current values attributed to assets and liabilities at the date of acquisition of control, net of any goodwill (the "partial goodwill method"). Alternatively, the full amount of the goodwill generated by the acquisition is recognised, therefore also taking into account the portion attributable to minority interests (the "full goodwill method"). In this case, minority interests are expressed at their total fair value, including the attributable share of goodwill. The choice of how to determine goodwill (Partial goodwill method or full goodwill method) is made based on each individual business combination transaction.

If control is assumed in successive stages, the acquisition cost is determined by adding together the fair value of the equity investment previously held in the acquired company and the amount paid for the remaining portion. The difference between the fair value of the previously held equity investment (redetermined at the time of acquisition of control) and the relative book value is posted to the income statement. Upon acquisition of control, any components previously recorded under other components of comprehensive income are posted to the income statement or to another item of shareholders' equity, if no provisions are made for reversal to the income statement.
When the values of the assets and liabilities of the acquired entity are determined provisionally in the financial year in which the business combination is concluded, the figures recorded are adjusted, with retroactive effect, no later than 12 months after the acquisition date, to take into account new information about facts and circumstances in existence at the acquisition date.

Business combinations involving entities under joint control

Business combinations involving companies that are definitively controlled by the same company or companies before and after the transaction, and where such control is not temporary, are classed as "business combinations of entities under common control". Such transactions do not fall within the scope of application of IFRS 3, and are not governed by any other IFRS. In the absence of a reference accounting standard, the selection of an accounting standard for such transactions, for which a significant influence on future cash flows cannot be established, is guided by the principle of prudence, which dictates that the principle of continuity be applied to the values of the net assets acquired. The assets are measured at the book values from the financial statements of the companies being acquired (or the vendor company) pre-dating the transaction or, alternatively, at the values from the consolidated financial statements of the common ultimate parent.
With regard to the sale of business, the treatment of the difference between the contractually defined consideration and the carrying amounts of the transferred business is differentiated depending on the entities involved in the transfer.

2 Joint control is the contractual sharing of control pursuant to an agreement, which exists only where the unanimous consent of all the parties that share power is required for decisions relating to significant activities.

With regard to contributions involving businesses under common control, on the other hand, irrespective of the pre-existing investment relationship, the transferee entity must recognize the transferred business at its historical carrying value, increasing its own equity by an equal amount; the transferring entity shall y recognize the investment in the transferee entity at an amount equal to the increase in the latter's shareholders' equity.
This accounting treatment refers to the proposal by Assirevi in the Preliminary Guidelines on IFRS (OPI No. 1 Revised) - "Accounting treatment of business combinations of entities under common control in the separate and consolidated financial statements" issued in October 2016.

Accounting treatment of put options written on the shares of a subsidiary

Under IAS 32, paragraph 23, a contract that contains an obligation for an entity to purchase its own equity instruments for cash or another financial asset gives rise to a financial liability for the present value of the redemption amount (fixed-price put option).
Therefore, if the entity does not have the unconditional right to avoid delivery of cash or other financial instruments when a put option on shares in subsidiaries is exercised, the liability is recognised; all subsequent changes are recognised in profit or loss. The same accounting treatment is applicable when, in addition to a put option, there is also the simultaneous presence of a symmetrical put and call options related to non-controlling interest.
Snam considers shares already acquired by the Group to be the subject of put options (i.e. symmetrical put and call options), in cases where non-controlling interests do not remain with third-party shareholders, the economic benefits and risks associated with the actual ownership of the shares; therefore, in such circumstances, it does not recognise non-controlling interests in the consolidated financial statements.

Intragroup transactions that are eliminated in the consolidation process

Unrealised gains from transactions between consolidated companies are derecognised, as are receivables, payables, income, expenses, guarantees, commitments and risks between consolidated companies. The portion pertaining to the Group of unrealised gains with companies valued using the equity method is derecognised. In both cases, intragroup losses are not derecognised because they effectively represent impairment of the asset transferred.

4) MEASUREMENT CRITERIA

The most significant measurement criteria adopted when preparing the consolidated financial statements are described below.

Property, plant and equipment

Property, plant and equipment is recognised at cost and recorded at the purchase, transfer or production cost, including directly allocable ancillary costs needed to make the assets available for use. When a significant period of time is needed to make the asset ready for use, the purchase, transfer or production cost includes the financial expense which theoretically would have been saved during the period needed to make the asset ready for use, if the investment had not been made.
If there are current obligations to dismantle and remove the assets and restore the sites, the book value includes the estimated (discounted) costs to be incurred at the time that the structures are abandoned, recognised as a contra-entry to a specific provision. The accounting treatment for revisions in these cost estimates, the passage of time and the discount rate are indicated in the paragraph "Provisions for risks and charges".
Property, plant and equipment may not be revalued, even through the application of specific laws.
The costs of incremental improvements, upgrades and transformations to/of property, plant and equipment are posted to assets when it is likely that they will increase the future economic benefits expected. The balance sheet assets also contain items purchased for security or environmental reasons which, although not directly improving the future economic benefits of the existing assets, are necessary to carry out corporate activity.
The costs of replacing identifiable components of complex assets are allocated to balance sheet assets and depreciated over their useful life. The remaining book value of the component being replaced is allocated to the income statement. Ordinary maintenance and repair expenses, other than replacement of identifiable components, which restore but do not increase the performance of the assets, are posted in the income statement in the year in which they were incurred.
Property, plant and equipment includes: (i) with regard to natural gas transportation, the value relating to the quantities of natural gas injected to bring natural gas pipelines into service. The valuation is carried out using the weighted average purchase price method. Specifically, the component of this quantity that can no longer be extracted (the "initial line pack") is depreciated over the useful life of the plant to which it refers. On the contrary, the commercial component, which may be sold on the market or employed for alternative uses (the "operating line pack"), is not depreciated, since it is not, by its nature, subject to

depreciation; and (ii) with regard to natural gas storage, the quantity of gas that is reinjected into the storage wells to form cushion gas.
Property, plant and equipment is derecognized on disposal or when no future economic benefit is expected from its use or disposal; the relative profit or loss is recognized in the income statement.

Depreciation of property, plant and equipment

Starting when the asset is available and ready for use, property, plant and equipment is systematically depreciated on a straight-line basis over its useful life, defined as the period of time in which it is expected that the company may use the asset. The amount to be depreciated is the book value, reduced by the projected net realisable value at the end of the asset's useful life, if this is significant and can be reasonably determined.
The table below shows the annual depreciation rates used for the year in question, broken down into homogeneous categories, together with the relevant period of application[3]:

Annual amortisation rate (%)

Buildings	2-2.5
Plant and equipment - Transportation	
Pipelines	2
Compression stations	5
Gas reduction/regulation plants	5
Radio links	25
Measuring and control instruments and systems	5
Plant and equipment - Storage	
Pipes	2
Treatment stations	4
Compression stations	5
Storage wells	2
Monitoring and control instruments and systems	5
Plant and equipment - Regasification	
Regasification plants	4
Tanks and pipelines	4
Centralized IT infrastructures	20
Other plant and equipment	2.5-12.5
Metering equipment	5
Industrial and commercial equipment	10-35
Other assets	10-33
Rights of use	the economic-technical life and duration of the contract

When an item recorded under property, plant and equipment consists of several significant components with different useful lives, a component approach is adopted, whereby each individual component depreciates separately. Land is not depreciated, even if purchased in conjunction with a building; neither is property, plant and equipment held for sale (see the "Non-current assets held for sale and discontinued operations" section).
Depreciation rates are reviewed each year and are altered if the current estimated useful life of an asset differs from the previous estimate. Any changes to the depreciation plan arising from revision of the useful life of an asset, its residual value or ways of obtaining economic benefit from it are recognised prospectively.
Freely transferable assets, if any, are depreciated during the period of the concession or of the useful life of the asset, if lower.

Leasing

A contract is or contains a lease if it gives an entity the right to control the use of an identified asset for a certain period of time in exchange for a fee[4].
By applying this model, the lessor[5] recognises: (I) in its balance sheet, an asset representing the relative right to use the asset and a liability representing the obligation to make the payments contractually agreed upon, for all leases with a duration of more than 12 months not considered

3 The application rate or internal could be higher depending on the residual life following business combination acquisitions and/or transactions.

4 The provisions of IFRS 16 "Leasing" came into force on 1 January 2019. The Group applied the new arrangements without restating the previous years or comparison, as permitted by the same principle (amended retroactive application method as governed by paragraphs C5b and C7 of IFRS 16.). Previously the arrangements in force governing leasing essentially required: (i) that assets under finance leases, that refer to agreements involving the essential transfer of the risks and benefits of the ownership, are recorded, at the contract start date, in the balance sheet assets at the fair value of the asset, net of contributions that the lessor is responsible for or, if less, at the current value of the minimum payments due for the lease, offsetting the financial payable to the tenant; and, on the other hand (ii) with reference to operating leases, for the entire duration of the contract, the allocation of the rental to the income statement.
5 The distinction between operating and finance leases, on the other hand, is maintained for the purpose of preparing the financial statements of the lessors.

material[6]; (ii) in its income statement, depreciation of the asset recognised and, separately, the debt income recorded. With reference to the duration of the lease, in addition to the period of the contract that cannot be cancelled, where there is reasonable certainty, the additional periods offered by the contractual extension options are also considered, or connected to the failure to exercise the early termination options in the contract.
Lease liabilities were initially reported at an amount equal to the current value of the following payments due for the lease not yet made at the commencement date: (i) fixed (or essentially fixed) payments, net of any incentives to receive; (ii) variable payments that depend on rates or indices; (iii) an estimate of the payment, by the lessor, as a guarantee of the residual value; (iv) the payment of the exercise price of the purchase option, if the lessor is reasonably certain of exercising it; and lastly (v) the payment of contractual penalties for the termination of the lease if the lessor is reasonably certain of exercising this option. The current value of the payments is calculated using a discount rate equal to the Group's incremental borrowing rate taking into account the frequency and duration of payments under the lease agreement. Following the initial reporting, lease liabilities are valued at the amortised cost and restated, to offset the recorded value of the related right-of-use asset if there is a change in payments due for lease following: (i) contractual renegotiations; (ii) changes in rates or indices; or (iii) changes in the assessments made with regard to the exercising of the contractually-required options (e.g. purchase of a leased asset, extension or termination of the contract).
The right-of-use asset is initially recorded at cost, calculated as the sum of the following components: (i) the initial amount of the lease liability; (ii) the initial direct costs incurred by the lessor; (iii) any payments made at the commencement date or before it, net of any incentives received by the lessor; and (iv) the best estimate of the costs that the lessor expects to incur for the dismantling and removal of the underlying assets as well as the possible restoration of the site (or the costs for restoring the asset to the conditions established in the contract). After the initial recording, the right-of-use asset is adjusted to take into account (i) the shares of depreciation and amortisation, (ii) any losses in value and (iii) the related effects and any restatements of the lease liability.

Intangible assets

Intangible assets are those assets without identifiable physical form which are controlled by the company and capable of producing future economic benefits, as well as goodwill, when purchased for consideration. The ability to identify these assets rests in the ability to distinguish intangible assets purchased from goodwill. Normally this requirement is satisfied when: (i) the intangible assets are related to a legal or contractual right, or (ii) the asset is separable, i.e. it can be sold, transferred, leased or exchanged independently, or as an integral part of other assets. The company's control consists of the power to utilise future economic benefits deriving from the asset and the ability to limit access to it by others. Intangible assets are recorded at cost, which is determined using the criteria indicated for property, plant and equipment. They may not be revalued, even through the application of specific laws.
Technical development costs are allocated to the balance sheet assets when: (i) the cost attributable to the intangible asset can be reliably determined; (ii) there is the intent, availability of financial resources and technical capability to make the asset available for use or sale; and (iii) it can be shown that the asset is capable of producing future economic benefits.
Alternatively, costs for the acquisition of new knowledge or discoveries, investigations into products or alternative processes, new techniques or models, or the design and construction of prototypes, or incurred for other scientific research or technological developments, which do not meet the conditions for disclosure under balance sheet assets are considered current costs and charged to the income statement for the period in which they are incurred.
Intangible fixed assets are derecognized on disposal or when no future economic benefit is expected from their use or disposal; the relatives profit or loss is recognized in the income statement.

Storage concessions

The value of storage concessions, which consists of the natural gas reserves present in deposits ("cushion gas"), is recorded under "Concessions, licences, trademarks and similar rights" and is not subject to amortisation, since: (i) the volume of said gas is not modified by storage activities; and (ii) the economic value of the gas that can be recovered at the end of the concession, pursuant to the provisions of the Ministerial Decree of 3 November 2005, "Criteria for determining an adequate consideration for the return of assets intended for a concession-holder for natural gas storage" of the Ministry of Productive Activities, is not lower than the value recorded in the financial statements.

6 Snam uses the waiver permitted for short-term leasing and for those of a moderate value, recording payments relating to these types of leases in the income statement as long-term operating costs of the lease agreement.

Amortisation of intangible assets

Intangible assets with a finite useful life are amortised systematically over their useful life, which is understood to be the period of time in which it is expected that the company may use the asset.
The amount to be depreciated is the book value, reduced by the projected net realisable value at the end of the asset's useful life, if this is significant and can be reasonably determined.

The table below shows the annual depreciation rates used for the year in question, broken down into homogeneous categories, together with the relevant period of application:

Annual amortisation rate (%)

Other intangible fixed assets	
Industrial patent rights and intellectual property rights	20-33
Other intangible assets	20, or according to the duration of the contract

Goodwill and intangible assets with an indefinite useful life are not subject to amortisation.

Grants

Capital grants given by public authorities are recognised when there is reasonable certainty that the conditions imposed by the granting government agencies for their allocation will be met, and they are recognised as a reduction to the purchase, transfer or production cost of their related assets. Similarly, capital grants received from private entities are recognised in accordance with the same regulatory provisions.
Operating grants are recognised in the income statement on an accruals basis, consistent with the relative costs incurred.

Impairment of non-financial fixed assets

Impairment of property, plant and equipment and intangible assets with a finite useful life

When events occur leading to the assumption of impairment of property, plant and equipment or intangible assets with a finite useful life, their recoverability is tested by comparing the book value with the related recoverable value, which is the fair value adjusted for disposal costs (see "Measurement at fair value") or the value in use, whichever is greater.
Value in use is determined by discounting projected cash flows resulting from the use of the asset and, if they are significant and can be reasonably determined, from its sale at the end of its useful life, net of any disposal costs. Cash flows are determined based on reasonable, documentable assumptions representing the best estimate of future economic conditions which will occur during the remaining useful life of the asset, with a greater emphasis on outside information. Discounting is done at a rate reflecting current market conditions for the time value of money and specific risks of the asset not reflected in the estimated cash flows.
The valuation is done for individual assets or for the smallest identifiable group of assets which, through ongoing use, generates incoming cash flow that is largely independent of those of other assets or groups of assets (Cash Generating Units or CGUs).
If the reasons for impairment losses no longer apply, the assets are revalued and the adjustment is posted to the income statement as a revaluation (recovery of value). The recovery of value is applied to the lower of the recoverable value and the book value before any impairment losses previously carried out, less any depreciation that would have been recorded if an impairment loss had not been recorded for the asset.

Impairment of goodwill, intangible assets with an indefinite useful life and intangible assets not yet available for use

The recoverability of the book value of goodwill, intangible assets with an indefinite useful life and intangible assets not yet available for use is tested at least annually, and in any case when events occur leading to an assumption of impairment. Goodwill is tested at the level of the smallest aggregate, on the basis of which the Company's management directly or indirectly assesses the return on investment, including goodwill. When the book value of the CGU, including the goodwill attributed to it, exceeds the recoverable value, the difference is subject to impairment, which is attributed by priority to the goodwill up to its amount; any surplus in the impairment with respect to the goodwill is attributed pro rata to the book value of the assets which constitute the CGU. Goodwill impairment losses cannot be reversed.

Investments valued using the equity method

Equity investments in joint ventures and associates are valued using the equity method.
In applying the equity method, investments are initially recognised at cost and subsequently adjusted to take into account: (i) the participant's share of the results of operations of the investee after the date of acquisition, and (ii) the share of the other components of comprehensive income of the investee. Dividends paid out by the investee

are recognised net of the book value of the equity investment. For the purposes of applying the equity method, the adjustments provided for the consolidation process are taken into account (see also the “Consolidation principles” section).
In the case of assumption of an association (or joint control) in successive phases, the cost of the equity investment is measured as the sum of the fair value of the interests previously held and the fair value of the consideration transferred on the date on which the investment is classed as associated (or under joint control). The effect of revaluing the book value of the investments previously held at assumption of association is posted to the income statement, including any components recognised under other components of comprehensive income. When the transferral of equity investments entails loss of joint control or significant influence over the investee company, the following are recognised in the income statement: (i) any capital gains or losses calculated as the difference between the consideration received and the corresponding portion of recorded value; (ii) the effect of the alignment to the fair value of any residual equity investment maintained; (iii) any amounts posted to other components of comprehensive income relating to the investee which will be reversed to the income statement. The value of any equity investment maintained, aligned with the relative fair value at the date of loss of joint control or significant influence, represents the new book value, and therefore the reference value for the successive valuation according to the applicable valuation criteria.
If there is objective evidence of impairment, the recoverability of the amount recognised is tested by comparing the carrying amount with the related recoverable value and the difference is recognised in profit and loss under “Income (expense) from equity investments”.
When the reasons for the impairment losses entered no longer apply, equity investments are revalued up to the amount of the impairment losses entered with the effect posted to the income statement under “Income (expense) from equity investments”.
The parent company’s share of any losses of the investee company, greater than the investment’s book value, is recognised in a special provision to the extent that the parent company is committed to fulfilling its legal or implied obligations to the subsidiary/associate, or, in any event, to covering its losses.

Cash and cash equivalents

Cash and cash equivalents include cash amounts, on demand deposits, and other short-term financial investments with a term of less than three months, which are readily convertible into cash and for which the risk of a change in value is negligible.
They are recorded at their nominal value, which corresponds to the fair value.

Inventories

Inventories, including compulsory inventories, are recorded at the lower of purchase or production cost and net realisation value, which is the amount that the entity expects to receive from their sale in the normal course of business, net of the estimated costs for the completion and the realisation of the sale.
The cost of natural gas inventories is determined using the weighted average cost method.

Note that transactions involving strategic gas do not have commercial substance[7], therefore they do not involve a change in inventories.

Financial instruments

Financial assets – debt instruments

Depending on the characteristics of the instrument and the business model adopted for management, the financial assets, that represent the debt instruments are classified into the following three categories: (i) financial assets valued at amortised cost; (ii) financial assets valued at fair value with the effects recognised under other components of comprehensive income (hereinafter also OCI); (iii) financial assets valued at fair value with the effects recognised in the income statement.
The initial recording takes place at the fair value; for trade receivables without a significant financial component, the initial value recognised is represented by the price of the transaction.
After the initial recognition, financial assets that generate contractual cash flows exclusively representative of payments of principal and interest are valued at the amortised cost if held with the purpose of collecting the contractual cash flows (the so-called hold to collect business model). According to the amortised cost method the initial book value is then adjusted to account for repayments of principal, any impairment losses and the amortisation of the

7 Or the risk, the timing or the amount of the future cash flows of the entity are not intended to change following these transactions IFRS 15.9c.

difference between the repayment amount and the initial book value.
Amortisation is carried out using the effective internal interest rate, which represents the rate that would make the present value of projected cash flows and the initial book value equal at the time of the initial recording.
Receivables and other financial assets valued at the amortised cost are presented in the statement of assets and liabilities net of the impairment provision.
Financial assets representing debt instruments where the business model includes both the possibility of collecting the contractual cash flows and the possibility of realising capital gains from their sale (the so-called hold to collect and sell model), they are valued at fair value with the effects recognised as OCI (hereinafter also FVTOCI).
In this case the changes in fair value of the instrument recognised at shareholders' equity, under other components of comprehensive income. The cumulative amount of the changes in fair value, recognised in the shareholders' equity reserve that includes other components of comprehensive income is subject to reversal to the income statement at the time of the derecognition of the instrument. The interest income calculated using the effective interest rate, exchange rate differences and impairments are recorded in the income statement.
A financial asset representing a debt instrument that is not valued at amortised cost or at the FVTOCI is valued at fair value with the effects recognised in the income statement (hereinafter FVTPL); financial assets held for trading come under this category.
When the purchase or the sale of financial assets takes place in accordance with a contract that involves the regulation of the transactions and the handing over of the asset within a certain number of days, established by the market control bodies or by market agreements (e.g. the acquisition of securities on regulated markets), the transaction is recognised at the regulation date.
Financial assets that are disposed of are derecognised in the balance sheet when the contractual rights connected to obtaining the cash flows associated with the financial instrument expire or are transferred to third parties.

Impairment of financial assets

The valuation of the recoverability of financial assets representing debt instruments that are not valued at fair value with effects on the income statement is carried out based on the Expected Credit Loss model.
Specifically, the expected losses are usually calculated based on the product of: (i) the exposure to the counterparty net of mitigating features (exposure at default); (ii) the probability that the counterparty does not fulfil its payment obligation (probability of default); (iii) the estimate, in percentage terms, of the quantity of credit that is not recovered in the case of default (loss given default) defined on the basis of previous experience and possible recovery actions that can be carried out (e.g. out-of-court actions, litigation, etc.).
Taking into consideration the characteristics of regulated markets, credit exposures more than 90 days overdue are considered to be in default or, in any event, credit exposures subject to litigation or for which restructuring/renegotiation actions are taking place.
Exposures for which credit recovery measures have been implemented through legal/judicial proceedings are defined as disputed.
Impairments of trade receivables and other receivables are recognised in the income statement, net of any write-backs in the item "Write-backs (write-downs) net of commercial receivables and other receivables".
The recoverability of long term financial receivables granted to associate companies and joint ventures, the repayment of which is not planned or is not probable in the foreseeable future, and which, in essence, represent a further investment in them, is valued, firstly, based on the expected credit loss model and, secondly, together with the investment in the associate company/joint venture by applying the criteria in the "Net equity method". The application of the expected credit loss model does not consider any adjustments of the book value of the long-term interest resulting from the application of the criteria in "Investments valued through the net equity method".
Because they are not held for trading, financial assets representing minority interests are valued at fair value alternatively with the recognition of the effects: (i) in the income statement (valuation at fair value recognised in the income statement or FVTPL) or (ii) in the shareholders' equity reserve that includes the other components of comprehensive income, without plans for their reversal to the income statement if realised (valuation at fair value recognised in the income statement or FVTOCI).
This classification can be made security by security, exclusively at the time of initial recognition and it is irrevocable.
The dividends from these investments are recognised in the income statement under "Income (expense) from investments". The valuation at cost of a minority interest is allowed in limited cases in which the cost represents an adequate estimate of the fair value.

Financial liabilities

Financial liabilities, unlike derivative instruments, including financial debt, trade payables, other payables and other liabilities, are initially recorded at fair value less any transaction-related costs; they are subsequently recognised at amortised cost using the effective interest rate for discounting, as demonstrated in "Financial assets" above.
Financial liabilities are derecognised upon extinguishment or upon fulfilment, cancellation or maturity of the contractual obligation.

Offsetting a financial asset and a financial liability

Financial assets and liabilities are offset in the balance sheet when there is: a currently legally enforceable right to set off and the intention either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Derivative financial instruments and hedge accounting

Derivatives, including embedded derivatives, are assets and liabilities recognised at fair value using the criteria set out under "Fair value measurement" below.
Under the scope of the strategy and objectives defined for risk management, the qualification of transactions as hedging requires: (i) the verification of the existence of an economic relationship between the object hedged and the hedging instrument for the purpose of offsetting the changes in value and ensuring this offsetting capacity is not invalidated by the level of counterparty credit risk; (ii) the definition of a hedge ratio consistent with the risk management objectives, under the scope of the risk management strategy defined, where necessary activating the appropriate rebalancing actions. The amendments of the risk management objectives, the disappearance of the conditions indicated previously for the qualification of transactions as hedging or the activation of rebalancing operations cause the total or partial prospective discontinuation of the hedge.
In order to qualify a transaction as a fair value hedge or cash flow hedge, at the start of the hedge a formal document is prepared that illustrates the strategies and objectives of the risk management and identifies the hedge instrument, the instrument hedged, the nature of the risk hedged as well as the methods through which the evaluation of whether the hedge relationship satisfies the hedge effectiveness requirements takes place.
When hedging derivatives hedge the risk of changes in the fair value of the hedged instruments ("fair value hedge"; e.g. hedge of the risk of fluctuations in the fair value of fixed-rate assets/liabilities), the derivatives are recognised at fair value with attribution of the effects on the income statement; by the same token, the hedged instruments are adjusted to reflect in the income statement the changes in fair value associated with the hedged risk, regardless of the provision of a different valuation criterion generally applicable to the instrument type.
When derivatives hedge the risk of changes in cash flows from the hedged instruments ("cash flow hedge"; e.g. hedge of changes in cash flows from assets/liabilities due to fluctuations in interest rates or exchange rates), the changes in the fair value of the effective derivatives are initially recognised in the shareholders' equity reserve for other components of comprehensive income and subsequently reported in the income statement in the same way as the economic effects produced by the hedged transaction. In the case of hedging future transactions that involve the recording of a non-financial asset or liability, the cumulative variations of the fair value of the hedge derivatives, recognised in shareholders' equity, are recognised in the adjustment of the book value of the non-financial asset/liability subject to hedging (basis adjustment).
The ineffective portion of the hedge is recorded under "(Expense) income from derivatives" in the income statement.
Changes in the fair value of derivatives which do not satisfy the requirements to be classed as hedging instruments, including any ineffective components of hedging derivatives, are recognised in the income statement. Specifically, changes in the fair value of non-hedging interest rate and currency derivatives are recognised in the income statement item "(Expense) income from derivatives".
Embedded derivatives, incorporated in financial assets, are not subject to accounting separation; in these cases the entire hybrid instrument is classified based on the general classification criteria of financial assets. Embedded instruments incorporated in financial liabilities and/or non-financial assets are separated from the main contract and measured separately if the embedded instrument: (i) meets the definition of derivative; (ii) is measured at fair value as a whole with the recognition of the effects in the income statement (FVTPL); (iii) if the characteristics and risks of the derivative are not closely connected to those of the main contract. Assessment of the existence of embedded derivatives to be separated and accounted for as derivatives takes place when the company enters into a contract and subsequently, in the event of amendments to the contract terms and conditions that result in significant changes in the cash flow generated by the contract.

Fair value measurement

The fair value is the amount that may be received for the sale of an asset or that may be paid for the transfer of a liability in a regular transaction between market operators as at the valuation date (i.e. exit price).
The fair value of an asset or liability is determined by adopting the valuations that market operators would use to determine the price of the asset or liability. A fair value measurement also assumes that the asset or liability would be traded on the main market or, failing that, on the most advantageous market to which the Company has access.
The fair value of a non-financial asset is determined by considering the capacity of market operators to generate economic benefits by putting the asset to its maximum and best use or by selling it to another market participant capable of using it in such a way as to maximise its value. The maximum and best use of an asset is determined from the perspective of market operators, also hypothesising that the company intends to put it to a different use; the current use by the company of a non-financial asset is assumed to be the maximum and best use of this asset, unless the market

or other factors suggest that a different use by market operators would maximise its value.
The fair value measurement of a financial or non-financial liability, or of an equity instrument, takes into account the quoted price for the transfer of an identical or similar liability or equity instrument; if this quoted price is not available, the valuation of a corresponding asset held by a market operator as at the valuation date is taken into account. The fair value of financial instruments considers the credit risk of the counterparty for financial assets (through a "Credit Valuation Adjustment" - CVA) and the entity's own risk of default for financial liabilities (through a "Debit Valuation Adjustment" - DVA).

When determining fair value, a hierarchy is set out consisting of criteria based on the origin, type and quality of the information used in the calculation. This classification aims to establish a hierarchy in terms of the reliability of the fair value, giving precedence to the use of parameters that can be observed on the market and that reflect the assumptions that market participants would use when valuing the asset/liability. The fair value hierarchy includes the following levels:

- level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date;
- level 2: inputs, other than the quoted prices included in Level 1, that can be directly or indirectly observed for the assets or liabilities to be valued;
- level 3: inputs for assets or liabilities that are not based on observable market data.

In the absence of available market quotations, the fair value is determined by using valuation techniques suitable for each individual case that maximise the use of significant observable inputs, whilst minimising the use of non-observable inputs.

Non-current assets held for sale and discontinued operations

Non-current assets and current and non-current assets of disposal groups are classified as held for sale if the relative book value will be recovered mainly by their sale rather than through their continued use. This condition is regarded as fulfilled when the sale is highly probable and the asset or discontinued operations are available for immediate sale in their current condition. In the case of a programme for the sale of a subsidiary that results in loss of control, all assets and liabilities of that subsidiary are classified as held for sale, regardless of whether a non-controlling investment is maintained following the sale. Verification of compliance with the terms and conditions provided for classification of an item as held for sale requires management to make subjective valuations formulating reasonable and realistic assumptions based on the information available to it.
Non-current assets held for sale, current and non-current assets related to disposal groups and directly related liabilities are recognised in the balance sheet separately from the Company's other assets and liabilities.
Immediately prior to classification of an item as held for sale, the assets and liabilities included in a disposal group are measured as required by the accounting standards applicable to them. Subsequently, non-current assets held for sale are not amortised or depreciated, and are measured at the lower of book value and the related fair value, less any sales costs (see "Fair value measurements" above).
The classification as "held for sale" of equity investments valued using the equity method implies suspended application of this measurement criterion. Therefore, in this case, the book value is equal to the value resulting from the application of the equity method at the date of reclassification.
Any negative difference between the book value of the non-current assets and their fair value less selling costs is posted to the income statement as an impairment loss; any subsequent recoveries in value are recognised up to the amount of the previously recognised impairment losses, including those recognised prior to the asset being classified as held for sale.
Non-current assets and current and non-current assets (and any related liabilities) of disposal groups, classified as held for sale, constitute discontinued operations if, alternatively: (i) they represent a significant independent business unit or a significant geographical area of business; (ii) they are part of a programme to dispose of a significant independent business unit or a significant geographical area of business; or (iii) they pertain to a subsidiary acquired exclusively for the purpose of resale. The results of discontinued operations, as well as any capital gains/losses realised on the disposal, are disclosed separately in the income statement as a separate item, net of related tax effects, including for the periods under comparison.
When events occur that no longer allow non-current assets or disposal groups to be classified as held for sale, they are reclassified under the respective items of the balance sheet and measured at the lower of: (i) the book value at the classification date as held for sale; and (ii) the recoverable value at the reclassification date.

Provision for risks and charges and contingent assets

Provisions for risks and charges concern costs and charges of a certain nature which are certain or likely to be incurred, but for which the amount or date of occurrence cannot be determined at the end of the year.
Provisions are recognised when: (i) the existence of a current legal or implied obligation arising from a past event is probable; (ii) it is probable that the fulfilment of

the obligation will involve a cost; and (iii) the amount of the obligation can be reliably determined. Provisions are recorded at the value representing the best estimate of the amount that the Company would reasonably pay to fulfil the obligation or to transfer it to third parties at the end of the reporting period. Provisions related to contracts with valuable consideration are recorded at the lower of the cost necessary to fulfil the obligation, less the expected economic benefits arising from the contract, and the cost of terminating the contract.
When the financial impact of time is significant, and the payment dates of the obligations can be reliably estimated, the provision is calculated by discounting the anticipated cash flows in consideration of the risks associated with the obligation at the Company's average debt rate; the increase in the provision due to the passing of time is posted to the income statement under "Financial income (expense)".
When the liability is related to items of property, plant and equipment (e.g. site dismantlement and restoration), the provision is recognised as a counter-entry to the related asset, and posting to the income statement is accomplished through amortisation. The costs that the Company expects to incur to initiate restructuring programmes are recorded in the period in which the programme is formally defined, and the parties concerned have a valid expectation that the restructuring will take place.
Provisions are periodically updated to reflect changes in cost estimates, selling periods and the discount rate; revisions in provision estimates are allocated to the same item of the income statement where the provision was previously reported or, when the liability is related to property, plant and equipment (e.g. site dismantling and restoration), as a contra-entry to the related asset, up to the book value; any surplus is posted to the income statement.
The notes to the financial statements describe contingent liabilities represented by: (i) possible (but not probable) obligations resulting from past events, the existence of which will be confirmed only if one or more future uncertain events occur which are partially or fully outside the Company's control; and (ii) current obligations resulting from past events, the amount of which cannot be reliably estimated, or the fulfilment of which is not likely to involve costs.
Contingent assets, or possible assets that result from past events and whose existence will only be confirmed when one or more uncertain future events, not totally under the control of the business, occur or do not occur, are not recognised unless obtaining the related benefits is virtually certain. If obtaining the benefits is probable, the contingent assets are illustrated in the notes to the financial statements. The contingent assets are periodically re-examined in order to assess the probability of the business obtaining economic benefits: the assets and the income are recognised.in the year in which obtaining the benefits has become virtually certain.

Employee benefits

Post-employment benefits

Post-employment benefits are defined according to programmes, including non-formalised programmes, which, depending on their characteristics, are classed as "defined-benefit" or "defined-contribution" plans.

- Defined-benefit plans
  The liability associated with defined-benefit plans is determined by estimating the present value of the future benefits accrued by the employees during the current year and in previous years, and by calculating the fair value of any assets servicing the plan. The present value of the obligations is determined based on actuarial assumptions and is recognised on an accruals basis consistent with the employment period necessary to obtain the benefits.
  Actuarial gains and losses relating to defined-benefit plans arising from changes in actuarial assumptions or experience adjustments are recognised in other comprehensive income in the period in which they occur, and are not subsequently recognised in the income statement. When a plan is changed, reduced or extinguished, the relative effects are recognised in the income statement.
  Net financial expense represents the change that the net liability undergoes during the year due to the passing of time. Net interest is determined by applying the discount rate to the liabilities, net of any assets servicing the plan. The net financial expense of defined-benefit plans is recognised in "Finance expense (income)".

- Defined-contribution plans
  In defined-contribution plans, the Company's obligation is calculated, limited to the payment of state contributions or to equity or a legally separate entity (fund), based on contributions due.
  The costs associated with defined-benefit contributions are recognised in the income statement as and when they are incurred.

Other long-term benefits

Obligations relating to other long-term benefits are calculated using actuarial assumptions; the effects arising from the amendments to the actuarial assumptions or the characteristics of the benefits are recognised entirely in the income statement.

Payments based on shares

Labour costs, consistent with the essential nature of the remuneration that they comprise, the cost of share-based incentive plans. The incentive cost is calculated with reference to the fair value of the instruments allocated and the forecast of the number of share that will effectively be allocated; the share pertaining to the financial year is calculated pro-rata temporis throughout the vesting period, or the period between the grant date and the allocation date. The fair value of the shares underlying the incentive plan is calculated at the grant date taking into account the forecasts with regard to reaching the performance parameters associated with market conditions and is not adjusted in future financial years; when obtaining the benefit is also connected to conditions other than market conditions, the estimate relating to these conditions is reflected by adjusting the number of shares during the vesting period that are expected to effectively be allocated. At the end of the vesting period, if the plan does not allocate shares to the participants because the performance conditions have not been achieved, the share of the cost relating to the market conditions is not subject to reversal to the income statement.

Treasury shares

Treasury shares, including those held to service share-based incentive plans, are measured at cost and entered as a reduction of shareholders' equity. The economic effects arising from any subsequent sales are recognised in shareholders' equity.

Distribution of dividends

The distribution of dividends to the Company's shareholders entails the recording of a payable in the financial statements for the period in which distribution was approved by the Company's shareholders or, in the case of interim dividends, by the Board of Directors.

Foreign currency transactions

The criteria adopted by Snam to convert transactions in currencies other than the functional currency (the Euro) are summarised below:

- revenue and costs relating to transactions in currencies other than the functional currency are recognised at the exchange rate in effect on the day when the transaction was carried out;
- monetary assets and liabilities in currencies other than the functional currency are converted into Euro by applying the exchange rate in effect on the reporting date, allocating the effect to the income statement.
- non-monetary assets and liabilities in currencies other than the functional currency which are valued at cost are recognised at the initially recorded exchange rate; when the measurement is made at fair value or recoverable or realisable value, the exchange rate used is the one in effect on the valuation date.

Revenue from contracts with customers

The recognition of revenue from contracts with customers is based on the following five steps: (i) identification of the contract with the customer; (ii) identification of the obligation performance, represented by the contractual promises to transfer goods and/or services to a customer; (iii) calculating the price of the transaction; (iv) allocating the price of the transaction to the performance obligations identified based on the stand alone sales price of each of the goods or services; (v) measuring the revenue when the performance obligation is met, or at the time of the transfer to the customer of the goods or services promised; the transfer is considered to be completed when the customer obtains control of the goods or service, which can take place over time or at a point in time.
As regards the activities carried out by the Snam Group, revenue is generally recognised when the service is provided. The largest share of core revenue relates to revenue from regulated activities, with the income governed by the regulatory framework established by the Italian Regulatory Authority for Energy, Networks and the Environment. Therefore, the economic terms and conditions of services provided are defined in accordance with regulations rather than negotiations. In the transportation segment[8], the difference between the revenue recognised by the regulator (the "revenue cap") and the revenue actually accrued is recognised with a contra-entry in the balance sheet under "Other assets", if positive, or "Other liabilities", if negative. This difference will be reversed in the income statement in future years by way of tariff changes. In the Regasification and Storage segments, however, any difference between the revenue recognised by the regulator and the accrued revenue is recognised in the balance sheet item "Trade and other receivables", if positive, and in the item "Trade and other payables", if negative, inasmuch as it will be subject to cash settlement with the Energy and Environmental Services Fund (CSEA).
By virtue of the principle of neutrality defined by applicable legislation, transactions carried out on the balancing market do not generate either costs or revenue, because they are mere pass-through items. Any (positive or negative) differences from the usage of different prices for the

8 With regard to the capacity portion of revenue, penalties for exceeding committed capacity and balancing fees.

transactions above will be neutralized by recognizing an asset or liability for CSEA, given that these differences are equalized by the latter.
Revenues are measured for the amount equal to the fair value of the consideration which the business believes it has the right to in exchange for the goods and/or services promised to the customer, with the exception of amounts collected on behalf of third-parties. If there is a variable consideration, the business estimates the amount of the consideration it shall have the right to in exchange for the transfer of goods and/or services promised to the customer; specifically, the amount of the consideration can vary in the presence of discounts, incentives, concessions on the price, performance bonuses, penalties or if the actual price depends on certain future events taking place or not.
Revenue is reported net of items involving tariff components, in addition to the tariff, applied to cover gas system expenses of a general nature. Amounts received from Snam are paid in full to the Energy and Environmental Services Fund. Gross and net presentation of revenue is described in more detail in Note 27 - "Revenue" of the Notes to the consolidated financial statements.
Since they do not represent sales transactions, exchanges between goods or services of a similar nature and value are not recognised in revenue.

Dividends received

Dividends are recognised at the date of the resolution passed by the Shareholders' Meeting, unless it is not reasonably certain that the shares will be sold before the ex-dividend date.

Costs

Costs are recognised in the period when they relate to goods and services sold or consumed during the same period or when it is not possible to identify their future use.
Costs relating to emission allowances, calculated on the basis of market prices, are only recognised for the portion of carbon dioxide emissions in excess of the allocated allowances. Earnings relating to emissions allowances are recognised at the point of realising the earnings by transfer.
The monetary receivables assigned in place of the free assignment of emissions allowances are recognised as a contra-entry under the income statement item "Other revenue and income".
Costs sustained for share capital increases are recorded as a reduction of shareholders' equity, net of taxes.

Income tax

Current income taxes are calculated by estimating the taxable income. Receivables and payables for current income taxes are recognised based on the amount which is expected to be paid/ recovered to/ from the tax authorities under the prevailing tax regulations and rates or those essentially approved at the reporting date.
Regarding corporation tax (IRES), Snam has exercised the option to join the national tax consolidation scheme, to which all the consolidated companies have officially signed up, except for Tea Servizi S.r.l. and Renerwaste S.r.l. and their subsidiaries. The projected payable is recognised under "Current income tax liabilities".

The regulations governing Snam Group companies' participation in the national tax consolidation scheme stipulates that:

- subsidiaries with positive taxable income pay the amount due to Snam. The taxable income of the subsidiary, used to determine the tax, is adjusted to account for the recovery of negative components that would have been non-deductible without the consolidation scheme (e.g. interest expense), the so-called ACE (help for economic growth) effect and any negative taxable income relating to the subsidiary's equity investments in consolidated companies;
- subsidiaries with negative taxable income, if and insofar as they have prospective profitability which, without the national tax consolidation scheme, would have enabled them to recognise deferred tax assets related to the negative taxable income on the separate balance sheet, receive from their shareholders – in the event that these are companies with a positive taxable income or a negative taxable income with prospective profitability – or from Snam in other cases, compensation amounting to the lower of the tax saving realised by the Group and the aforementioned deferred tax assets.

Regional production tax (IRAP) is recognised under the item "Current income tax liabilities"/"Current income tax assets".
Deferred and prepaid income taxes are calculated on the timing differences between the values of the assets and liabilities entered in the balance sheet and the corresponding values recognised for tax purposes, based on the prevailing tax regulations and rates applicable in financial years in which the temporary difference will be cancelled, approved or essentially approved at the end closing date of the reference year of the financial statements. Prepaid tax assets are recognised when their recovery is considered probable; specifically, the recoverability of prepaid tax assets is considered probable when taxable income is expected to be available in the period in which the temporary difference is cancelled, allowing the activation of the tax deduction. Similarly, unused tax receivables and prepaid taxes on tax losses are recognised up to the limit of recoverability; with reference to assets for prepaid taxes, their recoverability is verified at least annually.
If there are uncertainties over the application of tax regulations: (i) if it is deemed probable that the tax

authorities will accept the uncertain tax treatment, the income taxes (current and/or deferred) to be recognised in the financial statements according to the tax treatment applied or which it is expected to apply during the tax return are calculated; (ii) in cases where it is not deemed probable that the tax authorities will accept the uncertain tax treatment, this uncertainty is reflected in calculating the (current and/or deferred) taxes to be recognised in the financial statements.
Prepaid tax assets and deferred tax liabilities are classified under non-current assets and liabilities and are offset at individual company level if they refer to taxes which can be offset and/or at the level of the consolidating company in the presence of the taxation regime set out in the national consolidation scheme. The balance of the offsetting, if it results in an asset, is recognised under the item "Prepaid tax assets"; if it results in a liability, it is recognised under the item "Deferred tax liabilities". When the results of transactions are recognised directly in equity, prepaid and deferred current taxes are also posted to equity.

Information by operating segment

Disclosure on business segments has been prepared pursuant to IFRS 8 – "Operating Segments": consequently, the identification of the operating segments and the information presented are defined on the basis of the internal reporting used by the Company's management to allocate resources to the different segments and to analyse the respective performances.
An operating segment is defined by IFRS 8 as a component of an entity: (i) that engages in business activities from which it may earn revenue and incur expenses (including revenue and expenses relating to transactions with other components of the same entity); (ii) for which the operating results are regularly reviewed by the entity's most senior decision-makers for the purpose of making decisions about resources to be allocated to the segment and assessing its performance; and (iii) for which separate financial information is available.
Specifically, the declared operating segments are as follows: (i) natural gas transportation (the "transportation segment"); (ii) liquefied natural gas regasification (the "regasification segment"); (iii) natural gas storage (the "storage segment") relate to activities carried out predominantly by Snam Rete Gas, GNL Italia and Stogit, respectively.

5) FINANCIAL STATEMENTS[9]

The formats adopted for the preparation of the financial statements are consistent with the provisions of IAS 1 - "Presentation of financial statements" (hereinafter "IAS 1"). Specifically:

- the balance sheet items are broken down into assets and liabilities, and then further into current or non-current items[10];
- the income statement classifies costs by type, since this is deemed to be the best way of representing the Group's operations and is in line with international best practice;
- the statement of comprehensive income shows the profit or loss in addition to the income and expense recognised directly in shareholders' equity as expressly provided for by the IFRS;
- the statement of changes in shareholders' equity reports the total income (expense) for the financial year, shareholder transactions and the other changes in shareholders' equity;
- the cash flow statement is prepared using the "indirect" method, adjusting the profit for the year of non-monetary components.

It is believed that these statements adequately represent the Group's situation with regard to its balance sheet, income statement and financial position.
Moreover, pursuant to Consob Resolution No. 15519 of 28 July 2006, any income and expense from non-recurring operations is shown separately in the income statement.
With regard to the same Consob Resolution, the balances of receivables/payables and transactions with related parties, described in more detail in Note 34 – "Related-party transactions", are shown separately in the financial statements.
In compliance with IAS 1, unless otherwise stated, comparative data refer to the previous year.

9 The financial statements are the same as those adopted for the 2018 Annual report.
10 Assets and liabilities are classified as current if: (i) their realization/settlement is part of the normal operating cycle of the company or in the twelve months after the financial year-end; (ii) consist of the cash or cash equivalents without restrictions that would limit usage thereof in the 12 months following the closure of the year; or (iii) are held mainly for trading. Derivative instruments held for trading are classified as current items, regardless of their maturity date. Derivative instruments used for hedging are classified as current items if their realization is expected within the 12 months subsequent to the closure of the year; otherwise they are classified as non-current items.

6) USE OF ESTIMATES

The application of generally accepted accounting principles for the preparation of financial statements involves management making accounting estimates based on complex and/or subjective judgements, estimates based on past experience and assumptions regarded as reasonable and realistic on the basis of the information known at the time of the estimate. The use of these accounting estimates has an influence on the book value of the assets and liabilities and on the information about potential assets and liabilities at the reporting date, as well as the amount of revenue and costs in the reference period. The actual results may differ from the estimated results owing to the uncertainty that characterises the assumptions and the conditions on which the estimates are based.
Details are given below about the critical accounting estimates involved in the process of preparing the financial statements and interim reports, since they involve a high degree of recourse to subjective judgements, assumptions and estimates regarding matters that are by nature uncertain. Any change in the conditions forming the basis of the judgements, assumptions and estimates used could have a significant impact on subsequent results.

Impairment of non-financial fixed assets

Non-financial assets are impaired when events or changes in circumstances give cause to believe that the book value is not recoverable. The events which may give rise to an impairment of assets include changes in business plans, changes in market prices or reduced use of plants. The decision on whether to apply an impairment and the quantification of any such impairment depend on the Company's management assessment of complex and highly uncertain factors, such as future price trends, the impact of inflation and technological improvements on production costs, production profiles and conditions of supply and demand.
The impairment is determined by comparing the book value with the related recoverable value, represented by the greater of the fair value, net of disposal costs, and the usage value, determined by discounting the expected cash flows deriving from the use of the asset. The expected cash flows are quantified in the light of the information available at the time of the estimate, on the basis of subjective judgements regarding future trends in variables – such as prices, costs, the rate of growth of demand and production profiles – and are discounted using a rate that takes account of the risk inherent to the asset concerned.
The basis of the impairment testing used by management in relation to the property plant and machinery, intangible assets and investments measured using the equity method are illustrated respectively in the sections "Impairment of non-financial fixed assets" and "Investments valued using the equity method".

Provision for site dismantling and restoration

The Snam Group incurs significant liabilities associated with obligations to remove and dismantle plants or parts of plants. Estimating future dismantling and restoration costs is a complex process and requires the assessment and judgement of the Company's management in placing a value on the liabilities which will be incurred many years in the future for compliance with dismantling and restoration obligations, which often cannot be fully defined by laws, administrative regulations or contractual clauses. In addition, these obligations are affected by constant changes in technology and in dismantling and restoration costs, as well as the constant growth of political and public awareness regarding matters of health and protection of the environment.
The criticality of estimates of dismantlement and restoration costs also depends on the accounting method used for these costs, for which the current value is initially capitalised together with the cost of the asset to which they relate, offset against the provision for risks and charges. Subsequently, the value of the provision for risks and charges is updated to reflect the passing of time and any changes in the estimate as a result of changes in expected cash flows, the timing of their realisation and the discount rates applied. The calculation of the discount rate to be used both in the initial valuation of the cost and in subsequent valuations is the result of a complex process which involves subjective judgements on the part of the Company's management.

Investments and Business Combinations

Verification of the existence of control, joint control, considerable influence over another entity as well as, in the case of joint operations, verification of the existence of enforceable rights and obligations requires Corporate Management to exercise professional judgement taking into consideration the characteristics of the corporate structure and agreements between the parties as well as other facts and circumstances that are relevant for the purpose of this check. Similar considerations also apply in cases of a planned change in status following a loss of control, joint control or connection with the possible need to activate the classification as "assets held for sale/discontinued operation".
The reporting of business combination transactions involves the allocation to the assets and liabilities of the acquired company of the difference between the acquisition cost and the net book value. For the majority of assets and liabilities, the attribution of the difference is carried out by recognising the assets and liabilities at their fair value. The unallocated portion, if positive, is recognised as goodwill; if negative, it is allocated to the income statement. In the allocation process, the Snam Group draws on the available information and, for the most significant business combinations, on external valuations.

Environmental liabilities

The Snam Group is subject, in relation to its activities, to numerous laws and regulations on environmental protection at European, national, regional and local level, including the laws which implement international conventions and protocols relating to the activities carried out. With reference to this legislation, when it is probable that the existence and amount of a large liability can be reliably estimated, provisions are made for the associated costs.
The Group does not currently believe that there will be any particularly significant negative effects on its financial statements due to non-compliance with environmental legislation, including taking account of the interventions already made, however it cannot be ruled out that Snam might incur substantial additional costs or responsibilities, since with the current state of knowledge it is impossible to foresee the effects of future developments, in view of factors such as: (i) the potential for contaminations emerging; (ii) the refurbishment in progress and to be followed and the other possible effects arising from the application of the laws in force; (iii) the possible effects of new laws and regulations for environmental protection; (iv) the effects of any technological innovations for environmental cleansing; and (v) the possibility of disputes and the difficulty of determining the possible consequences, including in relation to the liability of other parties and to possible compensation payments.

Employee benefits

Defined-benefit plans are valued on the basis of uncertain events and actuarial assumptions which include, inter alia, the discount rates, the expected returns on the assets servicing the plans (where they exist), the level of future remuneration, mortality rates, the retirement age and future trends in the healthcare expenses covered.
The main assumptions used to quantify defined-benefit plans are determined as follows: (i) the discount and inflation rates representing the base rates at which the obligation to employees might actually be fulfilled are based on the rates which mature on high-quality bonds and on inflation expectations; (ii) the level of future remuneration is determined on the basis of elements such as inflation expectations, productivity, career advancement and seniority; (iii) the future cost of healthcare services is determined on the basis of elements such as present and past trends in healthcare costs, including assumptions regarding the inflationary growth of costs, and changes in the health of the participating employees; and (iv) the demographic assumptions reflect the best estimates of trends in variables such as mortality, turnover, invalidity and others in relation to the population of the participating employees.

Differences in the value of net liabilities (assets) in employee benefit plans, arising due to changes in the actuarial assumptions used and the difference between the actuarial assumptions previously adopted and actual events, occur routinely and are called actuarial gains and losses. Actuarial gains and losses relating to defined-benefit plans are recognised in the statement of comprehensive income.
Actuarial assumptions are also used to determine obligations relating to other long-term benefits; to this end, the effects arising from changes to the actuarial assumptions or the characteristics of the benefit are fully recognised in the income statement.

Provisions for risks and charges

In addition to recognising environmental liabilities and obligations to remove property, plant and equipment and restore sites, and liabilities relating to employee benefits, Snam makes provisions relating mainly to legal and tax disputes. The estimation of the provisions for these purposes is the result of a complex process involving subjective judgements on the part of the Company's management.

Fair Value

Calculating the fair value of financial and non-financial instruments is a structured process featuring the use of complex evaluation methodologies and techniques that involve collecting up to date information from the reference markets and/or using internal input data.
Similar to other estimates, calculating the fair value, albeit based on the best information available and on the adoption on adequate evaluation methodologies and techniques, it intrinsically features random elements and the exercising of professional judgement and could create forecasts with different values from those that will effectively be realised.

Classification and measurement of investments made for development and maintenance of proprietary infrastructures

The Snam Group makes significant investments for development and maintenance of its own infrastructures. Assessing the recoverability of the investments currently underway and the distinction of the costs as improvements, upgrades and transformations that increase the infrastructure and the expenses for ordinary maintenance and repairs which restore but do not increase the performance of the assets, includes valuation elements.
These assessments are formulated on the basis of objective criteria that the Group has developed to facilitate an application consistent with its accounting policies.

7) RECENTLY ISSUED ACCOUNTING STANDARDS

Accounting standards and interpretations issued by the IASB/IFRIC and approved by the European Commission, but not yet in force

The main accounting standards and interpretations approved by the European Commission in 2019 but not yet in force are listed and described below.

Other principles and interpretations approved by the European Commission, but not yet in force

Regulation 2019/2104, issued by the European Commission on 29 November 2019 endorsed the regulatory provisions contained in the document "Amendments of IAS 1 and IAS 8: definition of material". The arrangements are effective from the financial years starting on or after 1 January 2020.
The document reformulated and clarified the definition "material" with reference to the following concepts: (i) "obscuring"; obscuring important information with others that could be omitted can have a similar effect to omission or misrepresentation; (ii) "could reasonably be expected to influence"; the mass of information to be provided should not suffer from the remote risk of influencing users of the financial statements; (iii) "primary users"; it is them and not all the possible users of the financial statements to be considered when determining the information to be presented.
Regulation 2019/2075, issued by the European Commission on 29 November 2019 endorsed the regulatory provisions contained in the document "Amendments to References to the Conceptual Framework in IFRS Standards". The arrangements are effective from the financial years starting on or after 1 January 2020 and early application is permitted.
The document includes the updating of the references in international accounting standards in order to include the new features introduced by the revised version of "Conceptual Framework for Financial Reporting", issued by the IASB on 29 March 2018. Among the main aspects resulting from the introduction of the new versions of the Conceptual Framework we find the updating of the definitions of "assets" and "liabilities" as well as the process for their evaluation, elimination and presentation. The document also clarifies important concepts such as the identification of the financial statement recipients and the targets that the financial statements intend to reach, and it also deals with the issues of prudence and uncertainty in the evaluations for financial statement information.
Regulation 2020/34 issued by the European Commission on 15 January 2020 approved the regulatory provisions in the document "Reform of the reference indices for determining interest rates. Amendments to IFRS 9, IAS 39 and IFRS 7". The objective of the IASB is provide financial information from the gradual elimination of parameters on interest rates such as Interbank Offered Rates (IBORs); in particular, some specific accounting requirements for hedging to mitigate potential effects resulting from the uncertainty caused by the IBOR reform are being changed. In addition, the amendments require companies to provide additional information to investors with regard to their hedge ratios which are directly affected by these uncertainties. The amendments apply from 1 January 2020. Early application is permitted.
No impacts were identified as a result of the implementation of the above-mentioned arrangements.

Accounting standards and interpretations issued by the IASB/IFRIC and not yet approved by the European Commission

The following are newly issued accounting standards and interpretations for which the approval process by the European Commission has not yet been completed.
On 18 May 2017, the IASB issued the document IFRS 17 "Insurance Contracts", which is applicable to all insurance companies. They define the principles for recognition, measurement, presentation and disclosure, replacing IFRS 4. The measures contained in IFRS 17 will take effect from financial years starting on or after 1 January 2021, subject to deferrals established upon approval by the European Commission. The new standard requires a "Building Block Approach" (BBA) based on expected cash flow and the specification of a "risk adjustment" and of a Contractual Service Margin (CSM) which represents expected profit from insurance contract. This margin is reported in the income statement in the period in which the insurance cover is provided. Moreover, there are two alternative approaches in addition to the BBA which are the "Variable Fee Approach" (VFA) and the Premium Allocation Approach (PAA), applicable in specific cases. The new standard also provides a new procedure for recognition in profit and loss that presents separately the (i) insurance revenues, (ii) insurance service expenses and (iii) insurance finance income or expenses.
On 22 October 2018, the IASB issued the document "Amendments to IFRS 3 Business Combinations", the provisions of which are effective from the financial years starting on or after 1 January 2020, notwithstanding subsequent deferrals established upon approval by the European Commission. The amendments introduced by the documents are aimed to facilitate the classification of a transaction such as the acquisition of a business or group of assets.
On 23 January 2020, the IASB issued the document "Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current", the provisions of which will take effect from financial years starting on or after 1 January 2022, subject to deferrals

established upon approval by the European Commission. The IASB clarifies the criteria that should be used to determine whether the liabilities should be classified as current or non-current. The amendments aim to promote consistency in the application of the requirements helping companies to determine whether payables and other liabilities with an uncertain settlement date should be classified as current (due or potentially to be settled within a year) or non-current. In addition, they include clarifications regarding the classification requirements of payables that an entity could extinguish through conversion to equity. The early application of these amendments is permitted.
Snam is analysing the standards and interpretations in question, where applicable, to assess whether their adoption will have a significant impact on the financial statements.

8) CASH AND CASH EQUIVALENTS

Cash and cash equivalents of €2,851 million (€1,872 million at 31 December 2018) refer mainly to bank current and deposit accounts that can be collected quickly (€2,054 million) and short-term liquidity use transactions, due in less than 90 days, with banking institutions with high credit ratings (€750 million) and to cash and cash equivalents at Snam International BV (€20 million) and Gasrule Insurance DAC (€19 million).
Borrowing interest rates on short-term liquidity use transactions and on bank deposit accounts that can be collected quickly are slightly more than 0%.
The book value of cash and cash equivalents approximates to their fair value. They are not subject to any usage restrictions.
A comprehensive analysis of the financial situation and major cash commitments during the year can be found in the cash flow statement.

9) TRADE RECEIVABLES AND OTHER CURRENT AND NON-CURRENT RECEIVABLES

Trade receivables and other current receivables equal to €1,376 million (€1,347 million at 31 December 2018) and other non-current receivables equal to €3 million (€1 million at 31 December 2018) break down as follows:

	31.12.2018			31.12.2019		
(millions of €)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Trade receivables	1,247		**1,247**	**1,217**		**1,217**
Financial receivables	10	1	**11**		**3**	**3**
- short-term						
- long-term	10	1	**11**		**3**	**3**
Receivables from investment/divestment activities	9		**9**	**8**		**8**
Other receivables	81		**81**	**151**		**151**
	1,347	**1**	**1,348**	**1,376**	**3**	**1,379**

Trade receivables (€1,217 million; €1,247 million at 31 December 2018) mainly refer to the natural gas transportation (€993 million) and storage (€152 million) segments.
Trade receivables relating to the storage sector (€152 million) include the VAT receivable invoiced to uses for the use of strategic gas collected and not replenished (€77 million).
Receivables are reported net of the provision for impairment losses (€102 million; €137 million at 31 December 2018). This provision essentially relates to impairment losses recorded in previous years on receivables from the balancing service pursuant to resolution 608/2015/R/gas through which the Authority provided for partial payment to the balancing supervisor (Snam Rete Gas) of uncollected receivables for the period from 1 December 2011 to 23 October 2012[11] (€91 million, including the relative interest).

Changes in the provision for impairment losses on receivables during the year are shown below:

(millions of €)	Provision for impairment losses at 31.12.2018	Provisions	Utilisations for excess	Provision for impairment losses at 31.12.2019
Trade receivables	137	1	(36)	**102**
	137	**1**	**(36)**	**102**

Net uses of the provision for impairment losses (€35 million) involve the release to the income statement of the provision for impairment losses following the announcement by the Council of State on 5 March 2020 confirming the ruling of the Milan Regional Administrative Court of 2017, ratified the recognition, by the Authority to the company, of part of the receivables not collected relating to the balancing activities for the period 1 December 2011-23 October 2012[12].
Financial receivables amount to €3 million (€11 million at 31 December 2018). Compared with 31 December 2018, receivables fell by €8 million essentially due to the conversion into equity, in February 2019, of the residual portion of the Shareholders' Loan to TAP (€10 million).
Receivables for investment/divestment activities (€8 million; €9 million at 31 December 2018) include receivables for private contributions recorded for third-party interference works involving the transportation sector (compensation).

Other receivables (€151 million; €81 million at 31 December 2018) comprise:

(millions of €)	31.12.2018	31.12.2019
IRES receivables for the national tax consolidation scheme	9	**9**
Other receivables:	72	**142**
- Energy and Environmental Services Fund (CSEA)	63	**124**
- Advances to suppliers	4	**6**
- Other	5	**12**
	81	**151**

11 For more information, please see Note 26 "Guarantees, commitments and risks – Disputes – Recovering receivables from certain users of the transportation and balancing system".
12 For more details, see Note 26, "Guarantees, commitments and risks – Disputes", of the Notes to the consolidated financial statements.

IRES receivables for the national tax consolidation scheme (€9 million, compared with €9 million at 31 December 2018) related mainly to receivables from the former parent company, Eni, relating to the IRES refund request resulting from the partial IRAP deduction relating to tax years 2007 to 2011 (pursuant to Decree-Law 201/2011).
Receivables from the CSEA (€124 million) refer to the transportation sector and are attributable to the gas settlement, introduced by the Authority through resolutions 670/2017/R/gas and 782/2017/R/gas, and to the incentives paid to the balancing manager.
All receivables are in euros. The fair value measurement of trade and other receivables has no material impact considering the short period of time from when the receivable arises and its due date and the contractual terms and conditions.

The seniority of trade and other receivables is shown below:

	31.12.2019			31.12.2019		
(millions of €)	**Trade receivables**	**Other receivables (**)**	**Total**	**Trade receivables (*)**	**Other receivables (**)**	**Total**
Non-overdue and non-impaired receivables	1,134	97	**1,231**	**1,085**	**162**	**1,247**
Overdue and non-impaired receivables:	113	4	**117**	**132**		**132**
- 0-3 months overdue	15		**15**	**11**		**11**
- 3-6 months overdue	3		**3**	**7**		**7**
- 6-12 months overdue	1		**1**	**26**		**26**
- more than 12 months overdue	94	4	**98**	**88**		**88**
	1,247	**101**	**1,348**	**1,217**	**162**	**1,379**

(*) The exposure is net of ovedue and impaired receivables for an amount equal to €102 millions (€137 millions at 31 December 2018).
(**) Including financial receivables, receivables from investment/divestment activities and other receivables.

Overdue and non- impaired receivables (€132 million, €117 million at 31 December 2018) mainly refer to the storage segment (€77 million), principally comprising VAT[13] billed to users in previous years for the use of strategic gas which was withdrawn but not replenished by them pursuant to the provisions established in the Storage Code.
Receivables from related parties are described in Note 35 "Related-party transactions".
Specific information on credit risk can be found in Note 26 "Guarantees, commitments and risks - Credit risk".

13 As provided for under the applicable legislation, notices of VAT changes may be issued at the end of bankruptcy proceedings or unsuccessful enforcement proceedings.

10) INVENTORIES

Inventories, which amount to €475 million (€472 million at 31 December 2018) are analysed in the table below:

	31.12.2018			31.12.2019		
(millions of €)	**Gross amount**	**Impairment losses**	**Net value**	**Gross amount**	**Impairment losses**	**Net value**
Inventories (current assets)	**155**	**(46)**	**109**	**157**	**(45)**	**112**
Raw materials, consumables and supplies	103	(14)	**89**	**106**	**(13)**	**93**
Finished products and merchandise	52	(32)	**20**	**51**	**(32)**	**19**
Compulsory inventories (Non-current assets)	**363**		**363**	**363**		**363**
	518	**(46)**	**472**	**520**	**(45)**	**475**

Inventories (current assets)

Inventories of raw materials, consumables and supplies (€93 million; €89 million at 31 December 2018) primarily include stock materials relating to the pipeline network (€38 million) and to storage plants (€11 million), and natural gas used for transportation activities (€19 million).
Inventories of finished products and merchandise (€19 million, €20 million at 31 December 2018) mainly refer to the natural gas present in the storage system (619 million standard cubic metres, unchanged from 31 December 2018) and do not include compulsory inventories, recognised under "Non-current assets" in the balance sheet.
Inventories are reported net of the provision for impairment losses of €45 million (€46 million at 31 December 2018). The provision essentially involves the impairment loss (€30 million) recorded in 2014 for 0.4 billion cubic metres of natural gas used under the scope of storage activities of strategic gas unduly withdrawn by some service users in 2010 and 2011[14].

Changes in the provision for impairment losses during the year are shown below:

(millions of €)	**Provision for impairment losses at 31.12.2018**	**Other changes**	**Provision for impairment losses at 31.12.2019**
Raw materials, consumables and supplies	14	(1)	**13**
Finished products and merchandise	32		**32**
	46	**(1)**	**45**

Inventories are not collateralised. Inventories do not secure liabilities, nor are they recognised at net realisation value.

14 For more information regarding the progress of the lawsuits under way, see Note 26 "Guarantees, commitments and risks - Disputes and other measures - Recovering receivables from users of the storage system".

Compulsory inventories (non-current assets)

Compulsory inventories (€363 million, unchanged from 31 December 2018) comprise minimum quantities of natural gas that the storage companies are obliged to hold pursuant to Presidential Decree 22 of 31 January 2001.
The quantities of natural gas in stock, equal to around 4.5 billion standard cubic metres, are determined annually by the Ministry of Economic Development[15]:

11) CURRENT INCOME TAX ASSETS/LIABILITIES AND OTHER CURRENT TAX ASSETS/LIABILITIES

Current income tax assets/liabilities and other current tax assets/liabilities break down as follows:

(millions of €)	31.12.2018	31.12.2019
Current income tax assets	**10**	**12**
IRES	9	**9**
IRAP	1	
Other assets		**3**
Other current tax assets	**7**	**14**
VAT	4	**11**
Other taxes	3	**3**
	17	**26**
Current income tax liabilities	**(14)**	**(26)**
IRES	(13)	**(22)**
IRAP	(1)	**(4)**
Other current tax liabilities	**(9)**	**(9)**
IRPEF withholdings for employees	(7)	**(7)**
VAT	(1)	**(1)**
Other taxes	(1)	**(1)**
	(23)	**(35)**

Current income tax assets of €12 million (€10 million at 31 December 2018) mainly involve IRES receivables (€9 million) following the receivables for additional IRES (€8 million).
Other current tax assets of €14 million (€7 million at 31 December 2018) mainly refer to VAT receivables (€11 million).

15 On 8 January 2019, the Ministry confirmed the total volume of strategic storage for the contractual year 2019-2020 (1 April 2019-31 March 2020) at 4.62 billion cubic metres or approximately 48,846 gigawatt hours GWh, unchanged compared with the thermal year 2018-2019 (1 April 2018-31 March 2019). The Stogit share was unchanged at 4.5 billion cubic metres.

Current income tax liabilities of €26 million (€14 million at 31 December 2018) mainly refer to IRES payables in connection with the national tax consolidation scheme (€22 million).
Other current tax liabilities of €9 million (the same as at 31 December 2018) mainly relate to IRPEF (personal income tax) withholdings for employees (€7 million).
Taxes pertaining to the year under review are shown in Note 32 - “Income taxes”.

12) OTHER CURRENT AND NON-CURRENT ASSETS

Other current assets, which amount to €19 million (€27 million at 31 December 2018) and *other non-current assets* of €26 million (€36 million at 31 December 2018) break down as follows:

	31.12.2018			31.12.2019		
(millions of €)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Regulated activities	16	10	**26**	**1**	**1**	**2**
Market value of derivative financial instruments	4		**4**			
Other assets:	7	26	**33**	**18**	**25**	**43**
- Prepayments	6	13	**19**	**9**	**10**	**19**
- Security deposits		13	**13**		**13**	**13**
- Other	1		**1**	**9**	**2**	**11**
	27	**36**	**63**	**19**	**26**	**45**

The item “Other assets” (€43 million; €33 million at 31 December 2018) essentially comprises:

- prepayments (€19 million), relating to upfront fees and the substitute tax on revolving credit lines (€14 million) and to insurance premiums (€5 million). The current and non-current portions amount to €9 million and €10 million respectively (€6 million and €13 million at 31 December 2018);
- security deposits (€13 million) issued to support operations mainly relating to the natural gas transportation sector.

13) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, which amounts to €16,439 million (€16,153 million at 31 December 2018) changed as follows:

	31.12.2018						
(millions of €)	**Land**	**Buildings**	**Plant and equipment**	**Industrial and commercial equipment**	**Other assets**	**Non-current assets under construction and payments on account**	**Total**
Cost at 31.12.2017	**167**	**443**	**22,205**	**108**	**210**	**1,138**	**24,271**
Investments	2		3	7		793	805
Disposals	(1)	(4)	(17)	(3)	(2)	(4)	(31)
Change in scope of consolidation			1		1		2
Other changes	3	33	1,003	5	26	(1,111)	(41)
Cost at 31.12.2018	**171**	**472**	**23,195**	**117**	**235**	**816**	**25,006**
Provisions for amortisation and depreciation at 31.12.2017		**(107)**	**(7,862)**	**(53)**	**(153)**		**(8,175)**
Total amortisation and depreciation		(11)	(578)	(12)	(21)		(622)
Disposals		2	10	3	1		16
Change in scope of consolidation			(1)				(1)
Other changes			(1)				(1)
Provisions for amortisation and depreciation at 31.12.2018		**(116)**	**(8,432)**	**(62)**	**(173)**		**(8,783)**
Provision for impairment losses at 31.12.2017	**(1)**	**(4)**	**(25)**			**(33)**	**(63)**
(Impairment losses)/reversals			(2)			(6)	(8)
Disposals			1				1
Provision for impairment losses at 31.12.2018	**(1)**	**(4)**	**(26)**			**(39)**	**(70)**
Net balance at 31.12.2017	**166**	**332**	**14,318**	**55**	**57**	**1,105**	**16,033**
Net balance at 31.12.2018	**170**	**352**	**14,737**	**55**	**62**	**777**	**16,153**

	31.12.2019						
(millions of €)	**Land**	**Buildings**	**Plant and equipment**	**Industrial and commercial equipment**	**Other assets**	**Non-current assets under construction and payments on account**	**Total**
Cost at 31.12.2018	**171**	**472**	**23,195**	**117**	**235**	**816**	**25,006**
Investments			5	12	1	843	861
Disposals		(1)	(23)	(7)	(1)	(4)	(36)
Change in scope of consolidation		2	74	1		2	79
- *of which leased assets as right-of-use assets*		*2*					*2*
Other changes	2	11	682	5	50	(717)	33
Leased assets as rights-of-use assets (*)	3	20			2		25
Cost at 31.12.2019	**176**	**504**	**23,933**	**128**	**287**	**940**	**25,968**
Provisions for amortisation and depreciation at 31.12.2018		**(116)**	**(8,432)**	**(62)**	**(173)**		**(8,783)**
Total amortisation and depreciation		(11)	(605)	(12)	(22)		(650)
Disposals			20	7	1		28
Change in scope of consolidation			(18)				(18)
Leased assets as rights-of-use assets	(1)	(4)			(1)		(6)
Provisions for amortisation and depreciation at 31.12.2019	**(1)**	**(131)**	**(9,035)**	**(67)**	**(195)**		**(9,429)**
Provision for impairment losses at 31.12.2018	**(1)**	**(4)**	**(26)**			**(39)**	**(70)**
(Impairment losses)/reversals			(3)			(27)	(30)
Provision for impairment losses at 31.12.2019	**(1)**	**(4)**	**(29)**			**(66)**	**(100)**
Net balance at 31.12.2018	**170**	**352**	**14,737**	**55**	**62**	**777**	**16,153**
Net balance at 31.12.2019	**174**	**369**	**14,869**	**61**	**92**	**874**	**16,439**

(*) It includes first application effects of IFRS 16 (€20 millions) and changes of the year (€5 millions).

Property, plant and equipment (€16,439 million, compared with €16,153 million at 31 December 2018) relates mainly to transportation (€13,401 million), storage (€2,845 million) and regasification (€100 million) infrastructure.

Investments[16] (€861 million) refer mainly to the transportation (€723 million) and storage (€103 million) segments.

During the year, Snam capitalised €10 million of financial expenses (€12 million in 2018).

Depreciation (€656 million), included leased assets as right-of-use assets, refers to economic and technical depreciation determined on the basis of the useful life of the assets or their remaining possible use by the Company.

Capital contributions recorded against the net value of property, plant and equipment stood at €389 million (€385 million at 31 December 2018).

Disposals (€8 million, net of the related provisions for depreciation, amortisation and impairment losses) mainly relate to transportation segment assets.

16 Investments by business segment are shown in the "Business segment operating performance" section of the Directors' Report.

Impairment losses and reversals (€30 million) refer essentially to the write-down of assets not yet ready for use in the transportation segment.
The value of plant and equipment includes site dismantling and restoration costs (€266 million), relating mainly to the natural gas storage (€165 million) and transportation (€100 million) sectors.
Other changes (€33 million) relate to: (i) the revised downgrading of the estimate of site dismantling and restoration costs essentially refers to the storage sector, where the effects were partly absorbed by the reduction in anticipated discounting rates (€42 million in total); (ii) the change in inventories of pipes and ancillary materials used in the construction of plants, with reference to the natural gas transportation sector (€5 million); (iii) contributions to third-party interference works (compensation -€14 million).
Contractual commitments to purchase property, plant and equipment, and to provide services related to the construction thereof, are reported in Note 26 "Guarantees, commitments and risks".
There are no real guarantees on property, plant and equipment, with the exception of some property relating to two subsidiaries that came under the scope of consolidation in November 2019, with mortgages as collateral for bank loans (worth a total of around €70 million, double the original amount of the loans). The above real guarantees were cancelled in January 2020 in view of the repayment in full of the bank loans.

Property, plant and equipment by business segment

Property, plant and equipment by operating segment break down as follows:

(millions of €)	31.12.2018	31.12.2019
Historical cost	**25,006**	**25,968**
Transportation	20,934	**21,645**
Storage	3,893	**4,020**
Regasification	158	**176**
Corporate and other activities	21	**127**
Provision for amortisation, depreciation and impairment losses	**(8,853)**	**(9,529)**
Transportation	(7,690)	**(8,244)**
Storage	(1,080)	**(1,175)**
Regasification	(72)	**(76)**
Corporate and other activities	(11)	**(34)**
Net balance	**16,153**	**16,439**
Transportation	13,244	**13,401**
Storage	2,813	**2,845**
Regasification	86	**100**
Corporate and other activities	10	**93**

14) INTANGIBLE ASSETS

Intangible assets, which amounted to €990 million (€907 million at 31 December 2018) break down as follows:

	31.12.2018					
	Finite useful life				Indefinite useful life	
(millions of €)	Industrial patent rights and intellectual property rights	Concessions, licences, trademarks and similar rights	Other intangible assets	Non-current assets under construction and payments on account	Goodwill	Total
Cost at 31.12.2017	**701**	**763**	**42**	**27**	**27**	**1,560**
Investments				77		**77**
Disposals	(1)					**(1)**
Change in scope of consolidation		2	19		9	**30**
Other changes	**63**	**4**	**3**	**(66)**	**6**	**10**
Cost at 31.12.2018	**763**	**769**	**64**	**38**	**42**	**1,676**
Provisions for amortisation and depreciation at 31.12.2017	**(571)**	**(97)**	**(42)**			**(710)**
Total amortisation and depreciation	(54)	(4)	(2)			**(60)**
Disposals	1					**1**
Provisions for amortisation and depreciation at 31.12.2018	**(624)**	**(101)**	**(44)**			**(769)**
Provision for impairment losses at 31.12.2017						
Provision for impairment losses at 31.12.2018						
Net balance at 31.12.2017	**130**	**666**		**27**	**27**	**850**
Net balance at 31.12.2018	**139**	**668**	**20**	**38**	**42**	**907**

(millions of €)	31.12.2019					
	Finite useful life				Indefinite useful life	
	Industrial patent rights and intellectual property rights	Concessions, licences, trademarks and similar rights	Other intangible assets	Non-current assets under construction and payments on account	Goodwill	Total
Cost at 31.12.2018	763	769	64	38	42	1,676
Investments				102		102
Change in scope of consolidation		31	7		9	47
Other changes	91	3	(1)	(93)		
Cost at 31.12.2019	854	803	70	47	51	1,825
Provisions for amortisation and depreciation at 31.12.2018	(624)	(101)	(44)			(769)
Total amortisation and depreciation	(61)	(4)	(1)			(66)
Provisions for amortisation and depreciation at 31.12.2019	(685)	(105)	(45)			(835)
Provision for impairment losses at 31.12.2018						
Provision for impairment losses at 31.12.2019						
Net balance at 31.12.2018	139	668	20	38	42	907
Net balance at 31.12.2019	169	698	25	47	51	990

Industrial patent rights and intellectual property rights of €169 million (€139 million at 31 December 2018) mainly concern information systems and applications in support of operating activities.
Concessions, licences, trademarks and similar rights (€698 million; €668 million at 31 December 2018) refer essentially to concessions for natural gas storage activities (€656 million) and, specifically to the concessions of Settala (€226 million), Sergnano (€126 million), Fiume Treste (€91 million) and Brugherio (€56 million). The value of the storage concessions is represented by the reserves of natural gas in the fields ("cushion gas"[17]). The value also includes the fair value attributed at the Purchase Price Allocation of Renerwaste, as governed by IFRS3, related to the multi-year concessions for running the three waste management plants.

The change in the scope of consolidation (€47 million) refers to intangible fix assets recorded following the acquisition transactions completed in November 2019 by the companies Renerwaste and TEA Servizi.
The increase in assets with an indefinite useful life (€9 million) refers to the goodwill following the acquisition transactions of the companies Renerwaste (€8 million) and TEA Servizi (€1 million)[18]. This goodwill was allocated to the CGUs represented by these companies acquired.

17 Cushion gas is not depreciated.

18 For further information, see Note 25 - "Business combinations".

Investments (€102 million) refer mainly to the transportation (€88 million) segment[19].
Amortisation (€66 million) refers to economic and technical amortisation determined on the basis of the finite useful life of the intangible assets or their remaining possible use by the Company.
Contractual commitments to purchase intangible assets, and to provide services related to the development thereof, are reported in Note 26 - "Guarantees, commitments and risks".

As required by the reference accounting principle (IAS 36), assets and goodwill are subject to impairment testing. Impairment tests are conducted for all CGUs where there are impairment indicators and/or goodwill allocated to the CGUs. In 2019, the tests were also carried out for the main CGUs irrespective of whether there were impairment indicators and/or goodwill. In particular, the main CGUs were represented by:

- the businesses for regulated activities for the transportation, regasification and storage of natural gas by the companies Snam Rete Gas and ITG, GNL and Stogit;
- the CNG businesses composed of refuelling stations and compressor, of the companies Snam 4 Mobility and Cubogas;
- the biogas/biomethane businesses by the companies IES Biogas, and by the newly acquired company Renerwaste;
- the energy efficiency business, by the company TEP Energy Solutions and by the newly acquired company TEA Servizi.

With reference to the CNG business represented the refuelling stations, the recoverable value of the Snam 4 Mobility CGU was calculated on the basis of the Discounted Cash Flow (DCF) Method. Taking into consideration the start up stage of the business, the cash flows were calculated taking into consideration a longer time horizon compared with the forecast data of the 2020-2023 Plan approved by the Board, in order to be able to consider all the effects that could have a significant impact on cash flows. The Weighted Average Cost of Capital - WAAC method was used to discount cash flows.
With reference to other CNG activities (compressors), the recoverable value of the CGU Cubogas was determined based on the Discounted Cash Flow (DCF) Method, using the 2020-2023 Plan approved by the Board. The Weighted Average Cost of Capital - WAAC method was used to discount cash flows.
With reference to the biogas/biomethane business, the recoverable value of the CGU IES Biogas was determined on the basis of the Discounted Cash Flow (DCF) Method, using the 2020-2023 Plan approved by the Board. The Weighted Average Cost of Capital - WAAC method was used to discount cash flows.
With reference to the energy efficiency business, the recoverable value of the CGU TEP Energy Solutions was calculated on the basis of the Discounted Cash Flow (DCF) Method. Because of the nature of the business, significantly affected by the physical benefits related to the energy reclassification of buildings, the cash flows were calculated over a longer time horizon than the Plan approved by the Board, equal to the period in which these benefits are expected to remain in force. The Weighted Average Cost of Capital - WAAC method was used to discount cash flows.
For the newly acquired companies operating in the biogas/biomethane and energy efficiency business, the recoverable value allocated to the CGUs was assumed to be equal to the purchase prices of the companies also taking into account the timing of the acquisition transactions.
With reference to the Transportation (Snam Rete Gas), Regasification (GNL) and Storage (Stogit) CGUs, the recoverable value was defined corresponding to estimated value of the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) net of the flat-fee components[20], of the Employee Severance Pay (TFR) and contributions received.
With reference to the ITG CGU, the recoverable value allocated to the CGHU was calculated using the Discounted Cash Flow (DCF) Method, using the 2020-2023 Plan approved by the Board. The Weighted Average Cost of Capital - WAAC method was used to discount cash flows.
For all CGUs, the recoverable value as represented above was higher than the net book value of the CGUs included in the goodwill.
As set out in IAS 36, all the CGUs subject to impairment testing were subjected to a sensitivity analysis of the recoverable value, in the worst case scenario formulated which includes a 0.5% increase in the discount rate applied to cash flows. This stress test did not highlight any loss in value of the CGUs.

19 Investments by business segment are shown in the "Business segment operating performance" section of the Directors' Report.

20 The RAB is the reference basis for the determination of the service tariffs and, therefore, of the cash flows generated by the activities. The value of the RAB is defined through the historical cost method revalued as regards the fixed assets, and on a flat rate basis for the working capital, the employee severance indemnity and, with reference to the storage sector, the site dismantling and restoration fund.

Intangible assets by business segment

Intangible assets by business segment break down as follows:

(millions of €)	31.12.2018	31.12.2019
Historical cost	**1,676**	**1,825**
Transportation	721	**809**
Storage	835	**844**
Regasification	6	**6**
Corporate and other activities	114	**166**
Provision for amortisation, depreciation and impairment losses	**(769)**	**(835)**
Transportation	(544)	**(594)**
Storage	(159)	**(166)**
Regasification	(4)	**(4)**
Corporate and other activities	(62)	**(71)**
Net balance	**907**	**990**
Transportation	177	**215**
Storage	676	**678**
Regasification	2	**2**
Corporate and other activities	52	**95**

15) INVESTMENTS VALUED USING THE EQUITY METHOD

Investments valued using the equity method, amounting to €1,787 million (€1,710 million at 31 December 2018) break down as follows:

	Equity investments in		
(millions of €)	**joint ventures**	**associates**	**Total**
Initial value at 01.01.2018	**1,164**	**383**	**1,547**
Acquisitions and subscriptions	5	160	165
Capital gains from measurement using the equity method	117	48	165
(Capital losses) from measurement using the equity method		(8)	(8)
Exchange rate conversion differences		(1)	(1)
Sales and repayments	(16)		(16)
Decrease owing to dividends	(114)	(35)	(149)
Other changes	(57)	64	7
Final value at 31.12.2018	**1,099**	**611**	**1,710**
Initial value at 01.01.2019	**1,099**	**611**	**1,710**
Acquisitions and subscriptions		**23**	**23**
Capital gains from measurement using the equity method	**128**	**97**	**225**
(Capital losses) from measurement using the equity method		**(7)**	**(7)**
Exchange rate conversion differences		**6**	**6**
Sales and repayments	**(9)**	**(22)**	**(31)**
Decrease owing to dividends	**(98)**	**(34)**	**(132)**
Other changes	**7**	**(14)**	**(7)**
Final value at 31.12.2019	**1,127**	**660**	**1,787**

Acquisitions and subscriptions (€23 million) relate to TAP's capital increase following the shareholder loan requests received during the course of the year.
Capital gains from valuations using the equity method (€225 million) refer mainly to the share for the results of the jointly controlled companies TAG (€74 million), Terēga (€44 million) and AS Gasinfrastruktur Beteiligung GmbH (€10 million) and associate companies Italgas (€56 million) and Senfluga (€33 million). Capital losses from valuations using the equity method (€7 million) refer to the share of the results of the associate company TAP.
Disposals and redemptions (€31 million) refer to the reduction in the book value of Senfluga (€22 million) following the repayment of the share capital and AS Gasinfrastruktur Beteiligung (€9 million) following the distribution of part of the share premium reserve.
The decrease in dividends (€132 million) refers to the jointly controlled companies TAG (€63 million) and Terēga (€35 million) and the associate companies Italgas (€26 million) and Interconnector (UK) (€8 million).
Other changes (-€7 million) mainly refer to the change in fair value of the hedging derivatives of associate companies (-€23 million) partly offset by the conversion to equity in February 2019 of the remaining share of the Shareholders' Loan to TAP (+€9 million).
For investments, except for what is stated with reference to the investment in TAP[21], there were no real guarantees.
At 31 December 2019 the Group conducted impairment testing for each investment in associate and jointly controlled companies; in particular, for the Italgas CGU, the recoverable value was determined on the basis of the stock market capitalization of the homonymous stock on 31 December 2019, expression of the market values on that date. For the remaining CGUs, the recoverable amount was determined through the Dividend Discount Model (DDM) Method, based on the most recent plans of the respective companies. For the discounting of cash flows, the cost of equity was used (Cost of Equity - Ke). No impairments were revealed by these tests.
As set out in IAS 36, all investments subject to impairment testing were subjected to a sensitivity analysis of the recoverable value, in the worst case scenario formulated which includes a 0.5% increase in the discount rate applied to cash flows. This stress test did not highlight any loss in value of the investments.
Consolidated companies, joint ventures, associates and other significant equity investments are indicated separately in the appendix "Significant shareholdings, associates and equity investments of Snam S.p.A. at 31 December 2019", which is an integral part of these Notes.

Other information on equity investments

In accordance with the provisions of IFRS 12 - "Disclosure of interests in other entities", the economic and financial data for joint ventures and associates for the financial years ended 31 December 2018 and 31 December 2019 are provided below.

21 For more information, see Note 25, "Guarantees, Commitments and Risks – Commitments, guarantees and pledges - TAP".

Investments in joint ventures

The economic-financial data relating to each investment in joint ventures deemed significant, refers to values in the financial statements prepared on the basis of IFRS for investee companies[22] are listed below:

	31.12.2018		
(millions of €)	**Terēga Holding S.A.S. (*)**	**Trans Austria Gasleitung GmbH**	**AS Gasinfrastruktur Beteiligung GmbH**
Current assets	146	57	2
- *of which cash and cash equivalents*	*34*	*20*	*2*
Non-current assets	2,891	1,116	582
Total assets	**3,037**	**1,173**	**584**
Current liabilities	(146)	(105)	(3)
- *of which current financial liabilities*	*(81)*	*(35)*	*(3)*
Non-current liabilities	(1,685)	(497)	(283)
- *of which non-current financial liabilities*	*(1,423)*	*(353)*	*(283)*
Total liabilities	**(1,831)**	**(602)**	**(286)**
Shareholders´ equity	**1,165**	**571**	**298**
Equity investment held by the group % (**)	40.50%	89.22%	40.00%
Share attributable to the Group	472	509	119
Book value of the equity investment	**472**	**509**	**124**
Revenue	461	308	
Operating costs	(179)	(124)	
Amortisation, depreciation and impairment losses	(132)	(56)	
EBIT	**150**	**128**	
Financial income	1		2
Financial expense	(37)	(14)	(7)
Income (expense) from equity investments			28
Income tax	(31)	(32)	
Net profit	**83**	**82**	**23**
Other components of comprehensive income			
Total comprehensive income	**83**	**82**	**23**

(*) The data for 2018 were restated consistent with the definitive values of the financial statements approved by the company at 31.12.2018.
(**) The investment in Trans Austria Gasleitung GmbH is measured on the basis of the percentage of economic rights held.

22 Unless otherwise indicated, the financial statement figures for joint ventures, reported in full, have been updated to include adjustments made by the Parent Company pursuant to the equity-accounting method. The aforementioned amounts relate to the preliminary and/or approved reporting packages.

	31.12.2019		
(millions of €)	**Terēga Holding S.A.S.**	**Trans Austria Gasleitung GmbH**	**AS Gasinfrastruktur Beteiligung GmbH**
Current assets	133	46	2
- *of which cash and cash equivalents*	*40*	*5*	*2*
Non-current assets	2,930	1,104	605
Total assets	3,063	1,150	607
Current liabilities	(174)	(92)	(3)
- *of which current financial liabilities*	*(74)*	*(12)*	*(3)*
Non-current liabilities	(1,700)	(475)	(292)
- *of which non-current financial liabilities*	*(1,425)*	*(337)*	*(244)*
Total liabilities	(1,874)	(567)	(295)
Shareholders´ equity	1,189	583	312
Equity investment held by the group % (*)	40.50%	89.22%	40.00%
Share attributable to the Group	482	520	125
Book value of the equity investment	482	520	125
Revenue	502	312	
Operating costs	(208)	(127)	
Amortisation, depreciation and impairment losses	(103)	(61)	
EBIT	191	124	
Financial income			2
Financial expense	(52)	(11)	(7)
Income (expense) from equity investments			23
Income tax	(45)	(30)	(2)
Net profit	94	83	16
Other components of comprehensive income			
Total comprehensive income	94	83	16

(*) The investment in Trans Austria Gasleitung GmbH is measured on the basis of the percentage of economic rights held.

Information on Investments in joint ventures

Terēga Holding S.A.S.

Terēga Holding S.A.S. is a company operating under French law which, through Terēga S.A.S., wholly-owned by Terēga Holding S.A.S.) controls 100% of Terēga S.A.
Terēga S.A. (Transport et Infrastructures Gaz France) operates in the transportation and storage of natural gas in south-west France. Natural gas transportation and storage activities in France are subject to regulation.
At 31 December 2019 Terēga Holding S.A.S. was an investee of Snam S.p.A. (40.5%), Singapore sovereign wealth fund GIC (31.5%), EDF (18%, through a fund dedicated to liabilities arising from the disposal of nuclear assets) and Crédit Agricole Assurances (10%, through Prévoyance Dialogue du Crédit Agricole).
Terēga Holding S.A.S.'s consolidated financial statements include Terēga Holding S.A.S., Terēga S.A.S and Terēga S.A.
The corporate governance rules stipulate that decisions on significant activities must be taken with the unanimous consent of shareholders Snam and GIC.

Trans Austria Gasleitung GmbH (TAG)

Trans Austria Gasleitung GmbH (TAG) is a company operating under Austrian law that is active in the natural gas transportation segment. It owns the gas pipeline that links the Slovakian-Austrian border to the Tarvisio entry point.
Natural gas transportation in Austria is a regulated activity.
As at 31 December 2019, Snam S.p.A. holds 84.47% of the share capital, entitling it to 89.22% of the economic rights. The remainder of the share capital is held by Gas Connect Austria GmbH (GCA).
The contractual agreements drawn up between Snam, TAG and (GCA) also stipulate that if TAG is not capable of self-financing, the other companies must finance it according to the equity investment held by each shareholder.
The corporate governance rules stipulate that decisions on significant activities must be taken with the unanimous consent of shareholders Snam and GCA.

AS Gasinfrastruktur Beteiligung GmbH

AS Gasinfrastruktur Beteiligung GmbH is an Austrian company jointly controlled by Snam S.p.A. and the Allianz group, with holdings of 40% and 60% respectively. The company holds 100% of the Austrian company AS Gasinfrastruktur GmbH, which in turn holds 49% of the share capital of Gas Connect Austria GmbH, which is controlled by OMV AG.
The corporate governance rules of AS Gasinfrastruktur Beteiligung GmbH stipulate that decisions on significant activities must be taken with the unanimous consent of shareholders Snam and Allianz.

Significant restrictions

Pursuant to the provisions of IFRS 12, the major significant restrictions on investee companies' ability to transfer funds to Snam in the form of dividends, loan repayments or advances appear below.

Terēga S.A.S.

The payment to shareholders of interest on the nominal amount of the €670 million convertible bond (of which Snam has subscribed €272 million) may be deferred at the discretion of the issuer Terēga S.A.S.

Investments in associates

The economic-financial data relating to investments in associate companies deemed significant, refers to the values in the financial statements prepared in accordance with the IFRS of investee companies[23], and are reported below.

	31.12.2018			
(millions of €)	**Trans Adriatic Pipeline AG (TAP)**	**Italgas S.p.A.**	**Senfluga Energy Infrastructure Holding S.A. (*)**	**Interconnector UK Ltd**
Current assets	108	748	347	37
Non-current assets	4,050	6,011	815	668
Total assets	**4,158**	**6,759**	**1,162**	**705**
Current liabilities	(257)	(899)	(176)	(108)
Non-current liabilities	(2,619)	(4,531)	(519)	(117)
Total liabilities	**(2,876)**	**(5,430)**	**(695)**	**(225)**
Shareholders' equity	**1,282**	**1,329**	**467**	**480**
Equity interest held by the Group (%)	20%	13.50%	60%	23.68%
Share attributable to the Group	256	179	117	114
Book value of the equity investment	**258**	**180**	**117**	**55**
Revenue		1,641		168
EBIT	**(29)**	**453**	**(6)**	**47**
Net profit	**(18)**	**314**	**(6)**	**37**
Other components of comprehensive income		(3)		
Total comprehensive income	**(18)**	**311**	**(6)**	**37**

(*) The values reflect the recognition, as provisional accounting, of the assets and liabilities assumed by Senfluga when it acquired the controlling interest in DESFA at its fair value. Shareholders' equity includes amounts pertaining to minorities of 272 million euro.,

23 The financial statement figures for associates, reported in full, have been updated to include adjustments made by the Parent Company pursuant to the equity-accounting method. The aforementioned amounts relate to the preliminary and/or approved reporting packages.

(millions of €)	31.12.2019 Trans Adriatic Pipeline AG (TAP)	Italgas S.p.A.	Senfluga Energy Infrastructure Holding S.A. (*)	Interconnector UK Ltd
Current assets	79	985	220	32
Non-current assets	4,100	7,247	839	426
Total assets	4,179	8,232	1,059	458
Current liabilities	(210)	(1,319)	(105)	(29)
Non-current liabilities	(3,103)	(5,118)	(466)	(173)
Total liabilities	(3,313)	(6,437)	(571)	(202)
Shareholders' equity	866	1,795	488	256
Equity interest held by the Group (%)	20%	13.5%	54%(**)	23.68%
Share attributable to the Group	264	209	124	61
Book value of the equity investment	264	209	125	61
Revenue	2	1,893	257	88
EBIT	(39)	516	141	39
Net profit	(40)	424	88	33
Other components of comprehensive income	(93)	(6)	(5)	28
Total comprehensive income	(133)	418	83	61

(*) The shareholders' equity includes the value pertaining to minority shareholders, equal to €258 million.
(**) The equity investment held by the Group reflects the reclassification to Assets held for sale equal to 6% (€10 million).

Information on investments in associates

Trans Adriatic Pipeline A.G. (TAP)

Trans Adriatic Pipeline A.G. (TAP) is a Swiss company formed to design, develop and build a new gas pipeline, currently under construction, which will extend from the Greek-Turkish border to Italy (at the new entry point in San Foca-Melendugno), crossing Greece and Albania.
As at 31 December 2019, TAP A.G. was an investee of Snam S.p.A. (20%), Socar (20% through AzTAP GmbH), BP (20% through BP Gas Marketing Ltd), Fluxys (19% through Fluxys Europe B.V.), Enagas (16% through Enagás Internacional S.L.U.) and Axpo (5% through Axpo Trading AG).
In December 2019 TAP concluded a project financing agreement for the construction of the pipeline.
Under current corporate governance rules, none of TAP's shareholders is able to exercise control over the company, including in a joint capacity.

Italgas S.p.A.

Italgas S.p.A. is an Italian company that controls 100% of Italgas Reti S.p.A., Seaside S.r.l. and Italgas Acqua., companies operating in the natural gas distribution sector in Italy, energy efficiency and the management of the water service in five municipalities in Campania.
As at 31 December 2019, following the spin-off of the natural gas distribution business from Snam S.p.A. which took place in 2016, Italgas S.p.A., was a investee of Snam (13.5%), C.D.P. Reti S.r.l. (26.05%), while the remainder is owned by third party shareholders.
On 7 November 2016, the effective date of aforementioned separation, which covered all the shares each company held in Italgas S.p.A., the shareholder agreement signed by Snam S.p.A., CDP Reti S.p.A. and CDP Gas S.r.l., on 20 October 2016 entered into effect. The shareholder agreement establishes a block voting shareholder's agreement, with Snam having the right of early withdrawal if, in the event of Snam opposing the vote of the syndicated shares on reserved

subjects of an extraordinary nature, Snam does not sell its equity investment in Italgas within the next 12 months (accelerated exit). Transfers of Snam's equity investment in Italgas S.p.A. (including in the event of an Accelerated Exit) are subject not only to advance approval by CDP Reti, but also to the subrogation of a third party. In addition, Snam may not increase its equity investment. The agreement has a three-year term that is renewable barring notice of termination; in the event that Snam does not renew, CDP Reti shall have an option to purchase at fair market value Snam's equity investment in Italgas.

Senfluga Energy Infrastructure Holding

Senfluga Energy Infrastructure Holding is a company through which the European consortium composed of Snam (60%)[24], Enagás (20%) and Fluxys (20%) owns a 66% stake of DESFA, the national operator in the natural gas infrastructure sector. DESFA owns and manages a regulated system for a high pressure transportation network covering around 1,500 km, as well as a regasification terminal at Revithoussa. Greece, an important crossroads for the diversification of procurement and the opening of new natural gas routes in Europe, has further development potential as a south-east European hub.
Under current corporate governance rules, none of Senfluga's shareholders is able to exercise control over the company, including in a joint capacity.

Interconnector UK Ltd

Interconnector UK Ltd is a company under British law that owns the two-way pipeline that joins the United Kingdom to Belgium and the rest of Europe.
At 31 December 2019 Interconnector UK Ltd was an investee company of Snam International B.V. (23,68%) and Fluxys UK Ltd (76.32%).
The company directly holds 48% of the company under Dutch law Interconnector Zeebrugge Terminal S.C./C.V. Scrl and 1% indirectly through Interconnector Leasing company Ltd.

16) OTHER INVESTMENTS

Other investments of €41 million (€40 million at 31 December 2018) mainly involve the minority interest of 7.3% held by Snam S.p.A. in the share capital of Terminale GNL Adriatico S.r.l. (Adriatic LNG) and breaks down as follows:

(millions of €)	
Value at 31.12.2018	**40**
Acquisitions and subscriptions	1
Income from valuation to FVTOCI	4
Sales and repayments	(5)
Other changes	1
Value at 31.12.2019	**41**

The profit from the measurement of the Fair Value Through Other Comprehensive Income (FVTOCI) of €4 million refers to the change in fair value of the investment at 31 December 2019.

24 Following the sale of the 6% stake that took place on 13 January 2020, the share held by Snam was 54%. For more information, refer to Note 17 "Assets held for sale".

17) ASSETS HELD FOR SALE

Assets held for sale (€10 million) relate to a 6% share in the associate company Senfluga, reclassified following the agreements signed by the shareholders of Senfluga for the sale of a 10% stake in it, proportional to the stake held by each shareholder. In conformity with the provisions of IFRS 5 "Non-current assets Held for Sale and Discontinued Operations", the above-mentioned stake was recorded under assets held for sale and valued at the lower of the book value and the fair value, excluding any sales costs. The completion of the transaction, subject to the approval of the Greek regulator, took place on 13 January 2020, following a payment of €16 million (€10 million as Snam's share), pegged at the values of the transaction concluded by Snam in December 2018. Following the above-mentioned sale, the percentage of Snam's equity investment in the capital of Senfluga is 54%.

18) SHORT-TERM FINANCIAL LIABILITIES, LONG-TERM FINANCIAL LIABILITIES AND SHORT-TERM PORTIONS OF LONG-TERM FINANCIAL LIABILITIES

Short-term financial liabilities, amounting to €2,456 million (€1,976 million at 31 December 2018), and *long-term financial liabilities*, including short-term portions of long-term liabilities totalling €12,318 million (€11,444 million at 31 December 2018), break down as follows:

	31.12.2018					31.12.2019				
		Long-term financial liabilities					Long-term financial liabilities			
(millions of €)	**Short-term financial liabilities**	**Short-term portion**	**Long-term portion maturing within 5 years**	**Long-term portion maturing in more than 5 years**	**Total long-term portion**	**Short-term financial liabilities**	**Short-term portion**	**Long-term portion maturing within 5 years**	**Long-term portion maturing in more than 5 years**	**Total long-term portion**
Bonds		913	4,408	3,125	7,533		**1,439**	**3,800**	**3,809**	**7,609**
Bank loans	1,751	744	1,175	1,079	2,254	**455**	**230**	**1,798**	**1,221**	**3,019**
Euro Commercial Paper - ECP	225					**2,001**				
Lease liabilities							**6**	**11**	**4**	**15**
	1,976	**1,657**	**5,583**	**4,204**	**9,787**	**2,456**	**1,675**	**5,609**	**5,034**	**10,643**

Short-term financial liabilities

Short-term financial liabilities, standing at €2,456 million (€1,976 million at 31 December 2018) mainly relate to the use of floating rate uncommitted bank lines of credit (€450 million) and the issuing of unsecured short-term bonds (Euro Commercial Papers) issued by the money market and placed with institutional investors (€2,001 million). The increase compared with 31 December 2018 of €480 million is mainly due to the issuing of Euro Commercial Papers (€1,775 million) partly offset by the lower net use of lines of credit (-€1,301 million).
There are no short-term financial liabilities denominated in currencies other than the euro.
The weighted average interest rate on short-term financial liabilities was -0.11% (-0.04% for 2018).
The market value of short-term financial liabilities is the same as their book value.

Long-term financial liabilities and short-term portions of long-term financial liabilities

Long-term financial liabilities, including the short-term portion of long-term liabilities, amounted to €12,318 million (€11,444 million at 31 December 2018). The breakdown of bond loans (€9,048 million), indicating the issuing company, the year of issue, the currency, the average interest rate and the maturity, is provided in the following table.

(millions of €)

Issuing company	Issued (year)	Currency	Nominal amount	Adjust-ments (a)	Balance at 31.12.2019	Rate (%)	Maturity (year)
Euro Medium Term Notes (EMTN)							
SNAM S.p.A. (b) (c) (d) (e)	2012	€	602	6	608	5.25	2022
SNAM S.p.A. (b) (c) (d) (f)	2012	€	526	16	542	3.5	2020
SNAM S.p.A. (c) (d) (e)	2013	€	259	8	267	3.375	2021
SNAM S.p.A. (c) (d) (e)	2014	€	390	9	399	3.25	2024
SNAM S.p.A. (c) (d) (e) (g)	2014	€	246	4	250	1.5	2023
SNAM S.p.A. (c) (d) (e) (h)	2015	€	195	(17)	178	1.375	2023
SNAM S.p.A.	2016	€	1,250	(5)	1,245	0.875	2026
SNAM S.p.A.	2016	€	500	(1)	499		2020
SNAM S.p.A. (e)	2017	€	393	3	396	1.25	2025
SNAM S.p.A. (i)	2017	€	300		300	0.641	2022
SNAM S.p.A. (i)	2017	€	350		350	0.836	2024
SNAM S.p.A.	2017	€	650	(2)	648	1.375	2027
SNAM S.p.A. (i)	2018	€	350		350	0.212	2020
SNAM S.p.A. (l) (e)	2018	€	595	(3)	592	1.00	2023
SNAM S.p.A.	2019	€	500	(2)	498	1.25	2025
SNAM S.p.A. (i)	2019	€	250		250	1.625	2030
SNAM S.p.A.	2019	€	700	(5)	695		2024
SNAM S.p.A.	2019	€	600	(11)	589	1.00	2034
			8,656		**8,656**		
Convertible bonds							
SNAM S.p.A.	2017	€	400	(8)	392		2022
			9,056	**(8)**	**9,048**		

(a) Includes: (i) issue commission/discount; (ii) accrued interest
(b) Bond loans subject to the 2016 liability management operation.
(c) Bond loans subject to the 2017 liability management operation.
(d) Bond loans subject to the 2018 liability management operation.
(e) Bond loans subject to the 2019 liability management operation.
(f) Bond loan subject to reopening in September 2013 for an incremental amount of €500 million, with the same interest rate and maturity as the original placement.
(g) Bond loan subject to reopening in January 2015 for an incremental amount of €250 million, with the same interest rate and maturity as the original placement.
(h) Bond loans subject to the 2015 liability management operation.
(i) Floating-rate bond, converted into fixed-rate through an IRS hedging derivative.
(l) Bond loan subject to reopening in November 2018 for an incremental amount of €300 million, with the same interest rate and maturity as the original placement.

Bond loans (€9,048 million) rose by €602 million compared with 31 December 2018 mainly following the issuing of: (i) the Climate Action Bond, for a nominal amount of €500 million, fixed rate with a maturity date of 28 August 2025; (ii) a Private Placement of a nominal amount of €250 million, fixed rate with a maturity date of 7 January 2030; (iii) a dual tranche bone with a nominal amount of, respectively, €700 and €600 million, making a total of €1.3 billion, fixed rate with maturity dates, respectively of 12 May 2024 and 12 September 2034. These changes were partly offset by: (i) by the repayment of a fixed rate bond maturing on 18 January 2019, for a nominal amount of €519 million; (ii) the repayment of a fixed rate bond loan maturing on 24 April 2019, of a nominal amount of €225 million; (iii) the repayment of a JPY 10 billion bond maturing on 25 October 2019 of a nominal amount of €83 million; (iv) the repurchase on the market of fixed-rate bonds for a total nominal value of €597 million with an average coupon of 1.3% and a residual duration of approximately 3.9 years. The total disbursement resulting from the buy back of securities as part of the Liability Management transaction, concluded in December 2019 stood at €626 million[25], including the fees paid to intermediaries and accrued interest (€5 million in total).

Payables for bank loans (€3,704 million) relate to term loans, of which €1,669 million concern European Investment Bank (EIB) funding.

There are no other long-term bank loans denominated in currencies other than the euro.

The weighted average interest rate on bank loans used (excluding loan contracts with the EIB) was 0.2%[26] (0.3% for 2018).

There were no breaches of loan agreements as at the reporting date.

The market value of long term financial debts, including the short-term portion totals €12,755 million[27] (€11,564 million at 31 December 2018).

Snam also has unused committed credit lines totalling €3.2 billion.

Financial covenants and negative pledge commitments

At 31 December 2019 Snam had unsecured bilateral and syndicated loan agreements in place with banks and other lending institutions, with the exception of some bank loans (totalling €25.9 million) relating to two subsidiaries that entered the scope of consolidation in November 2019[28].

Some of these agreements include, inter alia, compliance with typical international practice commitments, some of which are subject to specific materiality thresholds, such as, for example: (i) negative pledge commitments pursuant to which Snam and its subsidiaries are subject to limitations concerning the pledging of real property rights or other restrictions on all or part of the respective assets, shares or merchandise; (ii) pari passu and change-of-control clauses; (iii) limitations on certain extraordinary transactions that the Company and its subsidiaries may carry out; and (iv) limits on the debt of subsidiaries.

Failure to comply with these covenants, and the occurrence of other events such as cross-default events could result in Snam’s failure to comply and, possibly, trigger the early repayment of the related loan. Exclusively for the EIB loans, the lender has the option to request additional guarantees if Snam’s credit rating is lower than BBB (Standard & Poor’s/Fitch Ratings Limited) or Baa2 (Moody’s) for at least two of the three ratings agencies.

The occurrence of one or more of the aforementioned scenarios could have negative effects on Snam Group’s operations, results, balance sheet and cash flow, resulting in additional costs and/or liquidity issues.

At 31 December 2019, the financial debt subject to these restrictive clauses amounted to approximately €3.2 billion.

Bonds issued by Snam as at 31 December 2019, with a nominal value of €9.1 billion, mainly referred to securities issued under the Euro Medium Term Notes programme. The covenants established for the programme’s securities are typical of international market practice and consist of, inter alia, negative pledge and pari passu clauses. Specifically, under the negative pledge clause, Snam and its material subsidiaries are subject to limitations to pledging or maintaining encumbrances on all or part of their assets or proceeds to guarantee present or future debt, unless this is explicitly permitted.

25 For more information on the operation, see the section “Snam in 2019 – Summary data and information - Main events” in the Directors’ Report.
26 It excludes the depreciation of the upfront fees.
27 It includes bonds, whose value is estimated on the basis of the market listings at 31 December 2019, and financial liabilities to banks, all at floating rate, whose corresponding market value is taken as the nominal repayment value.

28 These loans were repaid in January 2020.

Breakdown of net financial debt

The breakdown of net financial debt, showing related-party transactions, is provided in the following table:

	31.12.2018			31.12.2019		
(millions of €)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
A. Cash and cash equivalents	1,872		1,872	**2,851**		**2,851**
B. Securities available for sale and held to maturity						
C. Cash (A + B)	**1,872**		**1,872**	**2,851**		**2,851**
D. Short-term financial receivables						
E. Short-term financial liabilities to banks	1,751		1,751	**455**		**455**
F. Long-term financial liabilities to banks	744	2,254	2,998	**230**	**3,019**	**3,249**
G. Bonds	913	7,533	8,446	**1,439**	**7,609**	**9,048**
H. Short-term financial liabilities to related parties						
I. Long-term financial liabilities to related parties						
L. Other short-term financial liabilities	225		225	**2,001**		**2,001**
M. Other long-term financial liabilities (*)				**6**	**15**	**21**
N. Gross financial debt (E + F + G + H + I + L + M)	**3,633**	**9,787**	**13,420**	**4,131**	**10,643**	**14,774**
O. Net financial debt (N - C - D)	**1,761**	**9,787**	**11,548**	**1,280**	**10,643**	**11,923**

(*) The value includes financial payables for leased assets recorded pursuant to IFRS 16 "Leasing".

Reconciliation of net financial debt

In compliance with the provisions of IAS 7 "Statement of Cash Flows", we provide below the cash and non-cash changes to liabilities arising from financing activities and to assets included in net financial debt.

(millions of €)	31.12.2018	Cash flow changes	Changes without effects on cash flows			31.12.2019
			Impact of IFRS 16	Foreign Exchange difference	Change in scope of consolida-tion	
Cash and cash equivalents (*)	1,872	979				**2,851**
Liquidity and financial receivables	**1,872**	**979**				**2,851**
Short-term financial debt	1,976	478			2	**2,456**
Long-term financial liabilities (**)	11,444	807		3	43	**12,297**
Lease liabilities		(6)	25		2	**21**
Gross financial debt	**13,420**	**1,285**	**25**	**3**	**47**	**14,774**
Net financial debt	**11,548**	**306**	**25**	**3**	**47**	**11,923**

(*) Including cash and cash equivalents from the change in the scope of consolidation.
(**) Includes the current portion of long-term financial liabilities.

19) TRADE PAYABLES AND OTHER PAYABLES

Trade payables and other payables, which amount to €1,801 million (€1,768 million at 31 December 2018) comprise the following:

(millions of €)	31.12.2018	31.12.2019
Trade payables	491	**487**
Payables for investments	337	**320**
Other payables	940	**994**
	1,768	**1,801**

Trade payables of €487 million (€491 million at 31 December 2018) relate mainly to the natural gas transportation (€350 million, including €253 million relating to gas balancing activities), storage (€26 million) and regasification (€8 million) business segments.
Payables for investment activities of €320 million (€337 million at 31 December 2018) relate mainly to the natural gas transportation (€253 million) and storage (€38 million) business segments.

Other payables of €994 million (€940 million at 31 December 2018) break down as follows:

(millions of €)	31.12.2018	31.12.2019
Other payables		
- Payables to the Energy and Environmental Services Fund (CSEA)	570	**597**
- Interim dividend	298	**313**
- Payables to employees	32	**35**
- Payables to pension and social security institutions	19	**19**
- Consultants and professionals	8	**8**
- Other	13	**22**
	940	**994**

Payables to the CSEA (€597 million) essentially refer to ancillary tariff components applied to users of the transportation service, to be returned to the system.
The interim dividend (€313 million) refers to the payable to shareholders following the 2019 interim dividend of €0.095 per share, approved on 13 November 2019. The interim dividend was paid from 22 January 2020.
Note 35 - "Related-party transactions" contains information about payables due to related parties.
The fair value measurement of trade and other payables has no material impact given the short period of time between when the payable arises and its due date and the contractual terms and conditions.

20) OTHER CURRENT AND NON-CURRENT LIABILITIES

Other current liabilities, amounting to €97 million (€86 million at 31 December 2018), and *other non-current liabilities*, amounting to €213 million (€437 million at 31 December 2018), break down as follows:

	31.12.2018			31.12.2019		
(millions of €)	Current	Non-current	Total	Current	Non-current	Total
Liabilities from regulated activities	38	351	389	**49**	**98**	**147**
Market value of derivative financial instruments	7	26	33	**7**	**56**	**63**
Other liabilities	41	60	101	**41**	**59**	**100**
- Security deposits		46	46		**47**	**47**
- Prepaid revenue and income	29	6	35	**26**	**6**	**32**
- Prepaid contributions for connecting to the transportation network		6	6		**6**	**6**
- Other	12	2	14	**15**		**15**
	86	**437**	**523**	**97**	**213**	**310**

Liabilities from regulated activities, amounting to €147 million (€389 million at 31 December 2018), relate to:

- the transportation business segment (€118 million) following the penalties charged to users who have exceeded the committed capacity. The current and non-current portions amount to €49 million and €69 million respectively (€37 million and €322 million at 31 December 2018). The significant reduction compared with 31 December 2018 is due to the settlement of the previous tariff entries made in July 2019;
- the storage business segment (29 million) following the fees for the balancing and stock replenishment, to be returned to users of the service in accordance with the provisions of resolution 50/06 of the Authority corresponding entirely to the non-current portion (€1 and €29 million, respectively for the current portion and non-current portion at 31 December 2018).

The market value of derivatives at 31 December 2019 is as follows:

	31.12.2018			31.12.2019		
(millions of €)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Other assets	**4**		**4**			
Cash flow hedging derivatives:						
- Fair value exchange rate hedging derivatives	4		4			
Other liabilities	**(7)**	**(26)**	**(33)**	**(7)**	**(56)**	**(63)**
Cash flow hedging derivatives:						
- Fair value interest rate hedging derivatives	(6)	(26)	(32)	**(6)**	**(56)**	**(62)**
- Accrued expenses on derivatives	(1)		(1)	**(1)**		**(1)**

The liabilities arising from measurement at market value of the derivative financial instruments used as cash flow hedges (€63 million) refer to:

- two derivative Interest Rate Swap "Forward Start" contracts with Mandatory Early Termination, stipulated in July 2017 and August 2018 to cover the risk of interest rate fluctuations of long-term bond issues scheduled for 2020 and 2021, of nominal total value of €500 million and a total market value of €43 million;
- an Interest Rate Swap derivative, stipulated in August 2017, with a market value of €11 million. The IRS is used to hedge against the fluctuation risk of the fair value of a fixed rate liability resulting from a long-term bond issue of €350 million. The 7 year bond has a maturity of 2 August 2024 and variable rate linked to 3 month Euribor + 40 bps. Through the derivative contract, the floating rate liability is converted into an equivalent fixed rate liability with a benchmark rate of 0.436%;

- an Interest Rate Swap derivative, stipulated in February 2017, with a market value of €3 million. The IRS agreement is used to hedge against interest rate fluctuations following a long-term bond issue worth €300 million. The loan, which has a duration of five years and matures on 21 February 2022, pays a variable interest rate linked to 3 month Euribor plus 60 bps. The IRS has converted the floating-rate liability into an equivalent fixed-rate liability with reference rate of 0.0408%;
- an Interest Rate Swap derivative, stipulated in July 2018, with a market value of €2 million. The IRS is used to hedge against the fluctuation risk of a 50% portion of the floating rate term loan of €500 million. The 3-year term loan, has a maturity of 31 October 2021 and variable rate linked to 3 month Euribor + 45 bps. Through the derivative contract, the floating rate liability is converted into an equivalent fixed rate liability with a benchmark rate of 0.0570%;
- an Interest Rate Swap derivative, stipulated in July 2018, with a market value of €2 million. The IRS is used to hedge against the fluctuation risk of the interest rate resulting from a floating rate term loan of €150 million. The 5-year term loan has a maturity of 31 July 2022 and variable rate linked to 3 month Euribor + 58 bps. Through the derivative contract, the floating rate liability is converted into an equivalent fixed rate liability with a benchmark rate of 0.1250%;
- an Interest Rate Swap derivative, stipulated in December 2015, with a market value of €1 million. The IRS is used to hedge against the fluctuation risk of the interest rate resulting from a floating rate term loan of €9 million. The 13-year term loan, has a maturity of 30 June 2028 and variable rate linked to 6 month Euribor. Through the derivative contract, the floating rate liability is converted into an equivalent fixed rate liability with a benchmark rate of 1.04%;
- an Interest Rate Swap derivative, stipulated in December 2018, with a market value of €1 million. The IRS is used to hedge against the fluctuation risk of the remaining 50% portion of the floating rate term loan of €500 million. The 3-year term loan, has a maturity of 31 October 2021 and variable rate linked to 3 month Euribor + 45 bps. Through the derivative contract, the floating rate liability is converted into an equivalent fixed rate liability with a benchmark rate of - 0.0440%;
- an Interest Rate Swap derivative, stipulated in August 2013, with a market value of less than €1 million. The IRS is used to hedge against the fluctuation risk of the interest rate resulting from a floating rate term loan of €1 million. The loan, has a maturity of 30 June 2028 and variable rate linked to 6 month Euribor. Through the derivative contract, the floating rate liability is converted into an equivalent fixed rate liability with a benchmark rate of 2.16%;
- an Interest Rate Swap derivative, stipulated in January 2018, with a market value of less than €1 million. The IRS is used to hedge against the fluctuation risk of the fair value of a fixed rate liability resulting from a long-term bond issue of €350 million. The 2 year bond has a maturity of 29 January 2020 and variable rate linked to 3 month Euribor + 40 bps. Through the derivative contract, the floating rate liability is converted into an equivalent fixed rate liability with a benchmark rate of -0.1878%.

The main characteristics of the derivatives in question are summarised in the tables below:

Interest rate Swap - Forward Start

Type of derivative (millions of €)	Contract start date	Maturity date	Early extinguishment date	Residual term (years)	Snam pays	Snam receives	Nominal value at 31.12.2018	Nominal value at 31.12.2019	Market value at 31.12.2018	Market value at 31.12.2019
IRS - Forward start (*)	30/10/19	30/10/26	30/01/20	6.8	1.1805%	Euribor 6m	250		(9)	
IRS - Forward start	29/10/20	29/10/27	29/01/21	7.8	1.4225%	Euribor 6m	250	**250**	(8)	**(23)**
IRS - Forward start	15/04/21	15/04/28	15/07/21	8.3	1.3130%	Euribor 6m	250	**250**	(5)	**(20)**

(*) Derivate closed on 24 May 2019.

Interest rate Swap

Type of derivative (millions of €)	Contract start date	Maturity date	Residual term (years)	Snam pays	Snam receives	Nominal value at 31.12.2018	Nominal value at 31.12.2019	Market value at 31.12.2018	Market value at 31.12.2019
Interest Rate Swap	02/08/17	02/08/24	4.6	0.4360%	Euribor 3m	350	**350**	(5)	**(11)**
Interest Rate Swap	21/02/17	21/02/22	2.1	0.0408%	Euribor 3m	300	**300**	(2)	**(3)**
Interest Rate Swap	30/07/18	31/10/21	1.8	0.0570%	Euribor 3m	250	**250**	(2)	**(2)**
Interest Rate Swap	31/07/18	31/07/22	2.6	0.1250%	Euribor 3m	150	**150**	(1)	**(2)**
Interest Rate Swap	31/10/18	31/10/21	1.8	-0.0440%	Euribor 3m	250	**250**	(1)	**(1)**
Interest Rate Swap (*)	31/12/15	30/06/28	8.5	1.0400%	Euribor 3m	10	**9**		**(1)**
Interest Rate Swap (*)	07/08/13	30/06/28	8.5	2.1600%	Euribor 3m	1	**1**		
Interest Rate Swap	29/01/18	29/01/20	0.1	-0.1878%	Euribor 3m	350	**350**		

(*) Derivative contracts from the change in the scope of consolidation.

The fair value of hedging derivatives and their classification as a current or non-current asset/liability have been determined using generally accepted financial measurement models and market parameters at the end of the year.
Information on the risks being hedged by the derivatives and on policies adopted by the Company to hedge against these risks is provided in Note 26 - “Guarantees, commitments and risks - Management of financial risks”.
Other liabilities of €100 million (€101 million at 31 December 2018) mainly include: (i) the security deposits (€47 million; €46 million at 31 December 2018) paid as collateral by the users of the balancing service, pursuant to resolution ARG/gas 45/11 (ii) the liabilities for prepaid revenue and income (€32 million) essentially regarding the prepaid income to TAP for the presentation of design services rendered (€21 million corresponding entirely to the current portion) and the prepaid fee for the concession to use the fibre optic cables given to a telecommunications operator (€8 million, including €2 million as the current portion and €6 million as the non-current portion).

21) PROVISIONS FOR RISKS AND CHARGES

Provisions for risks and charges, which amount to €713 million (€665 million at 31 December 2018) are analysed in the table below:

	31.12.2018						
				Utilisations			
(millions of €)	Opening balance	Provisions	Increases due to passing of time	against charges	for excess	Other changes	Final balance
Provision for site dismantlement and restoration	610		11	(6)		(8)	**607**
Provision for litigation	16	6		(1)	(2)		**19**
Provision for tax litigation	10			(3)	(1)		**6**
Other provisions	41	20		(26)	(2)		**33**
	677	**26**	**11**	**(36)**	**(5)**	**(8)**	**665**

	31.12.2019						
				Utilisations			
(millions of €)	Opening balance	Provisions	Increases due to passing of time	against charges	for excess	Other changes	Final balance
Provision for site dismantlement and restoration	607		7	(9)		42	**647**
Provision for litigation	19	3			(4)		**18**
Provision for tax litigation	6	1			(1)		**6**
Other provisions	33	21		(12)			**42**
	665	**25**	**7**	**(21)**	**(5)**	**42**	**713**

The provision of €647 million for site dismantling and restoration (€607 million at 31 December 2018) includes the estimated (discounted) costs that will be incurred for the removal of facilities and the restoration of sites in the natural gas storage[29] (€518 million) and transportation (€124 million) business segments.
The discounting for the site dismantling and restoration provision was carried out using the corresponding to the euro area Corporate Bond returns with an "AA" rating. The rate thus determined was between 0.62% and 1.09%. Disbursements relating to the dismantling and restoration operations will be incurred over a time horizon covering the next 42 years.
The other changes (€42 million) refer to the estimated change as a result of the anticipated reduction in discounting rates partly absorbed by the downgrading of the estimated site dismantling and restoration costs that mainly refer to the storage business segment.
The provision for litigation (€18 million; €19 million as at 31 December 2018) included costs which the Company has estimated it will incur for existing lawsuits.
The risk provision for tax disputes (€6 million; the same at 31 December 2018) contains the estimate of the probable expenses in the event of levying of assessments and pursuant to tax disputes.

29 The costs refer to the estimated expenses for the removal of the connection works to the Livorno LNG regasification terminal - OLT Offshore LNG Toscana.

Other provision for risks and charges (€42 million; €33 million at 31 December 2018) mainly involve the expenses that the insurance company Gruppo Gasrule Insurance DAC expects to incur following insured claims (€18 million) and the redundancy package fund (€13 million).
In accordance with ESMA Recommendation 2015/1608 of 27 October 2015, the effects on provisions of risks and charges arising from a reasonably possible change to the discount rate used at year-end are shown below.

The sensitivity[30] of the discount rate represents the change in the value of the actuarial liability obtained using the end-of-year valuation data, changing the discount rate without any change in the other assumptions.

(millions of €)	**Change in discount rate**	
Effect on the net obligation at 31.12.2019	**Reduction of 10%**	**Increase of 10%**
Provision for site dismantlement and restoration	12	(12)

22) PROVISIONS FOR EMPLOYEE BENEFITS

Provisions for employee benefits, amounting to €46 million (€64 million at 31 December 2018), can be broken down as follows:

(millions of €)	**31.12.2018**	**31.12.2019**
Employee severance pay (TFR)	26	**25**
Supplemental healthcare provision for company executives of Eni (FISDE)	3	**4**
Isopensione provision	25	**12**
Other employee benefit provisions	10	**5**
	64	**46**

The provision for employee severance pay (TFR), governed by Article 2120 of the Italian Civil Code, represents the estimated liability determined on the basis of actuarial procedures for the amount to be paid to employees at the time that the employment is terminated. The principal amount of the benefit is equal to the sum of portions of the allocation calculated on compensation items paid during the employment and revalued until the time that such relationship is terminated. Due to the legislative changes introduced from 1 January 2007 for companies with more than 50 employees, a significant part of severance pay to be accrued is classified as a defined-contribution plan since the company's only obligation is to pay the contributions to the pension funds or to INPS. Liabilities related to severance pay pre-dating 1 January 2007 remain a defined-benefit plan to be valued using actuarial methods (€25 million; €26 million at 31 December 2018).

30 For the purposes of sensitivity, only provisions for risks and charges showing a significant accretion discount were taken into account.

The supplementary healthcare provision for Company executives of Eni (FISDE) of €4 million (€3 million at 31 December 2018) includes the estimate of costs (determined on an actuarial basis) related to contributions benefiting current[31] and retired executives.
FISDE provides financial supplementary healthcare benefits to Eni Group executives[32] and retired executives whose most recent contract of employment was as an executive with the Eni Group. FISDE is funded through the payment of: (i) contributions from member companies; (ii) contributions from individual members for themselves and their immediate family; and (iii) ad hoc contributions for specific benefits. The amount of the liability and the healthcare cost are determined on the basis, as an approximation of the estimated healthcare expenses paid by the fund, of the contributions paid by the company in favour of pensioners.
The early retirement fund (€12 million) refers to expenses incumbent upon the employer from application of the implementation agreement, relating to the early retirement instrument for employees regulated pursuant to Article 4 paragraphs 1 - 7 of Law 92/2012 (the "Fornero Law").
Other provisions for employee benefits (€5 million, €10 million at 31 December 2018) refer to the long-term benefits associated with seniority bonuses (€3 million), deferred monetary incentive plans (IMD) and long-term monetary incentive plans (ILT) (€2 million in total).
Deferred monetary incentive plans are allocated to executives who have met the goals set out in the year preceding the allocation year, and allocate a basic incentive that is disbursed after three years and varies according to the performance achieved by the Company during the course of the three-year period following the time of the allocation. The benefit is provisioned when Snam's commitment to the employee arises. The estimate is subject to revision in future periods, based on the final accounting and updates to profit forecasts (above or below target).
The long-term monetary incentive plans, involve the granting and payment, of a variable monetary bonus tied to a measure of company performance. Obtaining the benefit depends on the achievement of certain future performance levels and is conditional on the beneficiary remaining with the Company for the three-year period following the allocation (the "vesting period"). This benefit is allocated pro rata over the three-year period depending on the final performance parameters.
From 2017, in place of the long-term monetary incentive plans (IMD and ILT) a new share-based long-term incentive plan (share ILT) was introduced[33], the recipients of which was extended in 2018.
Seniority bonuses are benefits paid upon reaching a minimum service period at the company and are paid in kind in the form of goods and/or services.

31 For executives in service, contributions are calculated from the year in which the employee retires and refer to the years of service provided.
32 The fund provides the same benefits for Snam Group executives.
33 For more information on the characteristics of this plan, refer to the "Other information" paragraph of the Directors' Report.

The composition of and changes in employee benefit provisions, determined by applying actuarial methods, are as follows[34]:

	31.12.2018					31.12.2019				
(millions of €)	**TFR**	**FISDE**	**Isopensione provision**	**Other provisions**	**Total**	**TFR**	**FISDE**	**Isopensione provision**	**Other provisions**	**Total**
Current value of the obligation at the start of the year	**30**	**3**	**13**	**12**	**58**	**26**	**3**	**25**	**10**	**64**
Current cost			15	2	17		**1**	**(6)**		**(5)**
Cost in interest						**1**				**1**
Revaluations/ (Impairment losses):	(1)		1			**1**		**(1)**	**(1)**	**(1)**
- Actuarial (gains) and losses resulting from changes in the financial assumptions										
- Effect of past experience	(1)		1			**1**		**(1)**	**(1)**	**(1)**
Benefits paid	(3)		(4)	(4)	(11)	**(3)**		**(6)**	**(4)**	**(13)**
Change in scope of consolidation										
Current value of the obligation at the end of the year	**26**	**3**	**25**	**10**	**64**	**25**	**4**	**12**	**5**	**46**

Costs for defined-benefit plans recognised under other components of comprehensive income are broken down in the following table:

	31.12.2018			31.12.2019		
(millions of €)	**TFR**	**Isopensione provision**	**Total**	**TFR**	**Isopensione provision**	**Total**
Effect of past experience	(1)	1		**1**	**(1)**	
	(1)	1		**1**	**(1)**	

34 The table also provides a reconciliation of liabilities recorded for employee benefit provisions.

The main actuarial assumptions used to determine liabilities at the end of the year and to calculate the cost for the following year are indicated in the table below:

	31.12.2018			31.12.2019		
(millions of €)	**TFR**	**FISDE**	**Other provisions**	**TFR**	**FISDE**	**Other provisions**
Discount rate (%)	1.6	1.6	0.1-1.6	**0.9**	**0.9**	**0.9**
Inflation rate (%) (*)	1.5	1.5	1.5	**0.9**	**0.9**	**0.9**

(*) With regard to the other provisions, the rate relates only to seniority bonuses.

The discount rate adopted was determined by considering the yields on bonds issued by Eurozone companies with AA ratings.
The employee benefit plans recognised by Snam are subject, in particular, to interest rate risk, in the sense that a change in the discount rate could result in a significant change in the liability.

The table below illustrates the effects of a reasonably possible[35] change in the discount rate at the end of the year.

The sensitivity of the discount rate represents the change in the value of the actuarial liability obtained using the end-of-year valuation data, changing the discount rate by a certain number of basis points, without any change in the other assumptions.

(millions of €)	**Change in discount rate**	
Effect on the net obligation at 31.12.2018	**Reduction of 0.5%**	**Increase of 0.5%**
Employee severance pay (TFR)	1	(1)
FISDE	1	(1)

The maturity profile of the obligations for employee benefit plans is shown in the following table:

	31.12.2018					31.12.2019				
(millions of €)	**TFR**	**FISDE**	**Isopensione provision**	**Other provisions**	**Total**	**TFR**	**FISDE**	**Isopensione provision**	**Other provisions**	**Total**
Within the next year	1		8	5	14	**2**		**4**	**2**	**8**
Within five years	5		17	3	25	**6**		**2**		**8**
Between five and ten years	9			1	10	**9**	**1**		**1**	**11**
Beyond 10 years	11	3		1	15	**8**	**3**	**6**	**2**	**19**
	26	**3**	**25**	**10**	**64**	**25**	**4**	**12**	**5**	**46**

35 Any changes relating to mortality do not have a significant effect on the liability.

The weighted average maturity of obligations for employee benefit plans is shown below:

	31.12.2018				31.12.2019			
	TFR	FISDE	Isopensione provision	Other provisions	TFR	FISDE	Isopensione provision	Other provisions
Weighted average maturity (years)	10	22	2	4	**9**	**23**	**1**	**6**

23) DEFERRED TAX LIABILITIES

Deferred tax liabilities of €548 million (€541 million at 31 December 2018) are stated net of prepaid tax assets that can be offset of €442 million (€407 million at 31 December 2018).

There are no prepaid tax assets which cannot be offset.

(millions of €)	31.12.2018	Provisions	Utilisations	Other changes	Change in scope of consolidation	31.12.2019
Deferred tax liabilities	541	2	(16)	12	9	**548**
Prepaid tax assets	(407)	(39)	27	(22)	(1)	**(442)**
	134	**(37)**	**11**	**(10)**	**8**	**106**

Deferred tax liabilities and prepaid tax assets break down as follows, based on the most significant temporary differences:

	31.12.2019								
(millions of €)	**Opening balance**	**Provisions**	**Utilisations**	**Significant impacts on share-holders' equity**	**Other changes**	**Change in scope of consolida-tion**	**Final balance**	**Of which: IRES**	**Of which: IRAP**
Deferred tax liabilities	**541**	**2**	**(16)**		**12**	**9**	**548**	***531***	***17***
Depreciation and amortisation exclusively for tax purposes	422		(14)				408	*408*	
Site dismantlement and restoration	80	2			12		94	*80*	*14*
Revaluation of property, plant and equipment	19					2	21	*19*	*2*
Capitalisation of financial expenses	7						7	*6*	*1*
Impairment losses on receivables in excess of tax deductibility	3						3	*3*	
Other temporary differences	10		(2)			7	15	*15*	
Prepaid tax assets	**(407)**	**(39)**	**27**	**(10)**	**(12)**	**(1)**	**(442)**	***(404)***	***(38)***
Site dismantlement and restoration	(169)	(3)	2		(12)		(182)	*(155)*	*(27)*
Non-deductible amortisation and depreciation	(129)	(27)	5				(151)	*(149)*	*(2)*
Provision for risks and charges and other non-deductible provisions	(57)	(5)	11				(51)	*(47)*	*(4)*
Non-repayable and contractual grants	(20)						(20)	*(17)*	*(3)*
Employee benefits	(15)	(2)	7				(10)	*(9)*	*(1)*
Other temporary differences	(17)	(2)	2	(10)		(1)	(28)	*(27)*	*(1)*
Net deferred tax liabilities	**134**	**(37)**	**11**	**(10)**	**0**	**8**	**106**	***127***	***(21)***

Prepaid tax assets and deferred tax liabilities are considered to be long term. Note 32 "Income taxes" provides information about taxes for the year.

24) SHAREHOLDERS' EQUITY

Shareholders' equity, which amounts to €6,258 million (€5,985 million at 31 December 2018) breaks down as follows:

(millions of €)	31.12.2018	31.12.2019
Share capital	2,736	**2,736**
Share premium reserve	1,021	**746**
Legal reserve	547	**547**
Other reserves	67	**64**
Fair value reserve of minority interests	1	**5**
Retained earnings	2,286	**2,513**
Net profit for the year	960	**1,090**
Less:		
- Consolidation reserve	(674)	**(674)**
- Negative reserve for treasury shares in the portfolio	(625)	**(389)**
- Reserve for fair value of cash flow hedging derivatives net of tax effect	(28)	**(62)**
- Reserve for defined-benefit plans for employees net of tax effect	(8)	**(8)**
- Interim dividend	(298)	**(313)**
Shareholders' equity held by Snam's shareholders	**5,985**	**6,255**
Shareholders' equity attributable to third parties		**3**
Total shareholders' equity	**5,985**	**6,258**

Below is a breakdown of the shareholders' equity of Snam at 31 December 2019.

Share capital

The share capital at 31 December 2019 consisted of 3,394,840,916 shares without nominal value (3,469,038,579 at 31 December 2018), with a total value of €2,735,670,475.56 (unchanged from 31 December 2018). The reduction is due to the cancellation of 74,197,663 treasury shares in the portfolio with no nominal value, with no share capital reduction, approved by the Snam Shareholders' Meeting, held in extraordinary session on 2 April 2019 and completed on 17 April 2019.

Share premium reserve

The share premium reserve at 31 December 2019 totalled €746 million (€1,021 million at 31 December 2018). The reduction of €275 million is due to the use of part of the reserve following the cancellation of 74,197,663 treasury shares in the portfolio with no share capital reduction, approved by the Extraordinary Shareholders' Meeting held on 2 April 2019 and completed on 17 April 2019.

Legal reserve

The legal reserve stood at €547 million at 31 December 2019 (unchanged from 31 December 2018).

Other reserves

Other reserves of €64 million (€67 million at 31 December 2018) mainly refer to the effects resulting from the valuation of investments using the equity method.

Retained earnings

Retained earnings totalled €2,513 million (€2,286 million at 31 December 2018). The increase of €227 million was mainly due to the allocation of the 2018 residual profit.

Consolidation reserve

The negative consolidation reserve of €674 million (unchanged from 31 December 2018) includes the value derived from the difference between the acquisition cost of the Italgas and Stogit equity investments (€1,597 million, including the additional transaction expenses and price adjustment following the agreements reached at transaction closing) and the relative shareholders' equity attributable to the Group on the transaction completion date (€923 million).

Negative reserve for treasury shares in the portfolio

The negative reserve for treasury shares in the portfolio includes the purchase cost, net of uses, of 102,412,920treasury shares, equal to 3.02% of the share capital (168,197,663 shares at 31 December 2018), for an amount of €389 million (€625 million at 31 December 2018). The reduction of €236 million is mainly due to the cancellation of 74,197,663 treasury shares in the portfolio, approved by the Snam Shareholders' Meeting on 2 April 2019, partly offset by the buy back of 8,412,920 shares to execute the new buy back programme launched on 16 December 2019.
Detailed information on treasury shares and long-term share-based incentive plans are shown in the "Other information" section of Directors' Report, to which reference should be made.

Reserve for fair value of cash flow hedging derivatives net of tax effect

The fair value reserve for cash flow hedge financial instruments (-€62 million at 31 December 2019; -€28 million at 31 December 2018 net of tax effects) includes the fair value measurement of derivative instruments, 6 Interest Rate Swaps (IRF) and 2 Forward start Interest Rate Swaps, illustrated in Note 20 “Other current and non-current liabilities”.

The changes in the reserve during the course of the year are shown below:

(millions of €)	Gross reserve	Tax effect	Net reserve
Reserve at 31.12.2018	**(37)**	**9**	**(28)**
Changes in 2019	(44)	10	(34)
Reserve at 31.12.2019	**(81)**	**19**	**(62)**

Reserve for defined-benefit plans for employees net of tax effect

At 31 December 2019, the reserve for remeasurement of employee benefit plans of -€8 million (unchanged from 31 December 2018) included actuarial losses, net of the relative tax effect, recognised under other components of comprehensive income pursuant to IAS 19.

Interim dividend

The 2019 interim dividend of €313 million, of €0.095 per share, was approved on 13 November 2019 by the Board of Directors pursuant to Article 2433-bis, paragraph 5 of the Italian Civil Code. The interim dividend was paid out as of 22 January 2020, with an ex-coupon date of 20 January 2020 and a record date of 21 January 2020.

Dividends

On 2 April 2019, the Snam S.p.A. Shareholders’ Meeting approved the distribution of the 2018 ordinary dividend of €0.2263 per share, including €0.095 per share for an amount of €298 million already distributed by way of an interim dividend. The balance of the dividend of €0.1358 per share, for a sum of €448 million, was paid from 26 June 2019, with an ex-dividend date of 24 June 2019 and a record date of 25 June 2019.
In its meeting of 18 March 2020, the Board of Directors proposed to the Shareholders’ Meeting convened for 28 April 2020 the distribution of an ordinary dividend of € 0.2376 per share, of which €0.095 per share, for an amount of €313 million, was already distributed as the interim dividend. The dividend of € 0.1426 per share will be paid out from 24 June 2020, with an ex-coupon date of 22 June 2020 and a record date of 23 June 2020.

25) BUSINESS COMBINATIONS

TEA Servizi

On 11 November 2019, the acquisition of TEA Servizi was completed through the subsidiary Asset Company 4 S.r.l., for a total value of €8 million. TEA is one of the main Italian companies operating in the energy efficiency sector, as an Energy Service Company (ESCO), with over 200 customers which include major national and international companies and 950 thousand energy efficiency certificates.
The operation is a Business combination in conformity with IFRS 3, Business combinations. To this end, on the date that control was acquired, the individual assets acquired and the liabilities assumed were recognized at the relative fair values, as provisional accounting separate from goodwill.

The accounting effects of the business combination, in accordance with the provisions of IFRS 3 - "Business combinations", are summarised below:

(millions of €)	Values after assignment of fair value
Fair value of the consideration	7
Fair value of contingent consideration (earn out)	1
Total net assets identifiable at fair value	7
Goodwill	**1**

The calculation of the business combination consideration included the current value of the contractually-due earn out on achieving the specific operating results.

The main values of the assets and liabilities of TEA at the acquisition date are summarised below:

(millions of €)	Values after assignment of fair value
Current assets	3
Non-current assets	9
Goodwill	1
Assets acquired	**13**
Current liabilities	1
Short-term financial liabilities	-
Long-term financial liabilities	2
Non-current liabilities	2
Liabilities acquired	**5**
Shareholders' equity acquired	**8**

The goodwill of €1 million was calculated as the difference between the fair value of the consideration and the fair value of the net assets acquired.
From the acquisition date (November 2019), TEA's contribution to revenues and net consolidated earnings was less than €1 million.

Renerwaste

On 20 November 2019 Snam, through the new subsidiary Snam 4 Environment, completed the acquisition of a share of around 83% of Renerwaste, one of the leading companies in Italy operating in the biogas and biomethane infrastructures, for a value of around €46 million (including €16 million by way of repayment of existing shareholder loans and €30 million by way of a contractual consideration). The transaction, entirely funded through equity, includes the possibility of Snam, acquiring the remaining minority interest of around 17% of the share capital owned by Ecopartner from June 2020. The contract includes put and call options on the interests of minority shareholders expiring in 2020. The operations of Renerwaste, which owns three plants[36]) and currently generate annual revenues of more than €20 million and employ around 50 people.
The operation is a Business combination in conformity with IFRS 3, Business combinations. To this end, on the date that control was acquired, the individual assets acquired and the liabilities assumed were recognized at the relative fair values, as provisional accounting separate from goodwill.
At the acquisition date, on the basis of the terms of the contract governing the exercise of the cross put and call options on the interests of minority shareholders (equal to 17%), the transaction was accounted for as if Snam had acquired control over 100% of Renerwaste, without therefore recognising the interests of minority shareholders.
The present value of expected payments if the options are exercised was included in the determination of the consideration of the business combination including the earn out under the above option (roughly €6 million).

The accounting effects of the business combination, in accordance with the provisions of IFRS 3 - "Business combinations", are summarised below:

(millions of €)	Values after assignment of fair value
Fair value of the consideration	30
Fair value of minority interests put/call option	6
Total net assets identifiable at fair value	28
Goodwill	**8**

36 Based on the contractual arrangements, when certain conditions are verified, Snam has the right, by 2022, to buy two SPVs to which permits for the construction of another two plants will be granted to.

The main values of the assets and liabilities of Renerwaste at the acquisition date are summarised below:

(millions of €)	Values after assignment of fair value
Current assets	15
Non-current assets (*)	90
Goodwill	8
Assets acquired	**113**
Current liabilities	24
Short-term financial liabilities	2
Long-term financial liabilities	43
Deferred tax liabilities	8
Liabilities acquired	**77**
Shareholders' equity acquired	**36**

(*) Non-current assets include, among intangible fixed assets, multi-year concessions for three waste management plants.

Goodwill (€8 million) was calculated as the difference between the fair value of the consideration, including the financial component relating to the option to purchase the interests of minority shareholders and the fair value of the net assets acquired.
From the acquisition date (end of November 2019), Renerwaste's contribution to net consolidated earnings was less than €1 million. With reference to revenues, the contribution amounted to €4 million.

If the business combination had been effective from 1 January 2019, Renerwaste's contribution to the Group's net result would have been an insignificant amount.

26) GUARANTEES, COMMITMENTS AND RISKS

Guarantees, commitments and risks, amounting to €4,467 million (€5,950 million at 31 December 2018) comprise:

(millions of €)	31.12.2018	31.12.2019
Guarantees given:	**1,262**	**1,230**
In the interest of subsidiaries	69	**101**
In the interest of associates	1,193	**1,129**
- *of which TAP*	*1,129*	***1,129***
Commitments and risks:		
Commitments	**2,021**	**1,126**
Commitments for the purchase of goods and services (*)	1,691	**892**
Commitments in associates (**)	324	**234**
- *of which TAP*	*324*	***234***
Other	6	
Risks	**2,667**	**2,111**
Third-party assets on deposit	2,609	**2,073**
Compensation and litigation	58	**38**
	5,950	**4,467**

(*) The value for 2019 includes legally-binding orders at 31 December 2019.
(**) The value shown in the table refers to the residual commitment.

Guarantees given

Guarantees given in the interest of subsidiaries (€101 million; €69 million at 31 December 2018) essentially relate to: (i) indemnities issued in favour of third-parties to guarantee the execution of works (€33 million); (ii) bank guarantees in favour of the INPS to guarantee fulfilment of the obligations undertaken under the scope of performances associated with early retirement, regulated by Article 4, paragraph 1-7 of Law 92/2012 - Fornero Law (€22 million); (iii) guarantees given in favour of the Revenue Agency in the interest of the subsidiaries Stogit, GNL and Snam4Mobility (€41 million).
The guarantees given in the interest of associates (€1,129 million; €1,193 million at 31 December 2018) refer to the guarantee given in the interest of TAP relating to the project loan for the construction of the pipeline (for more information, refer to the next paragraph "Commitments, guarantees and pledges - TAP").

Commitments

Commitments for the purchase of goods and services (€892 million; €1,691 million at 31 December 2018) involve the commitments undertaken with suppliers for the purchase of tangible assets and the provision of services relating to investment projects in process.
Commitments in associates (€234 million, €324 million at 31 December 2018) refer to the commitment undertaken by Snam S.p.A. with regard to TAP by way of the shareholding owned (for more information, refer to the next paragraph "Commitments, guarantees and pledges - TAP").

Commitments, guarantees and pledges - TAP

Commitments in associates (€234 million) refer to Snam S.p.A.'s residual commitment, as a shareholder and in relation to the project loan for the construction of the pipeline by way of the shareholding owned, equal to 20%, with regard to Trans Adriatic Pipeline AG (TAP).

The commitment relates to the total costs of the project, including the financial expense in the realisation of the work resulting from the loan agreement, concluded by TAP, in December 2018. Note that following the finalisation of the project financing for TAP, around 75% of the cost of the project will be funded by lending institutions.
Base on the project funding concluded, Snam S.p.A.'s commitment to TAP could gradually be reduced as a result of the provision to TAP of loans by lending institutions.
In the phase relating to the construction and start-up of the plant, the loan agreement of the associate TAP will be, inter alia, accompanied by a debt service guarantee up to a maximum Snam pro rata amount of €1,129 million.
At 31 December 2019 the effective value of the guarantee relating to the above loan stood at around €654 million. The guarantee will be released when certain requirements agreed with the lending institutions are verified, including, specifically, the completion and start-up of the plant.
When the project is realised, during operation, another support mechanism is planned by shareholders to repay the loan, the debt payment undertaking, which will be activated when certain, specific conditions occur. The structure of the project financing concluded for TAP includes several limitations for shareholders for transactions of this type, including: (i) a restriction on the possibility of TAP shares being freely available according to certain time frames; (ii) the pledging of the shares owned by Snam in TOP in favour of the lenders for the entire duration of the loan.

Risks

Risks related to third-party assets on deposit, equal to €2,111 million (€2,609 million at 31 December 2018) relate to approximately 9 billion cubic metres of natural gas deposited in the storage plants by customers of the service. This amount was determined by applying the estimated unit repurchase cost[37] of approximately €0.23 per standard cubic metre (€0.32 per standard cubic metre at 31 December 2018) to the quantities of gas deposited.
Risks concerning compensation and litigation amounting to €38 million (€58 million at 31 December 2018) relate to possible (but not probable) claims for compensation arising from ongoing litigation, with a low probability that the pertinent economic risk will arise.

FINANCIAL RISK MANAGEMENT

Introduction

The main corporate financial risks identified, monitored and, where specified below, managed by Snam are as follows:

- risk arising from exposure to fluctuations in interest and exchange rates;
- credit risk arising from the possibility of counterparty default;
- liquidity risk arising from not having sufficient funds to meet short-term financial commitments;
- rating risk;
- debt covenant and default risk.

There follows a description of Snam's policies and principles for the management and control of financial risks. In accordance with IFRS 7 - "Financial instruments: additional information", there are also descriptions of the nature and size of the risks resulting from such financial instruments. Information on other risks affecting the company's business (natural gas price risk, operational risk and risks specific to the segment in which Snam operates) can be found in the "Elements of risk and uncertainty" section of the Directors' Report.

Interest rate change risk

Interest rate change risk is associated with fluctuations in interest rates affecting the market value of the Company's financial assets and liabilities and its net financial expense. Snam aims to optimise interest rate risk while pursuing its financial objectives.
The Snam Group has adopted a centralised organisational model. In accordance with this model, Snam's various departments access the financial markets and use funds to cover financial requirements, in compliance with approved objectives, ensuring that the risk profile stays within defined limits.
At 31 December 2019, the Snam Group used external financial resources in the form of bonds and bilateral and syndicated loans with banks and other financial institutions, in the form of medium- to long-term loans and bank credit lines at interest rates indexed to the reference market rates, in particular the Europe Interbank Offered Rate (Euribor), and at fixed rates.

37 Value calculated on the basis of the CCI Tariff, or the wholesale price established by the ARERA every quarter.

The exposure to interest rate change risk at 31 December 2019 was approximately 24% of the total exposure of the Group (22% at 31 December 2018). At 31 December 2019 Snam has Interest Rate Swaps (IRS) amounting to €1,660 million in total, that refer to hedges for the entire notional amount under three floating rate bond loans of €1 billion in total due in 2020, 2022 and 2024, respectively, and on floating rate bilateral loans for a total of €660 million due in 2021, 2023 and 2028.
The IRS derivative contracts are used to convert floating rate loans to fixed rate loans.
At 31 December 2019, Snam had IRS Forward Starting derivatives of a notional amount totalling €500 million, maturing in the medium to long-term, for highly probable future financial liabilities to be undertaken up to 2021 for coverage of financial requirements.

The effects on shareholders' equity and net profit at 31 December 2019 are shown below, assuming a hypothetical change in the interest rate basis points of +/-10% actually applied during the course of the year:

	31.12.2019			
	Profit for the period		Shareholders' equity	
(millions of €)	**Interest +10 bps**	**Interest -10 bps**	**Interest +10 bps**	**Interest -10 bps**
Floating-rate loans				
Effect of interest rate change	(5)	5		
Floating-rate loans converted by IRSs into fixed-rate loans				
Effect of interest rate change on the fair value of hedging derivatives pursuant to IAS 39 – effective portion (*)			7	(7)
Effect on pre-tax profit	(5)	5	7	(7)
Tax effect	1	(1)	(2)	2
	(4)	4	5	(5)

(*) The change in the interest rate has no effect on profit and loss. Therefore the change in the fair value of the derivative contracts following the decrease in the interest rates affects equity only.

Though the Snam Group has an active risk management policy, the rise in interest rates relating to floating-rate debt not hedged against interest rate risk could have negative effects on Snam Group's operations, balance sheet and cash flow.

Exchange rate risk

Snam's exposure to exchange rate risk relates to both transaction risk and translation risk. Transaction risk is generated by the conversion of commercial or financial receivables (payables) into currencies other than the functional currency and is caused by the impact of unfavourable exchange rate fluctuations between the time that the transaction is carried out and the time it is settled (collection/payment).

Translation risk relates to fluctuations in the exchange rates of currencies other than the consolidation currency (the euro), which can result in changes to consolidated shareholders' equity. Snam's risk management system aims to minimise transaction risk through measures such as the use of derivatives. It cannot be ruled out that significant future changes in exchange rates may generate negative effects on Snam Group's operations, balance sheet and cash flow, irrespective of the policies for hedging the risk resulting from exchange rate fluctuations through the financial instruments on the market put in place by Snam.
There is a EUR/GBP exchange rate risk with regard to Snam's investment in the associate Interconnector UK. Snam, however, believes that this risk should be considered as limited, given the low historical volatility of the EUR/GBP exchange rate, also taking into consideration the recent increase in volatility following Brexit. With reference to Snam's investment in the associate TAP, there is a EUR/CHF exchange rate risk on the equity cash calls based on the contractual commitments undertaken by shareholders. The latter are limited in terms of amount following the positive conclusion of the project financing. This risk is adequately hedged through the use of forward contracts.

Credit risk

Credit risk is the Company's exposure to potential losses arising from counterparties failing to fulfil their obligations. Default or delayed payment of fees may have a negative impact on the economic results and the financial balance of Snam. For the risk of non-compliance by the counterparty concerning contracts of a commercial nature, the credit management for credit recovery and any disputes are handled by the business units and the centralised Snam departments. Snam, as far as regulated activities, which current represent almost all activities, are concerned, provides its business services to around 200 operators in the gas sector, with 10 operators representing approximately 70% of the entire market (Eni, Edison and Enel Global Trading hold the top three spots). The rules for client access to the services offered are established by the Authorities and set out in the Network Codes. For each type of service, these documents explain the rules regulating the rights and obligations of the parties involved in selling and providing said services and contain contractual conditions, which significantly reduce the risk of non-compliance by the clients. The Codes contain guarantees to be provided to cover the obligations undertaken. In certain cases, if the customer has a credit rating issued by leading international organisation, the issuing of these guarantees can be mitigated. The regulations also contain specific clauses which guarantee the neutrality of the entity in charge of balancing, an activity carried out from 1 December 2011 by Snam Rete Gas as the major transportation company. Specifically, the current balancing rules require Snam, on the basis of criteria of financial merit, mainly operates in buying and selling on the GME balancing platform to guarantee the necessary resources for the safe and efficient movement of gas from the injection points to the withdrawal points in order to guarantee the constant equilibrium of the network. The above framework also requires Snam to have recourse to the storage resources of functional users to cover the imbalances of the system and related economic regulation.
Snam's maximum exposure to credit risk as at 31 December 2019 is represented by the book value of the financial assets recorded in the consolidated financial statements of the Snam Group as at 31 December 2019.
As shown in Note 9 - "Trade and other receivables", overdue and non-impaired receivables at 31 December 2019 amounted to €132 million (€117 million at 31 December 2018) and related chiefly to the storage segment (€77 million), mainly in relation to VAT invoiced to users for the use of strategic gas wrongfully withdrawn in 2010 and 2011, and to various receivables from public administrations.
Approximately 39% of trade receivables (55% as at 31 December 2018) were with extremely reliable clients, including Eni, which represents 16% of total trade receivables (22% as at 31 December 2018).
The current context characterised by the expansion of contagion from COVID-19, together with the macro economic context it is creating, could cause a financial stress situation with regard to both some customers and some suppliers or a slowdown in activities that could have an impact on Snam's assets and/or liabilities. With reference to the development of energy transition activities, similarly a slowdown in activities and a similar context risk is predicted, with possible repercussions on collection and payments activities, which currently represent an extremely limited amount compared with the entire scope of the Snam Group.

Liquidity risk

Liquidity risk is the risk that new financial resources may not be available (funding liquidity risk) or that the Company may be unable to convert assets into cash on the market (asset liquidity risk), meaning that it cannot meet its payment commitments. This may affect profit or loss should the Company be obliged to incur extra costs to meet its commitments or, in extreme cases, lead to insolvency and threaten the Company's future as a going concern.
Snam's risk management objective aims to establish a financial structure that, in line with the business objectives, ensures sufficient liquidity for the Group, minimising the relative opportunity cost and maintaining a balance in terms of the duration and composition of the debt.
The financial market is characterized by a continuous growth of sources of financing for companies able to improve the environmental impact of their investments. The interest of the investors is linked and subordinated to the ability of the companies themselves to achieve certain objectives in terms of environmental sustainability.

About the correct management of liquidity risk, the diversification of funding sources also through the use of sustainable finance instruments is therefore crucial to guarantee companies wide access to financial markets at competitive costs, with consequent positive effects on the economic situation, equity and financial position of the companies themselves.
Similarly, for Snam, the failure to achieve certain KPIs in the ESG area, within the general objective of the Group to make its business more sustainable in the medium-long term, could lead to higher financing costs or to the lack of access to some sources of funding.
The mitigation of this risk passes through Snam's extreme attention to ESG issues, traditionally a relevant and structured part of the corporate strategy.
In line with this approach, in 2018 Snam finalized the transformation into syndicated credit lines of €3.2 billion into sustainable loans, the third largest sustainable loan signed in the world and the first by a gas utility. This loan provides for bonus/malus mechanisms based on the achievement of certain KPIs in the ESG (Environment, Social, Governance) area. In addition, in February 2019 Snam issued its first 500 million euros Climate Action bond, a bond aimed at financing investments in the area of environmental sustainability.
As shown in the "Interest rate risk" section, the Company had access to a wide range of funding sources through the credit system and the capital markets (bilateral contracts, pool financing with major domestic and international banks, loan contracts with the European Investment Bank and EIB and bonds and commercial papers).
Snam's objective is to maintain a debt structure that is balanced in composition between bonds and bank credit, and the availability of usable committed bank credit lines, in line with its business profile and the regulatory environment in which Snam operates.

At 31 December 2019, Snam had unused committed long-term credit lines worth approximately €3.2 billion. In addition, at the same date, Snam has a Euro Medium Term Notes programme (EMTN), worth a maximum total nominal amount of €11 billion, used around €8.7 billion[38], and a Euro Commercial Paper Programme (ECP), worth a maximum total nominal amount of €2 billion, fully used at 31 December 2019.
Snam's cash and cash equivalents mainly refer to short-term liquidity transactions, with a maturity of less than three months, with a bank with a high credit standing as well as to bank deposits.
Although the Snam Group has relations with diverse counterparties with a high credit standing, based on the management policy and ongoing monitoring of their credit risk, the default of a counterparty or the difficulty to liquidate assets on the market could have negative effects on the Snam Group's operations, results balance sheet and cash flow.

Rating risk

With reference to rating risk, Snam's long term rating is equal to: (i) Baa2 with stable outlook, confirmed on 27 September 2019 by Moody's Investor Services; (ii) BBB+ with negative outlook, confirmed on 17 January 2020 by Standard & Poor's Global Rating ("S&P"); (iii) BBB+ with stable outlook, confirmed on 19 December 2019 by Fitch Ratings ("Fitch").
Snam's long-term rating by Moody's, Standard & Poor's and Fitch is a notch higher than that of Italian sovereign debt. Based on the methodology adopted by Moody's and S&P, the downgrade of one notch from the current rating of the Republic of Italy would lead to a corresponding reduction of Snam's current rating.
The company's short-term rating, used as part of Snam's Commercial Paper programme, is P-2 for Moody's, A-2 for S&P and F2 for Fitch.
Any downgrades in the rating assigned to the Snam Group, could limit the possibility of accessing the capital markets and increase the cost of raising funds and/or refinancing existing debt, with negative effects on Snam Group's operations, results, balance sheet and cash flow.

38 It should be noted that the convertible bond issued in March 2017, for a value of €400 million, is not part of the EMTN programme.

Risk of default and debt covenants

Default risk is the possibility that when certain circumstances occur, the lender may enact contractual protections that may result in the early repayment of the loan, thus generating a potential liquidity risk.
At 31 December 2019 Snam had unsecured bilateral and syndicated loan agreements in place with banks and other lending institutions, with the exception of some bank loans (totalling €25.9 million) relating to two subsidiaries that entered the scope of consolidation in November 2019[39].
Some of these agreements include, inter alia, compliance with typical international practice commitments, some of which are subject to specific materiality thresholds, such as, for example: (i) negative pledge commitments pursuant to which Snam and its subsidiaries are subject to limitations concerning the pledging of real property rights or other restrictions on all or part of the respective assets, shares or merchandise; (ii) pari passu and change-of-control clauses; (iii) limitations on certain extraordinary transactions that the Company and its subsidiaries may carry out; and (iv) limits on the debt of subsidiaries.
The bonds issued by Snam as at 31 December 2019 provide for compliance with covenants that reflect international market practices regarding, *inter alia*, negative pledge and pari passu clauses.
Failure to meet these covenants, and the occurrence of other events, for example cross-default events, may result in Snam's failure to comply and could trigger the early repayment of the relative loan.
Exclusively for the EIB loans, the lender has the option to request additional guarantees, if Snam's rating is lower than BBB (Standard & Poor's/Fitch) or Baa2 (Moody's) for at least two of the three rating agencies.
The occurrence of one or more of the aforementioned scenarios could have negative effects on Snam Group's operations, results, balance sheet and cash flow, resulting in additional costs and/or liquidity issues. There are no covenants among these commitments that involve compliance with ratios of an economic and/or financial nature.

39 These loans were repaid in January 2020.

Future payments for financial liabilities, trade and other payables

The table below shows the repayment plan contractually established in relation to the financial payables, including interest payments and other liabilities connected to derivative instruments:

	Future flows				Maturity				
(millions of €)	**31.12.2018**	**31.12.2019**	**Share within 12 months**	**Share after 12 months**	**2021**	**2022**	**2023**	**2024**	**Oltre**
Bank loans	4,747	**3,704**	**685**	**3,019**	1,282	94	305	117	1,221
Bonds (*)	8,422	**9,056**	**1,376**	**7,680**	259	1,302	1,037	1,440	3,642
Euro Commercial Paper - ECP	225	**2,000**	**2,000**						
Lease liabilities		**21**	**6**	**15**	4	4	2	1	4
Interest on loans (*)	754	**772**	**140**	**632**	124	109	82	71	246
Financial liabilities	**14,148**	**15,553**	**4,207**	**11,346**	**1,669**	**1,509**	**1,426**	**1,629**	**5,113**
Forward start derivative instruments (**)	47	**48**		**48**	48				
Derivative liabilities	**47**	**48**		**48**	**48**				
	14,195	**15,601**	**4,207**	**11,394**	**1,717**	**1,509**	**1,426**	**1,629**	**5,113**

(*) Future payments include the cash flow generated by hedging derivatives.
(**) The future payments are calculated as at the Mandatory Early Termination Date.

With reference to the payment terms for trade and other payables, please see Note 19 “Trade payables and other payables”.

Other information on financial instruments

With reference to the categories covered by IFRS 9 “Financial instruments”, note that, with the exception of the valuation of derivative agreements and minority investments, financial assets and liabilities, depending on the characteristics of the instrument and the business management adopted for their management, entirely come under the financial instruments valued through the amortised cost method.

The book value of financial instruments and their relative effects on results and on equity can be analysed as follows:

	Book value		Income/Expense recognised in the income statement		Other components of comprehensive income (a)	
(millions of €)	**Balance at 31.12.2018**	**Balance at 31.12.2019**	**Balance at 31.12.2018**	**Balance at 31.12.2019**	**Balance at 31.12.2018**	**Balance at 31.12.2019**
Financial instruments measured at amortised cost						
Trade and other receivables (b)	1,341	**1,380**	5	**35**		
Financial receivables (c)	11	**3**	8			
Trade and other payables (b)	1,814	**1,848**				
Financial payables (c)	13,420	**14,774**	(237)	**(200)**		
Financial instruments measured at fair value						
Net assets (liabilities) for hedging derivatives (c)	(29)	**(63)**	(2)	**(1)**	(20)	**(34)**
Other financial assets valued at the FVOCI						
Minority interests	40	**39**	2	**2**	1	**4**

(a) Net of tax effect.
(b) The effects on the income statement are recorded under "Purchases, services and other costs".
(c) The effects on the income statement are recorded under "Financial income/(expense)".

Market value of financial instruments

Below is the classification of financial assets and liabilities measured at fair value in the statement of financial position in accordance with the fair value hierarchy defined on the basis of the significance of the inputs used in the measurement process. More specifically, in accordance with the characteristics of the inputs used for measurement, the fair value hierarchy comprises the following levels:

a) level 1: prices quoted (and not amended) on active markets for the same financial assets or liabilities;
b) level 2: measurements made on the basis of inputs differing from the quoted prices referred to in the previous point, which, for the assets/liabilities submitted for measurement, are directly (prices) or indirectly (price derivatives) observable;
c) level 3: inputs not based on observable market data.

In relation to the above, the classification of activities and liabilities measured at fair value in the statement of financial position according to the fair value hierarchy concerned: (i) derivative financial instruments at 31 December 2019 classified at level 2 and recorded in Note 19 "Other current and non-current liabilities" (€63 million); (ii) the minority interest in Adriatic LNG, valued at the FVTOCI, classified at level 3 and illustrated in Note 16 "Other investments" (€39 million).

DISPUTES AND OTHER MEASURES

Snam is involved in civil, administrative and criminal cases and legal actions related to its normal business activities. According to the information currently available and considering the existing risks, Snam believes that these proceedings and actions will not have material adverse effects.
The following is a summary of the most significant proceedings; unless indicated otherwise, no allocation has been made for the litigation described below because the Company believes it improbable that these proceedings will have an unfavourable outcome or because the amount of the allocation cannot be reliably estimated.

Criminal disputes

Snam Rete Gas S.p.A. - Tresana incident

The public prosecutor at the Massa district court initiated criminal proceedings in relation to an incident that occurred on 18 January 2012 in the Municipality of Tresana regarding an explosion that took place during maintenance work carried out by a subcontractor. After committal to trial was ordered by the preliminary hearing judge, the trial began on 23 June 2015. At the hearing of 15 September 2017, the district court of Massa acquitted all the defendants of the offences charged against them due to lack of evidence. On 12 January 2018, the Public Prosecutor filed an appeal. On 17 April 2019, the Genoa Court of Appeal confirmed the first instance judgement with a ruling. Therefore, there was total acquittal for manslaughter because of the lack of evidence and the case did not proceed for alleged violations of accident prevention regulations for the duration of the terms of the law.

Snam Rete Gas S.p.A. - Pineto incident

On 6 March 2015 in Mutignano landslide affected 10 metres of the San Benedetto Del Tronto-Chieti section of the Ravenna-Chieti pipeline, causing it to break with the consequent escape of gas, with a subsequent fire due an electricity pylon collapsing at the same time.
With regard to this event, the Public Prosecutor at the Court of Teramo immediately opened an investigation into negligence associated with the forest fire. Upon completion, the Prosecutor requested the Snam Rete Gas technicians and technical managers be brought to court. The preliminary hearing judge set a date of 3 October 2018. At the first main hearing on 10 January 2019, the presiding member of the bench asked the defence and the Public Prosecutor to comment on moving the proceedings to a single judge proficient in this issue. The parties referred to the decision of the Court, which after a short period in council chambers, passed the proceedings onto a competent single judge. The first hearing was adjourned to April 2020.

Snam Rete Gas S.p.A. - Sestino (AR) incident

The public prosecutor at the Court of Arezzo initiated criminal proceedings in relation to the incident that took place on 19 November 2015 in the town of Sestino (AR), involving a gas leak on a section of piping. On 26 November 2015, a one-time notice of technical investigation was served which indicated that certain directors and managers, including those who served in the past, are included in the list of parties under investigation. The Public Prosecutor has appointed its own technical consultants. The investigating magistrate, following the request of the Public Prosecutor, definitively closed the proceedings.

IES Biogas - criminal offence conviction

On 2 November 2018 a criminal offence conviction was issued by the Court of Venice, with regard to an IES Biogas executive following the workplace accident that took place on 29 September 2016 involving a company employee, during the maintenance of a silo agitator. On 16 November 2018, a notice of opposition was filed against the criminal offence conviction, which requested the definition of the proceedings in the form of the simplified and shortened ruling. At the hearing on 25 September 2019, the judge, accepting the adjournment request submitted by both the defence team of the accused and the injured party, adjourning the hearing and arranging the examination of the witness that requested from Company in the notice of opposition. A date is yet to be set for the hearing.

Autorità di Regolazione per Energia Reti e Ambiente - ARERA

Snam Rete Gas S.p.A. Investigation into violations on the subject of natural gas metering with regard to Snam Rete Gas S.p.A and request for information

Through Resolution VIS 97/11, notified on 15 November 2011, the ARERA started proceedings to look into whether there were any violations with regard to natural gas metering, relating to alleged irregularities in gas metering with reference to 45 systems owned by the distributor; through Resolution 431/2012/S/Gas the proceedings were brought together with other proceedings involving said events contested by the company launched with regard to the distributor involved.
Snam Rete Gas S.p.A. has submitted proposals in relation to the alleged conduct. By means of Resolution 332/2015/S/gas, the ARERA declared the proposals to be inadmissible, on the grounds that they would not be adequate to restore the alignment of interests existing before the alleged violations or to eliminate any immediate and direct consequences of these violations.
Upon completion of the investigation on 20 October 2017, the ARERA notified the results to Snam Rete Gas, which confirmed the charges made when the proceedings were initiated. The company has requested time for it to formulate its own defence and, to this end, a hearing was called before the board of the Authority on 1 March 2018 during which the defence brief was submitted. After the proceedings, the Authority, although accepting some of the Company's arguments deemed relevant from the perspective of the quantification of the fine, imposed an administrative monetary fine on Snam Rete Gas, through resolution 206/2018/S/gas of 5 April 2018, of €880 thousand. Though it paid the pecuniary fine, the Company has appealed Resolution 206/2018/S/gas before the Regional Administrative Court of Milan. The hearing date remains to be set.

Snam Rete Gas S.p.A. - Resolution 608/2015/R/gas - Proceedings to determine the share of costs arising from outstanding receivables owing to the gas balancing supervisor

Upon completion of the proceedings initiated with Resolution 145/2013/R/gas to determine the share of costs arising from outstanding receivables owing to the gas balancing supervisor, relating to the period 1 December 2011 - 23 October 2012, in relation to three cases which had previously been investigated, with Resolution 608/2015/R/gas, the ARERA closed the proceedings deciding not to pay the share of the outstanding receivables in relation to which the specific case was the object of the investigation, for the total sum of approximately €130 million (including VAT).

The Company, believing that the conditions existed for paying the share of expenses resulting from receivables not collected and subject to the proceedings in question, challenged resolution 608/2015/R/gas before the Regional Administrative Court of Milan, which with its ruling 942/2017, published on 21 April 2017, partially admitted the appeal submitted by Snam Rete Gas as it ruled in favour of payment of all or part of the expenses from uncollected receivables in relation to certain of the items in the investigation. The decision made by the Regional Administrative Court was then recently confirmed by the Council of State in its ruling no. 1630/2020, published on 05 March 2020[40]. As a result of these rulings, the Company has obtained recognition of an amount of approximately €40 million (including VAT). An accrual had been made to the provision for impairment losses on receivables, partially released in profit and loss statement following the sentence, in relation to the costs in question.

Snam Rete Gas S.p.A. - Resolution 9/2014/S/gas – "Launch of punitive proceedings against Snam Rete Gas S.p.A. for non-compliance with Resolution 292/2013/R/gas"

With Resolution 9/2014/S/gas the ARERA launched punitive proceedings against Snam Rete Gas S.p.A. for non-compliance with Resolution 292/2013/R/gas. The proceedings aim to ascertain whether or not delays exist in provisions relating to the enactment of amendments to the Network Code established by Resolution 292/2013/R/gas, with regard to settlement. Upon conclusion of the proceedings, with its resolution 853/2017/S/gas, the Authority sentenced Snam Rete Gas to pay a pecuniary fine of €95 thousand since, although it accepted a part of the Company's arguments which were significant insofar as determining the amount of the fine, it considered that the Company was late in complying with Resolution 292/2013/R/Gas.
Though it paid the pecuniary fine, the Company has appealed Resolution 853/2017/S/gas before the Regional Administrative Court of Milan. The hearing date remains to be set.

Snam Rete Gas S.p.A. - Resolution 250/2015/R/gas, published on 1 June 2015 regarding the: "Adoption of measures on the odorising of gas for domestic use and similar for end users connected directly to the natural gas transportation networks"

Through Resolution 250/2015/R/gas, following the ruling of the Milan regional administrative court, the ARERA amended Article 5 of Resolution 602/2013/R/gas dealing with the obligation of transportation companies to odorise gas for end users connected directly to the transportation network, which, taking into account the categories of use indicated in the TISG, do not use the gas delivered for merely technological purposes. In this regard, the ARERA ordered that the transportation companies shall complete the implementation of the adaptation plans by 31 January 2017, after carrying out a survey of the redelivery points involved (by 31 July 2015) and sending the ARERA the adaptation plan (by 30 November 2015), to be updated every six months, with the description of the technical solution identified.
Snam Rete Gas has appealed against the above resolution believing that the deadline for implementing the plan can only be decided after the survey.
Having carried out the survey, when sending the plan and the subsequent updates Snam Rete Gas once again found that the deadline set by the ARERA with its Resolution 484/2016/E/gas was unreasonable. Consequently, in the appeal with which Snam Rete Gas challenged Resolution 250/2015/R/gas, it also included an appeal for further grounds against Resolution 484/2016/E/gas asking for the resolutions challenged to be suspended.
The request was accepted by the Council of State. Following the hearing that was held on 16 January 2019, through ruling no. 869 of 17 April 2019, the Milan Regional Administrative Court accepted the appeal submitted by Snam Rete Gas declaring the unlawfulness of the deadline set by the Authority because it was clearly unreasonable as it does not take into account the complexity of the activities to be carried out by the transportation company and the need to collaborate with end users on whom the burden of guaranteeing the use of gas in safe conditions for the workers involved weighs.
Note that through the Ministerial Decree of 18 May 2018 the Minister for Economic Development placed the responsibility of guaranteeing the use of gas in safe conditions on the end users directly connected to the natural gas transportation network, where there is domestic or similar use of gas, even only in part, if combined with technological uses. Following the functional activities to the implementation of the Decree, the end users demonstrated that they guaranteed the safe use of the gas in accordance with the methods laid down by said Decree.
As part of the Consultation Document (DCO 203/2019/R/Gas) as preparation for the revision of the regulation on the transportation service quality, the ARERA demonstrated it's intention to: (i) confirm the regulatory framework pursuant to the above Resolution 250/2015/R/Gas without setting a deadline by which the Plan has to be implemented; and (ii) promoting a regulatory amendment aimed at coordinating the regulation with the above-mentioned Ministerial Decree.
Following on from what the DCO anticipates, through Resolution 554/2019/R/gas, the Authority confirmed the previous regulatory regime (the obligation of the

40 For more information, refer to the next paragraphs "Recovering receivables from certain users of the transportation and balancing system".

transportation company to take responsibility for the odorising) thereby putting forward the issue of coordination with the obligations imposed by the Decree. While waiting for a possible amendment to the regulation, as it is impossible to implement both regulatory provisions and taking into consideration the specific powers awarded to the Minister on the issue of odorising, on 21 February 2020 Snam Rete Gas challenged Resolution 554/2019/R/gas through an appeal lodged on 21 February 2020. The company proceeded to write down part of the related plants.

Snam Rete Gas S.p.A. Determination DSAI/69/2017/gas – Initiation of proceedings for imposition of punitive and prescriptive measures regarding the safety of the natural gas transportation system

With its resolution 58/2017/E/Gas, the Authority closed the additional investigation order pursuant to Resolution 299/2015/E/gas in relation to 69 emergency events that took place on the Snam Rete Gas network. The resolution mentioned certain critical issues that were discovered during the investigation, in relation to which Snam Rete Gas provided the necessary clarifications. Through the later Determination DSAI/69/2017/gas it decided to launch punitive proceedings believing that, following the clarifications provided by Snam Rete Gas, there were still critical issues with regard to the registration methods of the results of surveillance activities and the possibility of verifying the information and data recorded relating to said activities. As part of the investigation the Company sent the documents and information requested by the Authority through the Determination in order to document the implementation of the changes to the information systems functional to overcoming the above-mentioned critical issues. Through Resolution 146/2018/E/gas the Authority arranged an inspection, later carried out on 25-26 September 2018, during this the information contained in the documentation previously sent by the Company was verified. On 19 September 2019, the ARERA announced the results of the investigation which confirmed what was stated previously and documented by the Company with regard to termination of the conduct in the proceedings. Following the results of the investigation, the Company filed a statement of defence and was heard, on 26 November 2019, before the Authority's Board. Lastly, through Resolution 1/2020/S/Gas, the Authority deemed the challenges to the results of the investigation formulated by the company as part of the decision-making stage as having foundation, arranged the closure of the punitive proceedings as there were no grounds for the contested violations in the provision for launching proceedings.

Tax disputes

TEP Energy Solution - Formal notice of assessment

On 14 December 2018, TEP Energy Solution S.r.l. received a notice of tax assessment limited to the 1 January 2013-31 December 2013 tax period. The notice of tax assessment was the result of a tax audit of the company that began on 27 September 2018 to verify its compliance with tax law requirements applicable to income tax, VAT and other duties. The audit was spurred by a more extensive investigation launched by the Milan Public Prosecutor's Office into a system of tax fraud based on issuing and using invoices for objectively and subjectively non-existent transactions in connection with energy certificate trading. Based on the findings of the tax audit, on 21 January 2019, TEP Energy Solution received a notice of tax assessment for the 1 January 2014-31 December 2014 tax period and TEP REAL ESTATE received one for the 2013 and 2014 tax years. The findings mainly refer to the alleged non-deductibility of VAT. Following notification of the notices of tax assessment, the company lodged defence briefs with the tax authorities and requested a hearing with the same tax office in order to clarify and explain the facts set out in the notices of tax assessment for a correct reconstruction of events. During the hearing with the tax authorities, the possibility of settling the notices of tax assessment arose, which would entail assessments with the taxpayer's acceptance and partial dismissal of the notices.
Later, on 30 July 2019, the Revenue Agency and TEP signed separate deeds of acceptance to settle the above-mentioned notices of tax assessment, following which the Company paid the agreed amounts, while enforcing the contractual guarantees released by vendors in favour of Snam when it acquired control of the company from the latter (which took place in May 2018). Alongside the hearing with the Tax Authority discussions were initiated with the Public Prosecutor who, on 3 October 2019, filed a motion to dismiss, for which the decision of the preliminary magistrate is being awaited.

Snam Rete Gas S.p.A. - IMU/TASI - northern Italy municipalities

The municipalities of northern Italy sent Snam Rete Gas 17 assessment notices for IMU/TASI for the years 2013, 2014 and 2015, which follow on from requests for information for land registry purposes pursuant to Article 1, paragraph 693 of Law 147/2013. The Company has made an allocation to the provision for risks and charges.

Stogit S.p.A. - IMU
The Municipality of Bordolano served Stogit S.p.A. with notices of assessment for IMU property tax for the years 2012, 2013 and 2014.
The notices come to a total of around €560 thousand (including taxes, penalties and interest). Through ruling no. 130/5/2019, the Cremona Provincial Tax Court confirmed the tax liability for the years 2012 and 2013, deferring the assessment for 2014 to a later hearing.
In the light of the above-mentioned rulings, the Company will use the provision previously allocated, releasing the excess amount.

GNL Italia S.p.A. - Local duties
The municipality of Porto Venere advised of assessment notices for TARSU/TARI for the years from 2012 to 2017 and for IMU for the year 2013, totalling €578 thousand in all. GNL Italia S.p.A. settled the dispute with the municipality by paying a sum of €184 thousand.

Recovering receivables from certain users of the transportation and balancing system

The balancing service ensures that the network is safe and that costs are correctly allocated between the market operators. Balancing has both a physical and a commercial purpose. The physical balancing of the system consists of the set of operations through which the Dispatching department of Snam Rete Gas controls flow parameters (capacity and pressure) in real time in order to ensure that gas can move safely and efficiently from injection points to withdrawal points at all times. Commercial balancing consists of the activities required to correctly schedule, account for and allocate the transported gas, as well as the fee system that encourages users to maintain a balance between the volumes they inject into and withdraw from the network.

Pursuant to the current balancing regime, which was introduced by Resolution ARG/gas 45/11 and came into effect on 1 December 2011, in its role as Balancing Supervisor, Snam Rete Gas must ensure that it procures the quantities of gas required to balance the system and offered on the market by users through a dedicated platform of the Energy Market Operator, and, accordingly, it must financially settle the imbalances of individual users by buying and selling gas on the basis of a benchmark unit price (the "principle of economic merit"). The Company must also ensure that it recovers sums owed for the settlement of imbalances from any defaulting users.

Unpaid receivables relating to the period from 1 December 2011 to 23 October 2012
The initial regulation laid down by the Authority with Resolution ARG/gas 155/11 stated that users had to provide specific guarantees to cover their exposure and, where Snam Rete Gas had performed its duties diligently and had not been able to recover the costs related to provision of the service, these costs would have been recovered through a special fee determined by the Authority.
Through its subsequent Resolution 351/2012/R/gas[41], the Authority ordered the application of the variable unit fee CVBL to cover uncollected receivables, and the payment of the expenses to be recovered in monthly instalments of up to €6 million over a minimum of 36 months.
The Authority subsequently opened an exploratory investigation into balancing service provision methods for the period 1 December 2011 - 23 October 2012[42]. The investigation was closed by Resolution 144/2013/E/gas of 5 April 2013. On the same date, the Authority: (i) opened proceedings to determine the share of costs arising from uncollected receivables owing to the gas balancing supervisor for the period 1 December 2011 - 23 October 2012; and (ii) opened six proceedings aimed at establishing whether there have been violations regarding the natural gas balancing service.

41 The aforementioned resolution was annulled pursuant to the ruling 1587/2014 of the Regional Administrative Court of Milan insofar as the obligation of Users to pay the CVBL consideration of €0.001/Scm with effect from 1 October 2012. Moreover, with the subsequent Resolution 372/2014/R/gas the coefficient was redefined at the same amount of €0.001/Scm.
42 The time period set for the preliminary investigation which was initially limited to 1 December 2011-31 May 2012, was subsequently extended to 23 October 2012.

With regard to the preliminary investigation discussed in point (i) above, the proceedings were closed by means of Resolution 608/2015/R/gas, with which the Authority decided not to pay a share of the uncollected receivables in relation to specific cases analysed in the preliminary investigation, in any case subject to Snam Rete Gas's right to withhold the receivables relating to the income statement entries on balancing, possibly already recuperated. The Company appealed Resolution 608/2015/R/gas, before the Regional Administrative Court of Milan, which partially admitted the appeal submitted by the Company with ruling 942/2017; this was in turn partially appealed by the Company and the Authority. The ruling was then confirmed through the ruling of the Council of State 1630/2020. published on 5 March 2020. As a result of these rulings, the Company has obtained, through CSEA, a recognition of an amount of approximately €40 million (including VAT).
During the above-mentioned investigation period, Snam Rete Gas, having terminated the transportation contracts of the six users involved in the aforementioned proceedings since they either defaulted on payments or failed to comply with the balancing obligations set forth in the industry regulations and the Network Code, initiated steps to recover the receivables relating to balancing and transport items. Specifically, the competent judicial authorities issued 11 provisional executive orders, of which six related to receivables arising from the balancing service and five to receivables arising from the transportation service[43]. Having received these orders, Snam Rete Gas initiated the executive proceedings, which resulted in the recovery of negligible amounts of the overall debt of the Users, partly because of the bankruptcy procedures under way at all of these Users.

In particular, at present:

- five Users were declared bankrupt. With regard to all five Users, Snam Rete Gas obtained measures for admission to the list of creditors for the receivable owed, plus interest; as part of these proceedings, a proposal for arrangement with creditors was submitted and approved by the majority of the creditors;
- one User has requested to be admitted to the arrangement with creditors and the Court Authorities have issued a ruling endorsing the arrangement[44].

Unpaid receivables after 23 October 2012

In 2013, two further transport contracts were terminated and Snam Rete Gas initiated injunction proceedings. It obtained three payment orders, of which two for receivables relating to the balancing service and one for the transport service. Both Users appealed, with the relative rulings rejecting the claims and consolidating the securities acquired by Snam Rete Gas. The executive procedures that were initiated resulted in a negligible recovery of amounts when compared to the overall amounts due from the Users which were then declared bankrupt. Snam Rete Gas regularly submitted its claims in the respective arrangements with creditors.
In 2014, a further transport contract was terminated and Snam Rete Gas initiated provisional executive procedures for recovery of the receivables, one relating to balancing services and the other to transport services. The User was declared bankrupt and Snam Rete Gas was admitted to the current list of creditors for the entire debt due, plus interest.

Finally, in 2015 a further transportation contract was terminated and Snam Rete Gas initiated debt recovery measures, securing two provisional executive injunctions against the User, one for the balancing service and the other for the transport service. Moreover, the User was recently declared bankrupt and Snam Rete Gas has regularly submitted its claims for the arrangements with creditors.
Snam Rete Gas, as stated in the provisional executive injunctions issued by the Court, has engaged in proper conduct and complied with the provisions of the transportation contract, the Network Code and, more generally, the applicable legislation.

43 The users in question have appealed against some of these injunctions. Specifically, as well as requesting the suspension of the provisional enforceability and the revocation and/or declaration as null and void of the injunctions themselves, three users have submitted counterclaims requesting that Snam Rete Gas be ordered to compensate them for alleged damage suffered. The oppositions were declared null and void, with the resulting lapse of the demand and the passage into judgment of the injunction decrees.
44 In respect of the approval provision, a claim was brought before the Court of Appeal of Turin, and – in respect to the confirmation procedure adopted by the same Court – the appeal was brought before the Court of Cassation.

Lastly, we note that on 12 February 2016 the Public Prosecutor at the Court of Milan ordered the urgent preventive seizure of the moveable and fixed assets belonging to companies and attributable in various guises to the above-mentioned five Users. In May 2017, the investigation was concluded and the investigated parties were charged with the being involved in a criminal association and committing aggravated fraud against Snam Rete Gas. In September 2018, both Snam Rete Gas and Stogit were notified, as the injured parties, of the preliminary hearing set for 19 December 2018 before the Court of Milan. At that hearing the judge accepted SRG joining the proceedings as a civil party and adjourned it until 11 April 2019.
These criminal proceedings resulted in the formal complaint report (and subsequent supplementary reports) filed by Snam Rete Gas, as offended party, in October 2012 for the crimes of falsehood and aggravated fraud.

Recovering receivables from users of the storage system

Withdrawals made from strategic storage by three users, invoiced by Stogit and not replenished by the user under the terms specified by the Storage Code

Following withdrawals from strategic storage made by a User in November and December 2010, Stogit asked for and obtained an injunction with regard to the sums due that the user failed to pay. The provisional enforceability was confirmed during the opposition launched by the opposing party. The appropriate executive actions were launched as a result.
Following the withdrawals and the failure to replenish the strategic gas in the initial months of 2011 as well, Stogit requested and obtained a second provisional executive injunction for the further sums accrued.
Urgent proceedings were also launched for the replenishment of all the gas unlawfully withdrawn, concluding with the conviction of the debtor, with the subsequent application for injunctive relief also being rejected.
In 2012 the above user together with another two users (who also defaulted with regard to Stogit) were added to the proceedings for an arrangement with creditors, in which Stogit formally transmitted and documented the amounts of its receivables with these users.
Moreover, following the sub-proceedings to dismiss the arrangement, the Court of Asti declared two of the above-mentioned users bankrupt. In both cases, Stogit promptly filed a proof of claim and its receivables were admitted in full.
However, the procedure for an arrangement with creditors is continuing with regard to the third user, which was appealed by one of the creditors. The Court of Appeal of Turin issued a ruling, confirming the approval of the arrangement with creditors. An appeal brought by the aforementioned creditor is currently pending before the Court of Cassation.

Withdrawals made from strategic storage by a user, invoiced by Stogit and not replenished by the User under the terms specified by the Storage Code, ascribable to the 2010-2011 and 2011-2012 thermal years

Stogit filed with the Civil Court of Milan for a payment injunction provisionally enforceable against one User pursuant to Article 186-*ter*.
At present, following the partial restitution of gas in the wake of legal action brought, Stogit is still owed approximately 23.6 million SCM.
Stogit has therefore taken the appropriate actions.
The Court of Rome then declared the User bankrupt and Stogit submitted its claim, which was accepted.

Withdrawals made from strategic storage by a User, invoiced by Stogit and not replenished by the User under the terms specified by the Storage Code, relating to October and November 2011

Stogit filed with the Civil Court of Milan for a provisionally enforceable payment injunction.
While the proceedings were ongoing, the Court of Rome declared the User bankrupt. Consequently, the Civil Court of Milan declared the case interrupted and Stogit submitted its claim, which was accepted.
At present, following the partial restitution of gas in the wake of legal action brought because of improper withdrawals, Stogit is still owed approximately 56.0 million SCM.

Emissions Trading

1 January 2013 was the start of the third regulatory period (2013-2020) of the Emission Trading System (ETS), the greenhouse gas emission allowance system governed by Legislative Decree 30 of 13 March 2013, as amended, and transposing Directive 2009/29/EC. The reduction of CO_2 emissions comes under the objectives set by the European Union in the 2020 Climate and Energy Package, approved in 2009, which involves reducing greenhouse gas emissions by 20% (compared with 1990 levels) by 2020, increasing the share of energy produced from renewable sources by 20% and improving energy efficiency by 20%.
There are 22 Snam Group plants subject to the Emissions Trading regulation, 13 of which are Snam Rete Gas compression plants, 8 Stogit storage facilities and the GNL Italian regasification plant.
In 2019 the free allocation for the Snam Group was 201,910 quotas, taking into consideration the 19,525 quotas allocated for 2018 and 2019 to the new gas compression plants of Minerbio and Sergnano. Not taking these quotas into consideration, the free allocation would have been reduced by 10 % compared with 2018, as a result of the gradually decreasing allocation of free quotas by the competent national authority, planned for the third regulatory period by Article 10 bis of Directive 2009/29/CE.
In 2019, carbon dioxide emissions of the Snam Group facilities covered by the ETS were overall greater than the emission permits allocated. In view of around 0.609 million tonnes of carbon dioxide emitted into the atmosphere, around 0.202 million tonnes were allocated, resulting in a 0.407 million-tonne deficit.

Other commitments and risks

The other unevaluated commitments and risks are:

Commitments arising from the contract for the acquisition of Stogit from Eni

At 31 December 2019 the residual commitments resulting from the above agreements involve hedging mechanisms to keep the risks and/or benefits that may derive from the following pertaining to Eni: (i) the possible exploitation of the gas owned by Stogit at the time of the transfer of the shares other than that recognised by the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) in the case of its sale, or partial sale, if certain quantities were to become no longer instrumental to the regulated concessions and therefore available for sale; (ii) the possible sale of the storage capacity which should be freely available on a negotiable basis rather than a regulated basis, or the transfer of concessions held by Stogit at the time of the share transfer that may become dedicated to mainly storage activities which are no longer regulated.

Commitments arising from the contract through which Edison acquired Terminale GNL Adriatico S.r.l.

The price determined for the acquisition of Terminale GNL Adriatico S.r.l. is subject to adjustment mechanisms based on commitments made when the transaction was completed, which were also intended to apply after the date of execution.
As at 31 December 2019, the commitment arising from the aforementioned agreement refers to the hedging mechanisms established to maintain the risks and/or benefits arising from conclusion of new contracts for usage of the terminal capacity under Edison.

Commitments arising from the TEP Energy Solution S.r.l. purchase contract

The price determined for the acquisition of TEP Energy Solution S.r.l. is subject to adjustment mechanisms based on the contractual commitments undertaken and intended to operate even after the execution date.
At 31 December 2019, the commitment resulting from the above agreement involves hedging mechanisms based on the economic results achieved by TEP in the financial years 2018-2020, to be settled contractually in cash for a sum which cannot, in any event, exceed €2.5 million.

Commitments arising from the Renerwaste S.r.l. purchase contract

Based on the contractual agreements, upon the occurrence of certain conditions, by 2022, Snam has the right to acquire two SPVs to which authorizations will be granted for the construction of two further plants for the production of Biogas/Biomethane.

27) REVENUE

The breakdown of revenue for the period, which totalled €2,665 million (€2,586 million in 2018), is shown in the following table:

(millions of €)	2018	2019
Core business revenue	2,555	**2,635**
Other revenue and income	31	**30**
	2,586	**2,665**

The Group generates most of its revenue in Italy. An analysis of revenue by business segment can be found in Note 34 - "Information by business segment". Revenue from related parties is illustrated in Note 35 "Related-party transactions".

Core business revenue

Core business revenue, which totalled €2,635 million (€2,555 million in 2018), is analysed in the following table:

(millions of €)	2018	2019
Natural gas transportation (*)	1,942	**2,006**
Igassificazione di Gas Naturale Liquefa (LNG) regasification	17	**17**
Storage of natural gas (*)	510	**511**
Corporate and other activities	86	**101**
	2,555	**2,635**

(*) In the consolidated financial statements, the considerations for the modulation service, an integral part of transportation revenue, are eliminated under the transportation companies, along with the costs of the service purchased from the storage company, in order to reflect the substance of the transaction. The comparative 2018 figures have been restated accordingly.

Natural gas transportation

Core business revenue (€2,006 million) relates mainly to fees for transportation services (€2,002 million) and mainly relate to Eni S.p.A. (€1,114 million) and Enel Trade S.p.A. (€319 million). Transportation revenue includes the charge back to users of the costs of connecting the Company's network to that of other operators (€52 million)[45].

Snam provided its transportation service to 150 companies in 2019.

Liquefied Natural Gas (LNG) regasification

Core business revenue (€17 million) refers to the regasification service fees, mainly attributable to the revenue coverage factor recognised by the Authority pursuant to Resolution 653/2017/R/gas[46] (€11 million). Snam provided its regasification service to 6 companies in 2019.

45 Where the provision of the transportation service involves the networks of multiple operators, Resolution 166/05 of the Authority, as amended, provides for the principal operator to invoice the users for the service, transferring to the other operators of the transportation networks the portion attributable to them.

46 Article 19 "Application methods for the revenue coverage factor" of Annex A to Resolution 537/2017/R/gas set the revenue coverage factor at 64% of the revenues in question.

Natural gas storage

Core business revenue (€511 million) relates essentially to fees for modulation storage (€416 million) and strategic storage (€83 million) services. Snam provided its natural gas storage service to 90 companies in 2019.
Revenue from the Group core business is reported excluding tariff components, mainly with reference to the transportation sector, additional to the tariff and intended to cover gas system general expenses (€1,287 million, €1,162 million in 2018). The amounts that refer to the above-mentioned components are repaid by Snam to the Energy and Environmental Services Fund (CSEA).
With reference to the residual sector "Corporate and other assets" which is not subject to separate disclosure pursuant to IFRS 8 "Operating segments", the core business revenue (€101 million) mainly involve: (i) considerations for the construction of biogas and biomethane plants (€27 million); (ii) technical-specialist services to unconsolidated foreign companies (€25 million); (iii) the provision of services relating to energy efficiency projects (€24 million); (iv) income from the rental and maintenance of fibre optic telecommunication cables (€13 million); (v) the sale of CNG compressors for motor transport (€11 million).

Other revenue and income

Other revenue and income, standing at €30 million (€31 million in 2018) mainly relates to the incentives paid to Snam Rete Gas S.p.A. for balancing services, based on technical and economic performance, regulated by resolution 554/2016/R/Gas (€16 million), income of a property nature (€4 million) and contributions for new connections to the transportation network (€2 million).

28) OPERATING COSTS

The breakdown of operating costs for the period, which totalled €461 million (€512 million in 2018), is shown in the following table:

(millions of €)	2018	2019
Purchases, services and other costs	311	**281**
Personnel cost	201	**180**
	512	**461**

The costs incurred with related parties are described in Note 35 "Related-party transactions".

Purchases, services and other costs

Purchases, services and other costs, which amounted to €281 million (€311 million in 2018), can be broken down as follows:

(millions of €)	2018	2019
Purchase costs for raw materials, consumables, supplies and goods	145	**213**
Costs for services	290	**319**
Costs for the use of third-party assets	21	**26**
Changes in Raw materials, consumables, supplies and goods	(19)	**(49)**
Net accrual to (utilisation of) provisions for risks and charges	6	**13**
Accruals to (utilisation of) provision for impairment losses on receivables	(5)	**(35)**
Other expenses	37	**29**
	475	**516**
Less:		
Increase on internal work	**(164)**	**(235)**
of which purchase costs for raw materials, consumables, supplies and goods	(69)	**(102)**
of which costs for services	(95)	**(133)**
	311	**281**

Costs for services, which amounted to €186 million (€195 million in 2018), related to:

(millions of €)	2018	2019
IT (Information Technology) services	50	**59**
Purchase of transportation capacity (interconnection)	49	**52**
Technical, legal, administrative and professional services	42	**52**
Ordinary maintenance	32	**27**
Personnel-related services	22	**23**
Construction, planning and coordination of work	27	**27**
Telecommunications services	13	**12**
Provision of utilities	16	**19**
Insurance	7	**8**
Other services	32	**40**
	290	**319**
Less:		
Increase on internal work	**(95)**	**(133)**
	195	**186**

Costs for the use of third-party assets which amounted to €26 million (€21 million in 2018) referring mainly to short-term lease agreement charges of a moderate amount, as well as IT and software licences.

The positive change in raw materials, ancillary materials, consumables, supplies and goods (€49 million) is mainly due to the natural gas purchases, mainly for use in transportation activities.
Net allocations to provisions for risks and charges, equal to €13 million, net of uses, mainly refers to: (i) expenses for incentives for the departure of employees (€8 million); (ii) the allocation to the accident reserve fund for the captive company Gasrule (€5 million).
For more details about the change in provisions for risks and charges, please see Note 22 "Provisions for risks and charges".
Net uses of the provision for impairment losses (€35 million) involve the release to the income statement of the provision for impairment losses following the announcement by the Council of State on 5 March 2020 confirming the ruling of the Milan Regional Administrative Court of 2017, ratified the recognition, by the Authority to the company, of part of the receivables not collected relating to the balancing activities for the period 1 December 2011-23 October 2012[47].
More information on changes of the provision for impairment losses can be found in Note 9 "Trade and other receivables".

Other expenses, which amounted to €29 million (€37 million in 2018), can be broken down as follows:

(millions of €)	**2018**	**2019**
Direct and indirect taxes	15	**12**
Capital losses on eliminations of property, plant and equipment and intangible assets	12	**8**
CO_2 emission rights	5	**1**
Other expenses	5	**8**
	37	**29**

Personnel cost

Personnel cost, which amounted to €180 million (€201 million in 2018), can be broken down as follows:

(millions of €)	**2018**	**2019**
Wages and salaries	163	**167**
Social security contributions (pensions and healthcare assistance)	46	**48**
Employee benefits	17	**(5)**
Other expenses	32	**25**
	258	**235**
Less:		
Increase on internal work	**(57)**	**(55)**
	201	**180**

The item other expense (€25 million) mainly includes the expenses for defined contribution plans (€11 million) and the expenses for redundancy packages (€8 million).
A description of employee benefits can be found in Note 23 "Provisions for employee benefits".

47 For more details, see Note 26, "Guarantees, commitments and risks – Disputes", of the Notes to the consolidated financial statements.

Average number of employees

The average number of payroll employees included in the scope of consolidation, broken down by status, is as follows:

Professional status	31.12.2018	31.12.2019
Executives	104	**116**
Middle Managers	464	**494**
Office workers	1,650	**1,699**
Manual workers	731	**733**
	2,949	**3,042**

The average number of employees is calculated on the basis of the monthly number of employees for each category.
The number of personnel in service at 31 December 2019 was 3,025 resources (3,016 resources at 31 December 2018), an increase of 9 resources (+0.3%) compared with 31 December 2018. The increase is mainly due to new companies joining the scope of consolidation.

Snam share-based incentive plan for senior managers

On 11 April 2017 the Shareholders Meeting approved the 2017-2019 Long-term share-based incentive plan conferring all necessary powers on the Board of Directors to implement the plan.
The plan, intended for the Snam CEO and senior managers, identified as those who hold positions with a greater impact on company results or with strategic importance for achieving Snam's multi-year targets, includes three cycles of the annual assignment of three-year targets (the so-called rolling plan) for the years 2017, 2018 and 2019. At the end of the three-year performance period, if the underlying conditions of the plan are met, the beneficiary shall have the right to receive Company shares free of charge.
A maximum number of 3,500,000 shares will service the Plan for each fiscal year that the Plan will be in effect. The Plan will end in 2022, when the vesting period of the last allocation in 2019 expires.
A total of 5,492,810 shares have been allocated in connection with the above-mentioned plan, 1,368,397 of which are for the 2017 allocation, 2,324,413 for the 2018 allocation and 1,800,000 for the 2019 allocation. The unitary fair value of the shares, calculated from the value of the Snam stock at the allocation dates (the grant date), is equal to €3.8548 and €3.5463 and €4.3522 per share, respectively for the 2017, 2018 and 2019 allocations. The cost for the Long-term incentive plan, measured as the labour cost component, amounts to €7 million (€3 million in 2018) with an opposing entry in shareholder equity reserves. Taking into consideration the non-market conditions to which receiving the benefit is connected, the cost reflects the adjustment, throughout the vesting period, of the number of shares that will effectively be granted.
For more information on the features of the Plan, see the Directors' Report "Financial review and Other Information".

Remuneration due to key management personnel

The remuneration due to persons with powers and responsibilities for the planning, management and control of the Company, i.e. executive and non-executive directors, general managers and managers with strategic responsibilities[48] ("key management personnel"), in office during the year amounted (including contributions and ancillary charges) to €11 million (€9 million in 2018) and breaks down as follows:

(millions of €)	2018	2019
Wages and salaries	7	6
Post-employment benefits		1
Share-based payments	2	4
	9	11

Remuneration due to directors and statutory auditors

The remuneration due to directors amounted to €6.0 million and €4.2 million respectively for 2019 and 2018. The remuneration due to statutory auditors amounted to €0.4 million (€0.2 million in 2018). This remuneration includes emoluments and any other amounts relating to pay, pensions and healthcare due for the performance of duties as a director or statutory auditor in Snam S.p.A. and in other companies included in the scope of consolidation, giving rise to a cost for Snam, even if not subject to personal income tax.

29) AMORTISATION, DEPRECIATION AND IMPAIRMENT LOSSES

Amortisation, depreciation and impairment, which amounted to €752 million (€690 million in 2018), can be broken down as follows:

(millions of €)	2017	2018
Total amortisation and depreciation	**682**	**722**
Property, plant and equipment	622	656
Intangible assets	60	66
Impairment losses	**8**	**30**
Property, plant and equipment write-downs	8	30
	690	752

For more details about amortisation, depreciation and impairment losses relating to property, plant and equipment and intangible assets, please see Note 13 "Property, plant and equipment", and Note 14 "Intangible assets".
An analysis of amortisation, depreciation and impairment by business segment can be found in Note 34 "Information by business segment".

48 This includes managers who have the power and the responsibility, both directly and indirectly, for the planning, direction and supervision of Snam. Snam managers with strategic responsibility, unlike directors and statutory auditors, are identified with reference to the following positions: (i) Chief Industrial Assets Officer; (ii) Chief Commercial Regulation and Development Officer; (iii) Chief International Assets Officer; (iv) Chief Global Solution Officer; (v) Chief Financial Officer; (vi) General Counsel; (vii) Executive Vice President Human Resources and Organization.

30) FINANCIAL EXPENSE (INCOME)

Financial expense (income), which amounted to €203 million (€242 million in 2018), can be broken down as follows:

(millions of €)	2018	2019
Financial expense (income)	**234**	**191**
Financial expense	237	**200**
Financial income	(3)	**(9)**
Other financial expense (income)	**6**	**11**
Other financial expense	15	**13**
Other financial income	(9)	**(2)**
Losses (Gains) on hedging derivatives – ineffective portion	**2**	**1**
Losses from derivative contracts	2	**1**
	242	**203**

(millions of €)	2018	2019
Financial expense (income)	**234**	**191**
Expense on financial debt:	**249**	**211**
Interest and other expenses on bond loans	232	**193**
Fees on loans and bank credit lines	7	**7**
Interest expense on credit lines and loans due to banks and other lenders	10	**11**
Financial expense capitalised	**(12)**	**(11)**
Income from financial receivables:	**(3)**	**(9)**
Interest and other income on short- and long-term financial assets	(3)	**(9)**
Other financial expense (income):	**6**	**11**
Accretion discount (*)	11	**8**
Other expenses	4	**5**
Interest income on long-term financial receivables	(8)	
Other income	(1)	**(2)**
Losses (Gains) on hedging derivatives – ineffective portion	2	**1**
	242	**203**

(*) This item refers to the increase in provisions for risks and charges and provisions for employee benefits, which are reported at discounted value under Note 20 "Provisions for risks and charges", and Note 21 "Provisions for employee benefits".

Expense on financial debt (€211 million) related to: (i) interest expense and other expense on bond loans (€193 million), referring essentially to interest on 20 bond loans (€145 million) and expenses from the liability management operation (€38 million) which led to the buy back on the market of bonds with a total nominal value of €597 million and an average coupon of approximately 1.3% and residual duration of approximately 3.9 years; (ii) interest expense to the banks relating to revolving lines of credit and loans totalling €11 million; (iii) the portion attributable to the period of upfront fees on revolving credit lines (€4 million) and credit line non-usage fees (€3 million).

Financial expense capitalised (€11 million) related to the portion of financial expense capitalised pursuant to investment activities.
Other net financial expense (€11 million) mainly involved expenses connected to the time relating to the storage and transportation sector site dismantling and restoration provision (€7 million in total).

31) INCOME (EXPENSE) FROM EQUITY INVESTMENTS

Income and expense from equity investments, which amounted to €216 million (€159 million in 2018), can be broken down as follows:

(millions of €)	2018	2019
Effect of valuation using the equity method		
Capital gains from valuation using the equity method	165	**225**
Capital losses from valuation using the equity method	(8)	**(7)**
Dividends	2	**2**
Other expense from equity investments		**(4)**
	159	**216**

Details of capital gains and capital losses from the valuation of equity investments using the equity method can be found in Note 15 "Equity-accounted investments".
Dividends (€2 million) relating to the minority interest of the company Terminale GNL Adriatico S.r.l., valued on a fair value basis with an opposing entry in shareholders' equity "Fair Value Through Other Comprehensive Income - FVTOCI".

32) INCOME TAX

Income taxes for the year, which amounted to €375 million (€341 million in 2018), can be broken down as follows:

	2018			2019		
(millions of €)	**IRES**	**IRAP**	**Total**	**IRES**	**IRAP**	**Total**
Current taxes	**313**	**60**	**373**	**339**	**62**	**401**
Current taxes for the year	314	60	374	**339**	**62**	**401**
Adjustments for current taxes relating to previous years	(1)		(1)			
Deferred and prepaid taxes	**(32)**		**(32)**	**(25)**	**(1)**	**(26)**
Deferred taxes	(16)		(16)	**(14)**		**(14)**
Deferred tax assets (prepaid taxes)	(16)		(16)	**(11)**	**(1)**	**(12)**
	281	**60**	**341**	**314**	**61**	**375**

The reconciliation of the theoretical tax charge (calculated by applying the corporation tax (IRES) and regional production tax (IRAP) rates in force in Italy) with the actual tax charge for the year can be broken down as follows:

	2018		2019	
(millions of €)	**Tax rate**	**Balance**	**Tax rate**	**Balance**
IRES				
Pre-tax profit		1,301		**1,465**
IRES due, calculated based on the theoretical tax rate	**24.0%**	**312**	**24.0%**	**352**
Changes to the theoretical rate:				
- Income from equity investments	(2.9%)	(38)	**(3.5%)**	**(51)**
- Tax on dividends	1.1%	14	**1.1%**	**16**
- Other permanent differences	(0.5%)	(7)	**(0.2%)**	**(3)**
IRES due for the year recorded on the income statement	**21.6%**	**281**	**21.4%**	**314**

	2018		2019	
(millions of €)	**Tax rate**	**Balance**	**Tax rate**	**Balance**
IRAP				
Difference between value and production costs		1,399		**1,431**
IRAP due, calculated based on the theoretical tax rate	**3.9%**	**55**	**3.9%**	**56**
Changes to the theoretical rate				
Regional IRAP rates delta	0.2%	3	**0.3%**	**4**
Other permanent differences	0.1%	2	**0.1%**	**1**
IRAP due for the year recorded in the income statement	**4.3%**	**60**	**4.2%**	**61**

An analysis of deferred and prepaid taxes based on the nature of the significant temporary differences that generated them can be found in Note 23 “Deferred tax liabilities”.

Taxes related to components of comprehensive income

Current and deferred taxes related to other components of comprehensive income can be broken down as follows:

	2018			2019		
(millions of €)	**Pre-tax value**	**Tax effect**	**Post-tax value**	**Pre-tax value**	**Tax effect**	**Post-tax value**
Remeasurement of defined-benefit plans for employees						
Portion of equity-accounted investments pertaining to "other components of comprehensive income"	(1)		(1)	**(18)**		**(18)**
Change in fair value of minority investments valued at the FVTOCI				**4**		**4**
Change in fair value of cash flow hedge derivatives	(26)	6	(20)	**(44)**	**10**	**(34)**
Other components of comprehensive income	**(27)**	**6**	**(21)**	**(58)**	**10**	**(48)**
Deferred/prepaid taxes		**6**			**10**	

33) EARNINGS PER SHARE

Basic earnings per share, at €0.330 per share (€0.286 per share in 2018), are calculated by dividing the net profit attributable to Snam (€1,090 million; €960 million in 2018) by the weighted average number of Snam shares outstanding during the year, excluding treasury shares (3,300,593,207 shares; 3,357,806,084 shares in 2018).

Diluted earnings per share are calculated by dividing net profit by the weighted average number of outstanding shares during the period, excluding treasury shares, increased by the number of shares which could potentially be added to the outstanding shares. For 2019, the diluted earnings per share take into account the potential effects from the allocation of the treasury shares in the portfolio against the issuing of the convertible bond loan into Snam ordinary shares and those from the long-term share-based incentive plan, with reference to the grants in 2017, 2018 and 2019.

The weighted average number of outstanding shares used to calculate diluted earnings per share is 3,386,571,782 and 3,441,622,458 for 2019 and 2018, respectively.

Reconciliation of basic and diluted earnings per share

The reconciliation of the weighted average number of outstanding shares used to determine basic and diluted earnings per share is set out below:

	2018	2019
Weighted average number of outstanding shares used to calculate basic earnings per share	**3,357,806,084**	**3,300,593,207**
Number of potential shares for the long-term incentive plans	1,262,145	**3,424,347**
Number of potential shares against the issuing of the convertible bond.	82,554,228	**82,554,228**
Weighted average number of outstanding shares used to calculate diluted earnings per share	**3,441,622,458**	**3,386,571,782**
Group net profit (€ millions) (a)	**960**	**1,090**
Dilution effect of the convertible bond	3	**3**
Group diluted net profit for diluted earnings (€ millions) (a)	**963**	**1,093**
Basic earnings per share (€ per share) (a)	0.286	**0.330**
Diluted earnings per share (€ per share) (a)	0.280	**0.323**

(a) Entirely held by Snam shareholders.

34) INFORMATION BY BUSINESS SEGMENT

The information about business segments has been prepared in accordance with the provisions of IFRS 8 "Operating segments", which requires the information to be presented in a manner consistent with the procedures adopted by the Company's management when taking operational decisions. Consequently, the identification of the operating segments and the information presented are defined on the basis of the internal reporting used for 2019 by the Company's management for allocating resources to the different segments and for analysing the respective performances.

The business segments for which information is provided are natural gas transportation ("Transportation"), LNG regasification ("Regasification") and natural gas storage ("Storage"). They relate to activities carried out predominantly by Snam Rete Gas, ITG and Enura, GNL Italia and Stogit respectively.

The information by business segment as at 31 December 2019 and 31 December 2018 is listed below.

(millions of €)	Corporate and other activities	Transpor-tation and dispatch	Storage	Regasifi-cation	Consoli-dation adjustments and eliminations	Total
2018						
Net core business revenue (a)	267	2,087	597	21		2,972
less: intra-segment revenues (b)	*(181)*	*(145)*	*(87)*	*(4)*		*(417)*
Revenue from third parties	86	1,942	510	17		2,555
Other revenue and income	1	26	3	1		31
Net (accruals to) utilisations of provisions for risks and charges	(3)	(3)				(6)
Amortisation, depreciation and impairment losses	(10)	(575)	(100)	(5)		(690)
EBIT	**(17)**	**1,064**	**335**	**2**		**1,384**
Valuation of equity investments using the equity method	157					157
Total assets	4,163	14,570	4,012	107		22,852
- *of which investments valued using the equity method*	*1,710*					*1,710*
Total liabilities	13,997	9,941	2,587	50	(9,978)	16,597
Investments in property, plant and equipment and intangible assets	10	764	99	9		882
2019						
Net core business revenue (a)	**310**	**2,139**	**594**	**27**		**3,070**
less: intra-segment revenues (b)	***(209)***	***(133)***	***(83)***	***(10)***		***(435)***
Revenue from third parties	**101**	**2,006**	**511**	**17**		**2,635**
Other revenue and income	**2**	**25**	**1**	**2**		**30**
Net (accruals to) utilisations of provisions for risks and charges	**(7)**	**(6)**				**(13)**
Amortisation, depreciation and impairment losses	**14**	**628**	**105**	**5**		**752**
EBIT	**(43)**	**1,122**	**337**	**1**		**1,417**
Valuation of equity investments using the equity method	**218**					**218**
Total assets	**5,172**	**14,694**	**4,053**	**124**		**24,043**
- *of which investments valued using the equity method*	***1,787***					***1,787***
Total liabilities	**15,458**	**9,911**	**2,598**	**65**	**(10,247)**	**17,785**
Investments in property, plant and equipment and intangible assets	**19**	**813**	**112**	**19**		**963**

(a) Balances before elimination of intra-segment revenue.
(b) In the consolidated financial statements, the considerations for the modulation service, an integral part of transportation revenue, are eliminated under the transportation companies, along with the costs of the service purchased from the storage company, in order to reflect the substance of the transaction. The comparative 2018 figures have been restated accordingly.

Revenue is generated by applying regulated tariffs or market conditions. The revenue was mainly generated in Italy; costs were incurred almost entirely in Italy.

35) RELATED-PARTY TRANSACTIONS

From 1 August 2019, CDP S.p.A. reclassified its equity investment in Snam, already classified as de facto control pursuant to international accounting standard IFRS 10 – Consolidated financial statements from 2014, as de facto control pursuant to Article 2359, paragraph 1 of the Italian Civil Code and Article 93 of the TUF.
Considering the de facto control of CDP S.p.A. over Snam S.p.A., based on the current Group ownership structure the related parties of Snam are represented by Snam's joint ventures as well as by the parent company CDP S.p.A. and its subsidiaries and joint ventures, as well as the subsidiaries and joint ventures of the Ministry of Economy and Finance (MEF). Members of the Board of Directors, Statutory Auditors and Snam Group and CDP managers with strategic responsibilities, and their families, are also regarded as related parties.
As explained in detail below, related-party transactions mainly concern the exchange of goods and the provision of regulated services in the gas sector. Transactions between Snam and related parties are part of ordinary business operations and are generally settled under market conditions, i.e. the conditions that would be applied between two independent parties. All the transactions carried out were in the interest of the companies of the Snam Group.
Pursuant to the provisions of the relevant legislation, the Company has adopted internal guidelines to ensure that transactions carried out by Snam or its subsidiaries with related parties are transparent and correct in their substance and procedure.
Directors and statutory auditors declare potential interests that they have in relation to the Company and the Group every six months, and/or when changes in said interests occur; they also inform the Chief Executive Officer (or the Chairman, in the case of the Chief Executive Officer's interests), who in turn informs the other directors and the Board of Statutory Auditors, of individual transactions that the Company intends to carry out and in which they have an interest.
Snam is not subject to any direction or coordination activities. Snam manages and coordinates its subsidiaries, pursuant to Article 2497 et seq. of the Italian Civil Code.

In terms of related-party transactions, the following should be pointed out pursuant to the disclosure obligations set forth under Consob Regulation No. 17221 of 12 March 2010:

- the conclusion between Snam Rete Gas S.p.A. and Eni S.p.A. of the natural gas transportation agreement for the Thermal Year 2018-2019. On 4 February 2019, the value of the transport contract exceeded the significance threshold of €140 million as defined in the Snam "Procedure for transactions in which directors and auditors have an interest and transactions with related parties";
- the conclusion between Snam Rete Gas S.p.A. and Enel Global Trading S.p.A. of the natural gas transportation agreement for the Thermal Year 2018-2019. On 3 October 2019, the value of the natural gas transportation contract for the Thermal Year 2018-2019 concluded between Snam Rete Gas S.p.A. and Enel Global Trading S.p.A. exceeded the significance threshold of €140 million identified in the Snam guideline "Procedure for transactions in which directors and auditors have an interest and transactions with related parties". This figure, based on the capacity values committed by Enel Global Trading S.p.A., actually amounted to €142,180,585.

The above contracts are defined in accordance with the procedures defined in the Snam Rete Gas S.p.A. Network Code approved by the Regulatory Authority for Energy Networks and the Environment (ARERA) pursuant to Resolution 75/2003, as amended.
The calculation of a fee for services rendered take place through application of the natural gas transportation and dispatching tariffs approved by Resolution of the Authority. These contracts are configured as ordinary transactions concluded at conditions equivalent to market or standard conditions because, pursuant to paragraph 2 of the guideline (published on the website www.snam.it): (i) they come under ordinary operations and related financial operations; (ii) the conditions applied are based on regulatory tariffs.
The amounts involved in commercial, financial and other transactions with the above-mentioned related parties are shown below for the current year and the previous one for comparison purposes. The nature of the most significant transactions is also stated.

Commercial and other transactions

Commercial and other transactions can be broken down as follows:

	31.12.2018				2018					
(millions of €)	Receivables	Other assets	Payables	Other liabilities	Costs (a)			Revenue (b)		
					Goods	Services	Other	Goods	Services	Other
Companies under joint control and associates										
Interconnector UK	1			1					1	
Senfluga	3								3	
TAG GmbH									3	
Terēga S.A.S.	1									
Trans Adriatic Pipeline AG (TAP)	6			26					10	
	11			**27**					**17**	
Snam Foundation							**2**			
Parent company										
Cassa Depositi e Prestiti			96							
			96							
Companies controlled by the parent company Cassa Depositi e Prestiti										
Italgas Group	5		1				3		16	
Terna Group						1				
	5		**1**			**1**	**3**		**16**	
Companies jointly controlled by the parent company Cassa Depositi e Prestiti										
Saipem Group			19			19				
Valvitalia Finanziaria S.p.A.					5	2				
			19		**5**	**21**				
Companies owned or controlled by the State										
Gestore dei mercati energetici S.p.A.	26		14		47					
Anas group	1	1	3							
Enel Group (c)	81		55						337	
Eni Group (c)	282		84		1	23	1		1,226	1
Ferrovie dello Stato group	4		1						4	
Finmeccanica group			1		1					
	394	**1**	**158**		**48**	**23**	**1**		**1,567**	**1**
Total	**410**	**1**	**274**	**27**	**53**	**45**	**6**		**1,600**	**1**

(a) Includes costs for goods and services to be used in investment activities.
(b) Before tariff components which are offset in costs.
(c) Inclusive of amounts on the balance sheet relating to balancing activities.

	31.12.2019				2019					
(millions of €)	**Recei-vables**	**Other assets**	**Payables**	**Other liabilities**	**Costs (a)**			**Revenue (b)**		
					Goods	**Services**	**Other**	**Goods**	**Services**	**Other**
Companies under joint control and associates										
Interconnector UK	1			1					3	
Albanian Gas Services	1								1	
Senfluga										
TAG GmbH	3		2						2	
Terēga S.A.S.	1									
Trans Adriatic Pipeline AG (TAP)	4			21					15	
	10		2	22					21	
Snam Foundation	1									
Parent company										
Cassa Depositi e Prestiti			100							
			100							
Companies controlled by the parent company Cassa Depositi e Prestiti										
Italgas Group	1		2				1			1
	1		2				1			1
Companies jointly controlled by the parent company Cassa Depositi e Prestiti										
Saipem Group			16			22				
Valvitalia Finanziaria S.p.A.			1		3	2				
			17		3	24				
Companies owned or controlled by the State										
Gestore dei mercati energetici S.p.A.	11		6							
Anas group	2	1	3		36				2	
Enel Group (c)	65		24			1			354	
Eni Group (c)	200		34			22			1,197	
Ferrovie dello Stato group	1		1						2	
Finmeccanica group						2				
	279	1	68		36	25			1,555	
Total	291	1	189	22	39	49	1		1,576	1

(a) Includes costs for goods and services to be used in investment activities.
(b) Before tariff components which are offset in costs.
(c) Inclusive of amounts on the balance sheet relating to balancing activities.

Companies under joint control and associates

The most significant commercial relations with companies under joint control and associates include:

- the provision to TAP of services for the construction of transport infrastructures governed by the Engineering and Project Management (EPMS) Agreement;
- the provision to TAG of services for the realisation of the transport infrastructures governed by the Engineering, Procurement and Construction Management (EPCM) Agreement.

Companies jointly controlled by the parent company Cassa Depositi e Prestiti

The most significant commercial relations with companies under the joint control of Cassa Depositi e Prestiti include the purchase by Saipem of design and works supervision services for the realisation of natural gas transportation and storage infrastructures, regulated by agreements signed at normal market conditions.

Companies owned or controlled by the State

The most significant commercial relations with companies controlled or owned by the State involve:

- the provision to the Eni Group and the Enel Group of natural gas transportation, regasification and storage services, regulated by tariffs established by the Authority;
- the purchase by the Eni Group of electricity used for carrying out activities.

Additionally, as at 31 December 2019 there were assets posted in reference to transactions arising from the national tax consolidation scheme in force until 31 July 2012.

Financial transactions

Financial transactions can be broken down as follows:

	31.12.2018			2018	
(millions of €)	**Receivables**	**Payables**	**Guarantees and Commitments**	**Expenses**	**Income**
Companies under joint control and associates					
Senfluga Energy Infrastructure Holding S.A.			64		
Trans Adriatic Pipeline AG (TAP)	10		1,453		8
	10		**1,517**		**8**

	31.12.2019			2019	
(millions of €)	**Receivables**	**Payables**	**Guarantees and Commitments**	**Expenses**	**Income**
Companies under joint control and associates					
Trans Adriatic Pipeline AG (TAP)			**1,363**		
			1,363		

Companies under joint control and associates

Financial relations with companies under joint control and associates include:

- the debt service guarantee on the loan agreement of the associate TAP, in the phase relating to the construction and start-up of the plant;
- Snam S.p.A.'s remaining commitment as a shareholder and in relation to the project funding for the construction of the pipeline on the basis of the shares owned, equal to 20%, with regard to TAP[49].

Impact of related-party transactions or positions on the balance sheet, income statement and statement of cash flows

The impact of related-party transactions or positions on the balance sheet and income statement is summarised in the following table:

	31.12.2018			31.12.2019		
(millions of €)	**Total**	**Related parties**	**Share %**	**Total**	**Related parties**	**Share %**
Statement of financial position						
Trade receivables and other current receivables	1,347	420	31.2	**1,341**	**291**	**21.7**
Other non-current assets	36	1	2.8	**26**	**1**	**3.8**
Trade payables and other payables	1,768	274	15.5	**1,801**	**189**	**10.5**
Other current liabilities	86	27	31.4	**97**	**22**	**22.7**

The impact of related-party transactions on the income statement is summarised in the following table:

	2018			2019		
(millions of €)	**Total**	**Related parties**	**Share %**	**Total**	**Related parties**	**Share %**
Income Statement						
Core business revenue	2,555	1,600	62.6	**2,635**	**1,576**	**59.8**
Other revenue and income	31	1	3.2	**30**	**1**	**3.3**
Purchases, services and other costs	311	77	24.8	**316**	**61**	**19.3**
Personnel cost	201			**180**	**(2.0)**	**(1.1)**
Financial income	13	8	61.5	**11**		

Related-party transactions are generally governed on the basis of market conditions, i.e. the conditions that would be applied between two independent parties.

49 For more information, see Note 26, "Guarantees, commitments and risks – Commitments, guarantees and pledges - TAP".

The principal cash flows with related parties are shown in the following table.

(millions of €)	2018	2019
Revenue and income	1,601	**1,577**
Cost and expense	(77)	**(59)**
Change in trade receivables and other current receivables	64	**129**
Change in trade and other payables	80	**(87)**
Change in other current liabilities	13	**(5)**
Interest received (paid)		
Net cash flow from operating activities	**1,681**	**1,555**
Investments:		
- Tangible and intangible fixed assets	(27)	**(30)**
- Equity investments		
- Long-term financial receivables	(148)	
- Change in payables and receivables relating to investments	(13)	**(3)**
Cash flow from investments	**(188)**	**(33)**
- Financial receivables (consideration for the sale)	519	
Cash flow from divestments	*519*	
Net cash flow from investment activities	**331**	**(33)**
Increase (decrease) in short-term financial debt	(14)	
Net cash flow from financing activities	**(14)**	
Total cash flows with related parties	**1,998**	**1,522**

The effect of cash flows with related parties is shown in the following table:

	2018			2019		
(millions of €)	Total	Related parties	Share %	Total	Related parties	Share %
Cash flow from operating activities	1,826	1,681	92.1	**1,486**	**1,555**	
Cash flow from investment activities	(665)	331		**(1,004)**	**(33)**	**3**
Cash flow from financing activities	(8)	(14)		**497**		

36) PUBLIC FUNDS - INFORMATION PURSUANT TO ARTICLE 1, PARAGRAPHS 125-129, LAW NO. 124/2017

Pursuant to Article 1, paragraph 125 of Law No. 124/2017 and later amendments, the information with regard to funds received from Italian public bodies by Snam S.p.A. and its wholly-consolidated subsidiaries are reported below. The consolidated information takes into account the funds received from Italian state bodies/public bodies. Specifically, the following are not presented: (i) forms of incentives/subsidies received in application of a general aid scheme to all those entitled; (ii) considerations relating to the provision of work/services, including sponsorships; (iii) refunds and indemnities paid to parties involved in training and orientation internships; (iv) contributions for ongoing training by inter-professional funds in the form of a legal association; (v) association contributions for membership of trade and regional associations, as far as to foundations, or equivalent organisations, functional to the activities related to the business. The funds are identified according to the cash criterion. Disclosure requirements on the issue of the transparency of public funds granted, pursuant to Law 124 of 2017, Article 1, paragraph 126, are not applicable to the Snam Group.

The information presented below includes funds of more than €10 thousand, supplied by the same party in 2019, including through a number of acts. Pursuant to the provisions of Article 3-quater of Legislative Decree 135/2018, converted with amendments by Law No. 12 of 11 February 2019 for funds received, refer to the guidelines contained in the National State Aid Register pursuant to Article 52 of Law No. 234 of 24 December 2012.

Beneficiary	Lender	Subject of the contribution	Amount of economic benefit received (€)
Snam S.p.A.	Lombardy Region	I-Gap Project: professional training	25,379

37) SIGNIFICANT NON-RECURRING EVENTS AND TRANSACTIONS

Pursuant to Consob Communication DEM/6064293 of 28 July 2006, it should be stated that no significant non-recurring events or transactions took place during the course of the year.

38) POSITIONS OR TRANSACTIONS ARISING FROM ATYPICAL AND/OR UNUSUAL TRANSACTIONS

Pursuant to Consob Communication DEM/6064293 of 28 July 2006, it should be stated that no atypical and/or unusual positions or transactions took place during the course of the year.

39) SIGNIFICANT EVENTS AFTER THE END OF THE FINANCIAL YEAR

On 31 December 2019, China notified the WHO (World Health Organisation) that it had identified a group of people, in the city of Wuhan, the capital of the Chinese province of Hubei, suffering symptoms of pneumonia with unknown features, caused by an unidentified virus not previously examined, which from that time became known as COVID-19 (the new coronavirus).
From February 2020 cases of infection from COVID-19 were diagnosed in over 100 countries throughout the world and measures and actions were taken by the individual countries to contain the epidemic, which became increasingly more stringent as information spread globally. On 11 March the WHO declared that COVID-19 should be considered “a pandemic”.
In Italy, through four Decrees from the Prime Minister’s Office, dated 23 February, 8 March, 9 March and 11 March 2020, restrictions and measures aimed at containing the COVID-19 epidemic were dictated and measures identified proposing to be more hard-hitting for the purpose of preventing the spread of the contagion, intervening, in particular, by restricting people’s mobility and introducing social distancing.
Snam, which undertook protective measures as early as 21 February 2020, equipped itself to implement new initiatives, both for alignment with the restrictions and for adopting additional precautions, with the goal of protecting its people.
The measures identified by the public authorities to fight and contain the contagion, have not at the moment prevented the continuation of routine operations as a whole, with no interruptions or slow-downs in the provision of the services offered by the Snam Group.
With reference to the impacts on costs, even potential, and on the anticipated cash flows resulting from the Coronavirus, the company, at present, is not capable of reliably calculating any repercussions on the 2020 results or any implications for future years. Based on the current and most up to date information available, including as a result of the nature of the activities carried out by Snam, the company expect limited impacts related to the situation described above.
Snam immediately took all the necessary steps to ensure the normal operation of the company and the energy security of the country.
At present, any effects on the development initiatives and suppliers or customers deriving from the slow-down to business and the current macroeconomic context consequent to the international reach of the pandemic, cannot yet be assessed. The same remarks also apply to the assets held by the Snam Group outside Italy, specifically in France, Austria, Greece, Albania and the UK.

Snam, partly through the Snam Foundation, has allocated €20 million to initiatives for the Italian healthcare system and the voluntary sector to deal with the Coronavirus emergency. The provisions and skills of Snam, which is strictly working with local authority, will go to hospitals, healthcare facilities and other institutions for the purchase of the equipment and items needed, for healthcare and to support voluntary sector organisations protecting the young and the elderly. In this regard, Snam has signed contracts to purchase 500 lung ventilators and 650 thousand N95 masks that will be donated to the territories most affected by the emergency. Through this initiative, Snam intends to demonstrate that it is close to healthcare operators and to support the institutions, the voluntary sector and the areas in Italy busy dealing with the emergency.

40) PUBLICATION OF THE FINANCIAL STATEMENTS

The financial statements were authorised for publication by Snam's Board of Directors at its meeting of 18 March 2020, in accordance with the law.

Certification of the consolidated financial statements

pursuant to Article 154-bis, paragraph 5 of Legislative Decree 58/98 (Consolidated Finance Act)

1. The undersigned Marco Alverà and Franco Pruzzi, as Chief Executive Officer and Chief Financial Officer of Snam S.p.A. respectively, certify, taking into account Article 154-*bis*, paragraphs 3 and 4 of Legislative Decree 58 of 24 February 1998:
   - the adequacy, considering the Company's characteristics, and
   - the effective implementation of the administrative and accounting procedures for the preparation of the consolidated financial statements during the course of 2019.

2. The administrative and accounting procedures for the preparation of the consolidated financial statements at 31 December 2019 were defined and their adequacy was assessed using the rules and methods in line with the Internal Control – Integrated Framework model issued by the Committee of Sponsoring Organisations of the Treadway Commission, which represents a benchmark framework for the internal control system generally accepted at international level.

3. It is also certified that:
   3.1 The consolidated financial statements at 31 December 2019:
      a) were prepared in accordance with the applicable international accounting standards recognised in the European Community pursuant to Regulation (EC) no. 1606/2002 of the European Parliament and of the Council of 19 July 2002;
      b) are consistent with the accounting records and ledgers;
      c) are able to provide a true and fair view of the financial position, results of operations and cash flows of the issuer and of the companies included in the scope of consolidation.
   3.2 The Directors' Report includes a reliable analysis of the operating performance and results, as well as the position of the issuer and of all the companies included in the scope of consolidation, together with a description of the principal risks and uncertainties to which they are exposed.

18 March 2020

/Signed/Marco Alverà Marco Alverà Chief Executive Officer	/Signed/Franco Pruzzi Franco Pruzzi Manager responsible for preparing the Company's financial reports

Independent Auditors' Report

pwc

Independent auditor's report

in accordance with article 14 of Legislative Decree No. 39 of 27 January 2010 and article 10 of Regulation (EU) No. 537/2014

To the shareholders of Snam SpA

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Snam Group (the Group), which comprise the consolidated statement of financial position as of 31 December 2019, the consolidated income statement, statement of comprehensive income, consolidated statement of changes in equity, consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Group as of 31 December 2019, and of the result of its operations and cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union, as well as with the regulations issued to implement article 9 of Legislative Decree No. 38/05.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of this report. We are independent of Snam SpA (the Company) pursuant to the regulations and standards on ethics and independence applicable to audits of financial statements under Italian law. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed

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in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matters	*Auditing procedures performed in response to key audit matters*
Investment in property, plant and equipment and intangible assets and related impairment tests *Note 13 "Property, plant and equipment" and Note 14 "Intangible assets" of the Notes to the consolidated financial statements as of 31 December 2019.*	
Property, plant and equipment and intangible assets amounted to Euro 17,429 million as of 31 December 2019, accounting for 89% of total non-current assets. The gas transportation, regasification and storage businesses in which the Snam Group operates are characterised by specific regulations issued by the Italian Regulatory Authority for Energy, Networks and the Environment ("ARERA"). In detail, revenues of the three operating businesses of the Group are determined by ARERA based on a predefined return on capital expenditure (on tangible and intangible assets), depreciation/amortisation charges and certain operating costs. During the year the Snam Group invested around Euro 861 million, mainly on infrastructure for gas transportation (Euro 723 million), storage (Euro 103 million) and regasification (Euro 19 million). In consideration of the significant amounts of capital investments, we identified a key audit matter relating to the appropriate recognition of assets in accordance with international financial reporting standards IAS 16 "Property, plant and equipment" and IAS 38 "Intangible assets". At the year end, management considered	As part of our audit procedures we analysed, understood and assessed the Group's internal control system in relation to the business processes "Assets" and "Investments" underlying controls on the capitalisation of expenditure, the management of fixed assets and the preparation of impairment tests. We identified and validated the operation and effectiveness of relevant (manual and automated) controls over those processes, also using the support of experts in IT systems and business process analysis belonging to the PwC network. We verified the reconciliation of the asset register to the general ledger and recalculated depreciation charges, on a test basis. In relation to additions of the period we selected a sample of transactions and verified the correct application of the capitalisation criteria required by the applicable financial reporting standards. We analysed projects included in assets under construction and discussed with management the key items of expenditure, their nature and, for the oldest projects, potential existence of impairment losses.

Key Audit Matters	*Auditing procedures performed in response to key audit matters*
appropriate to test property, plant and equipment and intangible assets for impairment, regardless of the existence of possible impairment indicators, in consideration of the materiality of the amounts involved. An impairment test was performed for each of the cash generating units (CGUs) in which the Snam Group operates. The recoverability of the values of fixed assets is tested by comparing the carrying amount with the recoverable amount, which is the higher of fair value and value in use. In detail, the recoverable amounts of assets included in the regulated businesses is generally estimated by management by reference to the capital invested used by ARERA to calculate the applicable tariffs (the Regulatory Asset Base, "RAB"), which market operators consider the minimum measurement of fair value for those assets. For the remaining CGUs the recoverable amount of each CGU is determined as its value in use calculated using the Discounted Cash Flow (DCF) method. We identified a key audit matter relating to the measurement of property, plant and equipment and intangible assets with regard to the risk of impairment losses, in consideration of the materiality of the balance and the fact that the valuation process involves a high degree of judgement by management in assessing possible impairment indicators and, where necessary, in estimating the recoverable amount.	We obtained the impairment tests performed by the Company and met with management to understand the method adopted to identify and assess possible indicators of impairment and to carry out impairment testing. For the regulated businesses, we obtained and tested the estimated RAB as of 31 December 2019 and verified that the values matched those included in the Tariff Proposals prepared for the year 2020 and approved by ARERA, respectively, with Resolution 201/2019 for the gas transportation business, Resolution 535/2019 for gas storage and Resolution 43/2020 for the regasification business. For the remaining CGUs we verified the accuracy of the valuation models adopted, the reasonableness of the assumptions underlying the estimated future cashflows and discount rates used and the mathematical accuracy of the quantification of the recoverable amount. In our analyses of the valuation models and discount rates applied we used the support of experts from the PwC network. Finally, we verified the accuracy and completeness of disclosures presented in notes 13 and 14 to the consolidated financial statements as of 31 December 2019.

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Key Audit Matters	***Auditing procedures performed in response to key audit matters***
Measurement of equity investments *Note 15 "Investments valued under the equity method" to the consolidated financial statements as of 31 December 2019.* The balance of equity investments in entities measured under the equity method as of 31 December 2019 was Euro 1,787 million and relates mainly to equity investments in foreign joint ventures. Investments in associates and joint ventures are measured under the equity method. At the year end, in accordance with its internal procedures, and regardless of the existence of possible indicators of impairment, management decided to test all equity investments for impairment by comparing the carrying amount with the recoverable amount, which is the higher of fair value and value in use. In detail, the recoverable amount of the investment in Italgas was determined with reference to stock market prices, and those of the remaining equity investments as the respective values in use based on the Dividend Discount Model (DDM). Based on the activities performed, management did not identify any impairment loss on equity investments as of 31 December 2019. We identified a key audit matter concerning the measurement of equity investments in entities valued under the equity method with regard to the risk of impairment losses, in consideration of the materiality of the balance and the fact that the valuation process involves a high degree of judgement by management in assessing possible impairment indicators and, where necessary, in estimating the recoverable amount.	As part of our audit procedures we analysed, understood and evaluated the Group's internal control system in relation to the business process "Business Development" which includes specific controls related to impairment testing. We obtained the impairment tests performed by the Company and held meetings with management to understand the method adopted to identify and assess possible indicators of impairment and to carry out impairment testing. We compared the carrying amounts of equity investments with the corresponding equity share and analysed their performance against previous years' and budgeted results. For Italgas we verified the accuracy of the stock market prices used. For the remaining equity investments we verified the accuracy of the valuation models adopted, the reasonableness of the assumptions underlying the estimated future cashflows and discount rates used, and the mathematical accuracy of the quantification of the recoverable amount. In our analyses of the valuation models and discount rates applied we used the support of experts from the PwC network. Finally, we verified the accuracy and completeness of disclosures provided in note 15 to the consolidated financial statements as of 31 December 2019.

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Key Audit Matters	*Auditing procedures performed in response to key audit matters*
Revenue recognition *Note 4 "Measurement criteria" and Note 27 "Revenues" to the consolidated financial statements as of 31 December 2019.* Revenue recognition for regulated businesses is governed by the regulatory framework established by ARERA, therefore the rates applied to services rendered are defined by a regulatory scheme rather than by contract. Revenues recognised in the income statement are those allowed by the regulator (the "revenue cap"). In accordance with current legislation, any difference between the allowed revenues and amounts actually billed/to be billed to customers will later be subject to monetary settlement with Cassa per i Servizi Energetici e Ambientali (CSEA). In consideration of the significant volume of transactions and the complexity of the regulations applicable to the quantification of revenues, we identified the revenue recognition process as a key audit matter with reference to the correct calculation of revenues.	As part of our audit procedures we analysed, understood and evaluated the Group's internal control system in relation to the business process "Assets" which includes specific controls related to revenue recognition. We identified and validated the operation and effectiveness of relevant (manual and automated) controls over those processes, also using the support of experts in IT systems and business process analysis belonging to the PwC network. We verified the reconciliation of revenue figures with the "revenue cap" identified by ARERA in its resolutions approving revenues for the year 2019 for the gas transportation, storage and regasification businesses. We verified the correct calculation of the difference between revenues allowed by ARERA and revenues earned, for each business, based on the difference between the "revenue cap" and amounts billed to customers during the year. Finally, we carried out balance confirmation procedures with third parties to obtain documentary evidence supporting the trade receivables reported in the consolidated financial statements. For the parties where we did not receive balance confirmations we performed alternative procedures on the balance as of 31 December 2019 to obtain relevant and reliable supporting evidence.

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Responsibilities of the Directors and the Board of Statutory Auditors for the Consolidated Financial Statements

The directors are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union, as well as with the regulations issued to implement article 9 of Legislative Decree No. 38/05 and, in the terms prescribed by law, for such internal control as they determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

The directors are responsible for assessing the Group's ability to continue as a going concern and, in preparing the consolidated financial statements, for the appropriate application of the going concern basis of accounting, and for disclosing matters related to going concern. In preparing the consolidated financial statements, the directors use the going concern basis of accounting unless they either intend to liquidate Snam SpA or to cease operations, or have no realistic alternative but to do so.

The board of statutory auditors is responsible for overseeing, in the terms prescribed by law, the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

As part of our audit conducted in accordance with International Standards on Auditing (ISA Italia), we exercised professional judgement and maintained professional scepticism throughout the audit. Furthermore:

- We identified and assessed the risks of material misstatement of the consolidated financial statements, whether due to fraud or error; we designed and performed audit procedures responsive to those risks; we obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- We obtained an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;

- We evaluated the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors;
- We concluded on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;
- We evaluated the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- We obtained sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion on the consolidated financial statements.

We communicated with those charged with governance, identified at an appropriate level as required by ISA Italia regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identified during our audit.

We also provided those charged with governance with a statement that we complied with the regulations and standards on ethics and independence applicable under Italian law and communicated with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determined those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We described these matters in our auditor's report.

Additional Disclosures required by Article 10 of Regulation (EU) No. 537/2014

On 24 April 2018 the shareholders of Snam SpA in general meeting engaged us to perform the statutory audit of the Company's and consolidated financial statements for the years ending 31 December 2018 to 31 December 2026.

We declare that we did not provide any prohibited non-audit services referred to in article 5, paragraph 1, of Regulation (EU) No. 537/2014 and that we remained independent of the Company in conducting the statutory audit.

We confirm that the opinion on the consolidated financial statements expressed in this report is

Pursuant to article 3, paragraph 10, of Legislative Decree No. 254 of 30 December 2016, the non-financial statement is the subject of a separate statement of compliance issued by ourselves.

Milan, 11 May 2020

PricewaterhouseCoopers SpA

Signed by

Giulio Grandi
(Partner)

This report has been translated into English from the Italian original solely for the convenience of international readers