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 business of the transmission and dispatching of natural gas, regasification of liquefied natural gas and storage of natural gas; it is also present in the sectors of sustainable mobility and energy efficiency. It operates in Europe's major energy corridors through agreements with and equity investments in the leading industry players. Through its subsidiaries, it operates in Austria (TAG and GCA), France (Terēga), Greece (DESFA) and the United Kingdom (Interconnector UK) and is amongst 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).
Shareholder CDP S.p.A. declared, with effect from the financial statements as at 31 December 2014, that it had de facto control over Snam S.p.A. pursuant to IFRS 10 "Consolidated Financial Statements". No management or coordination activity of CDP S.p.A. has been formalised or exercised.
As at 31 December 2018, CDP S.p.A. holds, through CDP Reti S.p.A.[1] 30.37% of the share capital of 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 continuing business 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 2018, approved by the Board of Directors of in its meeting of 18 February 2019, are audited by PricewaterhouseCoopers S.p.A. (PwC). As principal auditor, 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 euro. 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 2018

In the financial year ended 31 December 2018, 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 2018, which are described below.

IFRS 15 "Revenue from Contracts with Customers"

Regulations 2016/1905 and 2017/1987 issued by the European Commission respectively at 22 September 2016 and 31 October 2017, adopted the regulatory provisions included in the documents "IFRS 15" and "Clarifications to IFRS 15" issued by the IASB respectively on 11 September 2015 and 12 April 2016.
Within the Group, the time at which regulated revenues are recognised, which account for the most significant portion of the revenues and regard the provision of natural gas transmission, regasification and storage services, generally coincides with when the service is provided. The economic conditions of the services provided are defined by means of regulatory structures and not negotiated; they are regulated by the legislative framework defined by the Autorità di Regolazione per Energia Reti e Ambiente (ARERA).

1 Company in which CDP S.p.A. holds a share of 59.10%.

The application of IFRS 15 did not result in any changes to the related recording methods and, consequently, no impact was seen on the consolidated financial statements.
As regards non-regulated revenues, the activities carried out by the Snam Group mainly concern: (i) contracts for the provision of services between Snam and the joint ventures and/or associates, relative to services for the development of transmission infrastructures, project management, maintenance and information technology; contracts for the maintenance of optic fibre telecommunications cables granted for use by third parties; (iii) revenues deriving from the sale of goods and provision of services under the scope of the new businesses of compressed natural gas (CNG), energy efficiency and biomethane.
Regarding these contracts in particular, the main issues required by the standard have been analysed and the relative results are shown below: (i) identification of the performance obligations and allocation of the transaction price to these obligations; (ii) identification of the time required for satisfaction of the performance obligation (over time or at a point in time); (iii) assessment of the provision of goods and/or services in the capacity of a principal or an agent; (iv) any presence of a significant financial component. The analyses revealed that the accounting treatment was in line with the dictates of IFRS 15. Moreover, for existing contracts, the Group has concluded that a significant financial component is not present.
Therefore, in all, no impacts were identified as deriving from the application of the provisions of IFRS 15.

IFRS 9 "Financial Instruments"

With its regulation 2016/2067 issued by the European Commission on 22 November 2016, certain international accounting standards contained in "IFRS 9 Financial Instruments" issued by the IASBI 24 July 2014 are adopted together with their relative Basis for Conclusions and Application Guidelines are adopted in replacement of all the previous versions of the standard issued. The provisions of the aforementioned texts replace those contained in IAS 39 - "Financial Instruments: Recognition and Measurement".
Within the Group, the effects of the first time adoption of IFRS 9 regarded liability management transactions implemented by Snam in 2015 and 2017[2]. In accordance with IAS 39, in force until 31 December 2017, in the event of a change to cash flow deriving from the amendment or exchange of financial liabilities not derecognised, the new liability was recorded at the book value of the original liability, net of any amount paid. Any such differences were not booked as profit and loss at the exchange date but rather throughout the life of the new financial instrument through the new effective interest rate. Differently, IFRS 9 requires the amortised cost to be recalculated of the new financial liability, discounting the new contract flows at the original effective interest rate. The gain or loss deriving from the amendment or exchange of a financial liability is then booked as profit and loss. By applying the provisions introduced by the new standard, the effects of the first time adoption of IFRS 9 were determined retroactively and recorded in the opening balance of shareholders' equity as at 01 January 2018, without restating the periods given for comparison. These effects reduced the financial liabilities by 10 million euro. The increase in the Group's shareholders' equity, net of the tax effect, is around 8 million euro.
Regarding derivative financial instruments use for hedging, the hedging relations in existence which are currently designated as effective hedges continue to qualify for hedge accounting pursuant to IFRS 9. In consideration of the fact that the new standard does not modify the general principle based on which an entity recognizes effective hedges, there were no changes compared to the current treatment.
Moreover, in accordance with the provisions of IFRS 9, with reference to the minority equity investment held in the unlisted company Terminale GNL Adriatico S.r.l., Snam has availed itself of the possibility of designating the equity investment as measured at "Fair Value Through Other Comprehensive Income" (FVTOCI). On the basis of this measurement criterion, changes to the related fair value are entered in a specific equity reserve, which cannot be reclassified as profit and loss. Dividends are recorded on the income statement when they represent the return on the investment and not the recovery of part of the cost of the investment.
The Group does not expect any further effects from application of the classification and measurement requirements set forth in IFRS 9: financial assets, such as trade receivables, financial receivables and other receivables and financial liabilities such as trade payables, financial payables and other payables, continue to be measured at amortised cost. Snam also considers as insignificant the effects of the new impairment model (expected credit loss) on the Group's financial assets, since most of the receivables are relative to regulated activities for which there are guarantees in favour of Snam and/or provide for the intervention of the Energy and Environmental Services Fund (CSEA) in the cases indicated by the Network codes and the applicable laws.

Other standards/interpretations in force as from 01 January 2018

Regulation 2018/400 issued by the European Commission on 14 March 2018 adopts the regulatory provisions contained in the document "Change in use of tangible assets - Amendments to IFRS 40", issued by the IASB on 08 December 2016.

2 The effects do not include the shares of financial liabilities bought back in 2016 and 2017, insofar as the new provisions of the IFRS 9 do not apply to financial instruments that have been derecognised as at the date of the first application of the new standard (1 January 2018).

Regulation 2018/519 issued by the European Commission on 28 March 2018 adopts the regulatory provisions contained in the document "Interpretation of IFRIC 22 - Transactions in foreign currencies", issued by the IASB on 08 December 2016.
Regulation 2018/289 issued by the European Commission on 26 February 2018 adopts the regulatory provisions contained in the document "Classification and Measurement of Share-based Payment Transactions - Amendments to IFRS 2", issued by the IASB on 20 June 2016.
Regulation 2018/182 issued by the European Commission on 07 February 2018 approved the regulatory provisions contained in the "Annual Improvements to International Financial Reporting Standards 2014-2016 Cycle", issued by the IASB on 08 December 2016.
Regulation 2017/1988, issued by the European Commission on 03 November 2017 approved the regulatory provisions contained in the document "Joint application of IFRS 9 Financial Instruments and IFRS 4 Insurance Contracts "(Amendments to IFRS 4)", issued by the IASB on 12 September 2016.
No impacts have been identified as deriving from the application of these standards.

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. as at 31 December 2018", 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 2017 and 31 December 2018.
All financial statements of consolidated companies close as at 31 December and are presented in euro.

Companies included in the scope of consolidation

Figures relating to subsidiaries are included in the consolidated financial statements, on the basis of standardised accounting standards, 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 shareholders' equity transferred; (ii) the effect of the alignment with the related fair value of any residual equity investment maintained; and (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[3]. 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 of the seller company) predating 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 investment relations of the entities involved in the transfer.

3 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.

Intragroup transactions that are eliminated in the consolidation process

Unrealised gains from transactions between consolidated companies are eliminated, 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 eliminated 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 the structures are abandoned, recognised as a counter-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 go about the company business.
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 derecognised 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/amortisation rates used for the year in question, broken down into homogeneous categories, together with the relevant period of application[4]:

Annual technical economic rate (%)

Buildings	
- Buildings	2-2.5
Plant and equipment - Transportation	
- Pipelines	2
- Compression stations	5
- Gas reduction/regulation plants	5
- Radio bridges	25
- Instruments and systems for measurement and control	5
Plant and equipment - Storage	
- Pipes	2
- Treatment stations	4
- Compression stations	5
- Storage wells	2
- Instruments and systems for monitoring and control	5
Plant and equipment - Regasification	
- Regasification plants	4
- Tanks and pipelines	4
Centralised IT infrastructures	20
Other plant and equipment	2.5-12.5
Metering equipment	5
Industrial and commercial equipment	10-35
Other assets	10-33

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).

4 The rate or range of application may increase according to the residual life following acquisitions and/or business combinations.

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 changes in the pattern in which an asset's benefits are consumed 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.

Assets under finance leases

Assets under finance leases, or under agreements which may not take the specific form of a finance lease, but call for the substantial transfer of the risks and rewards of ownership, are recorded at the lower of fair value less fees payable by the lessee and the present value of minimum lease payments, including any sum payable to exercise a call option, under property, plant and equipment as a contra-entry to the financial debt to the lessor. The assets are depreciated using the criteria and rates adopted for owned property, plant and equipment. When there is no reasonable certainty that the right of redemption can be exercised, the depreciation is made in the shortest period between the term of the lease and the useful life of the asset.
Leases under which the lessor substantially retains all of the risks and rewards of ownership of the assets are classified as operating leases. In this case, the lessee incurs only costs for the period in the amount of the lease expenses set out in the contract, and does not record fixed assets. Improvements on leasehold assets are depreciated throughout their useful lives or the residual duration of the lease if shorter, with account taken of any renewal period if such renewal period depends exclusively on the lessee and is virtually certain.

Intangible assets

Intangible assets are identifiable assets without physical substance which are controlled by the company and capable of producing future economic benefits. 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. A company controls an asset if it has the power to obtain the future economic benefits flowing from the asset and the ability to restrict the access of others to those benefits. 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.

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 amortization rates used for the year in question, broken down into homogeneous categories, together with the relevant period of application:

Annual technical economic 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.

Grant

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 carried out 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 lowest level at which management monitors, directly or indirectly, the return on investments in assets that include 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 allocated first to the goodwill. Any excess impairment is allocated pro rata to the book value of the assets which constitute the CGU. Goodwill write-downs 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 participant's share of the other components of comprehensive income of the investee. Dividends paid out by the investee are recognised as a reduction in 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 (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 remeasuring previously held interests 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 the booked amount transferred; (ii) the effect of the alignment with the related fair value of any residual equity investment maintained; and (iii) any amounts posted to other components of comprehensive income relating to the investee company that will be taken 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 company expects to receive from their sale in the normal course of business, net of the costs estimated for completion and sale.

The cost of natural gas inventories is determined using the weighted average cost method.
Transactions involving strategic gas do not involve the effective transfer of risks and benefits associated with ownership, and thus do not result in a change in inventories.

Financial instruments

Financial assets - debt instruments

Depending on the characteristics of the instrument and the business model adopted for the related management, financial assets representing debt instruments are classified into the following three categories: (i) financial assets measured at amortised cost; (ii) financial assets measured at fair value with allocation of effects to other components of comprehensive income (hereinafter also OCI); (iii) financial assets measured at fair value with allocation of effects on the income statement.
The initial booking is at fair value; for trade receivables with no significant financial component, the initial booking is the price of the transaction.
After initial booking, financial assets generating contractual cash flows representing exclusively payments of principal and interest are measured at amortised cost if held in order to collect the contractual cash flows (the "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 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 measured at amortised cost are shown on the balance sheet net of the related provision for doubtful debt.
Financial assets representing debt instruments whose business model envisages both the possibility of collecting contractual cash flows and the possibility of realising capital gains on disposals (the "hold to collect and sell" business model), are measured at fair value with the allocation of effects on OCI (hereinafter also FVTOCI).
In this case, changes in the instrument's fair value are noted amongst other components of comprehensive income, in shareholders' equity. The cumulative amount of changes in fair value, allocated to the equity reserve that includes other components of comprehensive income, is reversed on the income statement when the instrument is derecognised.
Interest income is noted on the income statement, calculated using the effective interest, exchange differences and impairment.
A financial asset representing a debt instrument that is not measured at amortised cost or FVTOCI is measured at fair value with the allocation of the effects on the income statement (hereinafter FVTPL); this category includes financial assets held for trading.
When the purchase or sale of financial assets takes place according to a contract envisaging the settlement of the transaction and delivery of the asset within a certain number of days, established by market control organisations or market convention (e.g. purchase of securities on regulated markets), the transaction is booked on the date of settlement.
Financial assets sold are eliminated from the assets when the contractual rights connected with the obtaining of cash flows associated with the financial instrument expire or are transferred to third parties.

Impairment losses

The measurement of the potential recovery of financial assets representing debt instruments not measured at fair value with effects on the income statement, is carried out on the basis of the Expected Credit Loss model.
More specifically, the expected losses are generally determined on the basis of the product of: (i) exposure due with regards to the counterparty net of the related mitigating factors ("Exposure At Default"); (ii) the probability that the counterparty will not fulfil its obligation to make payment (the "Probability of Default"); (iii) the estimate, in percentage terms, of the quantity of credit that will not be recovered in the event of default (the "Loss Given Default"), defined on the basis of past experience and possible action that can be taken to collect (e.g. amicable action, lawsuits, etc.).
Considering the characteristics of the regulated markets, credit exposures that are past due by more than 90 days are considered as in default or, in any case, credit exposures that are disputed or for which restructuring/renegotiation procedures are underway. Disputed exposures are those for which debt collection action has been taken or is being taken, through legal channels.
The impairment of trade and other receivables is booked on the income statement, net of any write-backs, under "Net write-backs (write-downs) of trade and other receivables".
The potential recovery of long-term financial receivables connected with associates and joint ventures, effectively representing an additional investment in such, is measured also considering the results of the underlying industrial initiatives and the macroeconomic scenarios of the countries in which the investees operate.

Minority equity investments

Financial assets representing minority equity investments, insofar as not held for trading, are measured at fair value, allocating the effects to the shareholders' equity reserve

that includes the other components of comprehensive income, without envisaging any reversal of such on the income statement, if realised.
Dividends from such equity investments are noted on the income statement under "Income (expense) from equity investments". The measurement at cost of a minority equity investment is permitted only where the cost is an adequate estimate of the fair value.

Financial liabilities

Financial liabilities other than derivatives, including financial payables, 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.

Derivatives 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.
As part of the strategy and objectives defined for risk management, the classification of transactions as hedges requires: (i) the verification of the existence of a commercial relationship between the item hedged and the hedging instrument, such as to offset the related changes in value and that said capacity to offset is not flawed by the counterparty credit risk level; (ii) the definition of a hedge ratio that is consistent with the risk management objectives, as part of the defined risk management strategy, taking, where necessary, suitable rebalancing action. Changes to risk management objectives, the loss of the conditions indicated previously by which to classify transactions as hedges or the activation of rebalancing shall determine the total or partial prospective discontinuation of the hedge.
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.
In order to identify an operation as fair value hedge or cash flow hedge, at the beginning of the hedge, formal documentation is prepared to illustrates the strategies and objectives of risk management and identifies the hedging instrument, the hedged instrument, the nature of the hedge and the methods by which the hedging report will satisfy the hedge effectiveness requirements.
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 hedges of future transactions entailing the entry of a non-financial asset or liability, the cumulative changes to the fair value of the hedging derivatives, noted under shareholders' equity, are allocated as adjustments of the book value of the non-financial asset/liability hedged (this is termed "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 the derivatives not meeting the conditions for classification as hedges, including any ineffective components of the hedging derivatives, are booked to 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 into financial assets, are not separated out in the accounts; in this event, the entire hybrid instrument is classified according to the general criteria for the classification of financial assets. Embedded derivatives incorporated into financial liabilities and/or non-financial assets are separated from the main contract and booked separately if the embedded instrument: (i) meets the definition of derivative; (ii) if the entire instrument is not measured at fair value with changes in fair value recognised in the income statement (FVTPL); and (iii) if the characteristics and risks of the derivative instrument are not closely related to those of the host 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 valuation 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 using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use. The highest and best use of an asset is determined from the perspective of market participants, even if the entity intends a different use. The current use by the company of a non-financial asset is assumed to be its highest and best use, 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 reliability of the fair value, giving precedence to the use of parameters that can be observed on the market and 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 presence 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 the whether it maintains a non-controlling investment after 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 take place that no longer allow the non-current assets or disposal groups to be classified as held for sale, they are reclassified into the respective items of the balance sheet and noted at the lesser of: (i) the book value as at the date of classification as held for sale; and (ii) the recoverable value as at the date of reclassification.

Provisions for risks and charges and potential 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 deriving from a past event is likely; (ii) it is likely 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 a 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 deriving from the contract, and the cost to terminate the contract.
Where the effect of the time value of money is material, and the payment dates of the obligations can be reliably estimated, the provision is calculated by discounting the anticipated cash flows at a rate that reflects the current market assessments of the time value of money and the risks specific to the liability; 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 dismantlement and restoration), as a counter-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.
Potential assets, i.e. possible assets deriving from past events and for which the existence will only be confirmed if at least one or more future events that are uncertain and not entirely under the control of the company, should occur, are not noted unless the obtaining of the related benefits is virtually certain. If it is likely that the benefits will be obtained, the potential assets are explained in the notes to the financial statements. Potential assets are periodically reviewed to assess the probability of obtaining economic benefits for the company: in the year in which the obtaining of such benefits becomes virtually certain, the asset and related income are noted.

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 (a "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

The cost of labour includes, in line with the substantial nature of the remuneration, the cost of share-based payment incentive plans. The cost of the incentive is determined with reference to the fair value of the instruments assigned and the forecast number of shares that will be effectively assigned; the portion pertaining to the year is determined pro-rata temporis throughout the vesting period, i.e. the period running between the grant date and the award date. The fair value of the shares underlying the incentive plan is determined as at the grant date, considering forecast achievement of the performance parameters associated with market conditions and is not rectified in subsequent years; when the obtaining of the benefit is connected with conditions other than market conditions, the forecast in connection with such conditions is reflected by adjusting, throughout the vesting period, the number of shares to be effectively assigned. At the end of the vesting period, if the plan does not assign shares to participants due to failure to achieve the performance conditions, the portion of the cost relating to market conditions is not reversed on the income statement.

Treasury shares

Treasury shares, including those held for the share incentive plans, are noted at cost and entered as a reduction of shareholders' equity. The economic effect deriving 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 the 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 working currency are converted into euros by applying the exchange rate in effect on the reporting date, with attribution of 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 recording 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 performance obligation, represented by the contractual promised to transfer goods and/or services to a customer; (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligations identified on the basis of the stand-alone sales price of each good or service; (v) recording of the revenue when the related performance obligation has been satisfied, or at the time of transfer to the customer of the good or service promised; the transfer will be considered as made when the customer obtains control over the goods or services, which may take place over time or at a specific 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 regulated businesses, income of which is governed by the regulatory framework established by the Autorità di Regolazione per

Energia Reti e Ambiente. Therefore, the economic terms and conditions of services provided are defined in accordance with regulations rather than negotiations. In the transmission segment[5], 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 the applicable law, transactions on the balancing market do not generate costs or revenues, as they are mere transiting lots. Any (positive or negative) differences from the usage of different prices for the transactions above will be neutralized by recognizing an asset or liability for CSEA, given that these differences are equalized by the latter.
Revenues are noted for the amount equal to the fair value of the price to which the company believes it is entitled in exchange for the goods and/or services promised to the customer, with the exclusion of amounts collected on behalf of third parties. Where there is a variable price, the company estimates the amount of the price to which it will be entitled in exchange for the transfer of the goods and/or services promised to the customer; in particular, the amount of the price may vary if there are discounts, reimbursements, incentives, price concessions, performance bonuses, penalties or when the price depends on whether or not certain future events effectively take place.
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 26 - "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 revenues.

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.

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

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. Proceeds from the sale of emissions allowances are recognised when earned.
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".
Fees relating to operating leases are charged to the income statement for the duration of the contract.
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 to/recovered from the tax authorities under the tax regulations and rates that have been enacted or substantially enacted 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 the companies acquired in 2018. 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 tax regulations and rates that have been enacted or substantially enacted for future years. Prepaid tax assets are recognised when their recovery is considered probable; specifically, the recoverability of prepaid tax assets is considered probable when sufficient taxable income is expected to be available in the period in which the temporary differences reverse against which deductible temporary differences can be utilised. Similarly, unused tax receivables and prepaid taxes on tax losses are recognised up to the limit of recoverability. Prepaid tax assets and deferred tax liabilities are classified as other non-current assets and liabilities and are offset at single entity level, if related to offsettable taxes and/or on a consolidating company level in the event of the tax system envisaged by the National Tax Consolidation. 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. Income tax assets with elements of uncertainty are recognised when they are regarded as likely to be obtained.

Information by 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 purposes 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 transmission (the "transmission 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 and ITG, GNL Italia and Stogit, respectively.

5) FINANCIAL STATEMENTS[6]

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[7];
- 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 considered 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..

6 The financial statements are the same as those adopted for the 2017 Annual Report.

7 Assets and liabilities are classified as current if: (i) they are expected to be realised/extinguished in the normal operating cycle of the company or in the twelve months after year end; (ii) they comprise cash and cash equivalents that are not restricted such as to limit their use in the twelve months after year end; or (iii) they are mainly held 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.

In compliance with IAS 1, unless otherwise stated, comparative data refer to the previous year.

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 revenues 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 estimations regarding matters that are by nature uncertain. Any change in the conditions forming the basis of the judgements, assumptions and estimations used could have a significant impact on subsequent results.

Impairment of non-financial 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 dismantling 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 determination 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.

Equity investments and business combinations

The verification of the existence of control, joint control, considerable influence over another entity and, in the case of joint operations, the verification of the existence of enforceable rights and obligations requires the exercise of complex professional judgement on the part of the company's management team, made in consideration of the characteristics of the company structure, agreements reached by and between the parties and all other facts and circumstances as may be relevant to such checks. Similar considerations also apply to situations where there is an envisaged change in status consequent to loss of control, joint control or relation with the potential 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 unattributed portion, if positive, is recognised as goodwill; if negative, it is attributed 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 an onerous 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

The determination of the fair value of financial and non-financial instruments is an articulated process characterised by the use of complex measurement methods and techniques that envisage the collection of updated information from the reference markets and/or the use of internal input data.
Similarly to other estimates, the determination of the fair value, although based on the best information available and the use of suitable measurement techniques and methods, is intrinsically random in nature and relies on professional judgement, which may result in different forecast values to 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 valuations are formulated on the basis of objective criteria the Group has developed to facilitate application of its accounting policies.

7) RECENTLY ISSUED IFRS

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 2018 but not yet in force are listed and described below.

IFRS 16 "Leasing"

With its 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. By applying this model, an 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 material leases with a duration of more than 12 months; (ii) in its income statement, depreciation of the lease asset separately from interest. The distinction between an operating and a financial lease continues to apply for preparation of the financial statements of lessors. The provisions contained in IFRS 16 that replace those contained in IAS 17 "Leasing" and the relative interpretations, will take effect from financial years starting on or after 1 January 2019.
According to the analyses carried out, the contracts identified in which Snam is a lessee, mainly relate to property leases and long-term vehicle rentals.

Snam, as expedient practices envisaged by the transitional provisions of IFRS 16, has opted to:

- apply the standard to contracts previously classified as lease contracts applying IAS 17 "Leasing" and IFRIC 4 "Determining whether an Arrangement Contains a Lease" (IFRS16.C3);
- with reference to leases previously classified as operative leasing:
  - apply the standard retroactively, booking the cumulative effect of the application as at the date of initial application, without recalculating the comparative information but rather noting the potential cumulative effect as an adjustment of the opening balance of retained earnings (IFRS 16.C5b) and C7);
  - measure the asset consisting of the right to use the amount equal to the initial liability of the lease, net of any prepaid expenses entered on the statement of financial position immediately prior to the date of initial application (IFRS 16.C8b) ii);
  - not note assets and liabilities relating to leases whose term ends within 12 months of the date of initial application; these contracts will be booked as short-term leases (IFRS 16.C10c);
  - exclude the direct initial costs from the measurement of the asset consisting of the right to use as at the date of initial application (IFRS 16.C10d);

The weighted average of the marginal loan rate applied to leasing liabilities, to be noted on the statement of financial position as at 01 January 2019, is 1.33%. This rate was determined by weighting the market returns of bond loans issued by Snam, diversified according to the term of the various lease contracts.
The effects of the first-time application of IFRS 16, also taking into account the expedient practices listed above, will increase the financial liabilities by 20 million euro and increase assets for Property, plants and equipment by 20 million euro. The impact on the Group's shareholders' equity, net of the related tax effect, is consequently null.
The difference between the increase in financial liabilities and the amount of the commitments stated on the financial statements against the operative lease contracts that cannot be cancelled (see in this respect note no. 25 "Guarantees, commitments and risks") amounts to 14 million euro and is mainly (for more than 90%) due to the effect deriving from the inclusion of renewal options that are reasonably certain in the minimum contract term.

IFRIC 23 "Uncertainty over Income Tax Treatments"

Regulation 2018/1595 issue by the European Commission on 23 February 2018 approved the regulatory provisions contained in the document "Uncertainty over Income Tax Treatments", issued by the IASB on 7 June 2017. The document provides instructions on how to calculate current and deferred tax in the event of uncertainty as to application of the tax regulations. In determining the income taxes to recognize in the financial statements, an entity must consider the probability that the tax authority may or may not accept the treatment adopted by the entity. If the aforementioned acceptance is considered to be improbable, the entity must reflect the effect of uncertainty in determining current and deferred taxes, using one of the following methods: the most likely amount method and the expected value method; otherwise, the accounting treatment adopted in the income tax declarations will apply to the income

taxes recognized in the financial statements. An entity shall review the estimates of the uncertainties if new information becomes available or if the circumstances change. These provisions will take effect from financial years starting on or after 1 January 2019.
No impact is expected to arise from implementation of the new standard.

Other standards approved by the European Commission but not yet in force

The main accounting standards and interpretations approved by the European Commission but not yet in force are listed and described below.
Regulation 2018/498 issue by the European Commission on 22 March 2018 adopts the regulatory provisions contained in the document "Prepayment features with negative compensation - Amendments to IFRS 9", issued by the IASB on 12 October 2017. The document allows for the measurement at amortised cost or Fair Value Through Other Comprehensive Income (FVTOCI) of a financial asset characterised by a prepayment option with negative compensation. The document also clarified how to book a change or exchange of a financial liability at amortised cost, which has not been derecognised. The difference between original contractual cash flow and amended cash flow, discounted at the effective interest rate, must be booked as profit and loss as at the date of the change or exchange. These provisions will take effect from financial years starting on or after 1 January 2019.
Regulation 2019/237 issued by the European Commission on 08 February 2019 adopts the regulatory provisions contained in the document "Long-term Interests in Associates and Joint Ventures - Amendment to IAS 28", issued by the IASB on 12 October 2017. The document clarifies that an entity shall apply IFRS 9, including the impairment requirements, to long-term interests in a joint venture or associated company for which the equity method is not applied and that, in substance, form part of the net investment in those associates and joint ventures. These provisions will take effect from financial years starting on or after 1 January 2019.

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 07 February 2018, the IASB issued the document "Plan Amendment, Curtailment or settlement - Amendment to IAS 19" with which it specifies how pension expenses are calculated in the event of an amendment, reduction or extinguishing of defined benefit plans. More specifically, the document requires the use of updated actuarial hypotheses to determine the cost relative to the provision of current work and net financial expenses for the period after the event. These measures will take effect from financial years starting on or after 01 January 2019, notwithstanding any subsequent deferrals established upon approval by the European Commission.
On 29 March 2018, the IASB issued the document "Amendments to References to the Conceptual Framework in IFRS Standards", the provisions of which will take effect from financial years starting on or after 01 January 2020, notwithstanding subsequent deferrals established upon approval by the European Commission. The document envisages the update of references given in the international accounting standards, in order to incorporate the new features introduced by the revised version of the "Conceptual Framework for Financial Reporting" issued by the IASB on the same date and effective as from then. The main aspects deriving from the introduction of the new version of the Conceptual Framework include: (i) the amendment of the definitions of assets and liabilities; (ii) the re-introduction of some relevant concepts such as the principle of prudence and stewardship.
On 22 October 2018, the IASB issued the document "Amendments to IFRS 3 Business Combinations", the provisions of which will take effect from financial years starting on or after 01 January 2020, notwithstanding subsequent deferrals established upon approval by the European Commission. The changes made by the document seek to simplify the classification of a transaction as an acquisition of a business or group of businesses.
On 31 October 2018, the IASB issued the document "Amendments to IAS 1 and IAS 8: Definition of Material", the provisions of which will take effect from financial years starting on or after 1 January 2020, subject to deferrals established upon approval by the European Commission.

The document has reformulated and clarified the definition of "material" with reference to the following concepts: (i) "obscuring"; obscuring relevant information with other information that could be omitted may have a similar effect to omission or concealing; (ii) "could reasonably be expected to influence"; the quantity of the information to be supplied must not suffer the remote risk of influencing the users of the financial statements; (iii) "primary users"; are these and not all possible users of the financial statements to be considered in determining the information to be presented.
On 12 December 2017, the IASB issued the document "Annual Improvements to IFRS Standards 2015 - 2017 Cycle", the provisions of which will take effect from financial years starting on or after 01 January 2019, notwithstanding subsequent deferrals established upon approval by the European Commission. The document amended: (i) IFRS 3, defining that when an entity obtains control over a business classified as a joint operation, it must re-measure the interest previously held in said business; (ii) IFRS 11, clarifying that, when an entity acquires joint control over a business classified as a joint operation, it need not re-measure the interest previously held in said business; (iii) IAS 12, clarifying that, regardless of whether or not dividends are noted as a reduction to shareholders' equity, an entity should note on the income statement the tax effects of the dividends; (iv) IAS 23, clarifying that the specific loans requested to construct and/or purchase an asset, if these remain in place even when the asset is available and ready for use or sale, shall no longer be considered as specific and shall therefore be included in generic loans in order to define the capitalisation rate.
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 recognized in profit and loss throughout the time that the insurance coverage 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 "insurance revenues", "insurance service expenses" and "insurance finance income or expenses".
Snam is analysing the standards 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 1,872 million euro (719 million euro as at 31 December 2017) refer mainly to a short-term use of liquid funds, maturing within three months, with the counterparty being a bank of high credit standing (1,000 million euro), an on-call bank deposit (810 million euro) and cash held at the company Gasrule Insurance DAC (17 million euro) and Snam International BV (14 million euro).
The interest rate income on short-term liquid uses and on-demand bank deposits range between 0.1% and 0.3%.
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 statement of cash flows.

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

Trade receivables and other current receivables equal to 1,347 million euro (1,658 million euro as at 31 December 2017) and *other non-current receivables* equal to 1 million euro (373 million euro as at 31 December 2017) break down as follows:

	31.12.2017			31.12.2018		
(€ million)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Trade receivables	1,274		**1,274**	**1,247**		**1,247**
Financial receivables	350	373	**723**	**10**	**1**	**11**
- Short term	350		**350**			
- Long term		373	**373**	**10**	**1**	**11**
Receivables from investment/divestment activities	12		**12**	**9**		**9**
Other receivables	22		**22**	**81**		**81**
	1,658	**373**	**2,031**	**1,347**	**1**	**1,348**

Trade receivables of 1,247 million euro (1,274 million euro as at 31 December 2017) mainly refer to the natural gas transmission (1,018 million euro) and storage (145 million euro) segments.
Trade receivables relating to the storage segment (145 million euro) include the effects of the addition of revenue connected to the allocation of natural gas storage capacity by auction (25 million euro) and include coverage of the expenses relative to the natural gas transport service (7 million euro)[8].
Receivables are reported net of the provision for impairment losses (137 million euro; 140 million euro as at 31 December 2017). 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[9] (€126 million, including the relative interest).

8 These revenues refer to the application of Resolution 350/2018/R/gas "Provisions on settlement relating to storage services for the 2018-2019 thermal year", published on 22 June 2018, whereby the Authority envisaged, in continuity with the 2017-2018 thermal year, provisions for the issue of sterilising, in terms of revenue flows, the impact of transferring storage capacity at fees below the regulated tariff, to guarantee the storage companies have a revenue flow that is substantially equivalent to that obtained by applying, to the capacity allocated through auction, of the corresponding tariffs.

9 For more information, please see Note no. 25 "Guarantees, commitments and risks – Disputes - Recovering receivables from certain users of the transportation and balancing system.

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

(€ million)	Provision for impairment losses at 31.12.2017	Provisions	Uses for surplus	change in scope of consoli-dation	Provision for impairment losses at 31.12.2018
Trade receivables	140	3	(8)	2	**137**
	140	**3**	**(8)**	**2**	**137**

Financial receivables (11 million euro; 723 million euro as at 31 December 2017) relate to the residual portion of the Shareholders' Loan granted to the associate Trans Adriatic Pipeline AG (TAP). As compared with 31 December 2017, receivables are down 712 million euro. The reduction is mainly due to: (i) the reimbursement[10], by TAP by means of a true-up mechanism, of 519 million euro, against 373 million euro in relation to receivables in place as at 31 December 2017 and 156 million euro relative to receivables accrued in 2018. The reimbursement follows on from the finalisation, by TAP, in December, of a project financing agreement[11]; (ii) the closure, due to natural expiry, of the use of short-term liquid funds with a primary bank (350 million euro).
Receivables from investment/divestment activities (9 million euro; 12 million euro as at 31 December 2017) include receivables from private contributions recorded for investment activities involving the transportation segment (reclamation works for third parties).

Other receivables of 81 million euro (22 million euro as at 31 December 2017) comprise:

(€ million)	31.12.2017	31.12.2018
IRES receivables for the national tax consolidation scheme	9	**9**
Other receivables:	13	**72**
- Energy and Environmental Services Fund (CSEA)	5	**63**
- Advances to suppliers	4	**4**
- Other	4	**5**
	22	**81**

IRES receivables for the national tax consolidation scheme (9 million euro; same as at 31 December 2017) 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).
The receivables to the Electricity Equalisation Fund (CSEA) (63 million euro) principally refer to the transport business segment and related mainly to gas settlement, which was introduced by Authority with Resolution 670/2017/R/gas and 782/2017/R/gas, and to the incentives granted 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.

10 Including interest accrued.
11 For more information, including on the guarantees given by shareholders, see Note no. 25 "Guarantees, commitments and risks".

The aging of trade and other receivables is shown below:

	31.12.2017			31.12.2018		
(€ million)	**Trade receivables**	**Other receivables (*)**	**Total**	**Trade receivables**	**Other receivables (*)**	**Total**
Non-overdue and non-impaired receivables	1,173	745	**1,918**	**1,134**	**97**	**1,231**
Overdue and non-impaired receivables:	101	12	**113**	**113**	**4**	**117**
- 0-3 months overdue	5	7	**12**	**15**		**15**
- 3-6 months overdue			**0**	**3**		**3**
- 6-12 months overdue		1	**1**	**1**		**1**
- more than 12 months overdue	96	4	**100**	**94**	**4**	**98**
	1,274	**757**	**2,031**	**1,247**	**101**	**1,348**

(*) Including financial receivables, receivables from investment/divestment activities and other receivables.

Overdue and non-impaired receivables (117 million euro; 113 million euro as at 31 December 2017) essentially refer to the storage segment (89 million euro), principally comprising VAT[12] 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 34, "Related-party transactions".
Specific information on credit risk can be found in Note no. 25 "Guarantees, commitments and risks – Financial risk management – Credit risk".

10) INVENTORIES

Inventories, which amount to 472 million euro (449 million euro as at 31 December 2017) are analysed in the table below:

	31.12.2017			31.12.2018		
(€ million)	**Gross amount**	**Impairment losses**	**Net value**	**Gross amount**	**Impairment losses**	**Net value**
Inventories (current assets)	129	(43)	**86**	**155**	**(46)**	**109**
- Raw materials, consumables and supplies	79	(11)	**68**	**103**	**(14)**	**89**
- Finished products and merchandise	50	(32)	**18**	**52**	**(32)**	**20**
Compulsory inventories (non-current assets)	363		**363**	**363**		**363**
	492	**(43)**	**449**	**518**	**(46)**	**472**

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

Inventories (current assets)

Inventories of raw materials, consumables and supplies (89 million euro; 68 million euro as at 31 December 2017) primarily include stock materials relating to the pipeline network (39 million euro) and to storage plants (9 million euro), and natural gas used for transportation activities (23 million euro).
Inventories of finished products and merchandise (20 million euro; 18 million euro as at 31 December 2017) refer to the natural gas present in the storage system (619 million standard cubic metres, unchanged from 31 December 2017) 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 46 million euro (43 million euro as at 31 December 2017). The provision essentially involves the impairment loss (30 million euro) 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[13].

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

(million €)	Provision for impairment losses at 31.12.2017	Other changes	Provision for impairment losses at 31.12.2018
Raw materials, consumables and supplies	11	3	**14**
Finished products and merchandise	32		**32**
	43	**3**	**46**

The other changes (3 million euro) refer to the purchase of the Cubogas business unit.
Inventories are not collateralised. Inventories do not secure liabilities, nor are they recognised at net realisation value.

Compulsory inventories (non-current assets)

Compulsory inventories (363 million euro, unchanged from 31 December 2017) comprise minimum quantities of natural gas that the storage companies are obliged to hold pursuant to Presidential Decree no. 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[14].

13 For more information regarding the progress of the lawsuits underway, see Note no. 25 "Guarantees, commitments and risks - Disputes and other measures - Recovering receivables from users of the storage system".
14 On 06 February 2018, the Ministry confirmed the total volume of strategic storage for the contractual year 2018-2019 (01 April 2018-31 March 2019) at 4.62 billion cubic metres, equal to approximately 48,846 Giga Watthour - GWh, unchanged on thermal year 2017-2018 (01 April 2017-31 March 2018). The Stogit share was unchanged at 4.5 billion cubic metres.

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:

(million €)	31.12.2017	31.12.2018
Current income tax assets	**16**	**10**
- IRES	13	**9**
- IRAP	2	**1**
- Other assets	1	
Other current tax assets	**21**	**7**
- VAT	18	**4**
- Other taxes	3	**3**
	37	**17**
Current income tax liabilities		**(14)**
- IRES		**(13)**
- IRAP		**(1)**
Other current tax liabilities	**(11)**	**(9)**
- IRPEF withholdings for employees	(7)	**(7)**
- IVA		**(1)**
- Other taxes	(4)	**(1)**
	(11)	**(23)**

Current income tax assets of 10 million euro (16 million euro as at 31 December 2017) mainly involve IRES receivables (9 million euro) following the excess amount paid for additional IRES (8 million euro).
Other current tax assets of 7 million euro (21 million euro as at 31 December 2017) mainly refer to VAT receivables (4 million euro).
Current income tax liabilities of 14 million euro mainly refer to IRES payables for the national tax consolidation (13 million euro).
Other current tax liabilities of 9 million euro (11 million euro as at 31 December 2017) mainly relate to IRPEF (personal income tax) withholdings for employees (7 million euro).
Taxes pertaining to the year under review are shown in Note 31 - “Income taxes”.

12) OTHER CURRENT AND NON-CURRENT ASSETS

Other current assets, which amount to 27 million euro (56 million euro as at 31 December 2017) and *other non-current assets* of 36 million euro (50 million euro as at 31 December 2017) break down as follows:

	31.12.2017			31.12.2018		
(€ million)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Regulated activities	46	22	**68**	**16**	**10**	**26**
Market value of derivative financial instruments		1	**1**	**4**		**4**
Other assets:	10	27	**37**	**7**	**26**	**33**
- Prepayments	7	15	**22**	**6**	**13**	**19**
- Security deposits		12	**12**		**13**	**13**
- Other	3		**3**	**1**		**1**
	56	**50**	**106**	**27**	**36**	**63**

Regulated assets (26 million euro; 68 million euro as at 31 December 2017) relate to the natural gas transmission service and regard the lesser amounts billed that will be recovered through tariff adjustments in future years[15] (of which 16 million euro for the current share and 10 million euro for the non-current share).

The market value of derivatives at 31 December 2018 is as follows:

	31.12.2017			31.12.2018		
(€ million)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Other assets		**1**	**1**	**4**		**4**
Cash flow hedging derivatives:						
- Fair value exchange rate hedging derivatives				**4**		**4**
- Fair value interest rate hedging derivatives		1	**1**			
Other liabilities	**(2)**	**(11)**	**(13)**	**(7)**	**(26)**	**(33)**
Cash flow hedging derivatives:						
- Fair value interest rate hedging derivatives		(9)	**(9)**	**(6)**	**(26)**	**(32)**
- Fair value exchange rate hedging derivatives	(1)	(2)	**(3)**			
- Accrued expenses on derivatives	(1)		**(1)**	**(1)**		**(1)**

15 See Note 4 "Measurement criteria - Revenue".

Assets deriving from the market valuation of financial cash flow hedges (4 million euro) refer to a cross currency swap (CCS) stipulated in FY 2013. The CCS is used to hedge against fluctuations in the exchange rate of 10 billion (JPY) long-term bond issue. The six-year bond has a maturity of 25 October 2019 and a half-yearly coupon with an annual fixed rate of 1.115%. The CCS has converted the fixed-rate, foreign-currency liability into an equivalent liability in Euro with a fixed annual rate of 2.717%.
In relation to this contract, Snam agrees with its counterparties on the exchange of two capital flows (at the time of entering into the contract and upon the maturity of the underlying financial instrument) and periodic interest flows (on the same dates stipulated for the hedged item) denominated in different currencies at a predetermined exchange rate.

The main characteristics of the derivative in question are summarised in the table below:

Cross-currency swap

(€ million)									
Type of derivative	**Contract start date**	**Maturity date**	**Residual term (years)**	**JPY/EUR exchange rate Paid**	**JPY/EUR exchange rate Received**	**Nominal value (*) 31.12.2017**	**Nominal value (*) 31.12.2018**	**Market value 31.12.2017**	**Market value 31.12.2018**
Cross-currency swap	25.10.2013	25.10.2019	0.8	133.98	Spot	75	**75**	**(3)**	**4**

(*) Equal to a value of 10 billion Yen at an exchange rate of 133.98 Yen/€.

The liabilities arising from measurement at market value of the derivative financial instruments used as cash flow hedges (33 million euro) refer to:

- three 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 2019, 2020 and 2021, of nominal total value of 750 million euro and a total market value of 22 million euro;
- an Interest Rate Swap derivative, stipulated in August 2017, with a market value of 5 million euro. 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 7year 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 August 2017, with a market value of 2 million euro. 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 300 million euro. 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 + 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 euro. The IRS is used to hedge against the fluctuation risk of the fair value of a fixed rate liability resulting from a 50% portion of the long-term variable-rate loan of 500 million euro. 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 variable 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 one million euro. The IRS is used to hedge against the fluctuation risk of the interest rate on a variable rate term loan of 150 million euro. 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, for four years, the variable 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 2018, with a market value of one million euro. The IRS is used to hedge against the fluctuation risk of the fair value of a fixed rate liability resulting from the remaining 50% portion of the long-term variable-rate loan of 500 million euro. 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 variable rate liability is converted into an equivalent fixed rate liability with a benchmark rate of -0.0440%.

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

Interest Rate Swap - Forward Start

(€ million)

Type of derivative	Contract start date	Maturity date	Early extingui-shment date	Residual term (years)	Snam pays	Snam receives	Nominal value 31.12.2017	Nominal value 31.12.2018	Market value 31.12.2017	Market value 31.12.2018
IRS - Forward start	30.10.2019	30.10.2026	30.01.2020	7.8	1.1805%	Euribor 6 m	**250**	**250**	**(3)**	**(9)**
IRS - Forward start	29.10.2020	29.10.2027	29.01.2021	8.8	1.4225%	Euribor 6 m	**250**	**250**	**(3)**	**(8)**
IRS - Forward start	15.04.2021	15.04.2028	15.07.2021	9.3	1.3130%	Euribor 6 m		**250**		**(5)**

Interest Rate Swap

(€ million)

Type of derivative	Contract start date	Maturity date	Residual term (years)	Snam pays	Snam receives	Nominal value 31.12.2017	Nominal value 31.12.2018	Market value 31.12.2017	Market value 31.12.2018
Interest rate swap	02.08.2017	02.08.2024	5.6	0.4360%	Euribor 3 m	**350**	**350**	**(1)**	**(5)**
Interest rate swap	21.02.2017	21.02.2022	3.1	0.0408%	Euribor 3 m	**300**	**300**	**1**	**(2)**
Interest rate swap	30.07.2018	31.10.2021	2.8	0.0570%	Euribor 3 m		**250**		**(2)**
Interest rate swap	31.07.2018	31.07.2022	3.6	0.1250%	Euribor 3 m		**150**		**(1)**
Interest rate swap	31.10.2018	31.10.2021	2.8	-0.0440%	Euribor 3 m		**250**		**(1)**
Interest rate swap	29.01.2018	29.01.2020	1.1	-0.1878%	Euribor 3 m		**350**		

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 no. 25 - "Guarantees, commitments and risks - Management of financial risks".

The item "Other assets" (33 million euro; 37 million euro as at 31 December 2017) essentially comprises:

- prepayments (19 million euro), relating mainly to upfront fees and the substitute tax on revolving credit lines (16 million euro) and to insurance premiums (2 million euro). The current and non-current portions amount to 6 and 13 million euro respectively (7 and 15 million euro as at 31 December 2017);
- security deposits of 13 million euro (12 million euro as at 31 December 2017) granted to support operating activities relating mainly to the transport of natural gas.

13) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, which amounts to 16,153 million euro (16,033 million euro as at 31 December 2017) breaks down as follows:

				31.12.2017			
(€ million)	**Land**	**Buildings**	**Plant and equipment**	**Industrial and commercial equipment**	**Other assets**	**Non-current assets under construction and payments on account**	**Total**
Cost at 31.12.2016	**163**	**427**	**21,275**	**90**	**195**	**1,061**	**23,211**
Investments	1		8	5		954	968
Disposals		(4)	(29)	(7)	(7)	(7)	(54)
Change in scope of consolidation			182		1		183
Other changes	3	20	769	20	21	(870)	(37)
Cost at 31.12.2017	**167**	**443**	**22,205**	**108**	**210**	**1,138**	**24,271**
Provisions for amortisation and depreciation at 31.12.2016		**(98)**	**(7,302)**	**(48)**	**(140)**		**(7,588)**
Total amortisation and depreciation		(10)	(552)	(10)	(20)		(592)
Disposals		1	23	6	7		37
Change in scope of consolidation			(31)		(1)		(32)
Other changes				(1)	1		
Provisions for amortisation and depreciation at 31.12.2017		**(107)**	**(7,862)**	**(53)**	**(153)**		**(8,175)**
Provision for impairment losses at 31.12.2016	**(1)**	**(6)**	**(23)**			**(30)**	**(60)**
(Impairment losses)/reversals			(3)			(10)	(13)
Disposals		2	1			7	10
Provision for impairment losses at 31.12.2017	**(1)**	**(4)**	**(25)**			**(33)**	**(63)**
Net balance at 31.12.2016	**162**	**323**	**13,950**	**42**	**55**	**1,031**	**15,563**
Net balance at 31.12.2017	**166**	**332**	**14,318**	**55**	**57**	**1,105**	**16,033**

	31.12.2018						
(€ million)	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
Other changes			(1)				(1)
Change in scope of consolidation			(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

Property, plant and equipment (16,153 million euro; 16,033 million euro as at 31 December 2017) relates mainly to transmission (13,244 million euro), storage (2,811 million euro) and regasification (87 million euro) infrastructure.
Investments[16] (805 million euro) refer mainly to the transmission (702 million euro) and storage (90 million euro) segments.
During the year, Snam capitalised 12 million euro of financial expenses (13 million euro in 2017).
Depreciation (622 million euro) 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 entered as a reduction of the net value of property, plant and equipment come to 385 million euro (372 million euro as at 31 December 2017).
Disposals (14 million euro, net of the related provisions for depreciation, amortisation and impairment losses) mainly relate to transmission segment assets.
Impairment losses and reversals (8 million euro) refer essentially to the write-down of assets not yet ready for use in the transmission segment.
The value of plant and equipment includes site dismantling and restoration costs (237 million euro), relating mainly to the natural gas storage (147 million euro) and transmission (90 million euro) segments.

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

Other changes (42 million euro) related essentially to: (i) the revision in decrease of estimated costs for site restoration and dismantling refer essentially to the storage segment, which are partially offset by the decrease in the expected discount rates (8 million euro); (ii) the change in stocks of pipes and related accessory materials used in the production of plants in the natural gas transmission segment (11 million euro); and (iii) grants for the period refer to reclamation works for third parties (22 million euro).
Contractual commitments to purchase property, plant and equipment, and to provide services related to the construction thereof, are reported in Note no. 25 "Guarantees, commitments and risks".

Property, plant and equipment by business segment

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

(€ million)	31.12.2017	31.12.2018
Historical cost	**24,271**	**25,006**
Transportation	20,290	**20,934**
Storage	3,818	**3,893**
Regasification	150	**158**
Corporate and other activities	13	**21**
Provision for amortisation, depreciation and impairment losses	**(8,238)**	**(8,853)**
Transportation	(7,176)	**(7,690)**
Storage	(990)	**(1,080)**
Regasification	(66)	**(72)**
Corporate and other activities	(6)	**(11)**
Net balance	**16,033**	**16,153**
Transportation	13,114	**13,244**
Storage	2,828	**2,813**
Regasification	84	**86**
Corporate and other activities	7	**10**

14) INTANGIBLE ASSETS

Intangible assets, which amount to 907 million euro (850 million euro as at 31 December 2017) break down as follows:

	31.12.2017					
	Finite useful life				Indefinite useful life	
(€ million)	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 31.12.2016	**647**	**755**	**42**	**20**		**1,464**
Investments				66		**66**
Other changes	2				27	**29**
Change in scope of consolidation	52	8		(59)		**1**
Cost at 31.12.2017	**701**	**763**	**42**	**27**	**27**	**1,560**
Provisions for amortisation and depreciation at 31.12.2016	**(519)**	**(93)**	**(42)**			**(654)**
Total amortisation and depreciation	(50)	(4)				**(54)**
Other changes	(1)					**(1)**
Change in scope of consolidation	(1)					**(1)**
Provisions for amortisation and depreciation at 31.12.2017	**(571)**	**(97)**	**(42)**			**(710)**
Provision for impairment losses at 31.12.2016						
Provision for impairment losses at 31.12.2017						
Net balance at 31.12.2016	**128**	**662**		**20**		**810**
Net balance at 31.12.2017	**130**	**666**		**27**	**27**	**850**

(€ million)	31.12.2018					
	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 31.12.2017	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

Industrial patent rights and intellectual property rights of 139 million euro (130 million euro as at 31 December 2017) mainly concern information systems and applications in support of operating activities.
Concessions, licences, trademarks and similar rights (668 million euro; 666 million euro as at 31 December 2017) refer essentially to concessions for natural gas storage activities (656 million euro) and, specifically to the concessions of Settala (226 million euro), Sergnano (126 million euro), Fiume Treste (91 million euro) and Brugherio (56 million euro).
The value of the storage concessions is represented by the reserves of natural gas in the fields ("cushion gas"[17]).

Changes in the consolidation area (30 million euro) refer to the intangible assets noted after the acquisition of the companies operating in the energy efficiency, CNG and biomethane businesses. The assets mainly refer to the measurement of backlogs on contracts in place with customers and goodwill noted during the allocation of the company acquisition prices[18].

17 Cushion gas is not depreciated.

18 For further information, see Note no. 24 - "Business combinations".

The increase in intangible assets with an indefinite useful life (15 million euro) mainly refers to goodwill noted following the July 2018 acquisitions of the Cubogas business unit (7 million euro),70% of the share capital of IES Biogas (4 million euro) and 82% of the share capital of TEP (3 million euro). This goodwill was allocated to the CGU represented by the company Snam 4 Mobility, the Group company involved in activities connected with sustainable mobility, in particular the activities connected with the Compressed Natural Gas (CNG) business (refuelling stations, hereinafter "stations", and compressors) and in biomethane.
Investments (77 million euro) refer mainly to the transportation segment (62 million euro) [19].
Amortisation (60 million euro) 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 no. 25 - "Guarantees, commitments and risks".

As envisaged by the reference accounting standard (IAS 36), the assets and goodwill have been impairment tested. The impairment test has been carried out for all GCUs, regardless of the presence of impairment indicator or goodwill allocated to the CGUs, regardless of the presence of impairment indicators or goodwill allocated to the CGUs. In particular, the CGUs are represented:

- for the regulated business of transportation, regasification and storage of natural gas, respectively by the companies Snam Rete Gas and ITG, GNL Italia and Stogit;
- for the CNG business, consisting of the following stations and compressors, by Snam 4 Mobility and Cubogas;
- for the biomethane business, by the companies IES Biogas and Enersi;
- for the energy efficiency business, by the company TEPEnergy Solutions.

The impairment with reference to the CNG business represented by the stations, the recoverable value of the CGU Snam 4 Mobility has been determined on the basis of the Discounted Cash Flow (DCF) method. In consideration of the start-up phase of the business, the cash flow was determined considering a broader time frame than the forecast data of the 2019-2022 Plan approved by the Board, so as to consider all the effects that may significantly impact cash flow. To discount cash flow, the weighted average cost of capital (WACC) was used.

As regards the other businesses of CNG (compressors) and biomethane, headed respectively by the companies Cubogas and IES biogas, the recoverable value allocated to the CGU Snam 4 Mobility was assumed to be equal to the purchase price of the companies, also considering the timing of the acquisition.

As regards the goodwill already entered as at 31 December 2017 (27 million euro) and allocated to the CGU represented by the company ITG, this has been impairment tested. The recoverable value of the CGU ITG has been determined according to the DCF Method, considering a 2019-2022 Plan time frame. To discount cash flow, the weighted average cost of capital (WACC) was used in reference to the regulated business of natural gas transmission. The terminal value was determined according to the equity value/RAB and equity value/EBITDA multiples of the same business segment.
As regards the CGU of Transportation, Regasification and Storage, the recoverable value was defined in keeping with the estimated value of net invested capital recognised for such assets for tariff purposes (Regulatory Asset Base, or RAB) by ARERA, net of flat-fee components[20], the provision for employee severance pay (TFR) and grants received.
For all CGUs, the recoverable value, as shown above, exceeds the net book value of the CGU, including goodwill recorded at the time of acquisition.
As regards the CGU of Transportation, Regasification and Storage, the recoverable value of property, plant and equipment, including compulsory inventories, and intangible assets is around 20.5 billion euro[21] and exceeds the corresponding book values of the net invested capital.
For CGU Snam 4 Mobility, the recoverable value is around 34 million euro.

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

20 The RAB is used to determine the service tariffs and, therefore, the cash flows generated by the assets. The RAB value is defined using the revalued historical cost method with regard to fixed capital and on a flat-rate basis with regard to working capital, employee severance pay (TFR) and, in relation to the storage sector, the provision for site dismantling and restoration.
21 Estimated value as at 31 December 2018.

Intangible assets by business segment

Intangible assets by business segment break down as follows:

(€ million)	31.12.2017	31.12.2018
Historical cost	**1,560**	**1,676**
Transportation	659	**721**
Storage	826	**835**
Regasification	4	**6**
Corporate and other activities	71	**114**
Provision for amortisation, depreciation and impairment losses	**(710)**	**(769)**
Transportation	(502)	**(544)**
Storage	(152)	**(159)**
Regasification	(3)	**(4)**
Corporate and other activities	(53)	**(62)**
Net balance	**850**	**907**
Transportation	157	**177**
Storage	674	**676**
Regasification	1	**2**
Corporate and other activities	18	**52**

15) INVESTMENTS VALUED USING THE EQUITY METHOD

Investments valued using the equity method, amounting to 1,710 million euro (1,547 million euro as at 31 December 2017) break down as follows:

	Equity investments in		
(€ million)	**Joint ventures**	**Associates**	**Total**
Initial value at 01.01.2017	**1,195**	**304**	**1,499**
Acquisitions and subscriptions		66	66
Capital gains from measurement using the equity method	136	39	175
(Capital losses) from measurement using the equity method	(10)	(4)	(14)
Exchange rate conversion differences	(3)		(3)
Sales and repayments	(35)		(35)
Decrease owing to dividends	(127)	(22)	(149)
Other changes	8		8
Final value at 31.12.2017	**1,164**	**383**	**1,547**
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**

Acquisitions and subscriptions (165 million euro) relate to: (i) the subscription of the share capital increase of Senfluga (121 million euro) in view of the acquisition of Desfa; (ii) the share capital increase of TAP (39 million euro) in view of the requests for shareholders' loans received during the year; (iii) the share capital increase of the companies GasBridge 1 B.V. and GasBridge 2 B.V (5 million euro cumulatively) in view of the acquisition, by the same companies, by virtue of their respective shares held, of the incremental investment share of 7.93% held by Caisse de dépôt et placement du Québec (CDPQ) in Interconnector UK.
Capital gains arising from valuation using the equity method (165 million euro) refer to the pertinent share of the results of jointly controlled companies TAG (74 million euro), Terēga (28 million euro) and AS Gasinfrastruktur Beteiligung GmbH (11 million euro) and the associated company Italgas (43 million euro) and Interconnector (UK) (9 million euro).
Capital losses arising from valuation using the equity method (8 million euro) refer to the share of the results of the related companies TAP (4 million euro) and Senfluga (4 million euro).
Sales and reimbursements (16 million euro) refer to the reduction in the cost of recording the equity investments AS Gasinfrastruktur Beteiligung GmbH for the distribution of part of the share premium reserve.
The decrease owing to dividends (149 million euro) refers to the jointly controlled companies TAG (73 million euro), Terēga (41 million euro) and the associated companies Italgas (23 million euro) and Interconnector (UK) (12 million euro).
The other changes (7 million euro) mainly refer to the jointly controlled company Terēga.
No collateral is established on the equity investments, except for that indicated in reference to the equity investment in TAP[22].
As at 31 December 2018 the Group carried out the impairment test for each investments in associates and joint ventures. Test did not reveal any loss in value.

Consolidated companies, joint ventures, associates and other significant equity investments are indicated separately in the Annex "Significant shareholdings, associates and equity investments of Snam S.p.A. as at 31 December 2018", 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 as at 31 December 2017 and 31 December 2018 are provided below.

22 For more information, refer to Note no. 25 "Guarantees, commitments and risks - Commitments, guarantees and pledges - TAP".

Investments in joint ventures

The IFRS-compliant economic and financial data for each significant joint venture[23] are reported below:

	31.12.2017			
(€ million)	**Terēga Holding S.A.S. (formerly TIGF Holding SAS.)**	**Trans Austria Gasleitung GmbH**	**AS Gasinfrastruktur Beteiligung GmbH**	**GasBridge 1 B.V. and 2 B.V.**
Current assets	103	53	7	31
- of which cash and cash equivalents	*33*	*9*	*7*	
Non-current assets	2,852	1,048	596	81
Total assets	**2,955**	**1,101**	**603**	**112**
Current liabilities	(64)	(127)	(3)	
- of which current financial liabilities		*(60)*		
Non-current liabilities	(1,728)	(405)	(283)	
- of which non-current financial liabilities	*(1,462)*	*(261)*		
Total liabilities	**(1,792)**	**(532)**	**(286)**	
Shareholders´ equity	**1,163**	**569**	**317**	**112**
Equity interest held by the Group % (*)	40.50%	89.22%	40.00%	50%
Share attributable to the Group	471	508	127	56
Book value of the equity investment	**471**	**508**	**129**	**56**
Revenue	454	320		
Operating costs	(148)	(136)	(1)	
Amortisation, depreciation and impairment	(132)	(56)		
EBIT	**174**	**128**	**(1)**	
Financial income		2	1	
Financial expenses	(37)	(3)	(6)	
Income (expense) from equity investments			24	(20)
Income tax paid	(36)	(32)		
Net profit	**101**	**95**	**18**	**(20)**
Other components of comprehensive income	1		1	(6)
Total comprehensive income	**102**	**95**	**19**	**(26)**

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

23 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 refer to the preliminary and/or approved reporting packages.

	31.12.2018		
(€ million)	**Terēga Holding S.A.S.**	**Trans Austria Gasleitung GmbH**	**AS Gasinfrastruktur Beteiligung GmbH**
Current assets	128	57	2
- of which cash and cash equivalents	*34*	*20*	*2*
Non-current assets	2,891	1,116	582
Total assets	3,019	1,173	584
Current liabilities	(84)	(105)	(3)
- of which current financial liabilities	*(18)*	*(35)*	*(3)*
Non-current liabilities	(1,785)	(497)	(283)
- of which non-current financial liabilities	*(1,487)*	*(353)*	*(283)*
Total liabilities	(1,869)	(602)	(286)
Shareholders´ equity	1,150	571	298
Equity interest held by the Group % (*)	40.50%	89.22%	40.00%
Share attributable to the Group	466	509	119
Book value of the equity investment	466	509	124
Revenue	438	308	
Operating costs	(158)	(124)	
Amortisation, depreciation and impairment	(130)	(56)	
EBIT	150	128	
Financial income			2
Financial expenses	(36)	(14)	(7)
Income (expense) from equity investments			28
Income tax paid	(46)	(32)	
Net profit	68	82	23
Other components of comprehensive income			
Total comprehensive income	68	82	23

(*) 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. (a wholly owned subsidiary of 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 transmission and storage in France is a regulated activity.

As at 31 December 2018, Terēga Holding S.A.S. is 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 2018, 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 the associate of interest on the residual nominal amount of the 670 million euro convertible bond (of which Snam has subscribed 272 million euro) may be deferred at the discretion of the issuer Terēga S.A.S.

Investments in associates

The IFRS-compliant economic and financial data for all investments in associates[24] deemed to be significant are reported below:

	31.12.2017	
(€ million)	**Trans Adriatic Pipeline (TAP)**	**Italgas S.p.A.**
Current assets	106	684
Non-current assets	3,213	5,164
Total assets	**3,320**	**5,848**
Current liabilities	(280)	(624)
Non-current liabilities	(1,925)	(4,038)
Total liabilities	**(2,205)**	**(4,662)**
Shareholders' equity	**1,115**	**1,186**
Equity interest held by the Group (%)	20%	13.5%
Share attributable to the Group	223	160
Book value of the equity investment	**223**	**160**
Revenue		1,621
EBIT	**(27)**	**418**
Net profit	**(22)**	**293**
Other components of comprehensive income	3	(1)
Total comprehensive income	**(19)**	**292**

24 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 refer to the preliminary and/or approved reporting packages.

(€ million)	31.12.2018			
	Trans Adriatic Pipeline (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.

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 2018, 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 2018, TAP finalised a project financing agreement in connection with the project loan for the development of the gas pipeline[25].

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 distribution of natural gas throughout national territory, in energy efficiency and the management of the water service in five municipalities of Campania.

As at 31 December 2018, 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

25 For additional information regarding the commitments undertaken by the shareholders with regard to TAP see Note no. 25 "Guarantees, commitments and risks".

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 newly-established company through which the European consortium made up of Snam (60%), Enagás (20%) and Fluxys (20%) completed, on 20 December 2018, the acquisition by the Greek privatisation company HRADF and Hellenic Petroleum of a 66% stake in DESFA, the national operator in the natural gas infrastructure sector.
DESFA has and manages, in a regulated system, a high pressure transmission network of approximately 1,500 km, as well as a regasification terminal in Revithoussa. Greece, an important crossway for the diversification of procurement and the opening of new natural gas routes in Europe, has further potential development as a hub for south-east Europe.
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 an English company that owns the two-way gas pipeline that joins the United Kingdom with Belgium and the rest of Europe.
As at 31 December 2018, the company Interconnector UK Ltd is an investee of Snam International B.V. (23.68%) and Fluxys through the companies: Gasbridge 1 B.V. (23.68%), Fluxys Interconnector Ltd (15.04%) and Fluxys UK Ltd (37.59%).
The company directly holds 48% of the Dutch company Interconnector Zeebrugge Terminal S.C./C.V. Scrl and 1% indirectly through Interconnector Leasing company Ltd.

16) OTHER INVESTMENTS

Other investments (40 million euro) regard only the minority share of 7.3% held by Snam S.p.A. in the capital of Terminale GNL Adriatico S.r.l. (Adriatic LNG), as follows:

(€ million)	
Value at 31.12.2017	**44**
Income from valuation at FVTOCI	**1**
Sales and repayments	**(5)**
Value at 31.12.2018	**40**

The gain from measurement at Fair Value Through Other Comprehensive Income (FVTOCI) of 1 million euro refers to the change in fair value of the equity investment as at 31 December 2018.

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

Short-term financial liabilities, amounting to 1,976 million euro (1,373 million euro as at 31 December 2017), and *long-term financial liabilities*, including the short-term portion of long-term liabilities, totalling 11,444 million euro (11,246 million euro as at 31 December 2017), break down as follows:

	31.12.2017					31.12.2018				
		Long-term financial liabilities					Long-term financial liabilities			
(€ million)	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		1,042	3,621	4,009	7,630		**913**	**4,408**	**3,125**	**7,533**
Bank loans	1,358	27	1,366	1,180	2,546	**1,751**	**744**	**1,175**	**1,079**	**2,254**
Euro Commercial Paper - ECP						**225**				
Other lenders	15	1								
	1,373	**1,070**	**4,987**	**5,189**	**10,176**	**1,976**	**1,657**	**5,583**	**4,204**	**9,787**

Short-term financial liabilities

Short-term financial liabilities of 1,976 million euro (1,373 million euro as at 31 December 2017) relate to the use of uncommitted variable rate bank credit facilities (1,751 million euro) and the issue of unsecured short-term securities - Euro Commercial Papers - issued on the money market and placed with institutional investors (225 million euro). The performance with respect to 31 December 2017 of 603 million euro is mainly due to the greater net use of credit facilities (393 million euro) and the issue of the Euro Commercial Papers.
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 almost nil (same as for 2017).
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 11,444 million euro (11,246 million euro as at 31 December 2017).

The breakdown of bond loans (8,446 million euro), indicating the issuing company, the year of issue, the currency, the average interest rate and the maturity, is provided in the following table.

(€ million)

Issuing company	Issued (year)	Currency	Nominal amount	Adjust-ments (a)	Balance at 31.12.2018	Rate (%)	Maturity (year)
Euro Medium Term Notes (EMTN)							
SNAM S.p.A. (b) (c) (d)	2012	€	609	6	615	5,25	2022
SNAM S.p.A. (b) (c) (d) (e)	2012	€	526	15	541	3,5	2020
SNAM S.p.A. (b) (c) (f)	2012	€	519	25	544	5	2019
SNAM S.p.A. (c) (d)	2013	€	267	7	274	3,375	2021
SNAM S.p.A. (g)	2013	Yen	80		80	2,717	2019
SNAM S.p.A. (c) (d)	2014	€	394	9	403	3,25	2024
SNAM S.p.A. (c) (d) (h)	2014	€	344	7	351	1,5	2023
SNAM S.p.A. (c)	2014	€	225	3	228	1,5	2019
SNAM S.p.A. (c) (d) (f)	2015	€	263	(28)	235	1,375	2023
SNAM S.p.A.	2016	€	1.250	(6)	1.244	0,875	2026
SNAM S.p.A.	2016	€	500	(1)	499		2020
SNAM S.p.A.	2017	€	500	3	503	1,25	2025
SNAM S.p.A. (i)	2017	€	300	(1)	299	0,641	2022
SNAM S.p.A. (i)	2017	€	350	(1)	349	0,836	2024
SNAM S.p.A.	2017	€	650	(2)	648	1,375	2027
SNAM S.p.A. (i)	2018	€	350	1	351	0,212	2020
SNAM S.p.A. (l)	2018	€	900	(6)	894	1	2023
			8.027	**31**	**8.058**		
Convertible bonds							
Snam S.p.A.	2017	€	400	(12)	388		2022
			8,427	**19**	**8,446**		

(a) Includes: (i) issue premium/discount; (ii) accrued interest; (iii) adjustment to the fair value of the bond loan of 500 million euro, maturing in 2023, originally converted to floating rate through an IRS hedging derivative which was extinguished early on 27 January 2017.
(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 tapped for an incremental amount of 500 million euro, with the same interest rate and maturity as the original placement.
(f) Bond loans subject to the 2015 liability management operation.
(g) Bond with a nominal value of 10 billion Japanese yen, converted into euro through a cross-currency swap (CCS). The indicated nominal value is obtained by converting into euro at the year-end spot exchange rate."
(h) Bond tapped for an incremental amount of 250 million euro, with the same interest rate and maturity as the original placement.
(i) Floating-rate bond, converted into fixed-rate through an IRS hedging derivative.
(l) Bond tapped for an incremental amount of 300 million euro, with the same interest rate and maturity as the original placement.

The 226 million euro reduction in financial and bond debt compared with 31 December 2017 was mainly due to: (i) the repayment of a fixed-rate bond loan maturing on 19 March 2018, for a nominal amount of 851 million euro; (ii) the repayment of a fixed-rate bond maturing on 10 September 2018, for a nominal amount of 70 million euro; (iii) the repurchase on the market of fixed-rate bonds for a total nominal value of 538 million euro with an average coupon of 2.6% and a residual duration of approximately 3.7 years. The total outlay deriving from the buy-back of securities was made as part of the Liability Management operation concluded in December 2018 and comes to a total of 580 million euro[26], inclusive of commission paid to intermediaries (2 million euro)[27] and interest accrued (7 million euro). These effects were partially offset by the issue of: (i) a variable-rate bond[28], on 22 January 2018, for a nominal value of 350 million euro, (ii) a fixed-rate bond, on 11 September 2018, for a nominal value of 600 million euro; (iii) a fixed-rate equity linked bond, on 27 November 2018, for a nominal value of 300 million euro.

Payables for bank loans (2,998 million euro) relate to term loans, of which 1,448 million euro 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 0.3%[29] (unchanged on 2017).

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 11,564 million euro[30] (11,913 million euro as at 31 December 2017).

Snam also has unused committed credit facilities of a total of 3.2 billion euro.

Financial covenants and negative pledge commitments

As at 31 December 2018, Snam had unsecured bilateral and syndicated loan agreements in place with banks and other financial institutions. Some of these contracts include, inter alia, covenants typically imposed in international market practice, some of which subject to specific threshold values, 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; and (iii) limitations on certain extraordinary transactions that the Company and its subsidiaries may carry out; (iv) limits to the debt of subsidiaries.

Failure to comply with these covenants, and the occurrence of other events, such as cross-default events could 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 rating is lower than BBB (Standard & Poor's/Fitch Ratings Limited) or lower than Baa2 (Moody's) with 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.

As at 31 December 2018, the financial debt subject to these restrictive clauses amounted to approximately 3 billion euro.

Bonds, issued by Snam as at 31 December 2018, with a nominal value of 8.4 billion euro, refer mainly to securities issued under the Euro Medium Term Notes programme.

The covenants set for the programme's securities reflect international market practices and relate, inter alia, to negative pledge and pari passu clauses. Specifically, under the negative pledge clause, Snam and its significant subsidiaries are subject to limitations in relation to the creation or maintenance of restrictions on all or part of their own assets or inflows to guarantee present or future debt, unless this is explicitly permitted.

26 For more information about the acquisition, see the section "Snam in 2018 - Summary Data and Information - Main Events" in the Report on operations.
27 This commission was paid in January 2019.
28 The above-mentioned interest bond is converted at a fixed rate through a derivative Interest Rate Swap (IRS).
29 This does not include amortization of the Up-Front fee.
30 Includes bonds, whose value is estimated on the basis of the market listings as at 31 December 2018, and financial liabilities to banks, all at floating rate, whose corresponding market value is taken as the nominal repayment value.

Failure to comply with these covenants – in some cases only when this non-compliance is not remedied within a set time period – and the occurrence of other events, such as cross-default events, some of which are subject to specific threshold values, may result in Snam's failure to comply and could trigger the early repayment of the relative loan.
In confirmation of Snam's credit standing, the loan agreements do not contain covenants which require compliance with an economic and/or financial ratio.

Breakdown of net financial debt

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

	31.12.2017			31.12.2018		
(€ million)	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
A. Cash and cash equivalents	719		719	**1,872**		**1,872**
B. Securities available for sale and held to maturity						
C. Cash (A + B)	**719**		**719**	**1,872**		**1,872**
D. Short-term financial receivables	**350**		**350**			
E. Short-term financial liabilities to banks	1,358		1,358	**1,751**		**1,751**
F. Long-term financial liabilities to banks	27	2,546	2,573	**744**	**2,254**	**2,998**
G. Bonds	1,042	7,630	8,672	**913**	**7,533**	**8,446**
H. Short-term financial liabilities to related parties	15		15			
I. Long-term financial liabilities to related parties						
L. Other short-term financial liabilities				**225**		**225**
M. Other long-term financial liabilities	1		1			
N. Gross financial debt (E + F + G + H + I + L + M)	**2,443**	**10,176**	**12,619**	**3,633**	**9,787**	**13,420**
O. Net financial debt (N - C - D)	**1,374**	**10,176**	**11,550**	**1,761**	**9,787**	**11,548**

Reconciliation of net financial debt

In compliance with the provisions of IAS 7 "Statement of Cash Flows", effective from 01 January 2017, we provide below the cash and non-cash changes to liabilities arising from financing activities and to assets included in net financial debt.

(€ million)	31.12.2017	Cash flow changes	Changes without effects on cash flows			31.12.2018
			Impact IFRS 9	Foreign exchange	Change in scope of consoli-dation	
Cash and cash equivalents (*)	719	1,153				**1,872**
Short-term financial receivables	350	(350)				
Liquidity and financial receivables	**1,069**	**803**				**1,872**
Short-term financial liabilities	1,373	597			6	**1,976**
Long-term financial liabilities (**)	11,246	202	(10)	6		**11,444**
Gross financial debt	**12,619**	**799**	**(10)**	**6**	**6**	**13,420**
Net financial debt	**11,550**	**(4)**	**(10)**	**6**	**6**	**11,548**

(*) Includes liquid funds from change to consolidation scope.
(**) Includes the short-term portion of long-term financial debt.

18) TRADE AND OTHER PAYABLES

Trade and other payables, which amount to 1,768 million euro (1,673 million euro as at 31 December 2017), comprise the following:

(€ million)	31.12.2017	31.12.2018
Trade payables	406	**491**
Payables for investment activities	347	**337**
Other payables	920	**940**
	1,673	**1,768**

Trade payables of 491 million euro (406 million euro as at 31 December 2017) relate mainly to the natural gas transmission (390 million euro, including 230 million euro relating to gas balancing activities), storage (24 million euro) and regasification (5 million euro) business segments.
Payables for investment activities of 337 million euro (347 million euro as at 31 December 2017) relate mainly to the natural gas transmission (271 million euro) and storage (50 million euro) business segments.

Other payables of 940 million euro (920 million euro as at 31 December 2017) break down as follows:

(€ million)	31.12.2017	31.12.2018
Other payables		
- Payables to the Energy and Environmental Services Fund (CSEA)	564	**570**
- Interim dividend	294	**298**
- Payables to employees	26	**32**
- Payables to pension and social security institutions	16	**19**
- Consultants and professionals	5	**8**
- Other	15	**13**
	920	**940**

Payables to the CSEA (570 million euro) concern accessory tariff components that mainly relate to the transmission segment.
The interim dividend (298 million euro) refers to the payable due to shareholders for the 2018 dividend, of 0.0905 euro per share, resolved on 06 November 2018. The interim dividend was made available for payment from 23 January 2019.
Note 34 "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.

19) OTHER CURRENT AND NON-CURRENT LIABILITIES

Other current liabilities, amounting to 86 million euro (79 million euro as at 31 December 2017), and *other non-current liabilities*, amounting to 437 million euro (346 million euro as at 31 December 2017), break down as follows:

(€ million)	31.12.2017			31.12.2018		
	Current	Non-current	Total	Current	Non-current	Total
Regulated liabilities	45	254	299	**38**	**351**	**389**
Market value of derivative financial instruments	2	11	13	**7**	**26**	**33**
Other liabilities	32	81	113	**41**	**60**	**101**
- Security deposits		67	67		**46**	**46**
- Prepaid revenue and income	16	8	24	**29**	**6**	**35**
- Prepaid contributions for connecting to the transportation network		3	3		**6**	**6**
- Other	16	3	19	**12**	**2**	**14**
	79	**346**	**425**	**86**	**437**	**523**

Liabilities from regulated activities, amounting to 389 million euro (299 million euro as at 31 December 2017), relate to:

- the transmission segment (359 million euro) due to the transmission revenue invoiced in excess of the restriction established by the regulator and penalties charged to users who exceeded the committed capacity; this amount is to be returned through tariff adjustments pursuant to Resolution 575/2017/R/gas of ARERA. The current and non-current portions amount to 37 and 322 million euro respectively (44 and 224 million euro as at 31 December 2017);
- the storage segment (€30 million) due to payments for balancing and stock replenishment, to be returned to service users pursuant to Resolution 50/06 of the Authority. The current and non-current portions amount to 1 and 29 million euro respectively (no change from 31 December 2017).

The market value of the derivatives outstanding as at 31 December 2018 is broken down in Note no. 12 "Other current and non-current assets".
Other liabilities of 101 million euro (113 million euro as at 31 December 2017) include: (i) deposits (46 million euro; 67 million euro as at 31 December 2017) paid by way of guarantee to users of the balancing service, in accordance with Resolution ARG/gas 45/11; (ii) liabilities for revenues and prepaid income (35 million euro), essentially regarding revenues anticipated to TAP for the provision of the design services (26 million euro corresponding entirely to the current portion) and the prepaid charges for the concession to use optic fibre cable to a telecommunications operator (8 million, of which 2 million euro current portion and 6 million euro non-current portion).

20) PROVISIONS FOR RISKS AND CHARGES

Provisions for risks and charges, which amount to 655 million euro (677 million euro as at 31 December 2017) are analysed in the table below:

	31.12.2017						
				Utilisations			
(€ million)	**Opening balance**	**Provisions**	**Increases due to passing of time**	**Against charges**	**For excess**	**Other changes**	**Final balance**
Provision for site dismantling and restoration	628		11	(10)		(19)	**610**
Provision for litigation	14	2					**16**
Provision for tax litigation	1	9					**10**
Other provisions	64	11		(34)			**41**
	707	**22**	**11**	**(44)**		**(19)**	**677**

	31.12.2018						
				Utilisations			
(€ million)	**Opening balance**	**Provisions**	**Increases due to passing of time**	**Against charges**	**For excess**	**Other changes**	**Final balance**
Provision for site dismantling 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**

The provision of 607 million euro for site dismantling and restoration (610 million euro as at 31 December 2017) includes the discounted estimate of costs expected to be incurred for the removal of facilities and the restoration of sites in the natural gas storage (493 million euro) and transmission[31] (109 million euro) business segments. Discounting of the provision for site dismantlement and restoration was carried out using the rate corresponding to the returns of the Eurozone corporate bonds with "AA" rating. The rate thus determined was between 1.48% and 1.68%. The outlay connected with the dismantling and restoration interventions will be paid in a time frame that covers the next 43 years. Other changes (-8 million euro) regard the reduction of the estimated costs of dismantling and restoration of sites referring to the storage segment, the effects of which have been partly absorbed by the reduction of expected discounting rates.

The provision for litigation (19 million euro; 16 million euro as at 31 December 2017) included costs which the Company has estimated it will incur for existing lawsuits.

The risk provision for tax disputes (6 million euro; 10 million euro as at 31 December 2017) contains the estimate of the probable expenses in the event of levying of assessments and pursuant to tax disputes.

Other provisions for risks and charges (33 million euro; 41 million euro as at 31 December 2017) mainly regard the expenses that the insurance company of the Gasrule Insurance DAC Group expects to incur in view of insured claims (14 million euro) and the provision for incentives to take early retirement (14 million euro).

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[32] 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.

(€ million)	**Change in discount rate**	
Effect on the net obligation at 31.12.2018	**Reduction of 10%**	**Increase of 10%**
Provision for site dismantling and restoration	22	(21)

21) PROVISIONS FOR EMPLOYEE BENEFITS

Provisions for employee benefits, amounting to 64 million euro (58 million euro as at 31 December 2017), can be broken down as follows:

(€ million)	**31.12.2017**	**31.12.2018**
Employee severance pay (TFR)	30	**26**
Supplemental healthcare provision for company executives of Eni (FISDE)	3	**3**
Isopensione provision	13	**25**
Other employee benefit provisions	12	**10**
	58	**64**

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

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

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 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 (26 million euro; 30 million euro as at 31 December 2017).
The supplementary healthcare provision for Company executives of Eni (FISDE) of 3 million euro (also as at 31 December 2017) includes the estimate of costs (determined on an actuarial basis) related to contributions benefiting current[33] and retired executives.
FISDE provides financial supplementary healthcare benefits to Eni Group[34] executives 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 Isopensione pre-retirement fund (25 million euro) refers to expenses incumbent upon the employer from application of the implementation agreement (hereinafter the "Plan"), relatively to the pre-retirement instrument for employees regulated pursuant to Article 4 paragraphs 1-7 of Law 92/2012 (the so called "Fornero Law").
Other employee benefit provisions (10 million euro; 12 million euro as at 31 December 2017) concern long-term benefits connected with deferred monetary incentive plans (IMD), long-term monetary incentive plans (ILT) (7 million euro in total) and seniority bonuses (3 million euro).
Deferred cash 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 recognized when Snam's obligation 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 incentive plans involve the payment, three years after allocation, of a variable cash 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.
Starting 2017, in lieu of the long-term monetary incentive plans (IMD and ILT), the new long-term, share-based variable incentive plan was introduced (ILT share)[35], the scope of addressees of such was extended in 2018.

33 For executives in service, contributions are calculated from the year in which the employee retires and refer to the years of service provided.
34 The fund provides the same benefits for Snam Group executives.
35 For more information on the characteristics of the plan, please refer to the "Other information" section of this Report on operations.

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.

The composition of and changes in employee benefit provisions, determined by applying actuarial methods, are as follows[36]:

	31.12.2017					31.12.2018				
(€ million)	**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	**29**	**3**		**12**	**44**	**30**	**3**	**13**	**12**	**58**
Current cost			13	4	17			**15**	**2**	**17**
Cost in interest										
Revaluations/ (Impairment losses):	1				1	**(1)**		**1**		
- Actuarial (gains)/ losses resulting from changes in the financial assumptions	1				1					
- Effect of past experience						**(1)**		**1**		
Benefits paid	(1)			(4)	(5)	**(3)**		**(4)**	**(4)**	**(11)**
Change in scope of consolidation	1				1					
Current value of the obligation at the end of the year	**30**	**3**	**13**	**12**	**58**	**26**	**3**	**25**	**10**	**64**

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

	31.12.2017		31.12.2018		
(€ million)	**TFR**	**Total**	**TFR**	**Isopensione provision**	**Total**
- Actuarial (gains)/losses resulting from changes in the financial assumptions	1	1			
- Effect of past experience			**(1)**	**1**	
	1	**1**	**(1)**	**1**	

36 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:

	31.12.2017			31.12.2018		
	TFR	FISDE	Other	TFR	FISDE	Other
Discount rate (%)	1.5	1.5	0-1.5	**1.6**	**1.6**	**0.1-1.6**
Inflation rate (%) (*)	1.5	1.5	1.5	**1.5**	**1.5**	**1.5**

(*) 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 change[37] 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.

(€ million)	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:

	31.12.2017					31.12.2018				
(€ million)	Provision for employee severance pay (TFR)	FISDE	Isopensione provision	Other	Total	Provision for employee severance pay (TFR)	FISDE	Isopensione provision	Other	Total
Within the next year	1		3	4	8	**1**		**8**	**5**	**14**
Within five years	5		10	6	21	**5**		**17**	**3**	**25**
Between five and ten years	10			1	11	**9**			**1**	**10**
Beyond 10 years	14	3		1	18	**11**	**3**		**1**	**15**
	30	**3**	**13**	**12**	**58**	**26**	**3**	**25**	**10**	**64**

37 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:

	31.12.2017				31.12.2018			
	Provision for employee severance pay (TFR)	FISDE	Isopen-sione provision	Other provi-sions	Provision for employee severance pay (TFR)	FISDE	Isopen-sione provision	Other provi-sions
Weighted average maturity (years)	10	22	2	3	**10**	**22**	**2**	**4**

22) DEFERRED TAX LIABILITIES

Deferred tax liabilities of 541 million euro (549 million euro as at 31 December 2017) are stated net of offsettable prepaid tax assets of 407 million euro (384 million euro as at 31 December 2017).
There are no prepaid tax assets which cannot be offset.

(€ million)	**31.12.2017**	**Provisions**	**Utilisations**	**Other changes**	**Change in scope of consoli-dation**	**31.12.2018**
Deferred tax liabilities	549		(16)	2	6	**541**
Prepaid tax assets	(384)	(37)	21	(7)		**(407)**
	165	**(37)**	**5**	**(5)**	**6**	**134**

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

	31.12.2018								
(€ million)	**Opening balance**	**Provisions**	**Utilisations**	**Significant impacts on share-holders' equity**	**Other changes**	**Change in scope of consoli-dation**	**Final balance**	**Of which: IRES**	**Of which: IRAP**
Deferred tax liabilities	**549**		**(16)**		**2**	**6**	**541**	***527***	***14***
Depreciation and amortisation exclusively for tax purposes	437		(15)				422	*422*	
Site dismantling and restoration	84				(4)		80	*68*	*12*
Revaluation of property, plant and equipment	13					6	19	*18*	*1*
Capitalisation of financial expenses	7						7	*6*	*1*
Impairment losses on receivables in excess of tax deductibility	3						3	*3*	
Other temporary differences	5		(1)		6		10	*10*	
Prepaid tax assets	**(384)**	**(37)**	**21**	**(6)**	**(1)**		**(407)**	***(370)***	***(37)***
Site dismantling and restoration	(171)	(3)	1		4		(169)	*(144)*	*(25)*
Non-deductible amortisation and depreciation	(105)	(20)	4		(8)		(129)	*(128)*	*(1)*
Provision for risks and charges and other non-deductible provisions	(68)	(7)	10		8		(57)	*(53)*	*(4)*
Non-repayable and contractual grants	(21)		1				(20)	*(17)*	*(3)*
Employee benefits	(12)	(6)	4		(1)		(15)	*(13)*	*(2)*
Other temporary differences	(7)	(1)	1	(6)	(4)		(17)	*(15)*	*(2)*
Net deferred tax liabilities	**165**	**(37)**	**5**	**(6)**	**1**	**6**	**134**	***157***	***(23)***

Prepaid tax assets and deferred tax liabilities are considered to be long term. Note no. 31 "Income taxes" provides information about taxes for the year.

23) SHAREHOLDERS' EQUITY

Shareholders' equity, which amounts to 5,985 million euro (6,188 million euro as at 31 December 2017), breaks down as follows:

(€ million)	31.12.2017	31.12.2018
Share capital	2,736	**2,736**
Legal reserve	547	**547**
Share premium reserve	1,140	**1,021**
Reserve for fair value of cash flow hedging derivatives net of tax effect	(8)	**(28)**
Reserve for defined-benefit plans for employees net of tax effect	(8)	**(8)**
Reserve for fair value of minority equity investments		**1**
Retained earnings	2,112	**2,286**
Consolidation reserve	(674)	**(674)**
Net profit	897	**960**
Other reserves	58	**67**
Less:		
- Negative reserve for treasury shares in the portfolio	(318)	**(625)**
- Interim dividend	(294)	**(298)**
Snam shareholders' equity	**6,188**	**5,985**

Below is a breakdown of the shareholders' equity of Snam as at 31 December 2018.

Share capital

The share capital as at 31 December 2018 consisted of 3,469,038,579 shares without nominal value (3,500,638,294 as at 31 December 2017), with a total value of 2,735,670,475.56 (unchanged from 31 December 2017). The reduction is due to the cancellation of 31,599,715 treasury shares with no nominal value, without reducing the share capital, resolved by the Shareholders' Meeting on 24 April 2018.

Legal reserve

The legal reserve stood at €547 million as at 31 December 2018 (unchanged from 31 December 2017).

Share premium reserve

The share premium reserve as at 31 December 2018 totalled 1,021 million euro (1,140 million euro as at 31 December 2017). The reduction of 119 million euro is due to the cancellation of 31,599,715 treasury shares with no nominal value, without reducing the share capital, resolved by the Shareholders' Meeting on 24 April 2018.

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

The reserve for fair value of cash flow hedging derivatives (-28 million euro as at 31 December 2018, -8 million euro as at 31 December 2017, net of the related tax effects) includes the fair value measurement of cash flow hedges relative to a cross currency swap contract, 6 interest rate swaps (IRS) and 3 "forward start" interest rate swaps, explained under Note no. 12 "Other current and non-current assets".

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

(€ million)	Gross reserve	Tax effect	Net reserve
Reserve at 31.12.2017	**(11)**	**3**	**(8)**
Changes in 2018	(26)	6	(20)
Reserve at 31.12.2018	**(37)**	**9**	**(28)**

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

As at 31 December 2018, the reserve for remeasurement of employee benefit plans (-8 million euro; unchanged as at 31 December 2017) included actuarial losses, net of the relative tax effect, recognised under other components of comprehensive income pursuant to IAS 19.

Retained earnings

Retained earnings totalled 2,286 million euro (2,112 million euro as at 31 December 2017). The increase of 174 million euro was due to the allocation of 2017 residual profit.

Consolidation reserve

The negative consolidation reserve of 674 million euro (unchanged from 31 December 2017) includes the value derived from the difference between the acquisition cost of the Italgas and Stogit equity investments (1,597 million euro, 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 euro).

Other reserves

Other reserves of 67 million euro (58 million euro as at 31 December 2017) mainly refer to the effects deriving from the measurement of equity investments using the equity method.

Negative reserve for treasury shares in the portfolio

The negative reserve for treasury shares in the portfolio includes the cost of

purchase, net of use, of 168,197,663 treasury shares (85,915,616 shares as at 31 December 2017), as a total amount of 626 million euro (318 million euro as at 31 December 2017).
Detailed information on treasury shares and on the long-term share-based incentive plans are shown in the "Other information" section of the Report on operations, to which reference should be made.

Interim dividend

The interim dividend 2018 of 298 million euro of 0.0905 euro per share, resolved on 6 November 2018 by the Board of Directors in its meeting on 06 November 2018 pursuant to Article 2433-bis, paragraphs 5 of the Italian civil code. The interim dividend was paid out as of 23 January 2019, with an ex-coupon date of 21 January 2019 and a record date of 22 January 2019.

Dividends

The ordinary shareholders' meeting of Snam S.p.A. resolved on 24 April 2018 to distribute the 2017 ordinary dividend of 0.2155 euro per share, of which 0.0862 euro per share, for an amount of 294 million euro, already distributed by way of interim dividend. The balancing dividend of 0.1293 euro per share, for an amount of 437 million euro, will be paid from 20 June 2018, with an ex-coupon date of 18 June 2018 and a record date of 19 June 2018.
In its meeting of 18 February 2019, the Board of Directors proposed to the Shareholders' Meeting convened for 2 April 2019 the distribution of an ordinary dividend of 0,2263 euro per share, of which 0.0905 per share, for a total of 298 million euro, already distributed as interim dividend. The balancing dividend of 0,1358 euro per share will be paid out as of 26 June 2019, with an ex-coupon date of 24 June 2019 and a record date of 25 June 2019.

24) BUSINESS COMBINATIONS

Below is the information in accordance with accounting standard IFRS 3 "Business combinations" with reference to the main acquisitions made in 2018.

TEP Energy Solution (TEP)

On 30 May 2018, after obtaining antitrust clearance, through the subsidiary Asset Company 4 S.r.l., a controlling stake of 82% of the capital was acquired in TEP Energy Solution (TEP) for a total value of approximately 21 million euro. There is a contractual price adjustment mechanism in place, based on the results of FYs 2018-2020 and crossover put and call options on the interests of minority shareholders, maturing in 2020. TEP is one of Italy's most important companies in the energy efficiency sector, as an Energy Service Company (ESCO) with more than 200 leading national and international businesses as clients and 950 thousand energy efficiency certificates.
The transaction is a "business combination" recorded in compliance with IFRS 3 "Business combinations". To this end, on the date that control was acquired, the individual assets acquired, as provisional accounting separately from goodwill, and the liabilities assumed were recognised at the relative fair values.
As at the date of acquisition, in accordance with the terms of the contract regulating the exercise of crossover put and call options over minority shareholdings (equal to 18%), the transaction was booked as though Snam had acquired control over 100% of TEP, without, therefore, noting the interests of minority shareholders.
The current value of payments envisaged in the event of the exercise of the options has been included in the determination of the price of the business combination (approximately 5 million euro).

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

(€ million)	**Values after assignment of fair value**
Fair value of the consideration	21
Fair value of put/call option on minority interests (18%)	5
Total net identifiable assets at fair value	23
Goodwill	**3**

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

(€ million)	**Values after assignment of fair value**
Liquid funds	8
Current assets	7
Intangible assets (*)	21
Goodwill	3
Assets acquired	**39**
Current liabilities	5
Short-term financial liabilities	1
Long-term financial liabilities	1
Deferred tax liabilities	6
Liabilities acquired	**13**
Shareholders' equity acquired	**26**

(*) Mainly measurement of backlogs on contracts with customers, performed when allocating acquisition price..

Goodwill (3 million euro) was determined as the difference between the fair value of the price, including the financial component relative to the purchase option over minority interests and the fair value of the net assets acquired. Beginning from the acquisition date, the TEP contribution to consolidated net profits is approximately -1 million euro. With reference to revenues, the contribution came to 4 million euro.
If the business combination had been effective as from 1 January 2018, the contribution made by TEP to the net result would have been of a non-significant amount.

IES Biogas (IES)

On 5 July 2018 Snam acquired, for a value of approximately 4 million euro, 70% of IES Biogas, one of the most important Italian businesses involved in the design, development and management of biogas and biomethane production plants with a market share in excess of 10%. Contractual put and call options are envisaged on minority shareholders' interests, maturing in 2022.
With 2017 turnover exceeding 20 million euro, IES Biogas has to date developed more than 200 plants throughout national territory. In recent years, the company has also developed projects outside Italy.
This acquisition was completed through the subsidiary Snam4Mobility.

The transaction is a "business combination" recorded in compliance with IFRS 3 "Business combinations". To this end, on the date that control was acquired, the individual assets acquired, as provisional accounting separately from goodwill, and the liabilities assumed were recognised at the relative fair values.
As at the date of acquisition, in accordance with the terms of the contract regulating the exercise of crossover put and call options over minority shareholdings (equal to 30%), the transaction was booked as though Snam had acquired control over 100% of IES, without, therefore, noting the interests of minority shareholders.
The current value of payments envisaged in the event of the exercise of the options has been included in the determination of the price of the business combination (approximately 1 million euro).
Goodwill (4 million euro) includes the value of the operating and financial synergies. The goodwill is not expected to be tax deductible.

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

(€ million)	**Values after assignment of fair value**
Fair value of the consideration	4
Fair value of put/call option on minority interests (30%)	1
Total net identifiable assets at fair value	1
Goodwill	**4**

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

(€ million)	**Values after assignment of fair value**
Current assets	10
Inventories	2
Intangible assets	1
Goodwill	4
Assets acquired	**17**
Current liabilities	6
Short-term financial liabilities	4
Long-term financial liabilities	1
Current tax liabilities	1
Liabilities acquired	**12**
Shareholders' equity acquired	**5**

Goodwill (4 million euro) was determined as the difference between the fair value of the price, including the financial component relative to the purchase option over minority interests and the fair value of the net assets acquired.
Beginning from the acquisition date, the IES contribution to consolidated net profits is null. With reference to revenues, the contribution came to 23 million euro.
If the business combination had been effective as from 01 January 2018, the contribution made by IES would have been of a non-significant amount.

Cubogas

On 25 July 2018, through the newly-established company Cubogas S.r.l., a 100% subsidiary of Snam4Mobility, after the meeting of several conditions precedent including the completion of the union procedures, the business unit was acquired as operating in the design, development and production of technological solutions for natural gas vehicle refuelling stations of M.T.M., a company of the Westport Fuel Systems Group. The transaction has a value of 12.6 million euro, including price adjustments applied during closing.
The transaction is a "business combination" recorded in compliance with IFRS 3 "Business combinations". To this end, on the date that control was acquired, the individual assets acquired, as provisional accounting separately from goodwill, and the liabilities assumed were recognised at the relative fair values.
Goodwill (7 million euro) includes the value of the operating and financial synergies. The goodwill is not expected to be tax deductible.

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

(€ million)	**Values after assignment of fair value**
Fair value of the consideration	13
Total net identifiable assets at fair value	6
Goodwill	**7**

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

(€ million)	**Values after assignment of fair value**
Current assets	6
Non current assets	2
Goodwill	7
Assets acquired	**15**
Current liabilities	1
Deferred tax liabilities	1
Liabilities acquired	**2**
Shareholders' equity acquired	**13**

Goodwill (7 million euro) was determined as the difference between the fair value of the price and the fair value of the net assets acquired.
Beginning from the acquisition date, the Cubogas contribution to consolidated net profits is approximately -1 million euro. With reference to revenues, the contribution came to 7 million euro.

25) GUARANTEES, COMMITMENTS AND RISKS

Guarantees, commitments and risks, amounting to 5,961 million euro (3,918 million euro as at 31 December 2017) comprise:

(€ million)	31.12.2017	31.12.2018
Guarantees given in the interest of:	**130**	**1,262**
- subsidiaries	44	**69**
- associates	86	**1,193**
- of which TAP		***1,129***
Financial commitments and risks:		
Commitments	**1,872**	**2,021**
Commitments for the purchase of goods and services	1,428	**1,691**
Commitments in associates (*)	419	**324**
- of which TAP	*419*	***324***
Other	25	**6**
Risks	**1,916**	**2,667**
- third-party assets on deposit	1,879	**2,609**
- compensation and litigation	37	**58**
	3,918	**5,950**

(*) The value shown in the table refers to the residual commitment.

Guarantees

Guarantees given in the interests of subsidiaries (69 million euro; 44 million euro as at 31 December 2017) essentially relate to: (i) waivers issued in the favour of third parties as a performance guarantee (40 million euro); (ii) bank surety in the favour of INPS as a guarantee of the fulfilment of obligations accepted with regards to the same institute under the scope of the provisions connected with early retirement, regulated by Art. 4, paragraph 1-7 of Italian Law 92/2012 - the Fornero Law (15 million euro); (iii) guarantees given in the favour of the Revenue Agency in the interests of the subsidiaries Stogit and Gnl (14 million euro).
Other personal guarantees given in the interests of associates (1,193 million euro; 86 million euro as at 31 December 2017) essentially relate to: (i) the guarantee given in the interests of TAP (1,129 million euro) in connection with the project finance for the development of the gas pipeline (for more information, see the paragraph "Commitments, guarantee and pledges - TAP" below); (ii) the on-demand guarantee given in the favour of the Greek privatisation agency (TAIPED) during the tender for the purchase of 66% of DESFA, the national operator in the natural gas infrastructures sector in Greece[38] (64 million euro).

Commitments

The commitments for the purchase of goods and services (1,691 million euro; 1,428 million euro as at 31 December 2017) regard the commitments made with suppliers for the purchase of tangible assets and the supply of services relative to the investments being made.
Commitments in associates (324 million euro; 419 million euro as at 31 December 2017) refer to the commitment made by Snam S.p.A. to the company TAP by virtue of the share held (for more information, see the paragraph "Commitments, guarantees and pledges - TAP" below).
The other commitments (6 million euro; 25 million euro as at 31 December 2017) refer to minimum future payments relative to non-cancellable operating leases, all maturing within the next year.

38 The guarantee was released on 9 January 2019.

Commitments, guarantees and pledges - TAP

Commitments in associates (324 million euro) refer to the residual commitment of Snam S.p.A., as shareholder and in connection with the project finance for the development of the gas pipeline by virtue of the share held, of 20%, with regards to the company Trans Adriatic Pipeline AG (TAP). The commitment relates to the total project costs, including the financial expenses envisaged during the development of the work deriving from the loan agreement stipulated by TAP in December 2018. It is specified that, following the finalisation of the TAP Project Financing, the cost of the project will be financed for approximately 75% by the lenders. On the basis of the project financing concluded, Snam S.p.A.'s commitment toward TAP will progressively decline due to the disbursement to TAP of the financing by the lenders. During the construction and commissioning of the plant, the loan contract of the associate TAP will be, amongst others, accompanied by a first-demand guarantee (the "Debt Service Guarantee") up to a maximum pro-quota amount of Snam of 1,129 million euro. As at 31 December 2018, the value of the debt guaranteed by Snam is approximately 566 million euro. The guarantee will be released when certain requirements are met, as agreed with the lenders, including, in particular, the completion and commissioning of the plant. Once the project has been developed, during operation, a mechanism is instead envisaged in support of the repayment of the financial debt issued by shareholders (the "Debt Payment Undertaking"), which will activate where certain, specific conditions should arise. The project financing structure stipulated for TAP envisages some limits for shareholders typical of transactions of this type, including: (i) the restriction of the possibility of freely disposing of the shares in TAP according to certain timing; (ii) the establishment in pledge of the shares held by Snam in TAP in the favour of the lenders for the entire duration of the loan.

Risks

Risks related to third-party assets on deposit, equal to 2,609 million euro (1,879 million euro as at 31 December 2017) relate to approximately 8 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[39] of approximately 0.32 euro per standard cubic metre (0.24 euro per standard cubic metre as at 31 December 2017) to the quantities of gas deposited.
Risks concerning compensation and litigation (58 million euro) relate to possible (but not probable) claims for compensation arising from ongoing litigation, with a low probability that the pertinent economic risk will arise.

39 The value is calculated based on the CCI tariff, i.e. the wholesale price established every quarter by ARERA.

FINANCIAL RISKS 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 deriving 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 the 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 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" chapter of the Report on operations.

Interest rate risk

Interest rate 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. As at 31 December 2018, the Snam Group used external financial resources in the form of bonds and bilateral and syndicated loans with banks and other lenders, in the form of medium- to long-term loans and bank credit lines at interest rates indexed to benchmark market rates, in particular the Europe Interbank Offered Rate (Euribor), and at fixed rates.

The exposure to interest rate risk as at 31 December 2018 is about 22% of the total exposure of the Group (unchanged from 31 December 2017). As at 31 December 2018, Snam has six interest rate swaps (IRS) in place for a total amount of 1,650 million euro, referring to the hedge of the entire notional amount of three variable-rate bond loans for a total value of 1,000 million euro, maturing in 2020, 2022 and 2024 and two bilateral variable-rate loans for a total value of 650 million euro, maturing in 2021 and 2023. The IRS derivative contracts are used to convert floating rate loans to fixed rate loans.

Moreover, as at 31 December 2018, Snam has IRS Forward Starting derivatives in place of a notional amount totalling 750 million euro, 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 as at 31 December 2018 are shown below, assuming a hypothetical change in the interest rate basis points of +/-10% (bps) actually applied during the course of the year:

	31.12.2018			
	Profit for the period		Shareholders' equity	
(€ million)	**Interest +10 bps**	**Interest -10 bps**	**Interest +10 bps**	**Interest -10 bps**
Floating-rate loans				
Effect of interest rate change	(4)	4		
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 (*)			10	(10)
Effect on pre-tax profit	(4)	4	10	(10)
Tax effect	1	(1)	(2)	2
	(3)	3	8	(8)

(*) The change in interest rates has no effect on the income statement. Therefore, the change in the fair value of the derivative contracts following the decrease in the interest rate has an effect exclusively on shareholders' equity.

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.
As at 31 December 2018, Snam's foreign-currency items essentially refer to a 10 billion Yen bond maturing in 2019 and with an issue-date value of approximately 75 million euro. The bond has been fully converted into euros by a cross currency swap, with the same notional amount and maturity as the hedged component. This swap is considered to be a cash flow hedge derivative. Snam does not take out currency derivatives for speculative purposes.

The effects on shareholders' equity and net profit as at 31 December 2018 of a hypothetical change of +/-10% in euro/Japanese yen exchange rates actually applied over the course of the year is insignificant. The exchange rate change has no effect on the profit for the period since the effects of such a change are offset by the effects of the hedging derivative.
As regards Snam's investment in the associate IUK Interconnector, there is a euro/sterling exchange rate risk. Snam believes, however, that this risk should be considered limited, given the low historic volatility of the euro/sterling exchange rate, also considering the recent increase in volatility following the Brexit. With reference to Snam's investment in the associate TAP, there is a euro/CHF exchange rate risk on the equity cash call on the basis of the contractual commitments made by shareholders with the company, moreover the latter are limited in amount following the positive conclusion of the project financing. This risk is suitably hedged through the use of derivatives (e.g. 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 position 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 possible disputes is handled by the business units and the centralised Snam departments. Snam provides its business services to almost 200 operators in the gas sector, with 10 operators representing approximately 70% of the entire market (Eni, Edison and Enel 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 require guarantees in coverage of the commitments assumed. In specific cases, if the customer has a credit rating issued by major international organizations, the issue of these guarantees may 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.
In particular, the current balancing discipline requires that based on financial merit criteria, Snam shall make its purchases and sales on the GME balancing platform to ensure availability of the resources required for secure and efficient movement of the gas from the entry points to the withdrawal points and therefore constant balancing of the network. The aforementioned discipline also requires additional usage by Snam of the storage resources of the users to cover system imbalances and ensure the relative financial settlement.
Snam's maximum exposure to credit risk as at 31 December 2018 is represented by the book value of the financial assets recorded in the consolidated financial statements of the Snam Group as at 31 December 2018.
As shown in Note no. 9 "Trade and other receivables", overdue and non-impaired receivables as at 31 December 2018 amounted to 119 million euro (113 million euro as at 31 December 2017) and related chiefly to the storage segment (89 million euro), mainly in relation to VAT invoiced to users for the use of strategic gas wrongfully withdrawn in 2010 and 2011.
Approximately 55% of trade receivables (62% as at 31 December 2017) were with extremely reliable clients, including Eni, which represents 22% of total trade receivables (23% as at 31 December 2017).
Snam may, however, incur liabilities and/or losses from the failure of its clients to comply with payment obligations, partly because of the current economic and financial situation, which makes the collection of receivables more difficult and more important. Snam's maximum exposure to credit risk as at 31 December 2018 is the book value of the financial assets on its balance sheet.

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.
Under the financial plan, Snam's risk management system 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.
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 EIB and bonds).
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.

As at 31 December 2018, Snam had unused long-term committed credit lines totalling around €3.2 billion. In addition, as at the same date, Snam has a Euro Medium Term Notes (EMTN) programme in place for a maximum total nominal value of 10 billion, used for approximately 8.0 billion euro[40] and a Euro Commercial Paper Programme (ECP) for a maximum total nominal value of 1 billion euro, used for 225 million euro as at 31 December 2018.
Cash and cash equivalents related mainly to a short-term liquidity investment with a maturity of less than three months, with a high credit rating and demand deposit with a bank.
Although the Snam Group has relationships with diversified counterparties with high credit standing, based on a policy of continuous monitoring monitoring of credit risk, the default of an active counterparty or the difficulty of liquidating assets in the market could have negative effects on the financial situation of the Snam Group.

Rating risk

With reference to the rating risk, Snam's long-term rating is: (i) Baa2 with stable outlook, confirmed on 29 October 2018 by Moody's Investors Services Ltd ("Moody's"); (ii) BBB+ with negative outlook, confirmed on 27 November 2018 by Standard & Poor's Rating Services ("S&P"); (iii) BBB+ with stable outlook, confirmed on 12 December 2018 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 under the scope of the Snam Commercial Paper programme, is P-2 for Moody's, A-2 for S&P and F-2 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.

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.
As at 31 December 2018, Snam had unsecured bilateral and syndicated loan agreements in place with banks and other financial institutions. Some of these contracts include, inter alia, covenants typically imposed in international market practice, some of which subject to specific threshold values, 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; and (iii) limitations on certain extraordinary transactions that the Company and its subsidiaries may carry out; (iv) limits to the debt of subsidiaries.
The bonds issued by Snam as at 31 December 2018 provide for compliance with covenants that reflect international market practices regarding, inter alia, negative pledge and pari passu clauses.
Failure to comply with these covenants, and the occurrence of other events, such as cross-default events could 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 rating is lower than BBB (Standard & Poor's/Fitch Ratings Limited) or lower than Baa2 (Moody's) with 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. These commitments do not carry any comments that provide for compliance with ratios of an economic and/or financial nature.

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

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				
(€ million)	**31.12.2017**	**31.12.2018**	**Portion within 12 months**	**Portion beyond 12 months**	**2020**	**2021**	**2022**	**2023**	**Beyond**
Bank loans	3,921	**4,747**	**2,493**	**2,254**	200	582	92	302	1,078
Bonds (*)	8,632	**8,422**	**819**	**7,603**	1,376	267	1,309	1,507	3,144
Euro Commercial Paper - ECP		**225**	**225**						
Other lenders	16								
Interest on loans (*)	916	**754**	**159**	**595**	131	114	100	71	179
Financial liabilities	**13,485**	**14,148**	**3,696**	**10,452**	**1,707**	**963**	**1,501**	**1,880**	**4,401**
Forward start derivative instruments (**)	9	**47**		**47**	14	33			
Derivative liabilities	**9**	**47**		**47**	**14**	**33**			
	13,494	**14,195**	**3,696**	**10,499**	**1,721**	**996**	**1,501**	**1,880**	**4,401**

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

For information on the payment terms for trade and other payables, please see Note no. 18 "Trade and other payables".

Other information on financial instruments

With reference to the categories envisaged by IFRS 9 "Financial instruments", it is specified that, with the exception of the measurement of derivatives and minority shares, financial assets and liabilities, according to the instrument's characteristics and the business model adopted for their management, fall entirely within the category of the financial instruments measured according to the amortised cost method.

The book value of financial instruments and the relative effects on results and the balance sheet can be seen below.

(€ million)	Book value		Income/Expense recognised in the income statement		Other components of comprehensive income (a)	
	Balance at 31.12.2017	Balance at 31.12.2018	Balance at 31.12.2017	Balance at 31.12.2018	Balance at 31.12.2017	Balance at 31.12.2018
Financial instruments measured at amortised cost						
- Trade and other receivables (b)	1,661	**1,341**	(7)	**5**		
- Financial receivables (c)	373	**11**	6	**8**		
- Trade and other payables (b)	1,740	**1,814**				
- Financial payables (c)	12,619	**13,420**	(279)	**(237)**		
Financial instruments measured at fair value						
Net assets (liabilities) for hedging derivatives (c)	(12)	**(29)**	(1)	**(2)**	(6)	**(20)**
Financial assets measured at FVOCI						
Minority equity investments	44	**40**		**2**		**1**

(a) Net of tax effect.
(b) The effects on the income statement are recorded under “Purchases, services and other costs” and “Financial income/(expense)”.
(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 foregoing, the classification of the assets and liabilities measured at fair value in the statement of financial position, according to the fair value hierarchy, regarded: (i) derivatives as at 31 December 2018, classified at level 2 and entered under Note no. 12 “Other current and non-current assets” (4 million euro) and Note no. 19 “Other current and non-current liabilities” (33 million euro); (ii) the minority share in Adriatic LNG, measured at FVTOCI, classified as level 3 and explained at Note no. 16 “Other equity investments” (40 million euro).

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. - Judiciary investigations into gas metering

In 2006, the public prosecutor at the Court of Milan opened a criminal case on the issue of gas metering and the legitimacy and reliability of "Venturi meters". This case involved several companies in the gas sector, including Snam Rete Gas. Some managers and department heads were placed under further investigation with regard to various matters. On 24 January 2012, the preliminary hearing judge ruled that there was insufficient evidence to proceed to a trial of any of those under investigation and simultaneously ordered the release from seizure of the meters. The assistant public prosecutor filed for an appeal before the Court of Cassation at the Court of Milan. The Court of Cassation partially annulled the contested ruling, rejecting the rest of the public prosecutor's appeal. Following the adjournment by the Court of Cassation, on 12 December 2013, a new preliminary hearing was held upon completion of which, the preliminary hearing judge ordered committal to trial only for 2006 and 2007. The hearing began on 18 April 2014. At the hearing of 27 March 2015, the Court of Milan acquitted the defendants for the absolved charges against the defendants due to lack of evidence and because it did not constitute an offence. The public prosecutor has appealed.

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

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 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. The Genoa Court of Appeal set the hearing for 17 April 2019.

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

On 06 March 2015, in the district of Mutignano, a landslide struck the San Benedetto Del Tronto-Chieti segment of the Ravenna-Chieti methane pipeline for about ten metres, causing it to break and consequently leak out gas, resulting in a subsequent fire due to the simultaneous falling of an electricity pylon.

The Public Prosecution of the Court of Teramo immediately opened an investigation into the matter, hypothesising possible culpable conduct in connection with the forest fire. Upon completion, the Prosecution asked that the technicians and technical managers of Snam Rete Gas be summonsed to court. This summons was ordered on 03 October 2018 by the preliminary judge. At the first hearing for discussion held on 10 January 2019, the President of the Panel asked the defence counsel and the Public Prosecutor to agree to transfer the proceedings to a single judge competent on the matter. The parties therefore submitted to the decision of the Court, which, after a brief chamber discussion, transferred the proceedings to a competent single judge, who scheduled the hearing for 08 May 2019.

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

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. Snam Rete Gas is actively working with the competent authorities, including through appointment of its own technical consultants.

TEP Energy Solution - Formal Report of Findings

On 14 December 2018, TEP Energy Solution S.r.l. was served a Formal Report of Findings limited to the tax period 01 January 2013-31 December 2013. The Formal Report of Findings is the result of a tax audit launched with regards to the company on 27 September 2018, in order to control compliance with the provisions of legislation governing income tax, VAT and other tax. After completion of the tax audit, on 21 January 2019, TEP Energy Solution was served the Formal Report of Findings relative to the tax period 01 January 2014 and 31 December 2014 and TEP REALE ESTATE, the Formal Report of Findings relative to the years 2013 and 2014. It is specified that on 27 December 2018, the Guardia di Finanza sent information of the offence to the Public Prosecution of Rome.

IES Biogas - Criminal sentencing decree

On 02 November 2018, a criminal sentencing decree was notified, issued by the Court of Venice against a Manager of IES Biogas, following the injury at work that took place on 29 September 2016, to a company employee, during maintenance of a silos shaker. On 16 November 2018, a deed was filed opposing the criminal sentencing decree, whereby it was asked that the proceedings be settled in the conditional abridged judgement manner. We are currently awaiting scheduling of 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

By resolution VIS 97/11, notified on 15 November 2011, ARERA launched proceedings to assess the existence of violations on the metering of natural gas, in connection with alleged anomalies in the metering of gas with reference to 45 plants; by resolution 431/2012/S/Gas, the proceedings were joined to others, concerning the same events and charges brought against the Company, launched with regards to the distribution company concerned.
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 01 March 2018 during which the defence brief was submitted. Upon conclusion of the proceedings, although upholding part of Company's arguments, which were significant insofar as determining the amount of the fine, by resolution 206/2018/S/gas of 05 April 2018, the Authority sentenced Snam Rete Gas to pay a pecuniary fine of 880 thousand euro. 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. An allocation has been made to the provision for risks and charges in relation to the proceedings in question.

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 01 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 euro 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 expenses from uncollected receivables totalling approximately 38 million euro in relation to certain of the items in the investigation.
Both parties submitted a partial appeal against said ruling. The appeals were discussed before the Council of State at the hearing on 08 November 2018. We are awaiting the ruling. The Company has made an allocation to the provision for impairment losses on receivables 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 euro 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 01 June 2015, concerning: "Adoption of measures on the odorisation of gas for domestic and similar uses of end customers directly connected to the natural gas transmission network"

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 transmission companies to odorise gas for end users connected directly to the transmission 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 had ordered that the transmission companies should 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 to 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 for suspension has been accepted by the Council of State. During discussion of the merits, after the hearing held on 16 January 2019, we are awaiting the decision of the Regional Administrative Court of Milan. Please note that by Ministerial Decree of 18 May 2018, the Ministry for Economic Development assigned the task of guaranteeing safe use of gas to end customers directly connected to the natural gas transmission network, where they should fully or even only partly make domestic or similar use of gas, even if combined with technological uses.

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 transmission 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. By subsequent Determination, DSAI/69/2017/gas, the Authority expressed the decision to initiate punitive proceedings since, following the clarifications provided by Snam Rete Gas, critical issues remained with regard to the procedures used to record the outcomes of monitoring activities and the verifiability of the information and data recorded. During the investigation process, the Company provided the documents and information requested by the Authority through the Determination above. By resolution 146/2018/E/Gas, the Authority arranged for an inspection audit, subsequently carried out on 25-26 September 2018, during which the information contained in the documentation previously sent in by the Company, was verified.

Tax cases

Snam Rete Gas S.p.A. - ICI/IMU

On 18 July 2017, Tarsia Council served Snam Rete Gas S.p.A. notices of assessment of ICI/IMU with reference to the related compression plan for the years 2011, 2012 and 2013. Snam settled the dispute with the Council, paying the amounts stated in the notices of assessment for an adjustment of approximately 0.7 million euro.

Snam Rete Gas S.p.A. - Excise duty and VAT

The Milan Tax Unit of the Financial Police investigated the annual natural gas consumption declarations and the technical reports for 2003 to 2007. The results were transmitted to the Milan Customs Office for action.

On 15 September 2017, the Agenzia delle Dogane e dei Monopoli (Customs Office) served Snam Rete Gas S.p.A. with a formal report and assessment of administrative offences, with an order to pay excise taxes, VAT and administrative fines relative to 2003 (hereinafter the "2003 Formal Report of Findings").

On 10 May 2018 the following notices were issued to Snam Rete Gas: (i) a partial annulment of the 2003 Formal Report of Findings, whereby the charges were redetermined following the briefs submitted by the company; (ii) a formal report of findings and assessment of administrative offences with the recovery of excise duty, VAT and administrative fines relative to 2004.

On 24 December 2018, through a voluntary tax correction, the company settled the excise duty for the years running from 2003 to 2007, paying the amount due of approximately 1.8 million euro.

For completeness of information, we note that the investigation conducted by the Financial Police resulted in the initiation of penal proceedings for the failure to report or pay excise taxes on energy products. The accused were acquitted in the first instance, due to lack of evidence and because the fact is not a crime. The public prosecutor has appealed.

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 assessments total approximately 560 thousand euro (including, for 2015, tax, sanctions and interest). Stogit S.p.A. has submitted an appeal to the Provincial Tax Commission. The Company has made an allocation to the provision for risks and charges.

GNL Italia S.p.A. - Local tax

The Council of Porto Venere served notices of assessment for TARSU/TARI relative to the years from 2012 to 2017, for a total amount of approximately 444 thousand euro and for IMU for 2013 for approximately 134 thousand euro.
GNL Italia S.p.A. has submitted an appeal to the Tax Commission. The Company has made an allocation to the provision for risks and charges.

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 euro over a minimum of 36 months.
The Authority subsequently opened an exploratory investigation into balancing service provision methods for the period 01 December 2011 - 23 October 2012[42].
The investigation was closed by Resolution 144/2013/E/gas of 05 April 2013. On that 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 01 December 2011-23 October 2012; and (ii) opened six proceedings aimed at establishing whether there have been violations regarding the natural gas balancing service.
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.
During the above-mentioned investigation period, Snam Rete Gas, having terminated the transmission 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 transmission items.

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.

Specifically, the competent judicial authorities issued eleven provisional executive orders, of which six related to receivables arising from the balancing service and five to receivables arising from the transmission 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. All five Users were declared bankrupt and 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 transmission services. The User, moreover, 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 transmission 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.
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 offended parties, that the preliminary hearing had been scheduled for 19 December 2018, before the Court of Milan. At this hearing, the Judge admitted the filing of appearance of SRG as civil party and postponed until 11 April 2019.
This criminal proceeding 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. Executive actions were then launched.
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.

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 opposition proceedings brought were declared to have been annulled, as a result of which the counterclaims were withdrawn and the injunctions were made absolute.

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.

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

01 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 Italian Legislative Decree no. 30 of 13 March 2013, as amended and supplemented, implementing Directive 2009/29/EC. The reduction of CO2 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%.
In 2018, the free allocation for the Snam Group was equal to around 200,000 shares, with a reduction of approximately 21 % compared with 2017. The reduction is due to the progressively reducing assignment of the free quotas by the competent national authority, envisaged for the third regulatory period by Art. 10-bis of Directive 2009/29/EC.
In 2018, carbon dioxide emissions of the Snam Group facilities covered by the ETS were overall greater than the emission permits allocated. Against approximately 0.671 million tonnes of carbon dioxide emitted into the atmosphere, around 0.200 million quotas were allocated, resulting in a 0.471 million tonne deficit. This deficit was partly offset by the quotas already present in the Snam Rete Gas plant registers, accumulated thanks to the surplus of previous years, and with the further purchase of approximately 0.197 million tonnes on the European quotas market.

Other commitments and risks

The other unevaluated commitments and risks are:

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

As at 31 December 2018, the residual commitments resulting from said agreements concern hedging mechanisms aimed at keeping within Eni the risks and/or benefits that may derive from: (i) an eventual valuation of the gas owned by Stogit at the time of the transfer of the shares which differs from the valuation currently recognised by Autorità di Regolazione per Energia Reti e Ambiente (ARERA) in the event of an even partial transfer thereof when given quantities may no longer be instrumental to the regulated concessions and thus become available for sale; (ii) transfer of storage capacity that may eventually become freely available on a negotiated basis and no longer a regulated basis, or else from a transfer of concessions including those pertaining to Stogit at the time of the transfer of the shares which may eventually be dedicated predominantly to storage business no longer subject to regulation.

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 2018, 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 purchase contract of TEP Energy Solutions S.r.l.

The price determined for the acquisition of TEP Energy Solutions S.r.l. is subject to adjustment mechanisms based on contractual commitments made, which were also intended to apply after the date of execution.
As at 31 December 2018, the commitment resulting from the agreement regards hedging mechanisms based on the economic results achieved by TEP in the financial years 2018-2020, to be regulated contractually for cash, for an amount that cannot in any case exceed 2.5 million euro.

26) REVENUE

The breakdown of revenue for the period, which totalled 2,586 million euro (2,533 million euro in 2017), is shown in the following table.

(€ million)	2017	2018
Core business revenue	2,493	**2,555**
Other revenue and income	40	**31**
	2,533	**2,586**

The Group generates most of its revenue in Italy. An analysis of revenue by business segment can be found in Note no. 33 - "Information by business segment".
Receivables from related parties are described in Note no. 34 "Related-party transactions".

Core business revenue

Core business revenue, which totalled 2,555 million euro (2,493 million euro in 2017), is analysed in the following table:

(€ million)	2017	2018
Natural gas transportation	1,949	**2,010**
Regasification of Liquefied Natural Gas (LNG)	18	**17**
Natural gas storage	442	**442**
Corporate and other services	84	**86**
	2,493	**2,555**

Natural gas transportation

Core business revenue (2,010 million euro) relates mainly to fees for transportation services (2,007 million euro), and mainly concerns Eni S.p.A. (1,170 million euro) and Enel Trade S.p.A. (317 million euro) Transmission revenue includes the chargeback to users of the costs of connecting the Company's network to that of other operators (49 million euro)[45]. Snam provided its transportation service to 136 companies in 2018.

Regasification of Liquefied Natural Gas (LNG)

Core business revenue (17 million euro) refers mainly to the revenue coverage factor recognised by the Authority pursuant to Resolution 653/2017/R/gas[46]. During the course of 2018, Snam provided regasification services to 2 companies.

Natural gas storage

Core business revenue (442 million euro) relates to fees for modulation storage (352 million euro) and strategic storage (90 million euro) services. During the course of 2018 Snam provided its natural gas storage service to 91 companies.

The Group's core business revenue is reported net of the tariff components, mainly relating to the transmission business segment, additional to the tariff, and tariff surcharges applied to cover expenses of a general nature of the gas system (1,162 million euro, 1,153 million euro in 2017). The amounts referring to said components are reversed by Snam to the Energy and Environmental Services Fund (CSEA).

Other revenue and income

Other revenue and income, which amounted to 31 million euro (40 million euro in 2017) relates mainly to the incentives granted to Snam Rete Gas S.p.A. for balancing services, based on technical and economic performance pursuant to Resolution 554/2016 / R / Gas (15 million euro).

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 Art. 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.

27) OPERATING COSTS

The breakdown of *operating costs* for the period, which totalled 512 million euro (526 million euro in 2017), is shown in the following table:

(€ million)	2017	2018
Purchases, services and other costs	355	**311**
Personnel cost	171	**201**
	526	**512**

Costs from related parties are described in Note no. 34 "Related-party transactions".

Purchases, services and other costs

Purchases, services and other costs, which amounted to 311 million euro (355 million euro in 2017), can be broken down as follows:

(€ million)	2017	2018
Purchase costs for raw materials, consumables, supplies and goods	115	**145**
Costs for services	317	**290**
Costs for the use of third-party assets	21	**21**
Changes in raw materials, consumables, supplies and goods	(32)	**(19)**
Net accrual to (utilisation of) provisions for risks and charges	18	**6**
Net accrual to (utilisation of) the provision for impairment losses on receivables	8	**(5)**
Other expenses	30	**37**
	477	**475**
Less:		
Increase on internal work	**(122)**	**(164)**
- of which purchase costs for raw materials, consumables, supplies and goods	(49)	**(69)**
- of which costs for services	(73)	**(95)**
	355	**311**

Costs for services, which amounted to 195 million euro (244 million euro in 2017), related to:

(€ million)	2017	2018
IT (Information Technology) services	71	**50**
Purchase of transportation capacity (interconnection)	61	**49**
Technical, legal, administrative and professional services	38	**42**
Ordinary maintenance	31	**32**
Personnel-related services	19	**22**
Construction, planning and coordination of work	28	**27**
Telecommunications services	16	**13**
Provision of utilities	15	**16**
Insurance	8	**7**
Other services	30	**32**
	317	**290**
Less:		
Increase on internal work	**(73)**	**(95)**
	244	**195**

Costs for the use of third-party assets, which amounted to 21 million euro (same amount in 2017), can be broken down as follows:

(€ million)	2017	2018
Leases and rentals	17	**17**
Fees, patents and licences	4	**4**
	21	**21**

Leasings and rentals (17 million euro) mainly relate to charges for operating leases of properties for use as offices and long-term rental vehicles.
The positive change in raw materials, ancillary materials, consumables, supplies and goods (19 million euro) is mainly due to the natural gas purchases, mainly for use in transportation activities.
Net provisions for risks and charges, amounting to 6 million euro, net of uses, mainly refer to: (i) charges that the Company has estimated it will incur for litigation in progress in relation to the transmission business segment (+6 million euro); (ii) the provision made for claims in relation to the captive company Gasrule (+5 million euro); (iii) the release of the legal and tax provisions for surplus (-3 million euro).
For more details about the change in provisions for risks and charges, please see Note no. 20 “Provisions for risks and charges”.
More information on changes of the provision for impairment losses can be found in Note no. 9 “Trade and other receivables”.

Other expenses, which amounted to 37 million euro (30 million euro in 2017), can be broken down as follows:

(€ million)	2017	2018
Direct and indirect taxes	14	**15**
Capital losses on eliminations of property, plant and equipment and intangibile assets	5	**12**
Emissions rights (CO_2)		**5**
Other expenses	11	**5**
	30	**37**

Expenses relating to CO_2 emissions rights (5 million euro) relate to the net position recorded in the Group, of approximately 0.197 million tonnes, to be acquired, through certificates, on the European quotas market.

Personnel cost

Personnel cost, which amounted to 201 million euro (171 million euro in 2017), can be broken down as follows:

(€ million)	2017	2018
Wages and salaries	149	**163**
Social security contributions (pensions and healthcare assistance)	42	**46**
Employee benefits	17	**17**
Other expenses	22	**32**
	230	**258**
Less:		
Increase on internal work	**(59)**	**(57)**
	171	**201**

Other costs (32 million euro) mainly comprise costs for voluntary redundancy (14 million euro) and costs for defined-contribution plans (11 million euro).
A description of employee benefits can be found in Note no. 21 "Provisions for employee benefits".

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	31.12.2017	31.12.2018
Executives	94	**104**
Middle Managers	432	**464**
Office workers	1,632	**1,650**
Manual workers	722	**731**
	2,880	**2,949**

The average number of employees is calculated on the basis of the monthly number of employees for each category.
The number of employees in service as at 31 December 2018 was 3,016 (2,919 employees as at 31 December 2017), an increase of 97 resources (+3.3%) over 31 December 2017. The increase is mainly due to the inclusion of new companies into the consolidation scope.

Incentive plan for executives with Snam shares

On 11 April 2017, the Shareholders' Meeting approved the 2017-2019 long-term stock incentive plan, conferring to the Board of Directors, every necessary power for the implementation of the Plan.
The plan, intended for the Chief Executive Officer and managers of Snam, identified as those with positions of major impact on the business results or of strategic relevance in terms of achieving Snam's multi-year objectives, envisages three annual assignment cycles of three-year objectives (the "Rolling Plan") for the years 2017, 2018 and 2019. At the end of the three-year performance period, if the Plan conditions are met, the beneficiary will be entitled to receive Company shares free of charge.
The maximum number of shares serving the plan is 3,500,000 shares for each fiscal year of the Plan. The Plan will be concluded in 2022, upon expiration of the Vesting Period for the last attribution made in 2019.
Under this Plan, a total of 3,692,810 shares were assigned, of which 1,368,397 shares against the 2017 assignment and 2,324,413 shares against the 2018 assignment. The unit fair value of the share, determined by the value of the Snam security as at the grant date, is 3.8548 and 3.5463 euro per share, respectively for the 2017 and 2018 assignments. The cost relating to the long-term incentive plan, recorded as a component of the cost of labour, comes to 3 million euro (1 million euro in 2017), with an equivalent entry in the shareholders' equity reserves.
In consideration of the non-market conditions with which the obtaining of the benefit is connected, the cost reflects the adjustment, throughout the vesting period, of the number of shares expected to be effectively assigned.
For more information on the Plan characteristics, see the Report on operations, chapter "Comments on the economic and financial results 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[47] ("key management personnel"), in office during the year amounted (including contributions and ancillary charges) to 9 million euro (7 million euro in 2017) and breaks down as follows:

(€ million)	2017	2018
Wages and salaries	6	**7**
Other long-term benefits	1	**2**
	7	**9**

47 Those persons who have the power and the responsibility, both directly and indirectly, for the planning, direction and supervision of Snam. Managers with strategic responsibilities in Snam, other than directors and auditors, have been identified as 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 Organisation.

Remuneration due to directors and statutory auditors

The remuneration due to directors amounted to 4.2 million euro and 3.6 million euro respectively for 2018 and 2017. The remuneration due to statutory auditors amounted to 0.2 million euro (the same as in 2017). 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.

28) AMORTISATION, DEPRECIATION AND IMPAIRMENT

Amortisation, depreciation and impairment, which amounted to 690 million euro (659 million euro in 2017), can be broken down as follows:

(€ million)	**2017**	**2018**
Total amortisation and depreciation	**646**	**682**
Property, plant and equipment	592	**622**
- Intangible assets	54	**60**
Net impairment losses	**13**	**8**
- Impairment of property, plant and equipment	13	**8**
	659	**690**

For more details about amortisation, depreciation and impairment losses relating to property, plant and equipment and intangible assets, please see Note no. 13 “Property, plant and equipment”, and Note no. 14 “Intangible assets”.
An analysis of amortisation, depreciation and impairment by business segment can be found in Note no. 33 “Information by business segment”.

29) FINANCIAL EXPENSE (INCOME)

Financial expense (income), which amounted to 242 million euro (283 million euro in 2017), can be broken down as follows:

(€ million)	**2017**	**2018**
Financial expense (income)	278	**234**
Financial expenses	279	**237**
Financial income	(1)	**(3)**
Other financial expense (income)	4	**6**
Other financial expense	12	**15**
Other financial income	(8)	**(9)**
Losses (Gains) on hedging derivatives – ineffective portion	1	**2**
Losses on derivatives	1	**2**
	283	**242**

(€ million)	2017	2018
Financial expense (income)	**278**	**234**
Expense on financial debt:	**292**	**249**
- Interest and other expenses on bond loans	275	**232**
- Fees on loans and bank credit lines	11	**7**
- Interest expense on credit lines and loans due to banks and other lenders	6	**10**
Financial expense capitalised	**(13)**	**(12)**
Income from financial receivables:	**(1)**	**(3)**
- Interest and other income on short-term loans	(1)	**(3)**
Other financial expense (income):	**4**	**6**
- Accretion discount (*)	11	**11**
- Other expenses	1	**4**
- Interest income on long-term financial receivables	(6)	**(8)**
- Other income	(2)	**(1)**
Losses (Gains) on hedging derivatives – ineffective portion	1	**2**
	283	**242**

(*) 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 no. 20 "Provisions for risks and charges", and Note no. 21 "Provisions for employee benefits".

Expense on financial debt (249 million euro) related to: (i) interest and other expense on bond loans (232 million euro), referring essentially to expenses from the liability management operation (47 million euro) which led to the repurchase on the market of bonds with a total nominal value of 538 million euro and an average coupon of approximately 2.6% and residual duration of approximately 3.7 years and the interest on 18 bond loans (178 million euro); (ii) the portion attributable to the period of upfront fees on revolving credit lines (4 million euro) and credit line non-usage fees (3 million euro); and (iii) interest payable to banks on revolving credit lines, uncommitted credit lines and maturing loans totalling 10 million euro.

Financial expense capitalised (12 million euro) related to the portion of financial expense capitalised pursuant to investment activities.

Other net financial expense (6 million euro) mainly relate to expenses connected to the accretion discount on the provisions for site dismantling and restoration in the storage and transport business segments (+11 million euro overall), partially offset by the revenue from the Shareholders' Loan granted to TAP (-8 million euro).

30) INCOME AND EXPENSE FROM EQUITY INVESTMENTS

Income and expense from equity investments, which amounted to 159 million euro (161 million euro in 2017), can be broken down as follows:

(€ million)	2017	2018
Equity method valuation effect		
Capital gains from valuation using the equity method	175	**165**
Capital loss from valuation using the equity method	(14)	**(8)**
Dividends		**2**
	161	**159**

Details of capital gains and capital losses from the valuation of equity investments using the equity method can be found in Note no. 15 "Investments valued using the equity method". Dividends (2 million euro) relate to the minority share held in the company Terminale GNL Adriatico S.r.l., measured at fair value with equivalent entry under shareholders' equity "Fair Value Through Other Comprehensive Income - FVTOCI".

31) INCOME TAX

Income tax for the year, which amounted to 341 million euro (329 million euro in 2017), can be broken down as follows:

	2017			2018		
(€ million)	**IRES**	**IRAP**	**Total**	**IRES**	**IRAP**	**Total**
Current taxes	**301**	**59**	**360**	**313**	**60**	**373**
Current taxes for the year	300	59	359	**314**	**60**	**374**
Adjustments for current taxes relating to previous years	1		1	**(1)**		**(1)**
Deferred and prepaid taxes	**(31)**		**(31)**	**(32)**		**(32)**
Deferred taxes	(16)		(16)	**(16)**		**(16)**
Prepaid taxes	(15)		(15)	**(16)**		**(16)**
	270	**59**	**329**	**281**	**60**	**341**

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:

	2017		2018	
(€ million)	**Tax rate**	**Balance**	**Tax rate**	**Balance**
IRES				
Pre-tax profit		1,226		**1,301**
IRES due, calculated based on the theoretical tax rate	**24.0%**	**294**	**24.0%**	**312**
Changes to the theoretical rate:				
- Income from equity investments	(2.9%)	(35)	**(2.9%)**	**(38)**
- Dividend tax	0.7%	9	**1.1%**	**14**
- Other permanent differences	0.1%	2	**(0.5%)**	**(7)**
IRES due for the year recorded on the income statement	**22.0%**	**270**	**21.6%**	**281**

	2017		2018	
(€ million)	**Tax rate**	**Balance**	**Tax rate**	**Balance**
IRAP				
Difference between value and production costs		1,376		**1,399**
IRAP due, calculated based on the theoretical tax rate	**3.9%**	**54**	**3.9%**	**55**
Changes to the theoretical rate				
Regional IRAP rates delta	0.3%	4	**0.2%**	**3**
Other permanent differences	0.1%	1	**0.1%**	**2**
IRAP due for the year recorded in the income statement	**4.3%**	**59**	**4.3%**	**60**

An analysis of deferred and prepaid taxes based on the nature of the significant temporary differences that generated them can be found in Note no. 22 “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:

	2017			2018		
(€ million)	**Pre-tax value**	**Tax effect**	**Post-tax value**	**Pre-tax value**	**Tax effect**	**Post-tax value**
Remeasurement of defined-benefit plans for employees	(1)		(1)			
Share of "other components of comprehensive income" of investments accounted for using the equity method	(2)		(2)	**(1)**		**(1)**
Change in fair value of cash flow hedge derivatives	(8)	2	(6)	**(26)**	**6**	**(20)**
Other components of comprehensive income	**(11)**	**2**	**(9)**	**(27)**	**6**	**(21)**
Deferred/prepaid taxes		**2**			**6**	

32) EARNINGS PER SHARE

Basic earnings per share, at 0.286 euro per share (0.262 euro per share in 2017), are calculated by dividing the net profit attributable to Snam (960 million euro; 897 million euro in 2017) by the weighted average number of Snam shares outstanding during the year, excluding treasury shares (3,357,806,084 shares; 3,422,406,716 shares in 2017).

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 2018, the diluted earnings per share takes into account the potential effects from assignment of treasury shares in portfolio against the issuing of the bond convertible into ordinary Snam shares and those from the long-term share-based incentive plans, with reference to 2017 and 2018 assignments.

The weighted average number of outstanding shares used to calculate diluted earnings per share is 3,441,622,458 and 3,482,443,503 for 2018 and 2017, 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:

	2017	2018
Weighted average number of outstanding shares used to calculate basic earnings	**3,422,406,716**	**3,357,806,084**
Number of potential shares for the long-term incentive plans	326,331	**1,262,145**
Number of potential shares against the issuing of the convertible bond	59,710,455	**82,554,228**
Weighted average number of outstanding shares used to calculate diluted earnings	**3,482,443,503**	**3,441,622,458**
Group net profit (€ million) (a)	**897**	**960**
Dilution effect of the convertible bond	3	**3**
Diluted Group net profit for diluted earnings (€ million) (a)	**900**	**963**
Basic earnings per share (€ per share) (a)	0.262	**0.286**
Diluted earnings per share (€ per share) (a)	0.258	**0.280**

(a) Entirely held by Snam shareholders.

33) 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 for 2018 used 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 transmission ("Transmission"), LNG regasification ("Regasification") and natural gas storage ("Storage"). They relate to activities carried out predominantly by Snam Rete Gas and ITG, GNL Italia and Stogit respectively.

The information by business segment as at 31 December 2018 and 31 December 2017 is listed below.

(€ million)	Corporate and other activities	Transmission and dispatching	Storage	Regasification	Consolidation adjustments and eliminations	Total
FY 2017						
Net core business revenue (a)	232	2,000	596	20		2,848
less: intra-segment revenues	*(148)*	*(51)*	*(154)*	*(2)*		*(355)*
Revenue from third parties	84	1,949	442	18		2,493
Other revenue and income	1	34	5			40
Net (accruals to)/utilisation of provisions for risks and charges	(7)	(11)				(18)
Amortisation, depreciation and impairment	(7)	(550)	(97)	(5)		(659)
EBIT	**(30)**	**1,037**	**339**	**2**		**1,348**
Equity investments measured using the equity method	161					161
Total assets	3,153	14,481	4,078	104		21,816
- of which Equity investments measured using the equity method	*1,547*					*1,547*
Total liabilities	13,138	10,250	2,845	45	(10,650)	15,628
Investments in property, plant and equipment and intangible assets	11	917	101	5		1,034
FY 2018						
Net core business revenue (a)	**267**	**2,087**	**597**	**21**		**2,972**
less: intra-segment revenues	***(181)***	***(77)***	***(155)***	***(4)***		***(417)***
Revenue from third parties	**86**	**2,010**	**442**	**17**		**2,555**
Other revenue and income	**1**	**26**	**3**	**1**		**31**
Net (accruals to)/utilisation of provisions for risks and charges	**(3)**	**(3)**				**(6)**
Amortisation, depreciation and impairment	**(10)**	**(575)**	**(100)**	**(5)**		**(690)**
EBIT	**(17)**	**1,064**	**335**	**2**		**1,384**
Equity investments measured using the equity method	**157**					**157**
Total assets	**4,163**	**14,570**	**4,012**	**107**		**22,852**
- of which Equity investments measured 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**

(a) Balances before elimination of inter-segment revenue.

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

33) RELATIONSHIPS WITH RELATED PARTIES

Considering the de facto control of CDP S.p.A. over Snam S.p.A., pursuant to the international accounting standard IFRS 10 - Consolidated Financial Statements, based on the current Group ownership structure the related parties of Snam are represented by Snam's associates and joint ventures as well as by the parent company CDP S.p.A. and its subsidiaries and joint ventures, including joint ventures held with the Ministry of Economy and Finance (MEF). Members of the Board of Directors, Statutory Auditors and managers with strategic responsibilities, and their relatives, are also regarded as related parties of Snam Group and CDP.
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 applicable 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 auditors declare their interests affecting the company and the group every six months, and/or when changes in said interests occur; they also inform the CEO (or the Chairman, in the case of the CEO), who in turns 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 management and coordination. 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 stipulation by Snam Rete Gas S.p.A. and Eni S.p.A. of the natural gas transmission contract for Thermal Year 2017-2018. On 02 February 2018, 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 stipulation by Snam Rete Gas S.p.A. and Enel Global Trading S.p.A. of the natural gas transmission contract for Thermal Year 2017-2018. On 03 October 2018, 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 contracts are defined in accordance with the procedures provided for 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 constitute ordinary transactions concluded at arm's length or standard conditions insofar as, in accordance with paragraph 2 of the Guidelines (published on the website www.snam.it): (i) they are part of the core business and related financial operations; (ii) the conditions applied are based on regulated tariffs.

The amounts involved in commercial, financial and other transactions with the above-mentioned related parties are shown below for the current and prior financial years. The nature of the most significant transactions is also stated.

Commercial and other transactions

Commercial and other transactions can be broken down as follows:

	31.12.2017					2017				
(€ million)	Receivables	Other assets	Payables	Other liabilities	Guarantees and commitments	Costs (a) Goods	Costs (a) Services	Costs (a) Other	Revenue (b) Services	Revenue (b) Other
Companies under joint control and associates										
- TAG GmbH	5		5	1		17			4	17
- Terēga S.A.S. (c)	1									
- Trans Adriatic Pipeline AG (TAP)	5			13	419				6	
	11		**5**	**14**	**419**	**17**			**10**	**17**
Snam Foundation								**1**		
Parent company										
- Cassa depositi e prestiti			91							
			91							
Companies controlled by the parent company Cassa depositi e prestiti										
- Italgas Group	29		6		86		1	7	61	1
- Terna Group							1			
	29		**6**		**86**		**2**	**7**	**61**	**1**
Companies jointly controlled by the parent company Cassa depositi e prestiti										
- Saipem Group			33			1	30			
- Valvitalia Finanziaria S.p.A.						2	1			
			33			**3**	**31**			
Companies owned or controlled by the State										
- Gestore dei mercati energetici S.p.A.	6		10			2				
- Anas Group		1	3					3		
- Enel Group (d)	122		14						321	
- Eni Group (d)	306	1	38		1		18	1	1,235	1
- Ferrovie dello Stato Group	1		2					3		
	435	**2**	**67**		**1**	**2**	**18**	**7**	**1,556**	**1**
Total	**475**	**2**	**202**	**14**	**506**	**22**	**51**	**15**	**1,627**	**19**

(a) Inclusive of costs for goods and services to be used in investment activities.
(b) Before tariff components which are offset in costs.
(c) Terēga has been the new name of TIGF since 30 March 2018.
(d) Inclusive of amounts on the balance sheet relating to balancing activities.

	31.12.2018					2018				
(€ million)	Receivables	Other assets	Payables	Other liabilities	Guarantees and commitments	Costs (a)			Revenue (b)	
						Goods	Services	Other	Services	Other
Companies under joint control and associates										
- Interconnector UK	1			1					1	
- Senfluga	3				64				3	
- TAG GmbH									3	
- Terēga S.A.S. (c)	1									
- Trans Adriatic Pipeline AG (TAP)	6			26	1,453				10	
	11			27	1,517				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 (d)	81		55						337	
- Eni Group (d)	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	1,517	53	45	6	1,600	1

(a) Inclusive of costs for goods and services to be used in investment activities.
(b) Before tariff components which are offset in costs.
(c) Terēga has been the new name of TIGF since 30 March 2018.
(d) Inclusive of amounts on the balance sheet relating to balancing activities.

Companies under joint control and associates

The main commercial relations with jointly controlled and associated companies refer to:

- the purchases and sales of gas by TAG as part of the balancing service, as governed by the Service Balance Agreement, an agreement aimed at ensuring the daily balance between the quantities measured and the quantities expected at the Tarvisio entry point;
- the provision of services to TAG for the realisation of the transport infrastructures governed by the 'Engineering, Procurement and Construction Management (EPCM) Agreement;
- the provision to TAP of services for the construction of transport infrastructures governed by the Engineering and Project Management (EPMS) Agreement;
- the residual commitments, undertaken by Snam to TAP, as the shareholder in charge of financing the project due to the level of the shareholding held, equal to 20% and the Debt Service Guarantee during the costruction and commissioning of the first section of the network48.
- the "on-demand" guarantee given in the favour of the Greek privatisation agency (TAIPED) during the tender for the purchase of 66% of DESFA, the national operator in the natural gas infrastructures sector in Greece49.

Companies controlled by the parent company Cassa depositi e prestiti

The most significant commercial transactions with the subsidiaries of Cassa depositi e prestiti regard the supply to the Italgas Group of services provided by Snam S.p.A., mainly relating to ICT services and staff services. Services are regulated according to costs incurred with a full cost logic. With the year ended as at 31 December 2018, all contracts for services provided to the Italgas Group had been terminated.

Companies jointly controlled by the parent company Cassa depositi e prestiti

Among the main commercial relations with companies that are jointly controlled by Cassa depositi e prestiti we note the purchase from Saipem of design and supervision services for the realisation of natural gas transport and storage infrastructures, regulated by contracts concluded at arm's length.

Companies owned or controlled by the State

The key transactions with State-owned or controlled companies relate to:

- the provision to the Eni Group and the Enel Group of natural gas transport, regasification and storage services, which are settled on the basis of tariffs set by the Authority;
- purchase from the Eni Group of electricity used for operations.

Additionally, as at 31 December 2018, there were assets resulting from transactions with Eni as part of the national tax consolidation scheme in force until 31 July 2012.

48 For more information, see the note no 25 "Commitments, guarantees and pledges – TAP".
49 The guarantee was released on 09 January 2019.

Financial transactions

Financial transactions can be broken down as follows:

	31.12.2017		2017	
(€ million)	**Receivables**	**Payables**	**Expense**	**Income**
Companies under joint control and associates				
- GasBridge1 B.V. GasBridge 2 B.V.		15		
- Trans Adriatic Pipeline AG (TAP)	373			6
	373	**15**		**6**
Parent company				
- Cassa depositi e prestiti (*)			1	
			1	
	373	**15**	**1**	**6**

(*) This refers to costs incurred for loans granted by the European Investment Bank - EIB.

	31.12.2018		2018	
(€ million)	**Receivables**	**Payables**	**Expense**	**Income**
Companies under joint control and associates				
- Trans Adriatic Pipeline AG (TAP)	**10**			**8**
	10			**8**

Companies under joint control and associates

Financial transactions involving joint ventures and associates regard financial receivables relative to the residual portion of the shareholders' loan granted to the associate Trans Adriatic Pipeline AG (TAP) and related financial income.

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:

	31.12.2017			31.12.2018		
(€ million)	**Total**	**Related parties**	**Share %**	**Total**	**Related parties**	**Share %**
Statement of financial position						
Trade receivables and other current receivables	1,658	475	28.6	**1,347**	**420**	**31.2**
Other non-current receivables	373	373	100.0	**1**		
Other non-current assets	50	2	4.0	**36**	**1**	**2.8**
Short-term financial liabilities	1,373	15	1.1	**1,976**	**27**	**1.4**
Trade and other payables	1,673	202	12.1	**1,768**	**274**	**15.5**
Other current liabilities	79	14	17.7	**86**	**27**	**31.4**

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

	2017			2018		
(€ million)	**Total**	**Related parties**	**Share %**	**Total**	**Related parties**	**Share %**
Income statement						
Core business revenue	2,493	1,627	65.3	**2,555**	**1,600**	**62.6**
Other revenue and income	40	19	47.5	**31**	**1**	**3.2**
Purchases, services and other costs	355	43	12.1	**311**	**77**	**24.8**
Personnel cost	171	6	3.5	**201**		
Financial expenses	291	1	0.3	**253**		
Financial income	9	6	66.7	**13**	**8**	**61.5**

These transactions are generally settled at arm's length, i.e. the conditions which would be applied for two independent parties.

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

(€ million)	**2017**	**2018**
Revenue and income	1,646	**1,601**
Cost and expense	(49)	**(77)**
Change in trade receivables and other current receivables	25	**64**
Change in trade and other payables	8	**80**
Change in other current liabilities	12	**13**
Interest received (paid)	(1)	
Net cash flow from operating activities	**1,641**	**1,681**
Investments::		
- Tangible and intangible assets	(39)	**(27)**
- Equity investments		
- Long term financial receivables	(154)	**(148)**
- Change in payables and receivables relating to investment activities	(11)	**(13)**
Cash flow from investments	**(204)**	**(188)**
Net cash flow from investment activities	**(204)**	**331**
Increase (decrease) in short-term financial debt	(3)	**(14)**
Net cash flow from financing activities	**(3)**	**(14)**
Total cash flows with related parties	**1,434**	**1,998**

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

	31.12.2017			31.12.2018		
(€ million)	**Total**	**Related parties**	**Share %**	**Total**	**Related parties**	**Share %**
Cash flow from operating activities	1,864	1,641	88.04	**1,826**	**1,681**	**92.1**
Cash flow from investment activities	(1,441)	(204)	14.2	**(665)**	**331**	
Cash flow from financing activities	262	(3)	N.A.	**(731)**	**(14)**	**1.9**

35) 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.

36) 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.

37) SIGNIFICANT EVENTS AFTER THE END OF THE FISCAL YEAR

There were no significant events after the end of the financial year.

38) PUBLICATION OF THE FINANCIAL STATEMENTS

The financial statements were authorised for publication by Snam's Board of Directors at its meeting of 18 February 2019, in accordance with the law.