Selected Operating Information *continued*

	Year ended December 31,				
	2018	2017	2016	2015	2014
Worldwide natural gas sales(1)	76.71	80.83	86.31	87.72	86.11
Electricity sold(2)	37.07	35.33	37.05	34.88	33.58
Refinery throughputs(3)	23.23	24.02	24.52	26.41	25.03
Balanced capacity of wholly-owned refineries(4)	388	388	388	388	404
Retail sales (in Italy and rest of Europe)(3)	8.39	8.54	8.59	8.89	9.21
Number of service stations at period end (in Italy and rest of Europe)	5,448	5,544	5,622	5,846	6,220
Chemical production(3)	9.48	8.96	8.81	8.67	7.93
Average throughput per service station (in Italy and rest of Europe)(5)	1,776	1,783	1,742	1,754	1,725
Employees at period end (number)	31,701	32,934	33,536	34,196	34,846

(1) Expressed in BCM.
(2) Expressed in TWh.
(3) Expressed in mmtonnes.
(4) Expressed in KBBL/d.
(5) Expressed in thousand liters per day.

Risk factors

The risks described below may have a material effect on our operational and financial performance. We invite our investors to consider these risks carefully.

Eni’s operating results, cash flow and rates of growth are affected by volatile prices of crude oil, natural gas, oil products and chemicals

Prices of oil and natural gas have a history of volatility due to many factors that are beyond Eni’s control. These factors include among other things:

- global and regional dynamics of oil and gas supply and demand and global level of inventories. In 2018, the oil market environment was a volatile one. Until October 2018, crude oil prices continued the upward trend commenced in the second half of 2017 driven by economic growth, effectiveness of the production cuts implemented by OPEC Countries and other producers agreed at the end of November 2016 and normalizing inventory level. Geopolitical risks also played a role including production disruption in Venezuela, renewed internal tensions in Libya and worsening relations between USA and Iran. Oil prices peaked in October 2018, touching a four-year high around 85 $/BBL for the Brent crude oil benchmark. Then in November 2018, a sharp downturn, one of the steepest on record, followed driving crude oil prices as low as 60 $/BBL, a correction of about 30%. This downturn was driven by emerging trends pointing to an economic slowdown, uncertainties relating to the developments of the USA-China trade dispute and of the Brexit, and building oversupplies due to rising production levels in USA, OPEC and Russia also in anticipation of the enactment of US sanctions against Iran, which would happen to be less severe than expected. In December 2018, OPEC and Russia agreed to cut again production quotas by 1.2 million bbl/d, effective from January 2019, in an effort to curb a supply glut. In spite of this development, crude oil prices continued to slide throughout December 2018 to the year’s lows of 50 $/bbl, extending the correction from the highs to 40%. On average, in 2018 the price for the Brent crude oil benchmark increased by 31% y-o-y at about 71 $/BBL.

  In early 2019, oil prices regained the sixty-dollar mark thanks to better-than-expected gauges of economic activity and implementation of the production cuts. In the first quarter of 2019, the Brent crude oil price averaged approximately 63 $/BBL pointing to renewed strength;
- global political developments, including sanctions imposed on certain producing countries and conflict situations;
- global economic and financial market conditions;
- the ability of the OPEC cartel to control world supply and therefore oil prices;

- prices and availability of alternative sources of energy (e.g., nuclear, coal and renewables);
- weather conditions;
- operational issues;
- governmental regulations and actions;
- success in the development and deployment of new technologies for the recovery of crude oil and natural gas reserves and technological advances affecting energy consumption;
- competition from alternative energy sources like solar energy, photovoltaic and other renewables;
- rising commitment of the world nations and the civil society to addressing the issue of global warming and climate change by reducing the release in the atmosphere of greenhouse gases ("GHG") produced by the consumption of hydrocarbons in human activities.

All these factors can affect the global balance between demand and supply for hydrocarbons and hence prices of crude oil, natural gas, and other energy commodities.

Management expects global oil demand to grow by approximately 1.4 mmBBL/d in 2019, more or less in line with 2018, and global oil demand and supplies to be balanced overall. Considering the risks of an economic slowdown, geopolitical factors, uncertainties associated with possible developments in the USA-China trade dispute and with the Brexit, management is assuming a Brent price of 62 $/BBL in 2019, gradually increasing over the following three year period to reach 70$/BBL in 2022. After 2022, management is assuming a price growing in line with inflation (e.g. 71.4 $/BBL in 2023 assuming a long-term inflationary rate of 2%) based on its view of market fundamentals and oil price projections made by specialized agencies and financial analysts, substantially in line with the previous planning assumptions. Management's oil price forecast was utilized to elaborate the Group financial projections and the level of Group's capital expenditures for the 2019–2022 industrial plan and to estimate recoverability of the carrying amounts of the Group's oil and gas assets as of December 31, 2018.

Fluctuations in oil and natural gas prices materially affect the Group's results of operations and business prospects. Lower prices from one year to another negatively affect the Group's consolidated results of operations and cash flow. This is because lower prices translate into lower revenues recognized in the Company's Exploration & Production segment at the time of the price change, whereas expenses in this segment are either fixed or less sensitive to changes in crude oil prices than revenues. Based on the current portfolio of oil and gas assets, Eni's management estimates that the Company's consolidated net cash provided by operating activities would vary by approximately €190 million for each one-dollar change in the price of the Brent crude oil benchmark with respect to the price case assumed in Eni's financial projections for 2019 at 62 $/BBL. Furthermore, a structural decline in commodity prices may have material effects on Eni's business outlook and may limit the Group's funds available to finance expansion projects and certain contractual commitments. This because lower oil and gas prices over prolonged periods may adversely affect the funds available to finance expansion projects, further reducing the Company's ability to grow future production and revenues. In addition, in a weak scenario the Company may also need to review investment decisions and the viability of development projects and capex plans and as a result of this review the Company could reschedule, postpone or curtail development projects.

In case of a structural decline in hydrocarbon prices, the Company may review the carrying amounts of oil and gas properties and this could result in recording material asset impairments. Finally, lower oil and gas prices could result in the de-booking of proved reserves, if they become uneconomic in this type of environment. These risks may adversely impact the Group's results of operations, cash flow, liquidity, business prospects and shareholder returns, including dividends and the share prices.

In response to weakened oil and gas industry conditions and resulting revisions made to rating agency commodity price assumptions, lower commodity prices may also reduce the Group's access to capital and lead to a downgrade or other negative rating action with respect to the Group's credit rating by rating agencies, including Standard & Poor's Ratings Services ("S&P") and Moody's Investor Services Inc ("Moody's"). These downgrades may negatively affect the Group's cost of capital, increase the Group's financial expenses, and may limit the Group's ability to access capital markets and execute aspects of the Group's business plans.

Eni is estimating that approximately 50 per cent of its current production is exposed to fluctuations in hydrocarbons prices. Exposure to this strategic risk is not subject to economic hedging, except for some specific market conditions or transactions. The remaining portion of Eni's current production is largely unaffected by crude oil price movements considering that the Company's property portfolio is characterized by a sizeable presence of production sharing contracts, whereby, due to the cost recovery mechanism, the Company is entitled to a larger number of barrels in the event of a fall in crude oil prices. (See the specific risks of the Exploration & Production segment in "*Risks associated with the exploration and production of oil and natural gas*" below).

The Group's results from its Refining & Marketing and Chemicals businesses are primarily dependent upon the supply and demand for refined and chemical products and the associated margins on refined products and chemical products sales, with the impact of changes in oil prices on results of these segments being dependent upon the speed at which the prices of products adjust to reflect movements in oil prices.

Because of the above mentioned risks, a prolonged decline in commodity prices would materially and adversely affect the Group's business prospects, financial condition, results of operations, cash flows, ability to finance planned capital expenditures and commitments and may impact shareholder returns, including dividends and the share price.

Competition

There is strong competition worldwide, both within the oil industry and with other industries, to supply energy and petroleum products to the industrial, commercial and residential energy markets

Eni faces strong competition in each of its business segments.

The current competitive environment in which Eni operates is characterized by volatile prices and margins of energy commodities, limited product differentiation and complex relationships with state-owned companies and national agencies of the countries where hydrocarbons reserves are located to obtain mineral rights. As commodity prices are beyond the Company's control, Eni's ability to remain competitive and profitable in this environment requires continuous focus on technological innovation, the achievement of efficiencies in operating cost, efficient management of capital resources and the ability to provide valuable services to the energy buyers. It also depends on Eni's ability to gain access to new investment opportunities, both in Europe and worldwide.

- In the Exploration & Production segment, Eni faces competition from both international and state-owned oil companies for obtaining exploration and development rights, and developing and applying new technologies to maximize hydrocarbon recovery. Furthermore, Eni may face a competitive disadvantage because of its smaller size relative to other international oil companies, particularly when bidding for large scale or capital intensive projects, and it may be exposed to the risk of obtaining lower cost savings in a deflationary environment compared to its larger competitors given its potentially smaller market power with respect to suppliers. If, because of those competitive pressures, Eni fails to obtain new exploration and development acreage, to apply and develop new technologies, and to control costs, its growth prospects and future results of operations and cash flow in this business may be adversely affected.
- In the Gas & Power segment, Eni is facing strong competition in the European wholesale gas markets to sell gas to industrial customers, the thermoelectric sector and retailer companies from other gas wholesalers, upstream companies, traders and other players both in the Italian market and in markets across Europe. In recent years, competition has been fueled by muted demand growth, oversupplies and the development of very liquid European spot markets where large volumes of gas are traded daily. Players are competing mainly in terms of pricing and to a lesser extent on the ability to offer additional services to the buyers of the commodity, like volume flexibilities, different pricing options, the possibility to change the delivery point and other optionality. Management believes that competition in the European wholesale gas market will continue to negatively affect the results of operations and cash flow of Eni's Gas & Power segment in future reporting periods. Eni's Gas & Power segment also engages in the supply of gas and electricity to customers in the retail markets mainly in Italy, France and other areas in Europe. Customers include households, large residential accounts (hospitals, schools, public administration buildings, offices) and small and medium-sized businesses located in urban areas. The retail market is characterized by strong competition among local selling companies which mainly compete in term of pricing and the ability to bundle valuable services with the supply of the energy commodity. In this segment competition has intensified in recent years due to the

progressive liberalization of the market and the option on part of residential customers to switch smoothly from one supplier to another. Management believes that competition will represent a risk factor to the Company’s results of operations and cash flow in this business unit.

- Eni is facing strong competitive pressure in its business of gas-fired electricity generation which is largely sold at wholesale markets in Italy. Margins on the sale of electricity have declined in recent years due to oversupplies, weak economic growth and inter-fuel competition. This latter was due to the fact that power produced from renewable sources and coal-fired power generation are cheaper than gas-fired electricity, although coal-fired plants are expected to be progressively phased-out due to environmental issues. Management believes that these negative factors will continue to negatively affect crack-spread margins on electricity at Italian wholesale markets and the profitability of this business unit in the foreseeable future.
- In the Refining & Marketing segment, Eni faces strong competition both in the wholesale markets and in the retail marketing activity. Margins of European refiners are facing structural headwinds due to muted trends in the European demand for fuels and continued competitive pressures from players in the Middle East, the USA and Asia, who can leverage on larger plant scale and cost economies, availability of cheaper feedstock, lower energy expenses and fewer environmental obligations. Eni believes that the competitive environment will remain challenging in the foreseeable future, also considering refining overcapacity in the European area and expectations of a new investment cycle driven by capacity expansion plans announced in Asia and the Middle East, potentially leading to a situation of global oversupplies of refinery products. In 2018 Eni’s gauge of profitability in the refining business fell by approximately 26% to 3.7 $/BBL driven by rising costs of oil-based feedstock that the Company was unable to transfer to final products prices pressured by the weak market fundamentals described above. This decline negatively affected the performance of the Company’s refining activity. Management believes that in the long-term the trading environment will not recover meaningfully with refining margins seen in a 4-5 $/BBL range. Furthermore, Eni’s refining margins are exposed to the volatility in the spreads between crudes with high sulfur content or sour crudes vs. the Brent crude benchmark, which is a low-content sulfur crude. Eni complex refineries are able to process sour crudes which typically trade at a discount over the Brent crude. However, in 2019 a shortfall in supplies of sour crudes is expected in the market due to the production cuts implemented by OPEC, lower exports from Venezuela and the USA sanctions against Iran. Those developments could result in an appreciation of the relative prices of sour crudes vs. the Brent, which would negatively affect the results of our refining business. Against this backdrop, management has designed an action plan intended to reduce the Company’s breakeven margin in its refining business to about 3 $/BBL in 2019 by means of plant and feedstock optimization, energy savings and other cost efficiencies. Additionally, management expects to close by year-end the acquisition of a 20%-stake in a large refining asset in Abu Dhabi, which will de-risk Eni’s refining business due to the fact that the asset being acquired is more profitable than Eni’s legacy refineries due to larger scale, efficiency, geographic reach and proximity to raw materials sources. In case management fails to execute on this plan, the profitability of Eni’s refining business may be negatively affected considering management’s expectations for a weak trading environment. In marketing, Eni faces competition from other oil companies and newcomers such as low-scale operators and large retailers, who tend to adopt aggressive pricing policies. All these operators compete with each other primarily in terms of pricing and, to a lesser extent, service quality.
- In the Chemicals business, Eni faces strong competition from well-established international players and state-owned petrochemical companies, particularly in the most commoditized market segments such as the production of basic petrochemical products (like ethylene and polyethylene), which demand is a function of macroeconomic growth. Many of those competitors based in the Far East and the Middle East are able to benefit from cost economies due to larger plant scale, wide geographic moat, availability of cheap feedstock and proximity to end-markets. Excess capacity across Europe has also fueled competition in this business. Furthermore, petrochemical producers based in the United States have regained market share, as their cost structure has become competitive due to the availability of cheap feedstock deriving from the production of domestic shale gas from which ethane is derived which is a cheaper raw material for the production of ethylene than the oil-based feedstock utilized by Eni’s petrochemicals subsidiaries. In 2018 the operating profit of our Chemicals business fell sharply due to increased expenses for oil-based feedstock, which the Company was not able to pass to final products prices pressured by competition. The Company does not expect any meaningful improvement in the trading environment in the short to the medium-term due to competitive headwinds described above.

Management intends to execute an action plan designated to diversify the product portfolio away from the more commoditized products which are exposed to crude oil prices fluctuations and cyclical market dynamics and to focus on higher-value added products, particularly in the green chemicals business and in specialty niche markets, which we believe are less exposed to the economic cycle and to the volatility of crude oil prices. If the Company fails to reduce its exposure to commodity plastics and to gain critical mass in the green chemicals business and in the specialty markets, its future results of operations and cash flows may remain cyclical and exposed to any demand or cost downturn.

Safety, security, environmental and other operational risks

The Group engages in the exploration and production of oil and natural gas, processing, transportation and refining of crude oil, transport of natural gas, storage and distribution of petroleum products and the production of base chemicals, plastics and elastomers. By their nature, the Group’s operations expose Eni to a wide range of significant health, safety, security and environmental risks. Technical faults, malfunction of plants, equipment and facilities, control systems failure, human errors, acts of sabotage, loss of containment and adverse weather events can trigger damaging events such as explosions, fires, oil and gas spills from wells, pipeline and tankers, release of contaminants, toxic emissions and other negative events.

The magnitude of these risks is influenced by the geographic range, operational diversity and technical complexity of Eni’s activities. Eni’s future results of operations and liquidity depend on its ability to identify and mitigate the risks and hazards inherent to operating in those industries.

In the Exploration & Production segment, Eni faces natural hazards and other operational risks including those relating to the physical characteristics of oil and natural gas fields. These include the risks of eruptions of crude oil or of natural gas, discovery of hydrocarbon pockets with abnormal pressure, crumbling of well openings, leaks that can harm the environment and the security of Eni’s personnel and risks of blowout, fire or explosion. Accidents at a single well can lead to loss of life, damage or destruction to properties, environmental damage, GHG emissions and consequently potential economic losses that could have a material and adverse effect on the business, results of operations, liquidity, reputation and prospects of the Group, including its share price and dividends.

Eni’s activities in the Refining & Marketing and Chemical segment entail health, safety and environmental risks related to the handling, transformation and distribution of oil, oil products and certain petrochemical products. These risks can arise from the intrinsic characteristics and the overall life cycle of the products manufactured and the raw materials used in the manufacturing process, such as oil-based feedstock, catalysts, additives and monomer feedstock. These risks comprise flammability, toxicity, long-term environmental impact such as greenhouse gas emissions and risks of various forms of pollution and contamination of the soil and the groundwater, emissions and discharges resulting from their use and from recycling or disposing of materials and wastes at the end of their useful life.

All of Eni’s segments of operations involve, to varying degrees, the transportation of hydrocarbons. Risks in transportation activities depend both on the hazardous nature of the products transported, and on the transportation methods used (mainly pipelines, shipping, river freight, rail, road and gas distribution networks), the volumes involved and the sensitivity of the regions through which the transport passes (quality of infrastructure, population density, environmental considerations). All modes of transportation of hydrocarbons are particularly susceptible to a loss of containment of hydrocarbons and other hazardous materials, and, given the high volumes involved, could present a significant risk to people and the environment.

The Company has invested and will continue to invest significant resources in order to upgrade the methods and systems for safeguarding safety and health of employees, contractors and communities, and the environment; to prevent risks; to comply with applicable laws and policies and to respond to and learn from unforeseen incidents. Eni seeks to minimize these operational risks by carefully designing and building facilities, including wells, industrial complexes, plants and equipment, pipelines, storage sites and other facilities, and managing its operations in a safe and reliable manner and in compliance with all applicable rules and regulations. These measures may not ultimately be completely successful in protecting against those risks. Failure to manage these risks could cause unforeseen incidents, including releases or oil spills, blowouts, fire, mechanical failures and other incidents resulting in personal injury, loss of life, environmental damage, legal liabilities and/or damage claims, destruction of crude oil or natural gas wells, as well as damage to equipment and other property, all of which could lead to a disruption in operations and to negatively affect results and cash flow and the Company's business prospects.

Eni's operations are often conducted in difficult and/or environmentally sensitive locations such as the Gulf of Mexico, the Caspian Sea and the Arctic. In such locations, the consequences of any incident could be greater than in other locations. Eni also faces risks once production is discontinued, because Eni's activities require the decommissioning of productive infrastructures and environmental sites remediation and clean-up. Furthermore, in certain situations where Eni is not the operator, the Company may have limited influence and control over third parties, which may limit its ability to manage and control such risks.

Eni retains worldwide third-party liability insurance coverage, which is designed to hedge part of the liabilities associated with damage to third parties, loss of value to the Group's assets related to unfavorable events and in connection with environmental clean-up and remediation. Maximum compensation is $1.2 billion in case of offshore incident and $1.4 billion in case of incident at onshore facilities (refineries). Additionally, the Company may also activate further insurance coverage in case of specific capital projects and other industrial initiatives. Management believes that its insurance coverage is in line with industry practice and is sufficient to cover normal risks in its operations. However, the Company is not insured against all potential risks. In the event of a major environmental disaster, such as the incident which occurred at the Macondo well in the Gulf of Mexico several years ago, for example, Eni's third-party liability insurance would not provide any material coverage and thus the Company's liability would far exceed the maximum coverage provided by its insurance. The loss Eni could suffer in the event of such a disaster would depend on all the facts and circumstances of the event and would be subject to a whole range of uncertainties, including legal uncertainty as to the scope of liability for consequential damages, which may include economic damage not directly connected to the disaster.

The Company cannot guarantee that it will not suffer any uninsured loss and there can be no guarantee, particularly in the case of a major environmental disaster or industrial accident, that such a loss would not have a material adverse effect on the Company.

The occurrence of the above mentioned events could have a material adverse impact on the Group's business, competitive position, cash flow, results of operations, liquidity, future growth prospects and shareholders' returns and damage the Group's reputation.

Risks associated with the exploration and production of oil and natural gas

The exploration and production of oil and natural gas require high levels of capital expenditures and are subject to natural hazards and other uncertainties, including those relating to the physical characteristics of oil and gas fields. The exploration and production activities are subject to the mining risk and the risks of cost overruns and delayed start-up at the projects to develop and produce hydrocarbons reserves. Those risks could have an adverse, significant impact on Eni's future growth prospects, results of operations, cash flows, liquidity and shareholders' returns.

The production of oil and natural gas is highly regulated and is subject to conditions imposed by governments throughout the world in matters such as the award of exploration and production leases, the imposition of specific drilling and other work obligations, income taxes and taxes on production, environmental protection measures, control over the development and abandonment of fields and installations, and restrictions on production. A description of the main risks facing the Company's business in the exploration and production of oil and gas is provided below.

Eni's oil and natural gas offshore operations are particularly exposed to health, safety, security and environmental risks

Eni has material offshore operations relating to the exploration and production of hydrocarbons. In 2018, approximately 56% of Eni's total oil and gas production for the year derived from offshore fields, mainly in, Libya, Norway, Angola, Egypt, the Gulf of Mexico, Italy, Congo, Indonesia, Venezuela, the

United Arab Emirates, the United Kingdom and Nigeria. Offshore operations in the oil and gas industry are inherently riskier than onshore activities. Offshore accidents and spills could cause damage of catastrophic proportions to the ecosystem and health and security of people due to objective difficulties in handling hydrocarbons containment, pollution, poisoning of water and organisms, length and complexity of cleaning operations and other factors. Furthermore, offshore operations are subject to marine risks, including storms and other adverse weather conditions and vessel collisions, as well as interruptions or termination by governmental authorities based on safety, environmental and other considerations. Failure to manage these risks could result in injury or loss of life, damage to property or environmental damage, and could result in regulatory action, legal liability, loss of revenues and damage to Eni’s reputation and could have a material adverse effect on Eni’s future growth prospects, results of operations, cash flows, liquidity, reputation and shareholders’ returns.

Exploratory drilling efforts may be unsuccessful

Exploration drilling for oil and gas involves numerous risks including the risk of dry holes or failure to find commercial quantities of hydrocarbons. The costs of drilling and completing wells have margins of uncertainty, and drilling operations may be unsuccessful because of a large variety of factors, including geological failure, unexpected drilling conditions, pressure or heterogeneities in formations, equipment failures, well control (blowouts) and other forms of accidents. A large part of the Company exploratory drilling operations is located offshore, including in deep and ultra-deep waters, in remote areas and in environmentally sensitive locations (such as the Barents Sea, the Gulf of Mexico and the Caspian Sea). In these locations, the Company generally experiences higher operational risks and more challenging conditions and incurs higher exploration costs than onshore. Furthermore, deep and ultra-deep water operations require significant time before commercial production of discovered reserves can commence, increasing both the financial risks associated with these activities. Because Eni plans to make significant investments in executing exploration projects, it is likely that the Company will incur significant amounts of dry hole expenses in future years. Unsuccessful exploration activities and failure to discover additional commercial reserves could reduce future production of oil and natural gas, which is highly dependent on the rate of success of exploration projects, and could have an adverse impact on Eni’s future growth prospects, results of operations, cash flows and liquidity.

Development projects bear significant operational risks which may adversely affect actual returns

Eni is executing or is planning to execute several development projects to produce and market hydrocarbon reserves. Certain projects target the development of reserves in high-risk areas, particularly deep offshore and in remote and hostile environments or in environmentally-sensitive locations. Eni’s future results of operations and business prospects depend heavily on its ability to implement, develop and operate major projects as planned. Key factors that may affect the economics of these projects include:

- the outcome of negotiations with joint venture partners, governments and state-owned companies, suppliers, customers or others to define project terms and conditions, including, for example, Eni’s ability to negotiate favorable long-term contracts to market gas reserves;
- commercial arrangements for pipelines and related equipment to transport and market hydrocarbons;
- timely issuance of permits and licenses by government agencies;
- the ability to make the front-end engineering design in order to prevent the occurrence of technical inconvenience during the execution phase; timely manufacturing and delivery of critical equipment by contractors, shortages in the availability of such equipment or lack of shipping yards where complex offshore units such as FPSO and platforms are built; these events may cause cost overruns and delays impacting the time-to-market of the reserves;
- risks associated with the use of new technologies and the inability to develop advanced technologies to maximize the recoverability rate of hydrocarbons or gain access to previously inaccessible reservoirs;
- performance in project execution on the part of contractors who are awarded project construction activities generally based on the EPC (Engineering, Procurement and Construction) contractual scheme;
- changes in operating conditions and cost overruns;

- the actual performance of the reservoir and natural field decline; and
- the ability and time necessary to build suitable transport infrastructures to export production to final markets.

As previously described, events such as poor project execution, inadequate front-end engineering design, delays in the achievement of critical phases and project milestones, delays in the delivery of production facilities and other equipment by third parties, differences between scheduled and actual timing of the first oil, as well as cost overruns may adversely affect the economic returns of Eni’s development projects. Failure to deliver major projects on time and on budget could negatively affect results of operations, cash flow and the achievement of short-term targets of production growth. Lastly, the development and marketing of hydrocarbon reserves typically require several years after a discovery is made. This is because a development project involves an array of complex and lengthy activities, including appraising a discovery in order to evaluate the technical and economic feasibility of the development project, project final investment decision and building and commissioning the related plants and facilities. As a consequence, rates of return for such long lead time projects are exposed to the volatility of oil and gas prices and costs which may be substantially different from those estimated when the investment decision was made, thereby leading to lower return rates. Moreover, projects executed with partners and joint venture partners reduce the ability of the Company to manage risks and costs, and Eni could have limited influence over and control of the operations and performance of its partners. Furthermore, Eni may not have full operational control of the joint ventures in which it participates and may have exposure to counterparty credit risk and disruption of operations and strategic objectives due to the nature of its relationships.

Finally, if the Company is unable to develop and operate major projects as planned, particularly if the Company fails to accomplish budgeted costs and time schedules, it could incur significant impairment losses of capitalised costs associated with reduced future cash flows of those projects.

Inability to replace oil and natural gas reserves could adversely impact results of operations and financial condition

Unless the Company is able to replace produced oil and natural gas, its reserves will decline. In addition to being a function of production, revisions and new discoveries, the Company’s reserve replacement is also affected by the entitlement mechanism in its production sharing agreements (“PSAs”), whereby the Company is entitled to a portion of a field’s reserves, the sale of which is intended to cover expenditures incurred by the Company to develop and operate the field. The higher the reference prices for Brent crude oil used to estimate Eni’s proved reserves, the lower the number of barrels necessary to recover the same amount of expenditure, and vice versa. Based on the current portfolio of oil and gas assets, Eni’s management estimates that production entitlements vary on average by approximately 600 BBL/d for each $1 change in oil prices based on current Eni’s assumptions for oil prices. This led to negative reserves revisions of 38 mmBOE in 2018, due to the oil price increase previously described. In case oil prices differ significantly from Eni’s own forecasts, the result of the above mentioned sensitivity of production to oil price changes may be significantly different.

Future oil and gas production is dependent on the Company’s ability to access new reserves through new discoveries, application of improved techniques, success in development activity, negotiations with national oil companies and other entities owners of known reserves and acquisitions.

An inability to replace produced reserves by discovering, acquiring and developing additional reserves could adversely impact future production levels and growth prospects. If Eni is unsuccessful in meeting its long-term targets of production growth and reserve replacement, Eni’s future total proved reserves and production will decline and this will negatively affect future results of operations, cash flow and business prospects.

Uncertainties in estimates of oil and natural gas reserves

The accuracy of proved reserve estimates and of projections of future rates of production and timing of development expenditures depends on a number of factors, assumptions and variables, including:

- the quality of available geological, technical and economic data and their interpretation and judgement;
- projections regarding future rates of production and costs and timing of development expenditures;
- changes in the prevailing tax rules, other government regulations and contractual conditions;

- results of drilling, testing and the actual production performance of Eni's reservoirs after the date of the estimates which may drive substantial upward or downward revisions; and
- changes in oil and natural gas prices which could affect the quantities of Eni's proved reserves since the estimates of reserves are based on prices and costs existing as of the date when these estimates are made. Lower oil prices or the projections of higher operating and development costs may impair the ability of the Company to economically produce reserves leading to downward reserve revisions.

Reserve estimates are subject to revisions as prices fluctuate due to the cost recovery mechanism under the Company's production sharing agreements and similar contractual schemes.

Many of the factors, assumptions and variables involved in estimating proved reserves are subject to change over time and therefore affect the estimates of oil and natural gas reserves.

The prices used in calculating Eni's estimated proved reserves are, in accordance with the U.S. Securities and Exchange Commission (the "U.S. SEC") requirements, calculated by determining the unweighted arithmetic average of the first-day-of-the-month commodity prices for the preceding 12 months. For the 12-months ending December 31, 2018, average prices were based on 71.4 $/BBL for the Brent crude oil.

Brent prices have declined significantly since they reached a peak at 85 $/BBL in October of 2018 and in the first quarter of 2019 have recovered only partially. If such prices do not increase significantly in the coming months, our future calculations of estimated proved reserves will be based on lower commodity prices which could result in our having to remove non-economic reserves from our proved reserves in future periods. This effect could be counterbalanced in full or in part by increased reserves corresponding to the additional volume entitlements under Eni's PSAs relating to cost oil: i.e. because of lower oil and gas prices, the reimbursement of expenditures incurred by the Company requires additional volumes of reserves.

Accordingly, the estimated reserves reported as of the end of 2018 could be significantly different from the quantities of oil and natural gas that will be ultimately recovered. Any downward revision in Eni's estimated quantities of proved reserves would indicate lower future production volumes, which could adversely impact Eni's business prospects, results of operations, cash flows and liquidity.

The development of the Group's proved undeveloped reserves may take longer and may require higher levels of capital expenditures than it currently anticipates or the Group's proved undeveloped reserves may not ultimately be developed or produced.

At December 31, 2018, approximately 32% of the Group's total estimated proved reserves (by volume) were undeveloped and may not be ultimately developed or produced. Recovery of undeveloped reserves requires significant capital expenditures and successful drilling operations. The Group's reserve estimates assume it can and will make these expenditures and conduct these operations successfully. These assumptions may not prove to be accurate. The Group's reserve report at December 31, 2018 includes estimates of total future development and decomissioning costs associated with the Group's proved total reserves of approximately €35.3 billion (undiscounted, including consolidated subsidiaries and equity-accounted entities). It cannot be certain that estimated costs of the development of these reserves will prove correct, development will occur as scheduled, or the results of such development will be as estimated. In case of change in the Company's plans to develop those reserves, or if it is not otherwise able to successfully develop these reserves as a result of the Group's inability to fund necessary capital expenditures or otherwise, it will be required to remove the associated volumes from the Group's reported proved reserves.

Oil and gas activity may be subject to increasingly high levels of income taxes and royalties

Oil and gas operations are subject to the payment of royalties and income taxes, which tend to be higher than those payable in many other commercial activities. Furthermore, in recent years, Eni has experienced adverse changes in the tax regimes applicable to oil and gas operations in a number of countries where the Company conducts its upstream operations. As a result of these trends, management estimates that the tax rate applicable to the Company's oil and gas operations is materially higher than the Italian statutory tax rate for corporate profit, which currently stands at 24%.

Management believes that the marginal tax rate in the oil and gas industry tends to increase in correlation with higher oil prices, which could make it more difficult for Eni to translate higher oil prices into increased net profit. However, the Company does not expect that the marginal tax rate will decrease in response to falling oil prices. Adverse changes in the tax rate applicable to the Group’s profit before income taxes in its oil and gas operations would have a negative impact on Eni’s future results of operations and cash flows.

In the current uncertain financial and economic environment, governments are facing greater pressure on public finances, which may induce them to intervene in the fiscal framework for the oil and gas industry, including the risk of increased taxation, windfall taxes, and even nationalizations and expropriations.

Eni’s results and cash flow depend on its ability to identify and mitigate the above mentioned risks and hazards which are inherent to its operations.

The present value of future net revenues from Eni’s proved reserves will not necessarily be the same as the current market value of Eni’s estimated crude oil and natural gas reserves

The present value of future net revenues from Eni’s proved reserves may differ from the current market value of Eni’s estimated crude oil and natural gas reserves. In accordance with U.S. SEC rules, Eni bases the estimated discounted future net revenues from proved reserves on the 12-month un-weighted arithmetic average of the first-day-of-the-month commodity prices for the preceding twelve months. Actual future prices may be materially higher or lower than the U.S. SEC pricing used in the calculations. Actual future net revenues from crude oil and natural gas properties will be affected by factors such as:

- the actual prices Eni receives for sales of crude oil and natural gas;
- the actual cost and timing of development and production expenditures;
- the timing and amount of actual production; and
- changes in governmental regulations or taxation.

The timing of both Eni’s production and its incurrence of expenses in connection with the development and production of crude oil and natural gas properties will affect the timing and amount of actual future net revenues from proved reserves, and thus their actual present value. Additionally, the 10% discount factor Eni uses when calculating discounted future net revenues may not be the most appropriate discount factor based on interest rates in effect from time to time and risks associated with Eni’s reserves or the crude oil and natural gas industry in general. At December 31, 2018, the net present value of Eni’s proved reserves totaled approximately €57.6 billion. The average prices used to estimate Eni’s proved reserves and the net present value at December 31, 2018, as calculated in accordance with U.S. SEC rules, were 71.4 $/BBL for the Brent crude oil. Actual future prices may materially differ from those used in our year-end estimates. Commodity prices have decreased significantly in recent months. Holding all other factors constant, if commodity prices used in Eni’s year-end reserve estimates were in line with the pricing environment existing in the first quarter of 2019, Eni’s PV-10 at December 31, 2019 could decrease significantly.

Oil and gas activity may be subject to increasingly high levels of regulations throughout the world, which may impact our extraction activities and the recoverability of reserves

The production of oil and natural gas is highly regulated and is subject to conditions imposed by governments throughout the world in matters such as the award of exploration and production leases, the imposition of specific drilling and other work obligations, environmental protection measures, control over the development and abandonment of fields and installations, and restrictions on production. These risks can limit the Group access to hydrocarbons reserves or may have the Group to redesign, curtail or cease its oil&gas operation with significant effects on the Group business prospects, results of operations and cash flow.

In Italy, a new law has been enacted effective February 12, 2019, which requires certain Italian administrative bodies to adopt within eighteen months a plan intended to identify areas that are suitable for carrying out exploration, development and production of hydrocarbons in the national territory, including the territorial seawaters. Until approval of such a plan, it is established a moratorium on exploration activities, including the award of new exploration leases. Following the plan approval, exploration permits resume their efficacy in areas that have been identified as suitable; on the contrary, in unsuitable areas, exploration permits are repealed.

As far as development and production concessions are concerned, pending the national plan approval, ongoing concessions retain their efficacy and administrative procedures underway to grant extension to expired concession remain unaffected; instead no applications to obtain new concession can be filed. Once the above mentioned national plan is adopted, development and production concessions that fall in suitable areas can be granted further extensions and applications for new concessions can be filed; on the contrary development and production concessions current at the approval of the national plan that fall in unsuitable areas are repealed at their expiration and no further extensions can be granted, nor new concession applications can be filed.

In case Italian administrative bodies fail to adopt the national plan for suitable areas within two years from the law enactment, the general moratorium on exploration activities is revoked and application for new concession permits can be filed. According to the statute, areas that are suitable to the activities of exploring and developing hydrocarbons must conform to a number of criteria including morphological characteristics and social, urbanistic and industrial constraints, with particular bias for the hydrogeological balance, current territorial planning and with regard to marine areas for externalities on the ecosystem, reviews of marine routes, fishing and any possible impacts on the coastline.

Our largest development project in Italy is operated under a concession that will expire in 2019; the application for renewal is underway and the renewal process is unaffected by the new law; assuming it is renewed as expected, this concession will expire in 2029, unless renewed at that time. Production at those sites is currently scheduled to continue until 2045.

Management believes the criteria laid out in the law for identified unsuitable areas to be high-level principles, which make it difficult identifying in a reliable and objective manner areas that might be suitable or unsuitable to hydrocarbons activities before the plan adoption by Italian authorities. Therefore, management is not currently in the position to make a reliable and fair estimation of future impacts of the new law provisions on the recoverability of the volumes of proved reserves booked in Italy and the associated future cash flows. However, based on the review of all facts and circumstances and on the current knowledge of the matter, management does not expects any material impacts on the Group future results of operations and cash flow.

Political considerations

The large majority of Eni’s oil and gas reserves are located in countries outside Europe and North America, mainly in Africa, Central Asia and Central-Southern America, where the socio-political framework, the financial system and the macroeconomic outlook are less stable than in the OECD countries. In those non-OECD countries, Eni is exposed to a wide range of additional risks and uncertainties in addition to the material risks described above, which could materially impact the ability of the Company to conduct its oil&gas operations in a safe, reliable and profitable manner.

As of December 31, 2018, approximately 82% of Eni’s proved hydrocarbon reserves were located in such countries. Adverse political, social and economic developments, such as internal conflicts, revolutions, establishment of non-democratic regimes, protests, strikes and other forms of civil disorder, contraction of economic activity and financial difficulties of the local governments with repercussions on the solvency of state institutions, inflation levels, exchange rates and similar events in those non-OECD countries may impair Eni’s ability to continue operating in an economically viable way, either temporarily or permanently, and Eni’s ability to access oil and gas reserves. In particular, Eni faces risks in connection with the following, possible issues:

- lack of well-established and reliable legal systems and uncertainties surrounding the enforcement of contractual rights;
- unfavorable enforcement of laws, regulations and contractual arrangements leading, for example, to expropriation, nationalization or forced divestiture of assets and unilateral cancellation or modification of contractual terms. Eni is facing increasing competition from state-owned oil

companies that are partnering Eni in a number of oil and gas projects and properties in the host countries where Eni conducts its upstream operations. These state-owned oil companies can unilaterally change contractual terms and other conditions of oil and gas projects in order to obtain a larger share of profit from a given project, thereby reducing Eni's profit share. They can also enforce different interpretations of contractual clauses relating to the recovery of certain expenses incurred by the Company to produce hydrocarbons reserves in any given project;

- sovereign default or financial instability due to the fact that those Countries rely heavily on petroleum revenues to sustain public finance and petroleum revenues have dramatically contracted during the recent, three-year long oil downturn which ended by mid of 2017. Financial difficulties at country level often translate into failure on part of state-owned companies and agencies to fulfill their financial obligations towards Eni relating to funding capital commitments in projects operated by Eni or to timely paying supplies of equity oil and gas volumes;
- restrictions on exploration, production, imports and exports;
- tax or royalty increases (including retroactive claims);
- political and social instability which could result in civil and social unrest, internal conflicts and other forms of protest and disorder such as strikes, riots, sabotage, acts of violence and similar events. These risks could result in disruptions to economic activity, loss of output, plant closures and shutdowns, project delays, the loss of assets and threat to the security of personnel. They may disrupt financial and commercial markets, including the supply of and pricing for oil and natural gas, and generate greater political and economic instability in some of the geographical areas in which Eni operates;
- difficulties in finding qualified suppliers in critical operating environments; and
- complex processes of granting authorizations or licences affecting time-to-market of certain development projects.

Areas where Eni operates and where the Company is particularly exposed to political risk include, but are not limited to: Libya, Egypt, Algeria, Nigeria, Angola, Kazakhstan, Venezuela and Iraq. Additionally, any possible reprisals because of military or other action, such as acts of terrorism in Europe, the United States or elsewhere, could have a material adverse effect on Eni's business, results of operations and financial condition.

In recent years, Eni's operations in Libya were materially affected by the revolution of 2011 and a change of regime, which caused a prolonged period of political and social instability, still ongoing. In 2011 Eni's operations in the country experienced an almost one-year long shutdown due to security issues amidst a civil war, causing a material impact on the Group results of operation and cash flow of the year. In subsequent years Eni has experienced frequent disruptions at its operations albeit of a smaller scale than in 2011 due to security threats to its installations and personnel. In the second half of 2018 a resurgence of socio-political instability coupled with internal clashes reduced the Country economic activity and gas demand which negatively affected the Company's levels of production for the year. Management is closely monitoring the situation and is evaluating any possible measure to safeguard safety of Eni's local personnel and security of plants and production infrastructures. Going forward, management believes that Libya's geopolitical situation will continue to represent a source of risk and uncertainty to Eni's operations in the Country. Currently, Libya represents approximately 16% of the Group's total production; this proportion is forecasted to decrease in the medium term. In the event of major adverse events such as the resumption of internal conflict, acts of war, sabotage, social unrest, clashes and other forms of civil disorder, Eni could be forced to interrupt or reduce its producing activities at the Libyan plants, negatively affecting Eni's results of operations, cash flow and business prospects.

Venezuela is currently experiencing a situation of financial stress amidst an economic downturn due to lack of resources to support the development of the country's hydrocarbons reserves, which have negatively affected the Country production levels and hence petroleum revenues. The situation has been made worse by certain international sanctions targeting the country's financial system and its ability to export crude oil to the USA market, which is the main outlet of Venezuelan production, which are described below. Eni expects the financial and political outlook of Venezuela to negatively affect its ability to recover the investments made in the Country to develop two petroleum projects and the overdue trade receivables owned to us by the Venezuelan national oil company–PDVSA–and its affiliates for the gas supplies of the Cardon IV gas project, a 50 per cent.–held joint venture. In 2018, this venture was able to collect a certain percentage of the sales of the equity gas produced in the year to PDVSA. The venture is systematically accounting a loss provision on the uncollected revenues based on management's appreciation of the counterparty risk which was estimated based on the findings of a review of the past experience of sovereign defaults. Furthermore, due to a worsening operating environment, management decided to de-book the proved undeveloped reserves (down 106 million BBL) at one of the Company's projects in the Country, recognizing an impairment loss of around €200 million.

Nigeria is also undergoing a situation of financial stress, which has translated into continuing delays in collecting overdue trade receivables and credits for the carry of the expenditures of the Nigerian joint operators at projects operated by Eni and the incurrence of credit losses. Further, Eni's activities in Nigeria have been impacted in recent years by continuing incidences of theft, acts of sabotage and other similar disruptions, which have jeopardized the Company's ability to conduct operations in full security, particularly in the onshore area of the Niger Delta. Eni expects that those risks will continue to affect Eni's operations in Nigeria and other countries.

It is possible that the Group may incur further asset impairments or credit losses in future reporting periods depending on the evolution of the financial outlook of the Countries where the Group is conducting its oil&gas operations.

In Egypt, Eni plans to invest significantly in the next four-year plan to sustain the production plateau at the Zohr offshore gas field and to develop existing gas reserves at other projects. Since our gas production is entirely sold to local state-owned oil companies, we expect a significant increase in the credit risk exposure in Egypt, where we experienced some issues at collecting overdue trade receivables during the downturn. Eni will continue monitoring the counterparty risk in future years considering the significant volumes of gas expected to be supplied to Egypt's national oil companies.

Eni closely monitors political, social and economic risks of the countries in which it has invested or intends to invest, in order to evaluate the economic and financial return of certain projects and to selectively evaluate projects. While the occurrence of those events is unpredictable, the occurrence of any such events could adversely affect Eni's results from operations, cash flow and business prospects, also including the counterparty risk arising from the financing exposure of Eni in case state-owned entities, which are party to Eni's upstream projects for developing hydrocarbons, fail to reimburse due amounts.

Sanction targets

In response to the Russia-Ukraine crisis, the European Union and the United States have enacted sanctions targeting, inter alia, the financial and energy sectors in Russia by restricting the supply of certain oil and gas items and services to Russia and certain forms of financing. Eni has adapted its activities to the applicable sanctions and will adapt its business to any further restrictive measures that could be adopted by the relevant authorities. Recently, the US government has tightened the sanction regime against Russia by enacting the "Countering America's Adversaries Through Sanctions Act". In response to these new measures, the Company could possibly refrain from pursuing business opportunities in Russia, while currently the Company is not engaged in any upstream projects in Russia.

It is possible that wider sanctions targeting the Russian energy, banking and/or finance industries may be implemented. Further sanctions imposed on Russia, Russian citizens or Russian companies by the international community, such as restrictions on purchases of Russian gas by European companies or measures restricting dealings with Russian counterparties, could adversely impact Eni's business, results of operations and cash flow. Furthermore, an escalation of the international crisis, resulting in a tightening of sanctions, could entail a significant disruption of energy supply and trade flows globally, which could have a material adverse effect on the Group's business, financial conditions, results of operations and prospects.

In 2017, the US Administration enacted certain financing sanctions against Venezuela, which prohibit any US person to be involved in all transactions related to, provision of financing for, and other dealings in, among other things, any debt owed to the Government of Venezuela that is pledged as collateral after the effective date, including accounts receivable. Recently the US administration has resolved to impose an embargo on the import of crude oil from Venezuela state-owned oil company, PDVSA and has restricted the ability of US dealers to trade bonds issued by the Government of Venezuela and its affiliates. These sanctions do not affect directly Eni's activities, which however are affected by the worsening financial, political and operating outlook of the country which could limit the ability of Eni to recover its investments.

Risks in the Company's Gas & Power business

Risks associated with the trading environment and competition in the gas market

Until 2018, our Gas & Power segment has recorded a history of weak profitability and losses due to the changed fundamentals of the wholesale gas markets in Europe following the gas downturn of 2013–2014. Competition escalated driven by muted demand growth, oversupplies and the increasing weigh in the European energy mix of governmental-subsided renewable energy sources (particularly the photovoltaic). The large-scale development of shale gas in the United States was another factor contributing to the oversupply situation in Europe, because many LNG projects worldwide that originally targeted the US market were redirected to an already saturated European market. Furthermore, a number of re-gasification terminals in the US have been upgraded to gas liquefaction facilities with the aim of exporting the US gas surplus. Large gas supplies to Europe led to the development of liquid spot markets where gas is traded daily. Prices at those hubs became the main indexation parameter of selling prices, replacing prices contractually agreed in bilateral negotiations between gas buyers and gas wholesalers. Increased competition, market liquidity and indexation mismatch between gas purchase prices and selling prices determined a squeeze of margins on gas sales. These trends were exacerbated by the contractual commitments taken by the Company to supply gas to end-markets in Europe. A few years ago, before the onset of the European gas downturn, the Company signed with the main countries supplying gas to Europe (Russia, Algeria, the Netherlands, Libya and Norway) long-term gas supply contracts with take-or-pay clauses, which would expose us to a volume risk, as the Company was contractually required to purchase minimum annual amounts of gas or, in case of failure, to pay the corresponding price. Additionally, Eni booked the transportation rights along the main gas backbones across Europe to deliver its contracted gas volumes to end-markets. In a weak market, the need to dispose of the minimum off-take of gas negatively affected Eni's margins. Those market trends have negatively affected the operating performance of our Gas & Power segment from the beginning of the market crisis throughout 2017, when this segment closed at breakeven. However, in 2018 the segment posted a significant recovery in profitability due to the benefits of the renegotiations of its long-term gas supply contracts and other drivers. Furthermore, in 2018 gas demand and supplies in Europe were more balanced due to a certain recovery in demand supported by the phase out of a number of coal-fired power plants and lower production from nuclear plants, a slowdown in the final investment decisions in new liquefaction capacity due to the oil downturn and increasing gas demand from China. Looking forward, the Company expects that a muted demand environment in Europe driven by an ongoing economic slowdown will increase the risks of oversupplies and margin pressure.

Against the backdrop of a challenging competitive environment, Eni anticipates a number of risk factors to the profitability outlook of the Company's gas marketing business over the four-year planning period, considering the Company's operational constraints dictated by its long-term supply contracts with take-or-pay clauses and its structure of fixed costs linked to the transportation rights at the main European backbones booked for multi-year periods. Such risk factors include continuing oversupplies, pricing pressures, volatile margins and the risk of deteriorating spreads of Italian spot prices versus continental benchmarks. The results of Eni's wholesale business are particularly exposed to the volatility of the spreads between spot prices at European hubs and Italian spot prices because the Group's supply costs are mainly linked to prices at European hubs, whereas a large part of the Group's selling volumes are linked to Italian spot prices which, historically, have been higher due to the costs of logistics and other factors. This price differential enables the Company to recover its fixed operating expenses in the gas wholesale business. Risks are raising that spot prices in Italy could converge with prices at continental hubs due to the current slowdown of gas demand in Europe and in Italy and the return of LNG spot volumes at European markets and also at Italian regasification terminals. Longer-term there are risks of an oversupply build in the Italian market due to the expected entry into operations of a project to import gas from the Caspian region to Italy and other developments. A reduction of the spread between Italian spot prices and European spot prices for gas could negatively affect the profitability of our business by reducing the total addressable market and the related opportunities to monetize the flexibilities of our gas portfolio, as in the case of the possibility to lift additional gas volumes in addition to the annual minimum quantity at our take-or-pay contracts up the annual contractual quantity in case of favorable market conditions.

Eni's management is planning to continue its strategy of renegotiating the Company's long-term gas supply contracts in order to constantly align pricing and volume terms to current market conditions as they evolve, considering the risk factors described above. The revision clauses provided by these contracts state the right of each counterparty to renegotiate the economic terms and other contractual conditions periodically, in relation to ongoing changes in the gas scenario. Management believes that the outcome of those renegotiations is uncertain in respect of both the amount of the economic benefits that will be ultimately obtained and the timing of recognition of profit. Furthermore, in case Eni and the gas suppliers fail to agree on revised contractual terms, the claiming party has the ability to open an arbitration procedure to obtain revised contractual conditions. However, the suppliers might also file counterclaims with the arbitration panel seeking to dismiss Eni's request for a price review and may also claim an increase in the price of the gas supplied to Eni based on their own view of markets dynamics. All these possible developments within the renegotiation process could increase the level of risks and uncertainties relating the outcome of those renegotiations.

Current, negative trends in gas demands and supplies may impair the Company's ability to fulfil its minimum off-take obligations in connection with its take-or-pay, long-term gas supply contracts

In the years preceding the European gas downturn of 2013–2014, Eni signed a number of long-term gas supply contracts with national operators of certain key producing countries, from where most of the European gas supplies are sourced (Russia, Algeria, Libya, the Netherlands and Norway). These contracts were intended to secure Eni long-term access to gas supplies, particularly with a view to supplying the Italian gas market and in anticipation of certain pargets of gas demand growth, which however would fall short of industry's projections.

These contracts include take-or-pay clauses whereby the Company has an obligation to lift minimum, pre-set volumes of gas in each year of the contractual term or, in case of failure, to pay the whole price, or a fraction of that price, up to the minimum contractual quantity. Similar considerations apply to ship-or-pay contractual obligations. Long-term gas supply contracts with take-or-pay clauses expose the Company to a volume risk, as the Company is obligated to purchase an annual minimum volume of gas, or in case of failure, to pay the underlying price.

Management believes that the current level of market liquidity, the outlook of the European gas sector which is featuring muted demand growth, strong competitive pressures and large supplies, as well as any possible change in sector-specific regulation represent risk factors to the Company's ongoing ability to fulfil its minimum take obligations associated with its long-term supply contracts.

Risks associated with sector-specific regulations in Italy

Risks associated with the regulatory powers entrusted to the Italian Regulatory Authority for Energy, Networks and Environment in the matter of pricing to residential customers

Eni's Gas & Power segment is subject to regulatory risks mainly in its domestic market in Italy. The Italian Regulatory Authority for Energy, Networks and Environment (the "Authority") is entrusted with certain powers in the matter of natural gas pricing. Specifically, the Authority retains a surveillance power on pricing in the natural gas market in Italy and the power to establish selling tariffs for the supply of natural gas to residential and commercial users until the market is fully opened.

Developments in the regulatory framework intended to increase the level of market liquidity or of de-regulation, or intended to reduce operators' ability to transfer to customers cost increases in raw materials may negatively affect future sales margins of gas and electricity, operating results and cash flow.

Environmental, health and safety regulations

Eni has incurred in the past, and will continue incurring, material operating expenses and expenditures, and is exposed to business risk in relation to compliance with applicable environmental, health and safety regulations in future years, including compliance with any national or international regulation on GHG emissions

Eni is subject to numerous EU, international, national, regional and local laws and regulations regarding the impact of its operations on the environment and health and safety of employees, contractors, communities and properties. Generally, these laws and regulations require acquisition of a permit before drilling for hydrocarbons may commence, restrict the types, quantities and concentration of various substances that can be released into the environment in connection with exploration, drilling and production activities, including refinery and petrochemical plant operations, limit or prohibit drilling activities in certain protected areas, require to remove and dismantle drilling platforms and other equipment and well plug-in once oil and gas operations have terminated, provide for measures to be taken to protect the safety of the workplace and health of communities involved by the Company's activities, and impose criminal or civil liabilities for polluting the environment or harming employees' or communities' health and safety resulting from the Group's operations.

These laws and regulations set limits to the emission of scrap substances and pollutants and discipline the handling of hazardous materials and discharges of water contaminants nad nocive air emissions resulting from the operation of oil and natural gas extraction and processing plants, petrochemical plants, refineries, service stations, vessels, oil carriers, pipeline systems and other facilities owned or operated by Eni. In addition, Eni's operations are subject to laws and regulations relating to the production, handling, transportation, storage, disposal and treatment of waste.

Breaches of environmental, health and safety laws and regulations as in the case of negligent or willful release of pollutants into the atmosphere, the soil or groundwater or the overcome of concentration threshold of contaminants set by the law expose the Company to the incurrence of liabilities associated with compensation for environmental, health or safety damage and expenses for environmental remediation and clean-up. Furthermore, in the case of violation of certain rules regarding the safeguard of the environment and safety in the workplace and of communities, the Company may be liable for the negligent or willful conduct on part of its employees as per Italian Law Decree No. 231/2001, which assumes that any misconduct of employees in the field of environmental and health matters can be ascribed to the Company.

Environmental, health and safety laws and regulations have a substantial impact on Eni's operations. Management expects that the Group will continue to incur significant amounts of operating expenses and expenditures in the foreseeable future to comply with laws and regulations and to safeguard the environment, safety in the workplace, health of employees, contractors and communities involved by the Company operations, including:

- costs to prevent, control, eliminate or reduce certain types of air and water emissions and handle waste and other hazardous materials, including the costs incurred in connection with government action to address climate change;
- remedial and clean-up measures related to environmental contamination or accidents at various sites, including those owned by third parties (see discussion below);
- damage compensation claimed by individuals and entities, including local, regional or state administrations, should Eni cause any kind of accident, oil spill, well blowouts, pollution, contamination, emission of GHG above permitted levels or of any other hazardous gases, water, ground or air contaminants or pollutants, as a result of its operations or if the Company is found guilty of violating environmental laws and regulations; and
- costs in connection with the decommissioning and removal of drilling platforms and other facilities, and well plugging at the end of oil&gas field production.

As a further result of any new laws and regulations or other factors, like the actual or alleged occurrence of environmental damage at Eni's plants and facilities, the Company may be forced to curtail, modify or cease certain operations or implement temporary shutdowns of facilities, which could diminish Eni's productivity and materially and adversely impact Eni's results of operations, cash flow and liquidity.

Risks of environmental, health and safety incidents and liabilities are inherent in many of Eni's operations and products. Management believes that Eni adopts high operational standards to ensure safety in running its operations and safeguard of the environment and the health of employees, contractors and communities. In spite of such measures, it is possible that incidents like blowouts, oil spills, contaminations, pollution, and release in the air, soil and ground water of pollutants and other dangerous materials, liquids or gases, and other similar events could occur that would result in damage, also of large proportion and reach, to the environment, employees, contractors, communities and property. The occurrence of any such events could have a material adverse impact on the Group's business, competitive position, cash flow, results of operations, liquidity, future growth prospects, shareholders' returns and damage to the Group's reputation.

Eni has incurred in the past and may incur in the future material environmental liabilities in connection with the environmental impact of its past and present industrial activities. Eni is also exposed to claims under environmental requirements and, from time to time, such claims have been made against us. Furthermore, environmental requirements and regulations in Italy and elsewhere typically impose strict liability. Strict liability means that in some situations Eni could be exposed to liability for clean-up and remediation costs, environmental damage, and other damages as a result of Eni’s conduct of operations that was lawful at the time it occurred or of the conduct of prior operators or other third parties. In addition, plaintiffs may seek to obtain compensation for damage resulting from events of contamination and pollution or in case the Company is found liable of violations of any environmental laws or regulations.

In Italy, Eni is exposed to the risk of expenses and environmental liabilities in connection with the impact of its past activities at certain industrial hubs where the Group’s products were produced, processed, stored, distributed or sold, such as chemical plants, mineral-metallurgic plants, refineries and other facilities, which were subsequently disposed of, liquidated, closed or shut down. At these industrial hubs, Eni has undertaken a number of initiatives to remediate and to clean-up proprietary or concession areas that were allegedly contaminated and polluted by the Group’s industrial activities. State or local public administrations have sued Eni for environmental and other damages and for clean-up and remediation measures in addition to those which were performed by the Company, or which the Company committed to perform. In some cases, Eni has been sued for alleged breach of criminal laws (for example for alleged environmental crimes such as failure to perform soil or groundwater reclamation, environmental disaster and contamination, discharge of toxic materials, amongst others). Although Eni believes that it may not be held liable for having exceeded in the past pollution thresholds that are unlawful according to current regulations but were allowed by laws then effective, nor because the Group took over operations from third parties, it cannot be excluded that Eni could potentially incur such environmental liabilities.

Eni’s financial statements account for provisions relating to the costs to be incurred with respect to clean-ups and remediation of contaminated areas and groundwater for which a legal or constructive obligation exists and the associated costs can be reasonably estimated in a reliable manner, regardless of any previous liability attributable to other parties. The accrued amounts represent management’s best estimates of the Company’s existing liabilities.

Management believes that it is possible that in the future Eni may incur significant environmental expenses and liabilities in addition to the amounts already accrued due to: (i) the likelihood of as yet unknown contamination; (ii) the results of ongoing surveys or surveys to be carried out on the environmental status of certain Eni’s industrial sites as required by the applicable regulations on contaminated sites; (iii) unfavourable developments in ongoing litigation on the environmental status of certain of the Company’s sites where a number of public administrations and the Italian Ministry of the Environment act as plaintiffs; (iv) the possibility that new litigation might arise; (v) the probability that new and stricter environmental laws might be implemented; and (vi) the circumstance that the extent and cost of environmental restoration and remediation programs are often inherently difficult to estimate leading to underestimation of the future costs of remediation and restoration, as well as unforeseen adverse developments both in the final remediation costs and with respect to the final liability allocation among the various parties involved at the sites.

As a result of those risks, environmental liabilities could be substantial and could have a material adverse effect on Eni’s results of operations, cash flow, financial condition, business prospects, reputation and shareholders’ value, including dividends and the share price.

Rising public concern related to climate change has led and could continue to lead to the adoption of national and international laws and regulations which are expected to result in a decrease of demand for hydrocarbons and increased compliance costs for the Company. Eni is also exposed to risks of technological breakthrough in the energy field and risks of unpredictable extreme meteorological events linked to the climate change. All these developments may adversely affect the Group’s profitability, businesses outlook and reputation

Growing worldwide public concern over greenhouse gas (GHG) emissions and climate change, as well as increasingly regulations in this area, could adversely affect the Group’s business and reputation, increase its operating costs and reduce its results of operations, cash flow, financial condition, business prospects and shareholders returns. Those risks may emerge in the short and medium-term, as well as over the long-term.

The scientific community has established a link between climate change and increasing GHG concentration in the atmosphere. International efforts to limit global warming have led, and Eni expects them to continue to lead, to new laws and regulations designed to reduce GHG emissions that are expected to bring about a gradual reduction in the use of fossil fuel over the medium to long-term, notably through the diversification of the energy mix.

Governmental institutions have responded to the issue of climate change on two fronts: on one side, governments can both impose taxes on GHG emissions and incentivize a progressive shift in the energy mix away from fossil fuels, for example, by subsidizing the power generation from renewable sources.

Some governments have already introduced carbon pricing schemes, which can be an effective measure to reduce GHG emissions at the lowest overall cost to society. Today, about half of the GHG direct emissions coming from Eni operated assets are already included in national or supranational Carbon Pricing Mechanisms, such as the European Emission Trading Scheme. Eni expects that more governments will adopt similar schemes and that a growing share of the Group’s GHG emissions will be subject to carbon-pricing and other forms of climate regulation in the short to medium term. Eni expects that governments require companies to apply technical measures to reduce their GHG emissions. Eni is already incurring operating costs related to its participation in the European Emission Trading Scheme, whereby Eni is required to purchase on the open markets emission allowances in case its GHG emissions exceed freely-assigned emission allowances (see Note 27 to the Financial Statements). In 2018 to comply with this carbon emissions scheme, Eni purchased on the open market allowances corresponding to 12.7 million tonnes of CO_2 emissions. In certain jurisdictions, Eni is also subject to carbon pricing schemes in Norway. Due to the likelihood of new regulations in this area, Eni expects additional compliance obligations with respect to the release, capture, and use of carbon dioxide that could result in increased investments and higher project costs for Eni and could have a material adverse effect on Eni’s operating costs and results of operations, cash flow, financial condition, business prospects and shareholders’ returns. Eni also expects that governments will also require companies to apply technical measures to reduce their GHG emissions.

Eni expects that the achievement of the Paris Agreement goal of holding the increase in global average temperature to less than 2° C above pre-industrial levels, or the more stringent goal advocated by the Intergovernmental Panel on Climate Change (IPCC) to limit global warming to 1.5°C, will strengthen the global response to the threat of climate change and spur governments to introduce further measures and policies targeting the reduction of GHG emissions, which will reduce local demand for fossil fuels, thus negatively affecting global demand for oil and natural gas. Eni’s business depends on the global demand for oil and natural gas. If existing or future laws, regulations, treaties, or international agreements related to GHG and climate change, including incentives to preserve energy or use alternative energy sources, technological breakthrough in the field of renewable energies or mass-adoption of electric vehicles reduce the worldwide demand for oil and natural gas by a large amount, Eni’s results of operations, cash flow, financial condition, business prospects and shareholders’ returns may be significantly and adversely affected.

The scientific community has concluded that increasing global average temperatures produces significant physical effects, such as the increased frequency and severity of hurricanes, storms, droughts, floods or other extreme climatic events that could interfere with Eni’s operations and damage Eni’s facilities. Extreme and unpredictable weather phenomena can result in material disruption to Eni’s operations, and consequent loss of or damage to properties and facilities, as well as a loss of output, loss of revenues, increasing maintenance and repair expenses and cash flow shortfall.

Finally, there is a reputational risk linked to the fact that oil companies are increasingly perceived by institutions and the general public as the entities responsible of the global warming due to GHG emissions across the value chain and in particular related with the use of energy products. This could possibly make Eni’s shares less attractive to investment funds and individual investors who have been more and more assessing the risk profile of companies against their carbon footprint when making investment decisions. This trend could have a material adverse effect on the price of our securities and our ability to access equity or other capital markets. Additionally, the World Bank has announced plans to stop financing upstream oil and gas projects in 2019. Similarly, according to press reports, other financial institutions also appear to be considering limiting their exposure to certain fossil fuel projects. Accordingly, our ability to use financing for future projects may be adversely impacted. This could also adversely impact our potential partners’ ability to finance their portion of costs, either through equity or debt.

Further, in some countries, governments and regulators have filed lawsuits seeking to hold fossil fuel companies, including Eni, liable for costs associated with climate change. Losing any of these lawsuits could have a material adverse effect on our results of operations, cash flows, liquidity and business prospects.

Risks related to legal proceedings and compliance with anti-corruption legislation

Eni is the defendant in a number of civil and criminal actions and administrative proceedings. In addition to existing provisions accrued as of December 31, 2018 to account for ongoing proceedings, in future years Eni may incur significant losses in addition to the amounts already accrued in connection with pending or future legal proceedings due to: (i) uncertainty regarding the final outcome of each proceeding; (ii) the occurrence of new developments that management could not take into consideration when evaluating the likely outcome of each proceeding in order to accrue the risk provisions as of the date of the latest financial statements; (iii) the emergence of new evidence and information; and (iv) underestimation of probable future losses due to the circumstance that they are often inherently difficult to estimate. Certain legal proceedings and investigations in which Eni or its subsidiaries or its officers and employees are defendant involve the alleged breach of anti-bribery and anti-corruption laws and regulations and other ethical misconduct. Such proceedings are described in Note 27 to the 2018 Consolidated financial statements, under the heading “Legal Proceedings”. Ethical misconduct and noncompliance with applicable laws and regulations, including noncompliance with anti-bribery and anti-corruption laws, by Eni, its officers and employees, its partners, agents or others that act on the Group’s behalf, could expose Eni and its employees to criminal and civil penalties and could be damaging to Eni’s reputation and shareholder value.

Risks from acquisitions

Eni is constantly monitoring the oil and gas market in search of opportunities to acquire individual assets or companies with a view of achieving its growth targets or complementing its asset portfolio. Acquisitions entail an execution risk–the risk that the acquirer will not be able to effectively integrate the purchased assets so as to achieve expected synergies. In addition, acquisitions entail a financial risk–the risk of not being able to recover the purchase costs of acquired assets, in case a prolonged decline in the market prices of oil and natural gas occurs. Eni may also incur unanticipated costs or assume unexpected liabilities and losses in connection with companies or assets it acquires. If the integration and financial risks related to acquisitions materialize, expected synergies from acquisition may fall short of management’s targets and Eni’s financial performance and shareholders’ returns may be adversely affected.

Risks deriving from Eni’s exposure to weather conditions

Significant changes in weather conditions in Italy and in the rest of Europe from year to year may affect demand for natural gas and some refined products. In colder years, demand for such products is higher. Accordingly, the results of operations of the Gas & Power segment and, to a lesser extent, the Refining & Marketing business, as well as the comparability of results over different periods may be affected by such changes in weather conditions.

Eni’s crisis management systems may be ineffective

Eni has developed contingency plans to continue or recover operations following a disruption or incident. An inability to restore or replace critical capacity to an agreed level within an agreed period could prolong the impact of any disruption and could severely affect business, operations and financial results. Eni has crisis management plans and the capability to deal with emergencies at every level of its operations. If Eni does not respond or is not seen to respond in an appropriate manner to either an external or internal crisis, its business and operations could be severely disrupted with negative consequences on results of operations and cash flow.

Exposure to financial risk

Eni’s business activities are exposed to financial risk, which includes exposure to market risk, including commodity price risk, interest rate risk and foreign currency risk, as well as liquidity risk, and credit risk.

Eni’s primary source of exposure to financial risk is the volatility in commodity prices. Generally, the Group does not hedge its strategic exposure to the commodity risk associated with its plans to find and develop oil and gas reserves, volume of gas purchased under its long-term gas purchase contracts, which are not covered by contracted sales, its refining margins and other activities. The Group’s risk management objectives in addressing commodity risk are to optimize the risk profile of its commercial activities by effectively managing economic margins and safeguarding the value of Eni assets. To achieve this, Eni engages in risk management activities seeking both to hedge Group’s exposures and to profit from short-term market opportunities and trading.

Eni is engaged in substantial trading and commercial activities in the physical markets. Eni also uses financial instruments such as futures, options, Over-the-Counter forward contracts, market swaps and contracts for differences related to crude oil, petroleum products, natural gas and electricity in order to manage the commodity risk exposure. Eni also uses financial instruments to manage foreign exchange and interest rate risk.

The Group’s approach to risk management includes identifying, evaluating and managing the financial risk using a top-down approach whereby the Board of Directors is responsible for establishing the Group risk management strategy and setting the maximum tolerable amounts of risk exposure. The Group’s Chief Executive Officer is responsible for implementing the Group risk management strategy, while the Group’s Chief Financial Officer is in charge of defining policies and tools to manage the Group’s exposure to financial risk, as well as monitoring and reporting activities.

Various Group committees are in charge of defining internal criteria, guidelines and targets of risk management activities consistent with the strategy and limits defined at Eni’s top level, to be used by the Group’s business units, including monitoring and controlling activities. Although Eni believes it has established sound risk management procedures, trading activities involve elements of forecasting and Eni is exposed to the risks of market movements, of incurring significant losses if prices develop contrary to management expectations and of default of counterparties.

Exchange rate risk

Movements in the exchange rate of the euro against the U.S. dollar can have a material impact on Eni’s results of operations. Prices of oil, natural gas and refined products generally are denominated in, or linked to, U.S. dollars, while a significant portion of Eni’s expenses are incurred in euros. Accordingly, a depreciation of the U.S. dollar against the euro generally has an adverse impact on Eni’s results of operations and liquidity because it reduces booked revenues by an amount greater than the decrease in U.S. dollar-denominated expenses and may also result in significant translation adjustments that impact Eni’s shareholders’ equity. The Exploration & Production segment is particularly affected by movements in the dollar versus the euro exchange rates as the U.S. dollar is the functional currency of a large part of its foreign subsidiaries and therefore movements in the U.S. dollar versus the euro exchange rate affect year-on-year comparability of results of operations and cash flows.

Susceptibility to variations in sovereign rating risk

Eni’s credit ratings are potentially exposed to risk in reductions of sovereign credit rating of Italy. On the basis of the methodologies used by Standard & Poor’s and Moody’s, a potential downgrade of Italy’s credit rating may have a potential knock-on effect on the credit rating of Italian issuers such as Eni and make it more likely that the credit rating of the debt instruments issued by the Company could be downgraded.

Interest rate risk

Interest on Eni’s debt is primarily indexed at a spread to benchmark rates such as the Europe Interbank Offered Rate, “EURIBOR”, and the London Interbank Offered Rate, “LIBOR”. As a consequence, movements in interest rates can have a material impact on Eni’s finance expense in respect to its debt. Additionally, spreads offered to the Company may rise in connection with variations in sovereign rating risks or company rating risks, as well as the general conditions of capital markets.

Liquidity risk

Liquidity risk is the risk that suitable sources of funding for the Group may not be available, or the Group is unable to sell its assets on the marketplace in order to meet short-term financial requirements and to settle obligations. Such a situation would negatively affect the Group results of operations and cash flows as it would result in Eni incurring higher borrowing expenses to meet its obligations or, under the worst conditions, the inability of Eni to continue as a going concern. Global financial markets are volatile due to a number of macroeconomic risk factors, including the financial situation of certain hydrocarbons-exporting countries whose financial conditions have sharply deteriorated following the protracted downturn in crude oil prices. In the event of extended periods of constraints in the financial markets, or if Eni is unable to access the financial markets (including cases where this is due to Eni’s financial position or market sentiment as to Eni’s prospects) at a time when cash flows from Eni’s business operations may be under pressure, Eni’s ability to maintain Eni’s long-term investment program may be impacted with a consequent effect on Eni’s business prospects, results of operations and cash flows, and may impact shareholder returns, including dividends or share price.

The oil and gas industry is capital intensive. Eni makes and expects to continue to make substantial capital expenditures in its business for the exploration, development and production of oil and natural gas reserves. Over the next four years, the Company plans to invest in the business approximately €33 billion, approximately 50% of capital expenditures at the end of the four-year period refers to uncommitted projects, granting to the Group financial flexibility in case of sudden changes in the trading environment. In 2019, Eni expects to make capital expenditures of approximately €8 billion, in line with 2018. Historically, Eni’s capital expenditures have been financed with cash generated by operations, proceeds from asset disposals, borrowings under its credit facilities and proceeds from the issuance of debt and bonds.

The actual amount and timing of future capital expenditures may differ materially from Eni’s estimates as a result of, among other things, changes in commodity prices, available cash flows, lack of access to capital, actual drilling results, the availability of drilling rigs and other services and equipment, the availability of transportation capacity, and regulatory, technological and competitive developments.

Eni’s cash flows from operations and access to capital markets are subject to a number of variables, including but not limited to:

- the amount of Eni’s proved reserves;
- the volume of crude oil and natural gas Eni is able to produce and sell from existing wells;
- the prices at which crude oil and natural gas are sold;
- Eni’s ability to acquire, find and produce new reserves; and
- the ability and willingness of Eni’s lenders to extend credit or of participants in the capital markets to invest in Eni’s bonds.

If revenues or Eni’s ability to borrow decrease significantly due to factors such as a prolonged decline in crude oil and natural gas prices, Eni might have limited ability to obtain the capital necessary to sustain its planned capital expenditures. If cash generated by operations, cash from asset disposals, or cash available under Eni’s liquidity reserves or its credit facilities is not sufficient to meet capital requirements, the failure to obtain additional financing could result in a curtailment of operations relating to development of Eni’s reserves, which in turn could adversely affect its business, financial condition, results of operations, and cash flows and its ability to achieve its growth plans. These factors could also negatively affect shareholders’ returns, including the amount of cash available for dividend distribution as well as the share price.

In addition, funding Eni’s capital expenditures with additional debt will increase its leverage and the issuance of additional debt will require a portion of Eni’s cash flows from operations to be used for the payment of interest and principal on its debt, thereby reducing its ability to use cash flows to fund capital expenditures and dividends.

Credit risk

Credit risk is the potential exposure of the Group to losses in case counterparties fail to perform or pay due amounts. Credit risks arise from both commercial partners and financial ones. In the last few years, the Group has experienced a level of counterparty default higher than in previous years due to the severity of the economic and financial downturn that has negatively affected several Group counterparties, customers and partners and to the fact that Italy, which is still the largest market to Eni's gas wholesale and retail businesses, has underperformed other OECD countries in terms of GDP growth. Management believes that the Gas&Power segment is particularly exposed to credit risk due to its large and diversified customer base, which includes a large number of medium and small-sized businesses and retail customers who have been particularly hit by the financial and economic downturn. Going forward, we expect that an uncertain macroeconomic outlook in Europe and Italy will pose a risk to the Company's ability to collect revenues in its retail gas and power business.

Eni's E&P business is significantly exposed to the credit risk because of the deteriorated financial outlook of many oil-producing countries due to a three-year long downturn in oil prices, which has negatively impacted petroleum revenues and cash reserves. Certain countries where Eni is engaging in oil&gas operations have yet to recover from the oil downturn. The financial difficulties of those countries have extended to state-owned oil companies and other national agencies who are partnering Eni in the execution of development projects of hydrocarbons reserves or who are the buyers of Eni's equity production in a number of oil&gas projects. These trends have limited Eni's ability to fully recover or to collect timely its trade or financing receivable or its investments towards those entities. For further information, see the paragraph "Political Considerations" above.

Eni believes that the management of doubtful accounts represents an issue to the Company, which will require management focus and commitment going forward. Eni cannot exclude the recognition of significant provisions for doubtful accounts in the future. In particular, management is closely monitoring exposure to the counterpart risk in its Exploration & Production due to the magnitude of the exposure at risk and to the long-lasting effects of the oil price downturn on its industrial partners.

Disruption to or breaches of Eni's critical IT services or information security systems could adversely affect the Group's activities.

The Group's activities depend heavily on the reliability and security of its information technology (IT) systems. The Group's IT systems, some of which are managed by third parties, are susceptible to being compromised, damaged, disrupted or shutdown due to failures during the process of upgrading or replacing software, databases or components, power or network outages, hardware failures, cyber-attacks (viruses, computer intrusions), user errors or natural disasters. The cyber threat is constantly evolving. Attacks are becoming more sophisticated with regularly renewed techniques while the digital transformation amplifies exposure to these cyber threats. The adoption of new technologies, such as the Internet of things (IoT) or the migration to the cloud, as well as the evolution of architectures for increasingly interconnected systems, are all areas where cyber security is a very important issue. The Group and its service providers may not be able to prevent third parties from breaking into the Group's IT systems, disrupting business operations or communications infrastructure through denial-of-service attacks, or gaining access to confidential or sensitive information held in the system. The Group, like many companies, has been and expects to continue to be the target of attempted cybersecurity attacks. While the Group has not experienced any such attack that has had a material impact on its business, the Group cannot guarantee that its security measures will be sufficient to prevent a material disruption, breach or compromise in the future.

As a result, the Group's activities and assets could sustain serious damage, services to clients could be interrupted, material intellectual property could be divulged and, in some cases, personal injury, property damage, environmental harm and regulatory violations could occur, potentially having a material adverse effect on the Group's financial condition, including its operating income and cash flow.

The United Kingdom leaving the European Union may affect the Group's results

On 23 June 2016, the UK held a referendum to decide on the UK's membership of the European Union. The UK vote was to leave the European Union. There are a number of uncertainties in connection with the future of the UK and its relationship with the European Union. The negotiation of the UK's exit terms is likely to take a number of years. Until the terms and timing of the UK's exit from the European Union are clearer, it is not possible to determine the impact that the referendum, the UK's departure from the European Union and/or any related matters may have on the business of the Issuer.

As such, no assurance can be given that such matters would not adversely affect the Company's business prospects, results of operations, cash flows and liquidity.

Item 4. INFORMATION ON THE COMPANY

History and development of the Company

Eni SpA with its consolidated subsidiaries engages in the exploration, development and production of hydrocarbons, in the supply and marketing of gas, LNG and power, in the refining and marketing of petroleum products, in the production and marketing of basic petrochemicals, plastics and elastomers and in commodity trading. Eni has operations in 67 countries and 31,701 employees as of December 31, 2018.

Eni, the former Ente Nazionale Idrocarburi, a public law agency, established by Law No. 136 of February 10, 1953, was transformed into a joint stock company by Law Decree No. 333 published in the Official Gazette of the Republic of Italy No. 162 of July 11, 1992 (converted into law on August 8, 1992, by Law No. 359, published in the Official Gazette of the Republic of Italy No. 190 of August 13, 1992). The Shareholders' Meeting of August 7, 1992 resolved that the company be called Eni SpA. Eni is registered at the Companies Register of Rome, register tax identification number 00484960588, R.E.A. Rome No. 756453. Eni is expected to remain in existence until December 31, 2100; its duration can however be extended by resolution of the shareholders.

The name of the agent of Eni in the United States is Giovan Battista Di Giovanni, Washington DC– USA 601, 13th street, NW 20005.

Eni's principal segments of operations are described below.

Eni's Exploration & Production segment engages in oil and natural gas exploration and field development and production, as well as LNG operations, in 43 countries, including Italy, Libya, Egypt, Norway, the United Kingdom, Angola, Congo, Nigeria, the United States, Kazakhstan, Algeria, Australia, Iraq, Indonesia, Ghana, Mozambique, Oman and United Arab Emirates. In 2018, Eni average daily production amounted to 1,732 KBOE/d on an available-for-sale basis. As of December 31, 2018, Eni's total proved reserves amounted to 7,153 mmBOE, which include subsidiary undertakings and Eni's share of reserves of equity-accounted and proportionally consolidated entities.

Eni's Gas & Power segment engages in the supply, trading and marketing of gas, LNG and electricity, international gas transport activities and commodity trading and derivatives. This segment also includes the activity of electricity generation that is ancillary to the marketing of electricity. In 2018, Eni's worldwide sales of natural gas amounted to 76.71 BCM, of which 39.03 BCM in Italy. Eni produces power at a number of operated gas-fired plants in Italy with a total installed capacity of 4.7 GW as of December 31, 2018. In 2018, electricity sold totalled 37.07 TWh. The LNG business includes the purchase and marketing of LNG worldwide, with a large incidence of equity LNG supplies. The Group serves the gas and power wholesale and retail markets in Italy and in a number of European markets. As at December 31, 2018 the Gas & Power segment had 9.2 million retail customers. The Gas & Power segment comprises results of the Group activities intended to manage commodity risk of asset-backed trading activities and proprietary trading. Furthermore, this activity includes the result of crude oil and products supply, trading and shipping.

Eni's Refining & Marketing and Chemical segment includes the result of the R&M business and of the chemicals business.

The R&M business engages in crude oil supply and refining and marketing of petroleum products in retail and wholesale markets mainly in Italy and in the rest of Europe, as well as in the petrochemical business. In 2018, processed volumes of crude oil and other feedstock, including renewable feedstock, amounted to 23.48 mmtonnes (of which traditional refinery throughputs were 23.23 mmtonnes and green refinery throughputs were 0.25 mmtonnes) and sales of refined products were 32.92 mmtonnes, of which 25.91 mmtonnes in Italy. Retail sales of refined products at Eni's service stations amounted to 8.39 mmtonnes in Italy and in the rest of Europe. In 2018, Eni's retail market shares in Italy through its "Eni" branded network of service stations was 24%.

In the Chemical business Eni, through its wholly-owned subsidiary Versalis, engages in the production and marketing of basic petrochemical products, plastics and elastomers. Versalis is developing the business of green chemicals. Activities are concentrated in Italy and in Europe. In 2018, production volumes of petrochemicals amounted to 9,483 ktonnes. The results of Versalis have been aggregated with those of R&M, in the reportable segment "R&M and Chemicals" because the two businesses exhibit similar economic characteristics.