

Eni for  
2016

Sustainability Report



## Mission

We are an energy company.

We are working to build a future where everyone can access energy resources efficiently and sustainably.

Our work is based on passion and innovation, on our unique strengths and skills, on the quality of our people and in recognising that diversity across all aspects of our operations and organisation is something to be cherished.

We believe in the value of long term partnerships with the countries and communities where we operate.



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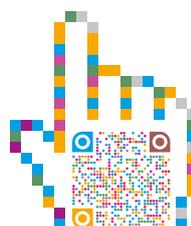
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## Annexes

Eni for 2016 - Sustainability Performance  
(also available on Eni.com)  
GRI Content Index (available on Eni.com)



The 17 Sustainable Development Goals (SDGs) for 2030, promoted by the United Nations, are used by Eni as a guide for its development projects over the long term.



For more details on sustainability issues, please visit the dedicated section on Eni.com



## Message to our stakeholders

Eni for 2016 is an opportunity to evaluate the three challenging and exciting years which, despite the complex global context, have strengthened and accompanied us on the path of growth and transformation. From a divisional structure with duplicated functions and processes, Eni has become an integrated energy company. The exploration and production activities have been further reinforced and the mid-downstream, gas, refinery and chemical businesses have been restructured, have been given new life and, after years of losses, have become newly profitable. This was not a simple journey. It was necessary to change Eni into a more agile and resilient company and this has been achieved thanks to all the Eni people, since they are the engine behind everything. It is their contribution and their ability to engage successfully with the great challenges we are facing, because the private sector can and must play a crucial role as the engine of sustainable development, balancing the business goals and the local socio-economic growth, over the long term. That's why we measure ourselves against the UN Sustainable Development Goals (SDGs) and in 2016 I have confirmed my presence on the Board of Directors of the SDG Centre for Africa with headquarters in Kigali, Rwanda, so as to reinforce our involvement in devising concrete solutions to ensure the development of Countries in which Eni is present. This commitment,

will be further amplified thanks to our collaboration with the governments, the civil society and the universities.

As operators in the energy field we therefore have the responsibility of facing and resolving two great challenges: maximising access to energy and combatting climate change. The world today is witnessing enormous and unacceptable differences, gaps and contradictions between the "North and South" of the planet that has come to host more than seven billion people, 82% of whom are concentrated in non-OECD Countries with an average GDP of about 5000\$ per capita, that is 7 times lower than in OECD Countries. The size of this difference is even more noteworthy, considering that 1.3 billion people, between Africa and the Far East, still do not have access to electrical energy, and 2.7 billion people use biomass to cook, risking serious damage to their health. The real contradiction is that in these Countries are concentrated approximately 90% of the world's energy resources that represent a driver of potential wealth for developing economies. While fighting energy poverty which hinders the development to which every human being is entitled, there is also the need to reduce the environmental impacts as to guarantee a sustainable future for everyone.

In order to meet these important challenges, which are characteristic of the energy sector, Eni has defined a clear long term integrated strategy that was also presented at the

ESG event dedicated to investors on September 30, 2016 in Paris. A strategy to reconcile financial stability with social and environmental sustainability, in order to create long term value for all the stakeholders. To implement these strategic guidelines Eni is leveraging on three key levers:

- A well-defined path to decarbonisation;
- An Operating Model that reduces risks as well as environmental and social impacts;
- A Cooperation Model with the hosting Countries.

These are the basic elements of our corporate culture which we will analyse and highlight in this report.

1. Firstly, Eni's commitment in promoting the process of energy transition for a low carbon future that mainly lies in reducing its activities' emissions, developing renewable energies and guaranteeing access to energy. With our plan to reduce GHG emissions, in 2016 we have continued to reduce the emissions intensity index by 9% and we will continue to do so in order to reach the 43% reduction goal in 2025. We will also continue to increase natural gas production, the bridge towards a low carbon future, and to develop projects in Italy and abroad to install a capacity of 463 MW from renewables by 2020. Our clear and effective decarbonization strategy has also received an important recognition. Eni is the only major Oil & Gas company included in the CDP's "A List", which is the reference for investors in the evaluation of the



climate change strategy. Together with other important companies in the industry, Eni was one of the five founding companies of the Oil and Gas Climate Initiative (OGCI) which now counts 10 companies. This initiative is meant to accelerate the development of low emissions technologies. In this regards, in 2016 we have contributed to the constitution of the OGCI Climate Investment, a corporate vehicle through which 1 billion dollars will be invested in the course of 10 years for the development of low carbon technologies.

2. To make access to new energy resources more efficient and minimize risks throughout the whole production cycle, we conduct our business using an operating model of excellence aimed at safeguarding people and assets, respecting the environment, engaging in research and development. Thanks to this model, over the last three years, we have been the top performer in the reduction of the injury rate. We registered TRIR (Total Recordable Injury Rate) values for both employees and contractors that were significantly lower than the peer average. In 2016, we reduced our TRIR by 20.8% compared with 2015, reaching a level of 0.35. We aim to reach zero injuries and we invest in training to spread our safety culture.

3. Finally, our Cooperation Model has been finalised to support local development, to minimise socio-economic gaps and to engage all the stakeholders. This is why our way of working aims at filling the gaps of local development and developing local resources for local growth. In the territories where we are present we do not simply invest in the oil and gas production for export but most of all for the

inland market while also investing in sectors that are distant from our core business, such as power stations, to provide access to energy and thus, we reduce today's profit for the sake of tomorrow's value. In our cooperation with the Countries in which we operate, we have developed important access to energy projects at infrastructural level, such as the construction and rehabilitation of electric grids and power stations and with gas production, primarily for local markets to feed the Countries' power stations. A concrete demonstration of how we operate is represented, for example, by what we have done in the Congo and Nigeria where we have invested 2 billion \$, respectively providing about 60% and 20% of the electricity of these two Countries. Today, in Sub-Saharan Africa we provide electricity to 18 million people. This Model will soon be repeated in Angola and Ghana, where we have already launched the Offshore Cape Three Points (OCTP), as well as in Mozambique. Furthermore, we're also continuing activities to support local development, such as the on and off-grid electrification for villages in the Delta State in Nigeria or actions to promote local entrepreneurship, economic diversification, access to drinking water and community health and education. In Italy, we were the first Italian Company to sign a Memorandum of Understanding on school-work alternation projects. Training and education is the starting point of every kind of growth.

This approach has its roots, before anything else, in the respect of human rights. In 2016, we have reinforced our commitment in this field, by launching an internal awareness-raising pathway that will involve all Eni people.

This process was launched with a special meeting in which I myself, together with the whole managerial line, have been face to face with experts of the most influential organisations, including the Danish Institute for Human Rights and Business, the University of Notre Dame and IPIECA.

Our way of operating, which distinctly defines Eni's identity, is well represented and synthesized by our new "mission", which has at its core, the people, the passion they invest every day in the most complex and remote operations, their competence and professionalism, their capacity to put themselves at stake, their will power. But it is not just that. Our mission also recognises the value of diversity, a diversity that is in itself a resource, whether it's about the Country, nationality, gender, culture, religion or belief. These are differences that enrich us, thanks to which people are able to grow together, in mutual respect and inclusion, and that lead to solid long-term partnership with the communities that host us. It is precisely the local communities that are our main reference, because growing together is the only way to be recognised as a credible partner.

Our goal is to build this development for everyone, because the future of others is also our future. Such is our contribution to the common good and these are the aspects that will be examined in depth in this publication.

Claudio Descalzi  
Chief Executive Officer

# Eni

## in the world

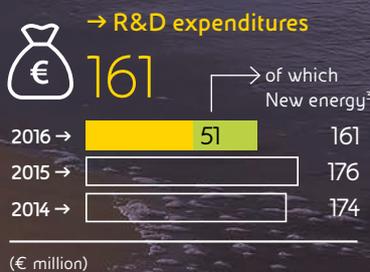
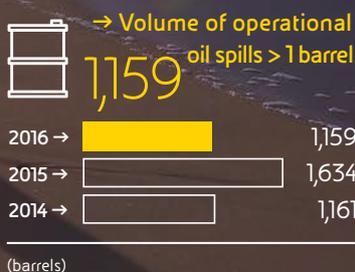
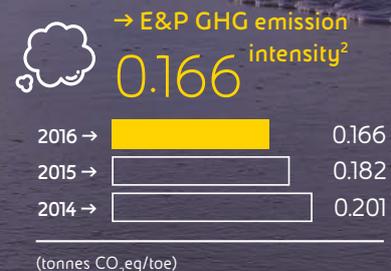
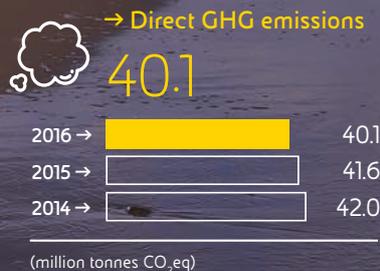
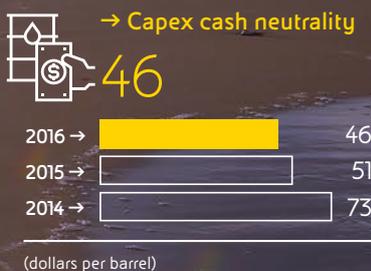
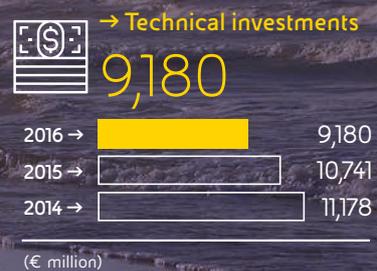
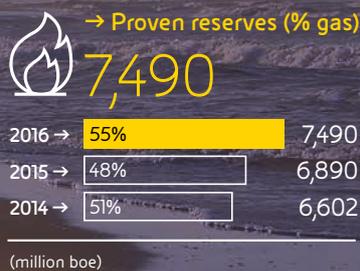
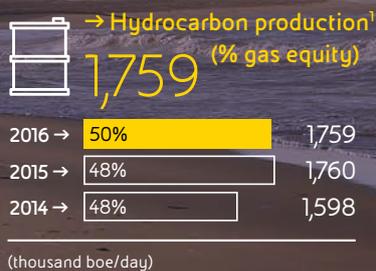
Eni is an energy Company of 33,000 people distributed in 73 Countries around the world.

Eni focuses on continuous growth based on exploration and on the creation of long term value, for a future where everyone can access energy resources efficiently and sustainably. This is why Eni has launched a transition path towards a low-carbon

future which gives natural gas a central role alongside increasing development of renewable sources. Eni's commitment even in complex and volatile environments, such as the recent ones, aims to consolidate its financial strength using an operating model that minimizes

risks throughout the entire production cycle. Activities are carried out by paying careful attention to developing the territories in which Eni operates, with the belief that growth of local contexts will contribute to create a stronger bond with the host Countries and a greater equality in the future.

2016 Highlights



1) Includes Eni's share in joint ventures and associated companies valued using the equity method.

Gross production of hydrocarbons, from reservoirs operated entirely by Eni (100%): Million toe: 117 in 2014, 125 in 2015, 122 in 2016.

2) E&P GHG emissions on gross operated production of hydrocarbons.

3) Includes research expenditure on: Natural gas promotion, Biorefining, Green chemistry and Renewable sources.

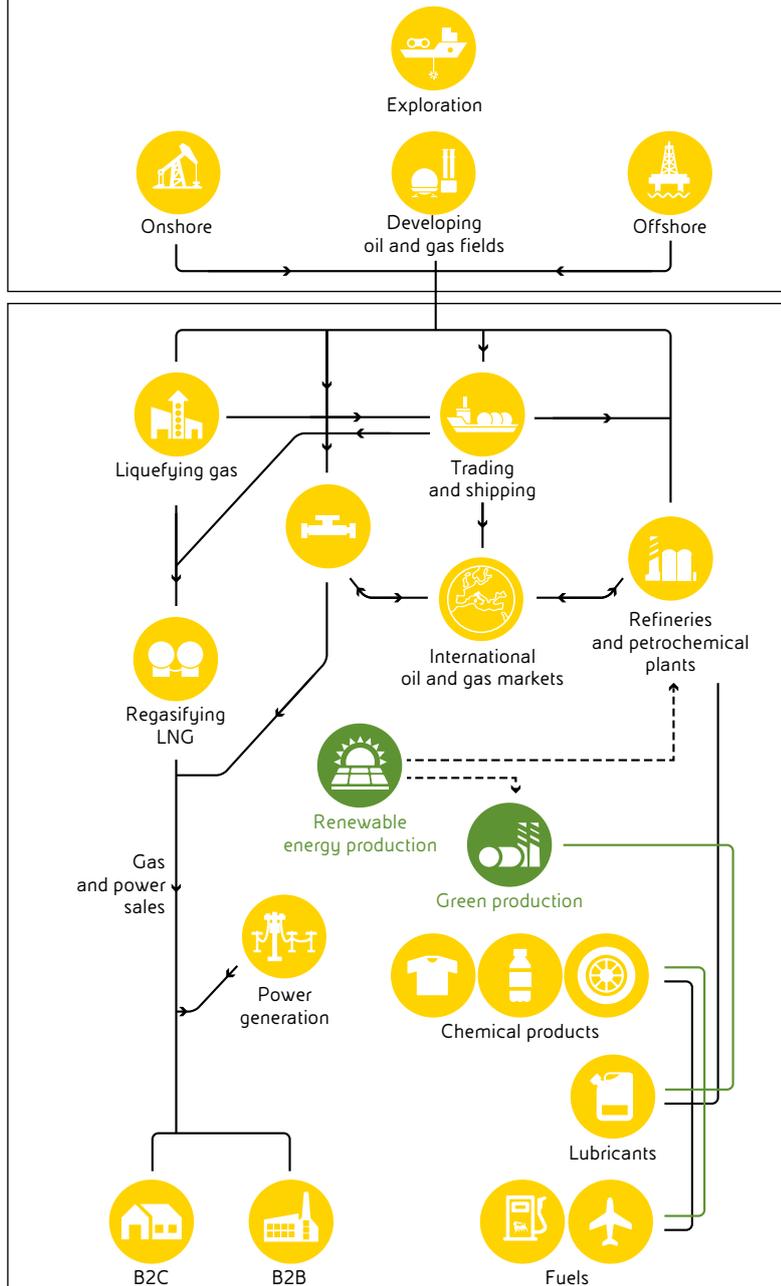
4) Amounts relating to resettlement and livelihood restoration activities are included.



# Production cycle

## Upstream

Eni engages in oil and natural gas exploration, field development and production, mainly in Italy, Algeria, Angola, Congo, Egypt, Ghana, Libya, Mozambique, Nigeria, Norway, Kazakhstan, the UK, the United States and Venezuela, overall in 44 Countries.



## Mid-Downstream

Eni sells gas, electricity, LNG and oil products in the European and extra-European markets, also leveraging on trading activities. Products availability is ensured by oil and gas production in the upstream segment, long-term gas supply contracts, CCGT power plants, Eni's refinery system as well by Versalis' chemical plants. The supply of commodities is optimized through trading activity. Integrated business units enable the Company to capture synergies in operations and reach cost efficiencies.

## Eni's worldwide presence

	E&P	G&P	R&M & C
<b>Europe</b>			
Austria			
Belgium			
Croatia			
Cyprus			
Czech Republic			
Denmark			
France			
Germany			
Greece			
Greenland			
Hungary			
Ireland			
Italy			
Luxembourg			
Montenegro			
Norway			
Poland			
Portugal			
Romania			
Slovakia			
Slovenia			
Spain			
Sweden			
Switzerland			
the Netherlands			
the United Kingdom			
Turkey			
Ukraine			
<b>Africa</b>			
Algeria			
Angola			
Congo			
Egypt			
Gabon			
Ghana			
Ivory Coast			
Kenya			
Liberia			
Libya			
Morocco			
Mozambique			
Nigeria			
South Africa			
Tunisia			
<b>Asia and Oceania</b>			
Australia			
China			
India			
Indonesia			
Iraq			
Japan			
Jordan			
Kazakhstan			
Kuwait			
Malaysia			
Myanmar			
Oman			
Pakistan			
Russia			
Saudi Arabia			
Singapore			
South Korea			
Taiwan			
the United Arab Emirates			
Timor Leste			
Turkmenistan			
Vietnam			
<b>America</b>			
Argentina			
Canada			
Ecuador			
Mexico			
Puerto Rico			
the United States			
Trinidad & Tobago			
Venezuela			

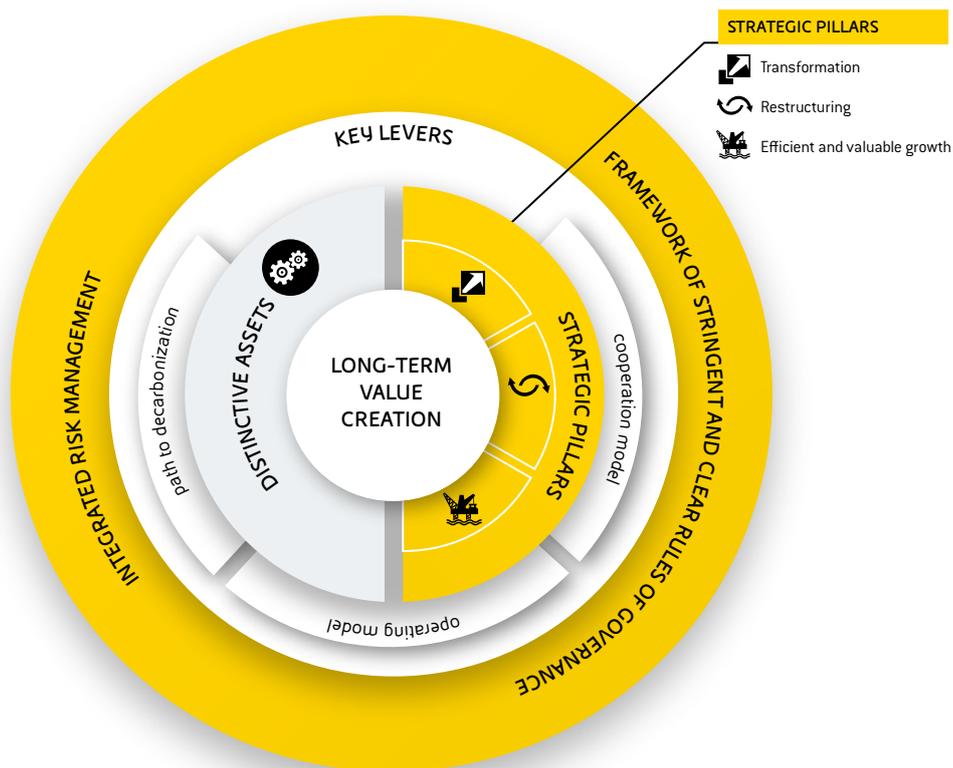


# A responsible and sustainable company approach

Eni's business model targets long-term value creation by delivering on profitability and growth, efficiency, operational excellence and handling operational risks of its businesses. Eni recognizes that the main challenge in the energy sector is to maximize access

to energy while combatting climate change. This challenge is met with Eni's adoption of an integrated strategy able to combine financial stability with social and environmental sustainability. This strategy can be broken down into three key levels:

- a clear and well-defined decarbonization strategy;
- an operating model that reduces social and environmental risks as well as impacts;
- a host Country development model based on long-lasting partnerships and cooperation.



The **three key levers**, covered in this report, include: the fight against climate change through the reduction of direct and indirect emissions, a hydrocarbons portfolio focused on gas, the development of renewables, the importance of technological innovation, ensuring the safety of people who work in or for Eni, respect for human

rights, ethics and transparency, safeguarding the environment and development of communities.<sup>5</sup> Eni's **distinctive assets**<sup>6</sup> are linked to economic, financial, operational, environmental, technological, human, social and relational aspects, and their management, together with the strategic guidelines, allow Eni to achieve its objectives.

5) These subjects mirror the results of the 2016 materiality analysis (see page 56).

6) More details are given on page 17 of the Integrated Annual Report 2016.

# Clear and transparent governance rules

Integrated sustainability in Eni's governance system envisages:

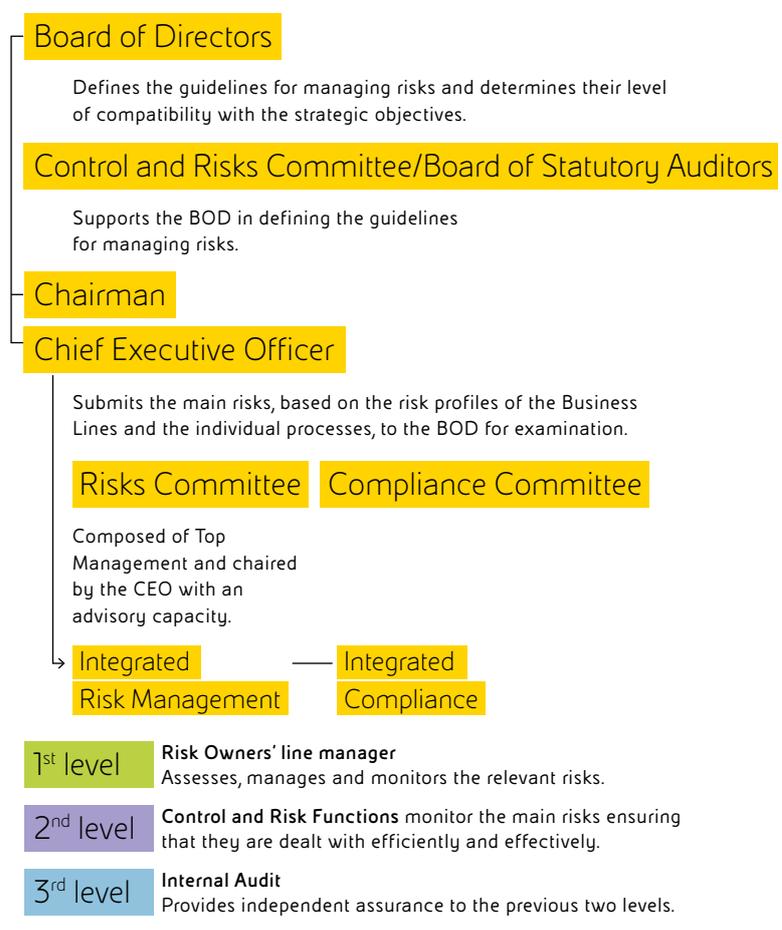
<p>The BOD's central role in the strategic guidelines and the Company's objectives, including sustainability policies and strategies.</p>	<p>A Sustainability and Scenarios Committee was set up in 2014 to examine integration issues between strategy, evolution scenarios and business sustainability over the medium to long term.</p>	<p>Board induction for directors including sustainability issues.</p>	<p>The integration of sustainability principles in the internal regulatory system and in all the company processes.</p>	<p>Transparent disclosure to stakeholders also through periodic roadshows, including the Chairman's presentation to the main institutional investors on corporate governance and ESG.</p>
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# Integrated risk management model

The Integrated Risk Management processes:

- enable strategic planning to be aligned with risk assessments;
- are based on impact assessments concerning financial, social, environmental and reputational aspects;
- are conducted using quarterly analyses of the risk profile;
- cover all the business lines and 20 processes (95% of performance on cash flow, production and capex);
- have identified approximately 150 risks, including around 20 Top Risks, grouped into strategic, external and operational risks;
- involved 64 subsidiaries across 22 Countries in 2016.

Risk profile analysis is also carried out using a long-term perspective and, as part of this, analysis of the risks associated with climate change are particularly important.



# Objectives and results



Path to decarbonization

	Commitments	Progress as at 2016 vs 2015	Objectives for 2017-2020
→ Reduction of GHG emissions	Reduction of the upstream GHG emission intensity rate	-9% -17.4% vs 2014	-43% by 2025 vs 2014
	Reduction in hydrocarbon volumes sent to process flaring	-2.2% -8.8% vs 2014	Zero process flaring by 2025
	Reduction of upstream fugitive methane emissions	-20.5% -37% vs 2014	-80% by 2025 vs 2014
→ Low carbon portfolio	Promotion of natural gas	50% gas out of total hydrocarbon production	Over 50% of natural gas equity production on total hydrocarbons
→ Renewables and technological innovation	Production plants using renewable sources	FID <sup>7</sup> for 4 initiatives as part of the "Progetto Italia" and FID for the upstream BRN project (Algeria)	463 MW installed capacity Investments of €0.55 billion
	Reconversion of industrial sites into biorefineries	FID for the reconversion of the Gela refinery	+610,000 tonnes/year of biofuels in Gela and launch of second generation biofuels production
	Use of solar power and energy storage	Prototypes of proprietary technologies for concentrated solar power and solar smart windows	7 pilot plants to demonstrate the technological solutions developed
→ Partnership	Oil and Gas Climate Initiative (OGCI)	Establishment of the OGCI Climate Investments	Joint investment of \$1 billion over 10 years in low-carbon technologies



Operating model

	Commitments	Progress as at 2016 vs 2015	Objectives for 2017-2020
→ Safety	TRIR reduction for employees and contractors	-20.8% (TRIR 0.35 <sup>8</sup> in 2016)	Zero injuries
→ Focus on the environment	% increase in the reinjection of production waters	+3.9% (58% in 2016)	72% by 2020
	Reduction of operational oil spills and those caused by sabotage	€37 million <sup>9</sup> (-65% total spills volume vs 2015)	Investments of over €150 million during the plan's lifetime
→ Research and development	Investments in R&D	€161 million (-8.5% vs 2015)	€659 million
→ Human rights	Training and awareness raising	Human Rights event chaired by the CEO; e-learning course that expected over 22,000 participants	4 e-learning training modules on the supply chain, security, employment, relationships with the territory
	Continuous improvement in company processes	Issue of the Responsible and Sustainable Company Management System Guideline	Action plan and regulatory document on Human Rights

7) Final Investment Decision.

8) (Total recordable injuries/hours worked) x 1,000,000.

9) Investments and current expenditures.



	Commitments	Progress as at 2016 vs 2015	Objectives for 2017-2020
→ Employment and equal opportunities	Maternity as a Master: Learning pathway for parenting	68 people involved	160 per year
	Smart Working for new mothers and fathers (Italy)	Project definition	Start of the project and extension to 1,000 participants over the Plan's lifetime <sup>10</sup>
→ Access to energy	Distribution of gas to local markets	Offshore Cape Three Points (OCTP) project ongoing in Ghana	Supply of gas to power up to 1 GW
	→ Local development projects	Community Investment	€ 67 million (including amounts relating to resettlement and livelihood restoration)
	Access to off-grid energy	On- and off-grid electrification of villages in the Delta State (Nigeria)	25,000 beneficiaries with 9 MW installed
	Education	School-work alternation for 1,200 young people in Italy	In 2017/18: 4,000 students involved in school-work alternation programs
		Apprenticeship contracts for 140 young people in Italy	In 2017/2018: 35 1 <sup>st</sup> level apprenticeship contracts for training
		Over 29,000 students involved in primary and secondary education programs	Primary and secondary training projects for 60,000 children worldwide (€86.7 million)
	Economic Diversification	Over 41,000 people involved in agriculture, fishing and local entrepreneurial projects	Projects for 19,000 beneficiaries worldwide (€171 million)
	Access to water and sanitation	Over 50,000 people with access to water and better hygiene and sanitary conditions	Investments of €38.3 million
	Health	Over 240,000 people involved in health projects	Projects for 420,000 beneficiaries worldwide (€16.8 million)
→ Local content	Development of local content valuation methodology	Pilot project implemented in Ghana	Extension of the local content valuation methodology
→ Payments to governments and EITI	Transparency of payments to governments	Implementation of the new mandatory reporting regime and a support community on EITI for subsidiaries	Promoting the active role of subsidiaries in local EITI Multi-Stakeholder Groups

<sup>10</sup> Potential catchment estimated based on the historical trend.





Path to

decarbonization

Eni recognizes the need to keep global warming below 2° C above pre-industrial levels by the end of the century and intends to play a leading role in the energy transition process, in accordance with the objectives of the Paris Agreement. For this reason Eni pursues a climate strategy that is integrated with the business model.

In addition to reducing direct emissions, this involves developing renewable sources along with natural gas, which has a central role in the conventional hydrocarbon portfolio, and R&D investments to contain indirect emissions.

Zero process flaring by 2025

Upstream fugitive methane emissions -80% by 2025 vs 2014

Efficiency



Reduction of emissions

Exploration



Gas switch

gas discoveries

Electricity production from renewables



New energy

-43%

E&P GHG Emission intensity<sup>(a)</sup> by 2025 vs 2014  
(a) E&P GHG emissions on gross operated production of hydrocarbons



50%

Over 50% of natural gas equity production on total hydrocarbons



463 MW

Installed power from renewables by 2020  
Investments of €0.55 billion





Commitment to the Climate Strategy, together with the results achieved until now and the set targets, has enabled Eni – the only major company in the Oil & Gas sector – to be included in the CDP's "A List"<sup>11</sup>, which is the main reference for stock markets to evaluate climate change performances,

strategies and risk management. This opinion was confirmed by the Transition Pathway Initiative<sup>12</sup>, which positioned Eni at the top level for companies involved in the fight against climate change thanks to the integration of climate strategy in its business model.

Eni is the only major Oil & Gas company on the CDP's "A List" in 2016

## Climate strategy

Eni's path to decarbonization is based on the following 3 pillars:



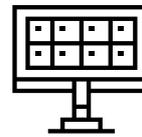
### → Reduction of GHG emissions

- Reduction of carbon intensity of the different businesses using energy efficiency initiatives
- Reduction in process flaring
- Reduction of fugitive methane emissions
- R&D to reduce emissions



### → Low carbon portfolio and gas promotion

- Ever growing portfolio of natural gas reserves
- Portfolio of conventional low-intensity CO<sub>2</sub> projects
- Development of a strategy for forestry carbon offsets and use of credits
- R&D to promote natural gas



### → Commitment to renewable energies

- Business plan for the development of renewables
- Biofuels and Green refinery
- Green Chemistry
- R&D to develop new technologies and applications for renewables

**Commitment through partnerships in order to develop innovative solutions to deal with increasing energy demands and the need to be responsible in the fight against climate change**

11) Formerly the Carbon Disclosure Project.

12) Initiative promoted by the Church of England with the support of investors for over £2 trillion, which assesses a transition pathway for companies to follow towards a low-carbon future. [www.lse.ac.uk/GranthamInstitute/tpi/](http://www.lse.ac.uk/GranthamInstitute/tpi/)



## Climate governance

In 2016 Eni broadened the Climate Action Plan it adopted in 2015 by giving greater emphasis to the development of renewable energies for its own consumption and for electricity production and direct sale to the market. The Sustainability and Scenarios Committee supported the Board of Directors in the assessments related to climate change by addressing the issue in 6 of the 10 meetings, focusing especially on the energy scenarios and development of renewable sources. The Control and Risks Committee also prepared an analysis of the long-term risk profile, examining the evolution

of the context and analysing the potential impacts on the Company's business model. The CEO's 2017 variable incentive plan also envisages a sustainability target weighted 25% and composed of two sub-objectives: the first involves reducing the GHG emission intensity rate in the operated production of hydrocarbons, in line with the 2025 objectives; the second concerns worker safety performance (Severity Incident Rate). For managers with strategic responsibilities, the guidelines envisage remuneration tools that are strictly consistent with those of the CEO.

6 of the 10 meetings of the Sustainability and Scenarios Committee dealt with climate change

## Risk management

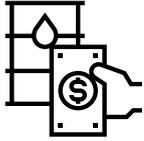
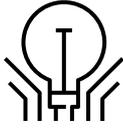
The process for managing the risks and opportunities associated with climate change is carried out by considering 5 drivers, in line with the recommendations of the Task Force on Climate Related

Financial Disclosure<sup>13</sup>, of which Eni is a member. Climate change risk identifies the possibility of changes occurring to aspects associated with climate change which may generate, in the short, medium and long term, physical

and other risks which impact on the business. The risks and opportunities associated with climate change, analysed particularly with regard to the four-year strategic plan and over the long term, concern:

<sup>13</sup> The Task Force on Climate Related Financial Disclosure (TCFD) was set up by the Financial Stability Board with the aim of defining recommendations for companies on climate change disclosure.

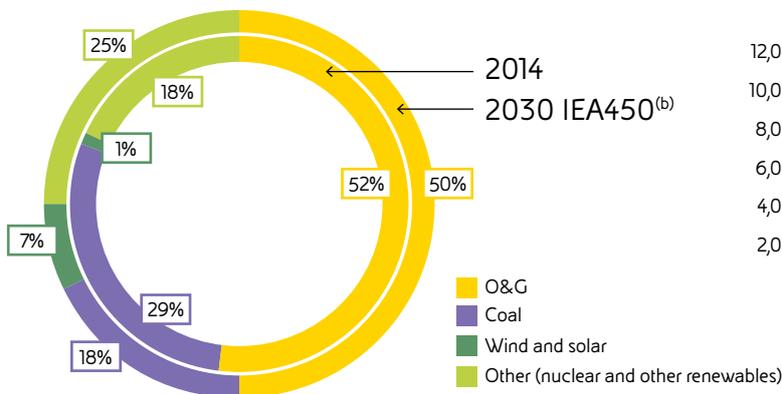


Physical drivers	Scenario drivers	Regulatory drivers	Technological drivers	Reputational drivers
 <p>Extreme/ chronic weather and climate phenomena with a possible increase in costs (including insurance) for adaptation measures to protect assets and people.</p>	 <p>Uncertainty over the evolution of the energy mix and hydrocarbon prices in a low-carbon context, with effects on the demand for fossil fuels, on project operating costs and profitability.</p>	 <p>Adoption of policies (such as carbon pricing) aimed at sustaining the energy transition towards low-carbon sources with effects on the price of CO<sub>2</sub>.</p>	 <p>Speed of development of low-carbon technological solutions and consequent uncertainty regarding the effects on business.</p>	 <p>Stakeholders' focus on the issue and increasing requests for transparency by Institutions, the financial community, NGOs and public opinion.</p>

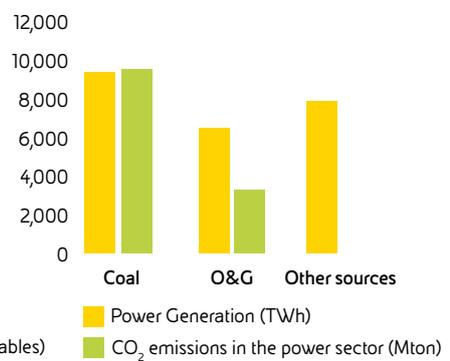
Two assessment cycles were performed in 2016. They confirmed that climate change was among Eni's top 20 risks that are monitored by the Board of Directors quarterly.

## Comparing scenarios

→ Worldwide energy mix<sup>(a)</sup>



→ Global generation and emissions in the power sector<sup>(a)</sup>



(a) Source: IEA, World Energy Outlook 2016 (b) World demand for power from 2014 to 2030 increases by approximately 6%

Ensuring that demand is met while observing the Paris Agreement objectives requires a sharp reduction of the current

energy mix's emission intensity. This would be possible with a gradual transition towards less carbon intensive sources.

Global demand for oil will continue to grow, at least until 2035<sup>14</sup>, albeit at progressively slower rates.

14) Source: IEA, World Energy Outlook 2016, New Policy Scenario.



Moreover, the decline in the existing hydrocarbon production will require new discoveries and new developments, even if demand remains stable. Transportation efficiency will increase with the spread of electric vehicles but their impact in terms of oil displacement will remain marginal for now, curbed by the slow process of replacing fleets of cars. Furthermore, the decline in existing production will require new discoveries and new developments, even if demand remains stable. Gas, supported by high plant

efficiencies and low emission coefficients, is the only fossil fuel that is growing in absolute terms even under the IEA's 450 scenario, which is in line with the 2° C target. Growth will be driven by the electricity and industrial sectors, where gas replaces fuels with greater environmental impact, and by non-OECD Countries, where, for many of whom, gas represents an immediate response to increasing energy needs. Gas is also the ideal partner for the development of renewables, which still have some economic

and technological limits such as intermittence. Use of the gas-renewables mix will also allow coal consumption to be reduced. Currently, coal contributes approximately 40% to global power generation and is responsible for over 70% of CO<sub>2</sub> emissions in the electricity sector. Lastly, the development of new technologies and energy policy measures will play an important role in this transition. One such measure is carbon pricing systems which promote the use of energy sources with a lower environmental impact.

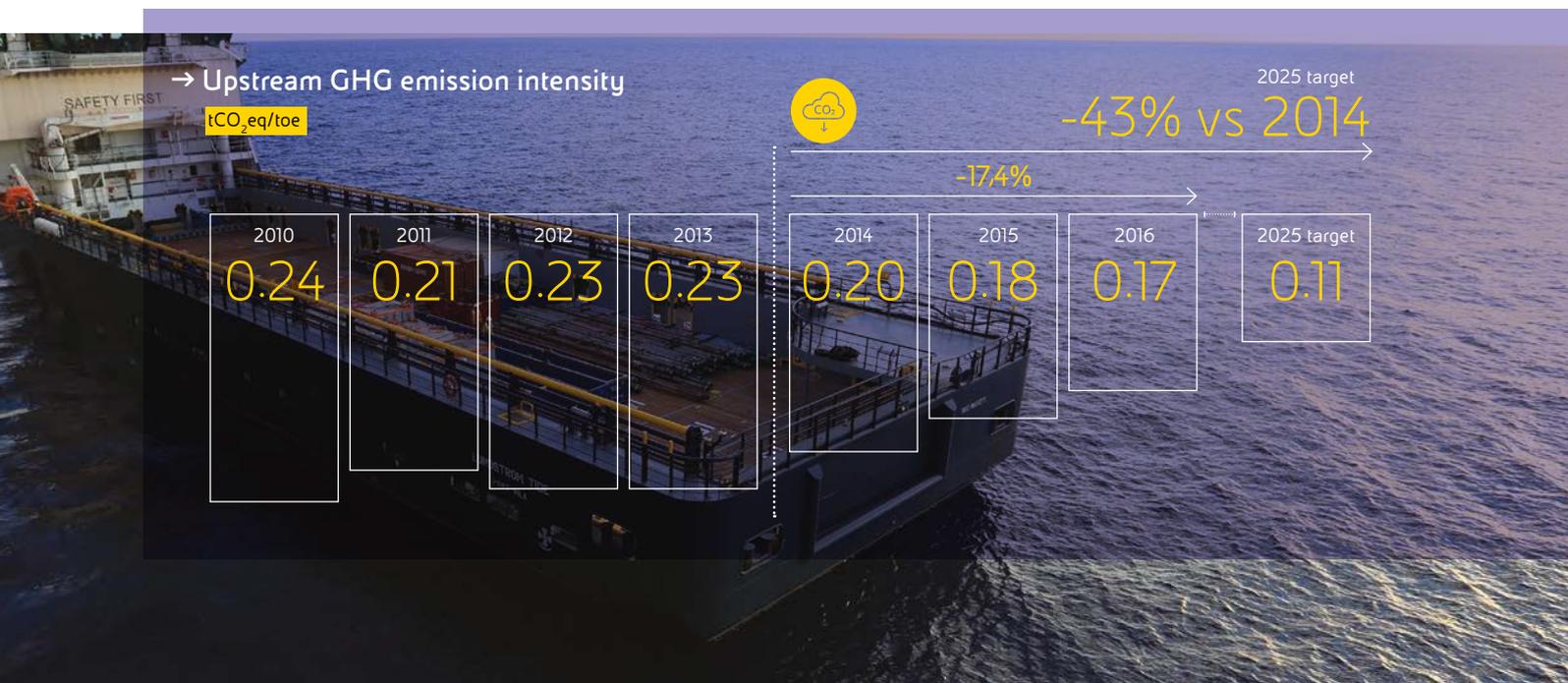
## 2016 results

### Reduction of direct emissions

From 2010 to 2016, changes to the production mix and actions taken to contain GHG emissions have allowed Eni to reduce total GHG emissions by 31% and the upstream

GHG emission intensity rate by 30%. Considering the target of reducing upstream emission intensity by 43% by 2025 compared with 2014, Eni achieved a reduction of 17.4% in 2016

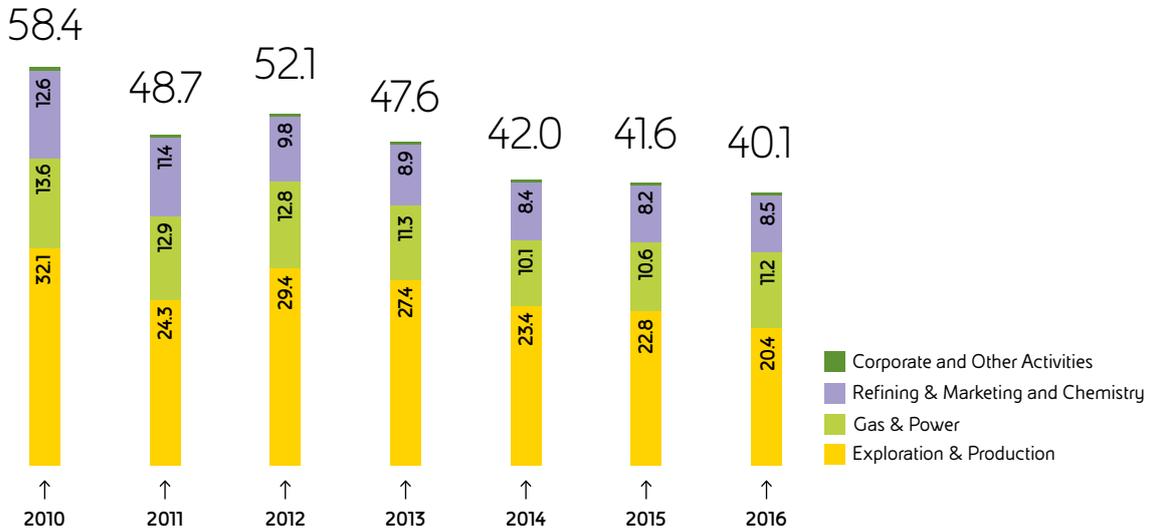
compared with 2014. The GHG Reduction Plan has three main action areas: eliminating process flaring, reducing fugitive methane emissions and continuous improvement of energy efficiency.





→ Direct GHG emissions<sup>15</sup>

MtCO<sub>2</sub>eq



## Reduction of process flaring

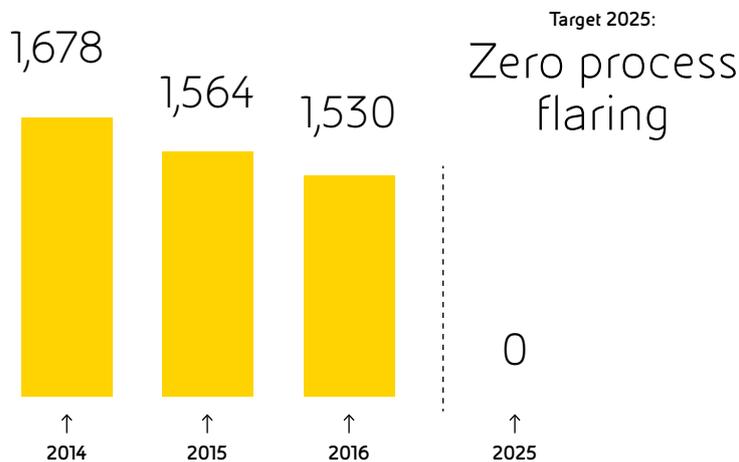
Eni has a program to reduce gas sent to flaring which is achieved with an emphasis on the production of electricity for local populations, distribution for domestic consumption or export. Where these practices were not possible, Eni created re-injection systems in natural gas reservoirs.

After having consolidated a 75% reduction of volumes compared with 2007 over recent years, despite the difficult environment in Countries like Nigeria and Libya, during the 2014-2016 period Eni accomplished a further reduction of 8.8% in process flaring.

Eni has adopted the Global Gas Flaring Reduction Partnership (GGFR) promoted by the World Bank and aims to achieve zero process flaring 5 years earlier than scheduled in the initiative, with expected investments of over €500 million by 2020.

→ Volumes of hydrocarbon fuels sent to process flaring

MSm<sup>3</sup>



15) Any discrepancies between partial and total data are due to the rounding up/down of partial data.



research and development

- As part of the Zero Flaring strategy, Eni is researching and experimenting a **proprietary technology for gas re-injection** in low pressure mineralized levels using the water produced as transport fluid. Pilot testing will begin in Nigeria shortly.
- At its New Oils Centre in Gela, Eni has piloted an **oxy-combustion technology** which allows the exploitation of low-calorific tail gases with direct production of electricity and practically zero CO, NO<sub>x</sub> and hydrocarbon emissions.

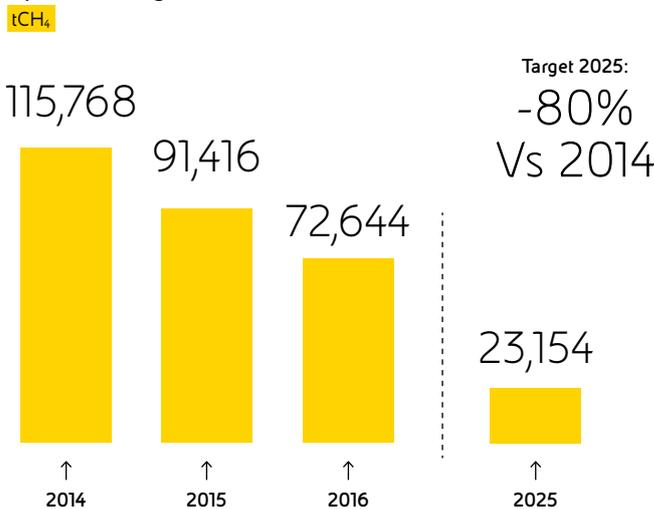
## Reduction of fugitive methane emissions

Eni is committed to reducing methane emissions associated with its industrial operations. Most of these refer to uncontrolled emissions from upstream businesses and it is here that efforts have been concentrated. Eni upstream has achieved reductions of over 43ktCH<sub>4</sub>, equal to 1.1Mt of CO<sub>2</sub>eq estimated for the 2015-2016

period compared with 2014, thanks to the start of specific campaigns to identify fugitive methane emissions from plants and related maintenance and leakage elimination (so-called Leak Detection and Repair campaigns - LDAR). Furthermore, as part of its public/private partnership Climate and Clean Air Coalition (CACC) Oil & Gas

Methane Partnership, guided by UNEP, Eni presented a methane emissions control program which involves establishing monitoring campaigns over the next 10 years to cover the most important upstream sites, with aim of reducing fugitive methane emissions by 80% by 2025 compared to the estimated 2014 value.

→ Upstream fugitive methane emissions





## Indirect emissions

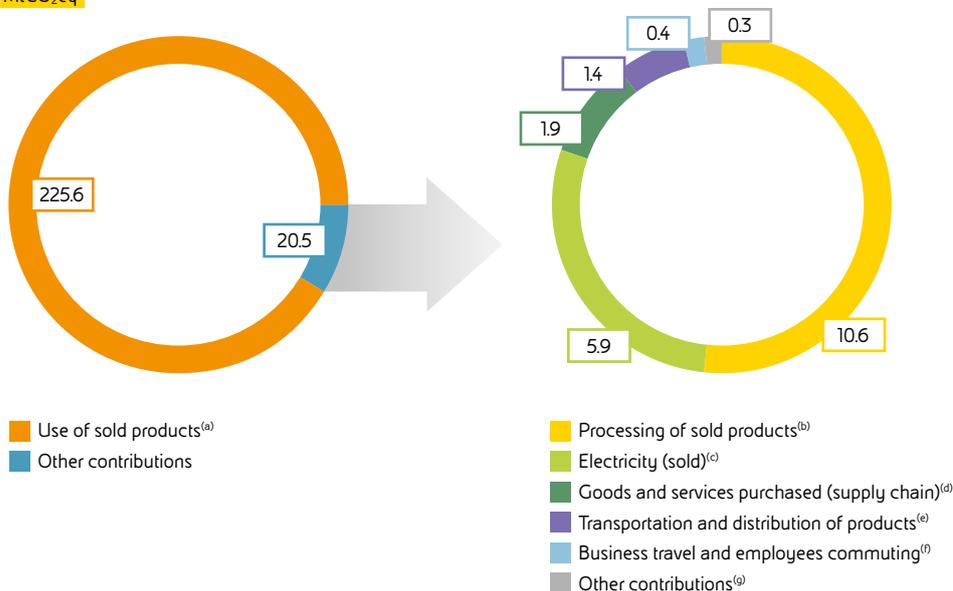
Emissions resulting from purchases of electricity, steam and heat from third parties (Scope 2) are negligible for Eni (approximately 0.7 MtCO<sub>2</sub>eq), since electricity is generated inside its plants and the related GHG emissions are included among direct emissions.

Given the relevance of other indirect emissions for the O&G sector (Scope 3, approximately 246 MtCO<sub>2</sub>eq), over time Eni has refined its reporting and certification process<sup>16</sup> for these emissions, associated with the entire value chain, including activities resulting from

suppliers, consumers and use of products. Eni monitors its own Scope 3 emissions in accordance with the main international methodologies, which are also implemented by IPIECA and API for the O&G sector, providing an estimate for most of the emissions categories.<sup>17</sup>

→ Scope 3 2016

MtCO<sub>2</sub>eq



- (a) Use of sold products: includes emissions associated with the use of natural gas and oil products deriving from the production of crude oil and natural gas;
- (b) Processing of sold products: emissions associated with the processing of products not carried out within Eni's operational perimeter;
- (c) Electricity (sold): emissions associated with the production of electricity purchased on the market and resold to the final customer (not including EniPower's share);
- (d) Goods and services purchased (supply chain): includes emissions associated with suppliers (estimated based on annual procurement) and drilling activities managed by third parties;
- (e) Transportation and distribution of products: emissions associated with sea and road transport of crude oil, oil products and goods;
- (f) Business travel and employees commuting: emissions associated with employees' business travel and home-work commuting as well as movements to/from and inside operating sites by car and helicopter;
- (g) Other contributions: contributions associated with end-of-life disposal of lubricants and waste management.

Over 98% of indirect emissions are associated with the final use of the products sold (natural gas and oil products, such as petrol, diesel and kerosene) and with the

production and processing of products outside of Eni as well as the purchase and sale of electricity. The main lever for reducing indirect emissions is to

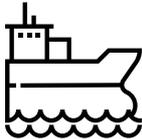
increase the share of gas in Eni's hydrocarbon production portfolio. Gas has a lower carbon content and is the bridging fuel for the energy transition.

16) Eni's GHG inventory is drawn up in accordance with international standard ISO 14064 and checked in accordance with ISAE 3000 / ISAE 3410.

17) For data on 2014 and 2015, please refer to Eni for 2016 - Sustainability Performance. More details on the Scope 3 emissions for the 15 categories defined by the main international standards are published as part of the CDP Climate Change questionnaire.



Further actions to reduce indirect emissions include:

			
Use of sold products	Purchased goods and services (supply chain)	Transport and distribution of products	Employee travel and home-work commuting
<ul style="list-style-type: none"> <li>• Eni Diesel+ with lower CO<sub>2</sub> emissions</li> <li>• Methane for motor vehicles</li> <li>• Car sharing (Enjoy)</li> <li>• Advertising campaigns aimed at energy saving</li> <li>• Energy efficiency consultancy</li> </ul>	<ul style="list-style-type: none"> <li>• Green procurement criteria even during procurement of goods and services</li> </ul>	<ul style="list-style-type: none"> <li>• Optimization of shipping routes and loads in the logistics sector</li> </ul>	<ul style="list-style-type: none"> <li>• Video conferencing for meetings</li> <li>• Favouring means of transport with less impact</li> <li>• Company shuttles running on methane</li> <li>• Special public transport fares for employees</li> </ul>



Eni launched the **Energy Transition program** in 2016 which aims to develop new technologies to promote the widespread use of natural gas, facilitating its production and transport and extending its use in order to decarbonize the whole production chain. Research has included the development of: materials for the Absorbed Natural Gas (ANG) transport technology, processes to convert natural gas into methanol (which can be used in low-impact fuels and to produce chemicals), technologies for separating and purifying CO<sub>2</sub> (including on-board capture of the CO<sub>2</sub> generated by vehicles) and for using CO<sub>2</sub> to produce plastics, fibres and materials for construction.



## Commitment to energy efficiency

Commitment continued in 2016 to improve energy performance in the production processes. Works carried out during the year expect to achieve savings of approximately 231 ktoe/year (equivalent to 541 tCO<sub>2</sub>/year).

The upstream sector contributes more with nearly 200 ktoe/year (equivalent to approximately 450 ktCO<sub>2</sub>/year) of savings thanks to the optimization of production and logistics processes and especially the rationalization

of gas compression and fuel consumption. The adoption of ISO 50001 certified energy management systems has gradually spread across Eni companies (+38% compared to 2015).

### research and development

A new oil for high-efficiency gas turbines has been developed in collaboration with General Electrics (GE). Its use will allow Eni to save 22 Mm<sup>3</sup>/year of gas and lower CO<sub>2</sub> emissions by 44,000 tons/year. The product's characteristics have been laboratory tested and validated under actual operation, obtaining the manufacturer's (GE) approval for specific models of turbomachinery.

## Low carbon portfolio and natural gas promotion

Eni's strategy focuses on the organic growth and development of conventional assets that ensure a low break-even price for new projects. Conventional hydrocarbons represent 99% of the equity production in 2016

of 1.759 kboe/d and almost all the resource base of 39 billion barrels. Eni has decided not to invest in projects with a high CO<sub>2</sub> content, such as tar sands, preferring instead conventional resources and, where possible, Near Field resources in order to

exploit synergies with existing facilities. In combination with the focus on simple and modular projects, to maximize flexibility and optimize expenditure and exposure, Eni has managed to bring the average break-even

→ Average break-even price of new projects

\$/boe





price of its projects down from \$45/b to \$30/b of Brent equivalent, one of the lowest of all its peers. Natural gas plays a key role in the decarbonization strategy and is the ideal partner for renewable

energies. Eni pursues a solution that combines natural gas and renewables in order to eliminate the use of more polluting fossil fuels, such as coal, which still represents 41% of electricity production globally and causes

almost 73% of emissions in this sector. The portfolio of assets and new investments is regularly reviewed by management in order to identify any emerging risks.

## Portfolio resilience / Stranded Assets

Eni's strategy and its portfolio composition minimize the risk of "stranded assets". The resilience of Eni's production and reserves portfolio, even under a decarbonization scenario, is guaranteed by:

<p>Focus on conventional projects developed in stages (to limit initial investment).</p>	<p>Exploration leadership at low unit costs and a dual exploration model that enables early monetization of the discoveries.</p>	<p>Cautious scenario assumptions which lead to strong investment selectivity.</p>	<p>Energy mix balanced with gas.<sup>18</sup></p>
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Eni also assesses the potential impacts of the energy transition scenarios on its portfolio:

- by applying a sensitivity with a CO<sub>2</sub> price of 40 \$/ton in real terms in 2015 on all the main projects in order to adopt the most appropriate

solutions for reducing emissions from the project's initial stages. This assumption reduces the effect on average portfolio IRR by 0.5% and all the projects stay above the minimum rate of return.

- by conducting a stress test on

the IEA 450 ppm scenario<sup>19</sup> to assess the risk of stranded assets on the upstream portfolio. Taking into account this scenario's assumptions regarding the price of CO<sub>2</sub> and Brent, the impacts on Eni's portfolio are increased.

18) 50% of current production uses gas and this exposure will increase as the plan progresses with the development of reserves in Egypt and Indonesia and, over the long term, with Mozambique.

19) A scenario that entails containing the increase of temperatures within 2 degrees with a coherent system of actions that ensure the containment of consumption, the switch towards low-carbon sources and the promotion of energy efficiency using high prices of energy variables (crude and CO<sub>2</sub>).



## Development of renewables

The development of renewable energy sources in the Countries in which Eni operates is a key element in the Company's strategy to move the business model towards a low-carbon scenario.

In 2016 large scale projects for generating power from renewable sources were identified and launched in Italy and across the world.

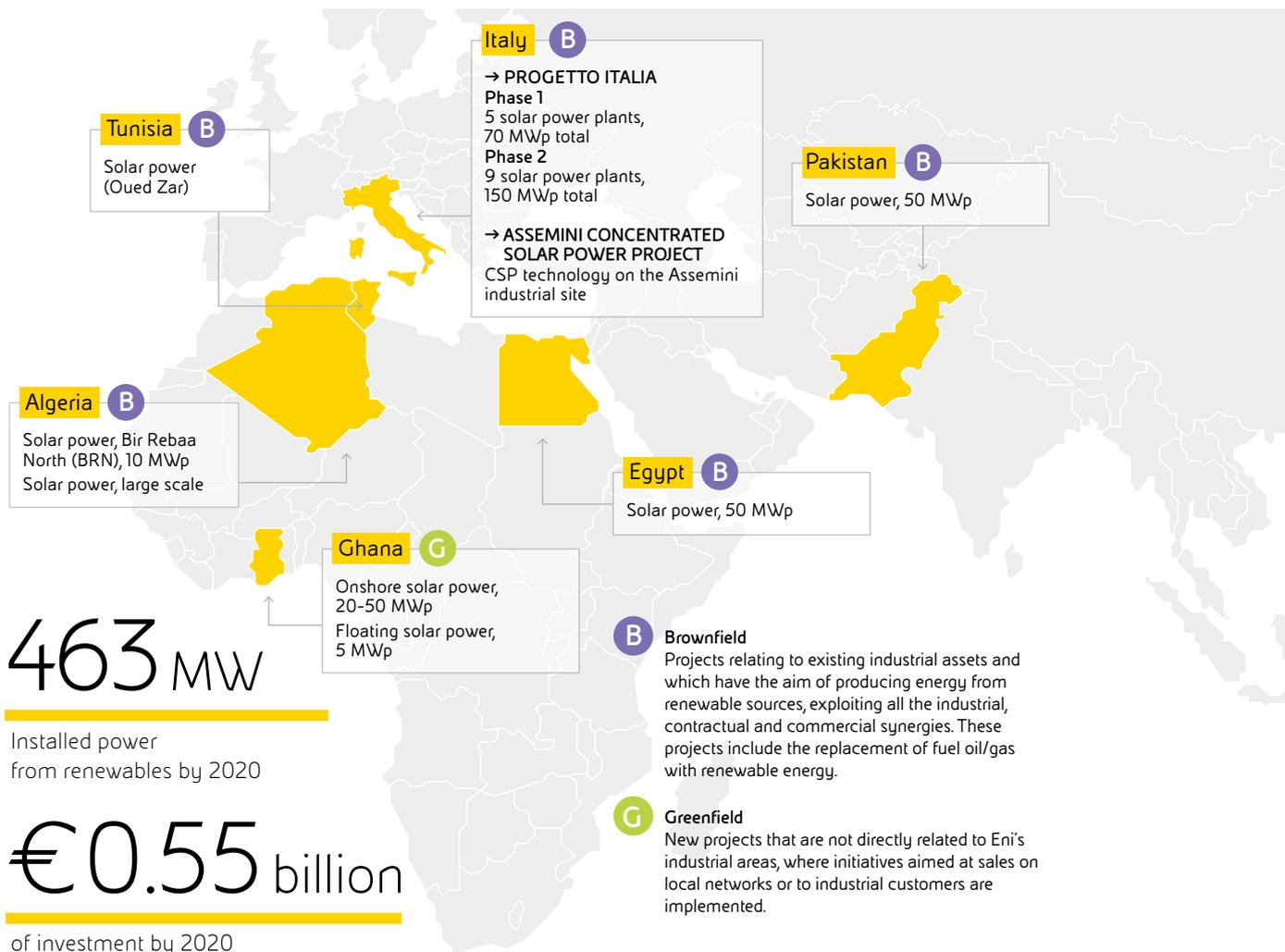
In Italy, Eni has launched

"Progetto Italia" which involves the development of plants (mainly photovoltaic) in its industrial areas, available for use and of little interest to other economic activities. Eni has identified 14 projects for an overall capacity of about 220 MW which will be installed across the nation by 2022.

At international level, Eni has identified projects to be developed in Countries where it has strategic interest (especially

Africa and Asia) with the aim of increasing energy efficiency, the sustainability of Eni's consumption and improve local populations' access to energy using a more sustainable energy mix. A series of cooperation agreements have been concluded with Ghana, Algeria and Tunisia to strengthen Eni's long-standing presence in these Countries and broaden its sphere of activities.

### → Development of the main renewable energy projects




 research and development

A project has been underway for some years to develop innovative solutions for **Concentrated Solar Power (CSP)** able to reduce the costs of investment and production of solar power. A low-cost parabolic solar collector has been developed in collaboration with MIT. It is simple to make and assemble and so it can be manufactured directly in the Countries in which it will be installed, promoting local employment and development. Over the year, the first full-scale prototype was built with the Politecnico di Milano and tests were performed that confirmed the collector's originality and functionality.

## Biofuels and Green Refinery

In the biorefinery started in 2014 in Porto Marghera, 0.2 Mt of biomass were processed to produce over 180,000 tonnes of biofuels in 2016. This is where Eni produces Eni Diesel+ (launched on the Italian market in 2016) which, with the 15% renewable component, preserves engine efficiency and contributes to reducing CO<sub>2</sub> emissions by 5%, particulate up to 20%, unburned hydrocarbons and carbon oxides up to 40% compared to the diesel in the market. In the second half of 2016, waste oil from frying started to be processed in Porto Marghera alongside palm oil. The use of alternative raw materials will gradually increase

### The Green Refinery Project was started in Gela in 2016 and envisages the production of about 530,000 tonnes of biofuels

after the start-up (mid 2017) of a pre-processing plant which will increase operating flexibility still further.

Eni also pursues biomass diversification objectives with an eye on future EU directives that will promote biofuels from waste and residue.

Focus on the sustainability of used biomass has always been a priority and has led to the definition of a

specific policy, available on the website.<sup>20</sup> This policy includes an emphasis on the procurement and use of palm oil.

Eni uses only biomass that is certified according to the International Sustainability & Carbon Certification (ISCC) - the reference standard for Europe - which guarantees respect for environmental and social requirements.

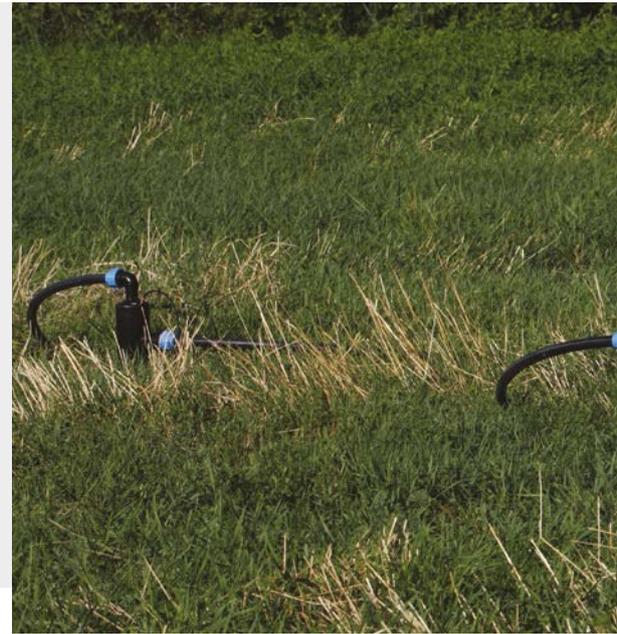
A technology to capture CO<sub>2</sub> and produce third generation biofuels from micro algae is being experimented in Ragusa. A pilot plant is expected to be started in April 2017

20) [https://www.eni.com/en\\_IT/media/news/2016/11/enis-position-on-biomass](https://www.eni.com/en_IT/media/news/2016/11/enis-position-on-biomass)



## research and development

- Eni aims to reduce its carbon footprint also by exploiting CO<sub>2</sub>-TO-Oil technology which captures CO<sub>2</sub> in order to produce a **third generation biofuel**. This is a new technology based on the cultivation of micro algae in bio-reactors which produce a bio-algal oil suitable for use in a Green Refinery. The technology is being developed in Ragusa and the plant's start-up is expected in April 2017.
- Eni is developing **Waste-to-Fuel** processes able to transform the organic part of solid urban waste (FORSU) into bio-oils to feed into the refining cycle in order to obtain biofuels. The technology's development stage on a pilot scale has been completed at the Novara Research Centre.



## Green chemistry

Chemistry from renewable sources is a strategic sector for Eni's medium-to-long term development, especially because it focuses on innovative technologies that are not readily available on the market and uses raw materials, such as biomass, vegetable oils and second generation sugars that are less susceptible to market volatility. These can be integrated upstream through agricultural chains. The aim is to identify sustainable chains and technologies in order to obtain intermediates

from renewable sources. These are then integrated with those from traditional fossil sources and partly usable for the same market applications that are predominantly fossil-based today. This aim is crucial for Eni to pursue the development of sustainable chemistry. The new projects will broaden the portfolio of products considerably, improving the Company's resistance to difficult competitive scenarios where price level is the key variable in sales policies and consolidating Versalis's presence

in more stable market segments. Among the projects already launched, mention must be made of the **Porto Torres** and **Porto Marghera** programs for developing renewable products for application sectors with high added value and, in some cases, connected to Chemistry businesses or to hydrocarbon exploration and production activities. These include applications for oilfield chemicals, bio-lubricants, bio-plastics, detergents, cosmetics and medical applications.

## research and development

- Project for the production of **natural latex, dry rubber and Guayule resin** which includes the development of the whole agricultural chain and aims to use all the plant components. Cultivations are being experimented in Basilicata and Sicily.
- Technological joint venture (80% Versalis) with the biotechnology company Genomatica for the production of **butadiene from vegetable raw materials**. This project was given the Environmental Achievement Award by the Tire Technology Committee.



## International partnerships

Eni actively participates in the main international climate initiatives. One of these initiatives involved Eni in the development of the "Oil and Gas Climate Initiative" (OGCI)<sup>2)</sup>, established in 2014 by Eni and other companies from the petroleum sector representing over 20% of the global production of hydrocarbons. In 2016, the CEOs of the OGCI companies relaunched their commitment at an event in London, announcing a joint investment of \$1 billion over 10 years for the development of technologies capable of reducing GHG emissions.

Technological deployment will cause the OGCI's investment to have a multiplier effect on the low-carbon economy, with the expected aim of reducing global GHG emissions by 1 Gt CO<sub>2</sub> over the next ten years.

Eni continues in its commitment to a global plan of action on carbon pricing in order to promote natural gas as a bridging solution in the climate change challenge and encourage the switch from coal to gas in power generation. Eni continues to work together with other O&G companies on the "Carbon Pricing Leadership Coalition" initiative aimed at building an

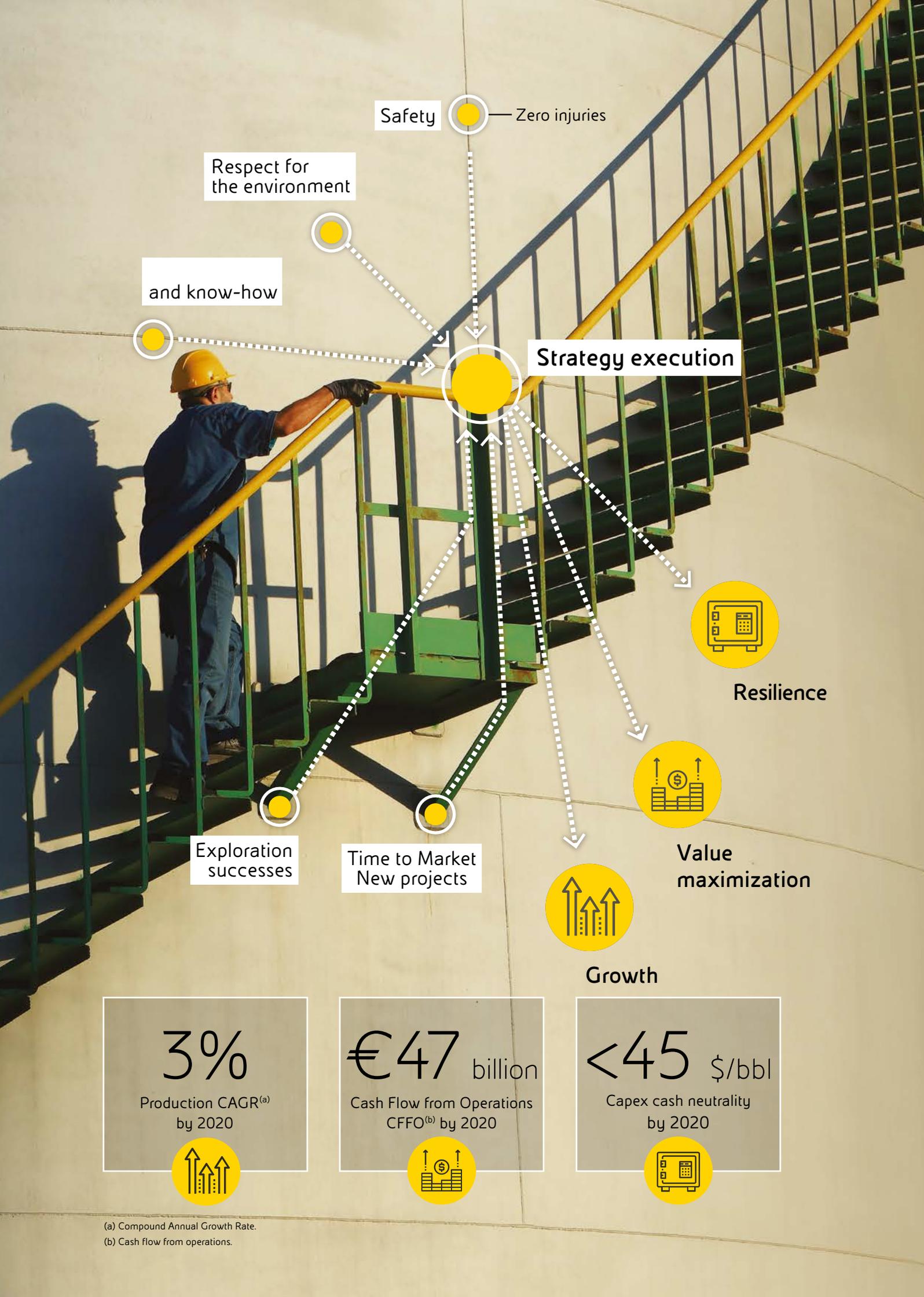
effective dialogue on Carbon Pricing with governments and companies around the world. Lastly, to confirm its commitment to transparency, Eni has participated in the Task Force set up by the Financial Stability Board (FSB-TCFD) in December 2015. The aim of this Task Force is to develop international recommendations and guidelines on the disclosure of risks associated with climate change. The Task Force's first recommendations were published in December 2016 and will be formalized after a public consultation.

2) Current group members are BP, CNPC, Eni, PEMEX, Reliance, Repsol, Saudi Aramco, Shell, Statoil and Total.



## Operating model

The operating model's excellence lies in the constant commitment to minimizing risks along the whole cycle of activities with respect to people, assets and the environment, also thanks to Eni's commitment to research. For Eni creating long-term value originates in exploration where the aim is to find resources to develop quickly, at low cost, near field and, for gas, not too far away from the final market. By using this approach in the last 3 years 3.4 billion barrels of oil equivalent have been discovered, 25% of which have already been transformed into proved reserves with sanctioned projects and another 25% being sold under the dual exploration model.



Safety — Zero injuries

Respect for the environment

and know-how

Strategy execution



Resilience



Value maximization



Growth

Exploration successes

Time to Market New projects

3%

Production CAGR<sup>(a)</sup> by 2020



€47 billion

Cash Flow from Operations CFFO<sup>(b)</sup> by 2020



<45 \$/bbl

Capex cash neutrality by 2020

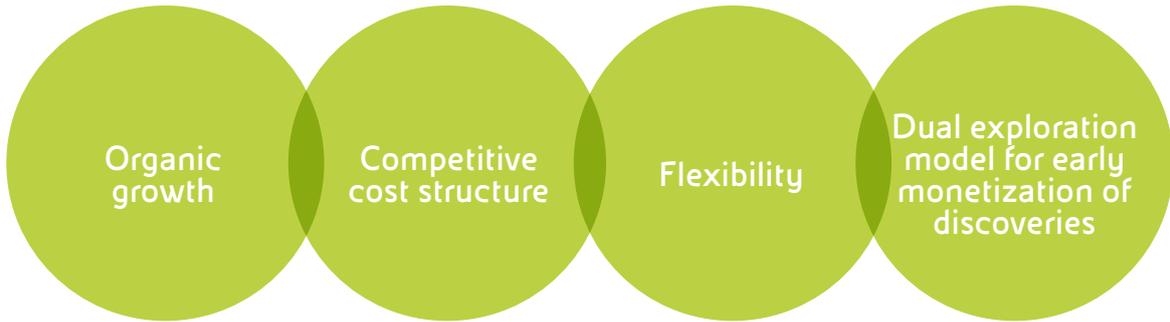


(a) Compound Annual Growth Rate.  
 (b) Cash flow from operations.



# Upstream model

The upstream model is based on exploration, which is the driver of:



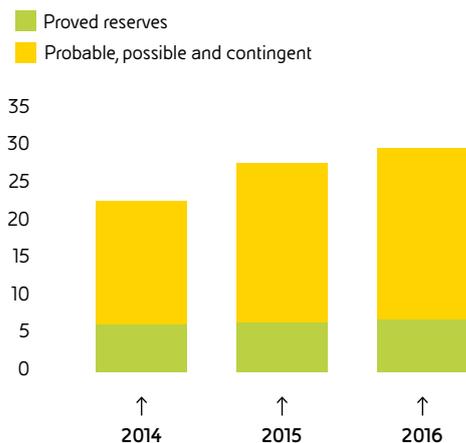
The exploration strategy is guided by the objectives of shortening time-to-market and cost optimization when converting discoveries into productions. Eni has adopted a development in stages approach in order to speed up start-ups and cash

flows and dilute long-term risks. Furthermore, Eni has a high percentage of operatorship, which will reach 90% in start-ups over the next 4 years. This will ensure there is firm control of costs, timings and risks. In 2016 the rate of reserve replacement, indicator

of the quality of the discoveries and the model's flexibility, was 193%, Eni's best ever result. It has been achieved completely organically by generating value from the discoveries made. The heart of this strategy and these results lies in the enhancement of people.

## → Evolution of reserves and resources

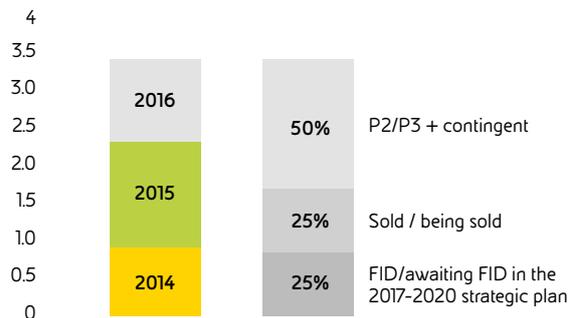
Billion boe



**+29%**  
2016 vs 2014

## → Evolution of reserves and resources

Billion boe



**~50%**  
of discovered resources are already generating value



# Value of people

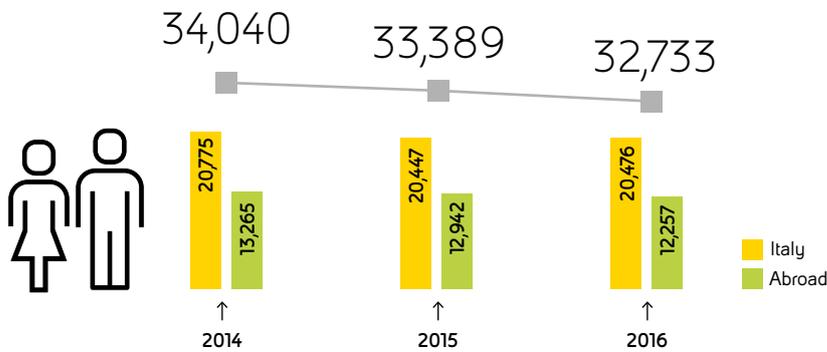
In Eni people have always been a strategic asset in the achievement of the company objectives. Although the Oil & Gas market has seen a reduction of 400,000 people<sup>22</sup> from 2014 to 2016, Eni has decided not to focus its efficiency recovery strategy on redundancies and instead follow these lines of action:

- Focusing on strategic projects, particularly in the upstream sector;

- Implementing a significant change in the quality/quantity mix to optimize costs without compromising operating capacity;
- Re-using resources after industrial reconversion processes;
- Enhancing internal mobility, including internationally;
- Careful management of turnover with selected replacement of outgoing

staff, with particular attention paid to critical roles and skills. This approach has enabled Eni to safeguard operating capacity, skills and professionalism that are critical for the business while recovering efficiency. In overall terms, employment fell slightly by 3.8% from 2014 to 2016, essentially due to the methods used to manage turnover.

→ Eni people



## Diversity as a resource

Eni considers diversity, in all of its forms, as a strength and value that must be safeguarded and promoted within the Company and in all relationships with stakeholders. Special attention is paid to the development of local people and planning and recruitment

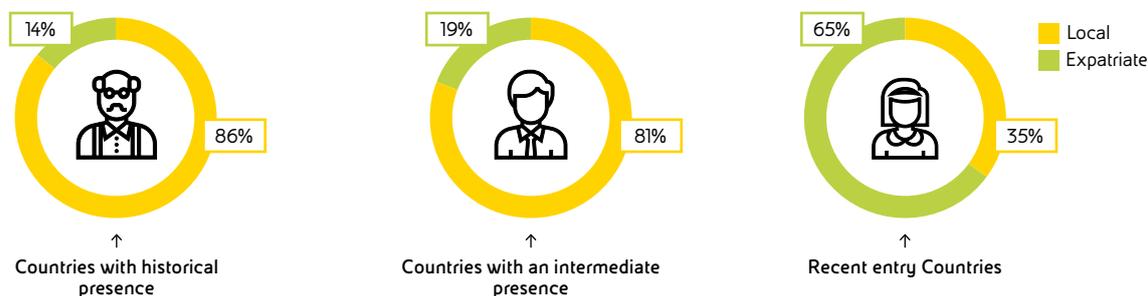
processes have been defined to achieve this objective. These processes envisage greater uniformity of management at global level and boosting collaborations with universities to select young graduates in the Countries in which Eni is present. In the upstream sector, the

commitment to greater integration with local companies was confirmed by the percentage of total local workforce standing at 35% in Countries that Eni has recently entered and reaching 86% in those Countries where it built a long-standing presence.

22) Source: Graves & Co.



→ Local Eni people in the upstream sector

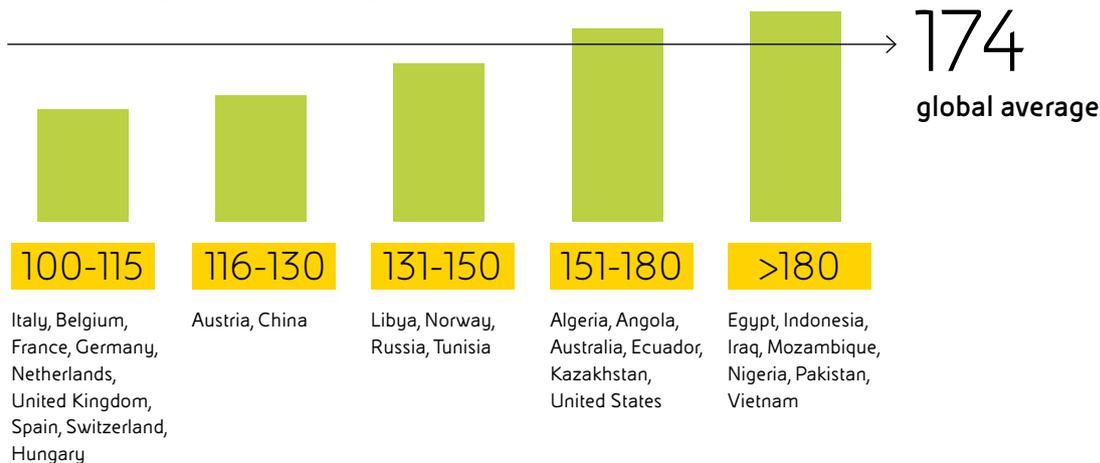


In overall terms, despite a slight reduction in resources (-5%) recorded in 2016 compared with the previous year, the percentage of local staff out

of total employment overseas has increased since 2015, moving from 84.5% to 84.7%. For companies that are not consolidated with

the line-by-line method<sup>23</sup>, local resources overseas have increased by 1,676 compared with 2015, leaving the incidence on total employment the same.

→ Ratio between Eni minimum wage policy and market minimum wage (1<sup>st</sup> decile)  
(middle manager - senior staff - employee)



Equal opportunities is also one of the main guidelines for managing personnel.

In 2016 the number of women working in Eni declined slightly more than the total population trend. This was also due to the more favourable retirement conditions, particularly in Italy. However, the initiatives launched to support equal opportunities have led to continued growth

of the percentage of women in managerial positions

(senior and middle managers), reaching 24.06%.

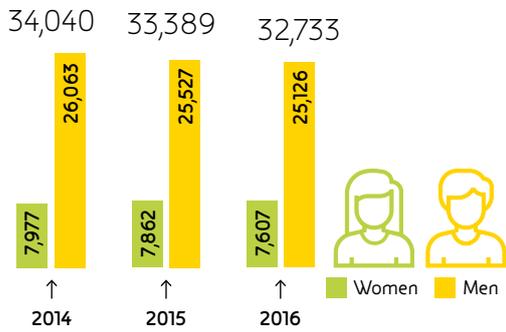
In 2016 women held 24% of management positions and 14% of senior management positions. The pay gap<sup>24</sup> between women and men in 2016 was 97%

23) These include JVs and non-consolidated subsidiaries and Joint Operations consolidated using the proportional method in line with IFRS/11.

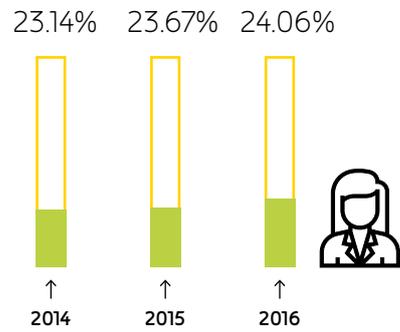
24) The pay gap is calculated as the ratio between women's average salary and men's, at the same position and seniority level.



→ Women and men in Eni



→ % women in managerial positions  
(senior and middle managers)



The main initiatives on gender equality continued in 2016 included:

Female presence in the Board	Equal treatment	Work life balance	Attracting female employees
<ul style="list-style-type: none"> <li>• Presence of women in the Board of Directors of subsidiaries in Italy has reached 35%</li> <li>• Gender representation has also been extended to foreign Boards with 25% of female appointments</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring of female population</li> <li>• Alignment of women's salaries to men's (pay gap 97%) at the same position and seniority level</li> <li>• Targeted development paths for the managerial population including targeted training sessions</li> </ul>	<ul style="list-style-type: none"> <li>• Maternity as a Master program, a learning path centred around parenting and aimed at supporting skills that are useful socially and for work</li> <li>• Smart Working project for mothers and fathers enabling greater working flexibility</li> </ul>	<p>Initiatives to attract women to technical careers:</p> <ul style="list-style-type: none"> <li>• in high schools to promote technical and scientific studies</li> <li>• in universities by participating in sector events with testimonies from women working in Eni</li> <li>• through the publication of video testimonies of expatriates and employees of foreign subsidiaries</li> </ul>

Eni, together with 20 other Oil & Gas companies, signed the World Economic Forum's "Closing the Gender Gap - A call to Action" to analyse work areas on which initiatives must be launched to promote the development of women's careers





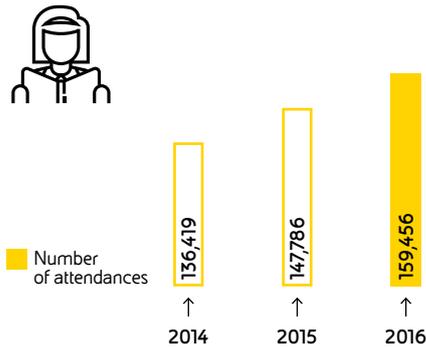
## Skill enhancement

To promote targeted development paths for the managerial population, courses and projects were launched in 2016 to consolidate leadership, guide change and enhance in-house training staff.

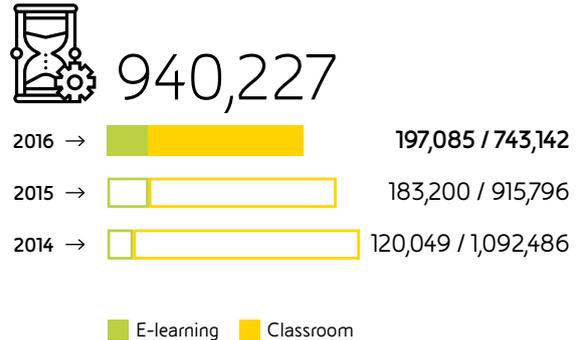
# €26.6 million

invested in training in 2016

### → Participation in training activities



### → Training hours



## Engagement of people

"Vision and strategy do not make much sense if there is no team taking them forward and embedding them in the company culture, especially if this building process is not viewed as being a shared value. It was for this reason that I thought about opening up a space where a doing moment became a sharing moment and where we can play with ideas to build towards a common vision." CEO's blog, 6 July 2015.

Engaging people has always been key when managing personnel.

A first step towards cultural transformation and one that led to greater engagement of Eni people, was the launch of the CEO's blog "The energy of dialogue". This communication tool was set up by the CEO in

July 2015 to dialogue openly and directly with all Eni people. The blog contains all the CEO's posts and all the comments made by people who actively participated in the discussion.

The third climate survey "Your Eni 2016" was conducted in 2016. It involved about 80% of the corporate population, a response

rate that was higher than the international average for the sector, and achieved an average rate of engagement<sup>25</sup> of 81%. A cross-cutting action plan was activated after the survey for specific population segments in order to reinforce the Listening & Feedback, Development & Career, and Skill & Innovation aspects.

### → Climate Survey by Eni people



25) An indicator summarizing affective, rational and motivational components.



# People's safety

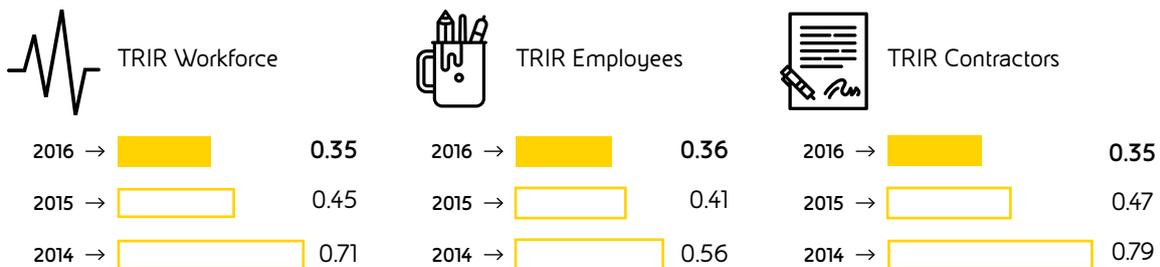
Eni considers the safety of people its priority and this is why it implements all the actions needed to reduce accident rates and eliminate fatalities. In 2016, the main actions involved:

<p>Promoting the identification, analysis and reporting of Near Misses<sup>26</sup> and Unsafe Conditions in order to reduce the causes of accidents and injuries.</p>	<p>Allocating internal skills, taught in the Safety Competence Center in Gela, in the different Italian and overseas sites and the start of the Safety Training Center's activities.</p>	<p>Promoting and spreading the safety culture using initiatives such as Road Shows, "Use your Head", "Safety Day" and the "Inside Lesson Learned" project.</p>	<p>Implementing the Process Safety Management System, related audits and performance indicators.</p>	<p>Promoting actions to improve emergency training and response.</p>
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In 2016, the total recordable injury rate (TRIR)<sup>27</sup> continued to improve for both employees and contractors. For the global workforce, there was a recorded decrease of 20.8% compared to 2015, with the rate falling from 0.45 to 0.35. Despite this improved trend in 2016, 2 fatal accidents occurred to contractors in Egypt and Congo.

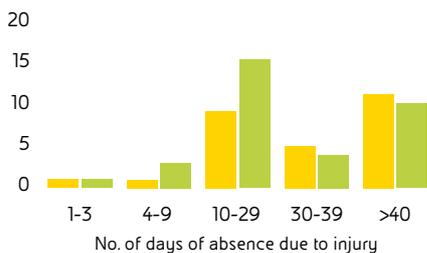
## → Total recordable injury rate (TRIR)

$$\text{TRIR} = \frac{\text{total recordable injuries}}{\text{hours worked}} \times 1,000,000$$



## → Injuries by days of absence

■ No. of employee injuries ■ No. of contractor injuries



26) Incidental events that did not result in damage or injury due to luck or favourable circumstances or to the mitigating intervention of technical and/or organizational protection systems.

27) Injury rates are calculated on Work Related events.



## Safety culture

A primary objective for Eni is to spread the safety culture and in 2016 initiatives aimed at increasing awareness on the issue continued, thanks to:

Road Show	Safety Day	Inside Lessons Learned
In 12 industrial sites in Italy and 2 sites abroad: top management met with employees and contractors to share results, goals and new projects.	Prizes and awards to acknowledge the best behaviours and performances across all Eni companies and contractors.	New methods for sharing lessons learned with video clips made in-house and inspired by incidents that actually happened.

In Egypt, Eni achieved ISO 39001:2012<sup>28</sup> certification for Road Traffic Safety after a 3-year program to define a road traffic safety Management System which has enabled speeding violations to be reduced considerably, from 90 in 2013 to 1 in 2016.

## Process safety

In recent years Eni has intensified focus on the process safety culture too, developing a specific management system that is in line with international

standards and which is being implemented at the Operating Areas. Eni has recently started to use additional indicators and methods to further reduce

the probability of incidents associated with explosions and the release of substances in its plants.

Monitoring	Knowledge dissemination	Audit processes	Plant upgrading
<ul style="list-style-type: none"> <li>Use of indicators has increased for the most dangerous events (Tier 2 and Tier 1) caused by a "Loss of primary Containment", which stops the release of substances</li> <li>Corrective actions have been identified that have reduced the number of spills and releases into the environment</li> </ul>	<ul style="list-style-type: none"> <li>Internal knowledge of "Process safety" increased by analysing "near misses", sudden unplanned events and any deviations from the standard in the implemented processes</li> </ul>	<ul style="list-style-type: none"> <li>Number of Process Safety audits has been increased</li> <li>Regular meetings with the business lines have been set up to share safety measures learned from any accidents that occurred</li> </ul>	<ul style="list-style-type: none"> <li>Plants designed in the past have been revisited and upgrades have been planned</li> <li>After applying specific tools, such as Risk Based Inspections, targeted inspections were conducted on the higher risk elements</li> </ul>

28) International standard that defines the requirements of a Road Traffic Safety Management System (RTMS) and enables an organization to reduce serious injuries or fatalities resulting from road accidents.



## Emergency prevention and management

Eni continues to plan and implement emergency drills involving all the departments concerned, from the intervention teams to specialized contractors, from the authorities to top management. The process is under continuous improvement in order to validate the necessary experience in line

with company procedures. Many initiatives have been set up to improve support during

oil spill emergencies (see "Managing oil spills" on page 37).

**Around 50 drills (Level 2 and 3<sup>29</sup>) were carried out in 2016 with the involvement of top management**



→ **COLLABORATION WITH THE CIVIL PROTECTION DEPARTMENT**

In 2016 Eni supported the Italian Civil Protection Department during the earthquake emergency in central Italy, providing fuel for the rescuers' base camps in Amatrice, Sommati and Norcia. The continuation of the shocks and the harsh winter conditions required assistance from all the Eni

departments involved to support the populations affected and an increase in emergency technical assistance. To improve its ability to respond to civil protection emergencies, Eni has set up a stock of fuel tanks that can be deployed across the territory in the event of a natural disaster.

To minimize operational risk, Eni believes that prevention and combining skills and technologies are fundamental in order to ensure safety in operations.

On this point Eni has not followed the trend of outsourcing which has been rife in the industry over the last two decades, and instead has

attempted to keep fundamental technical skills inside the Company, particularly with regard to drilling, management and maintenance.

### research and development

Eni is a leader in the development of technologies to maximize in-house safety, from the proof of concept to design and patent application. In recent years, Eni's use of innovative technologies and its approach have reduced the probability of accidents by one order of magnitude compared to its peers (one event in 100,000 wells as opposed to one event in 10,000 wells), and Eni has set itself the objective of reducing it by another.

29) Drills to manage different levels of emergency. Level 2 refers to emergencies that can be managed locally with the aid of the central business functions/foreign subsidiary and/or of public authorities and administrations on a peripheral level.

Level 3 can lead to a situation of serious danger with the activation of the emergency plan and/or the emergency team of the business units, and/or, for sites at risk of serious accidents, the central authorities and public administrations. It may be necessary for Eni to coordinate the technical and specialist support available in the various business units centrally.



## Respect for the environment

Eni operates in very different geographical contexts which require specific assessments of the environmental aspects in order to minimize the impact of its activities. To ensure a uniform approach that adheres to the best technologies and international practices, Eni adopts an integrated health, safety and environment Management System in all its

plants and production units. Sustainability and performance objectives are monitored and managed on a six-monthly basis. Eni set up the Environment Award in 2016. Starting from 2017 this new award will run alongside the Safety Award, rewarding the operating realities, people and teams that develop the best ideas and projects to protect the

environment and which achieved the best performances, enhancing positive examples and fostering a spirit of healthy competition.

# ISO 14001

Certification program completed in 2016 for all relevant production sites

## Efficient use of water

For years Eni has recorded rather low consumption of fresh water, thanks to the use of sea water (over 90%) mainly

for thermal cooling. Fresh water is used (approximately 130 million m<sup>3</sup>) essentially in downstream production and

the production of electricity and only a small part (8.2%) is used in the upstream sector.

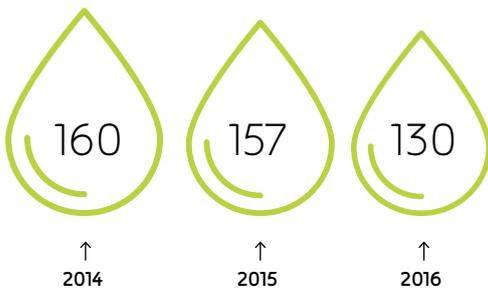
### → Water withdrawals

Million m<sup>3</sup>



### → of which fresh water

Million m<sup>3</sup>



In 2016 only 5% of fresh water withdrawals were situated in areas of water stress



Eni performs an annual mapping and monitoring of water risks and drought scenarios caused by climate change in order to define long-term prevention and mitigation actions.

Nearly all the withdrawals from areas of water stress are concentrated in the upstream sector and specific water management plans are used to reduce consumption. In these areas, for example, the share of reinjected reservoir water is higher than the Eni average (65-100% compared to an average of

52% in the rest of world). In the downstream sector, reclamation waters are re-evaluated for use by the subsidiary company Syndial, making large volumes of water available for industrial use through its groundwater treatment plants (TAF). Over the next 4 years, these volumes of water will comprehensively increase from 3.5 to 5.0 million m<sup>3</sup>/year. The petrochemical sector, responsible for over 3/4 of all of Eni's fresh water withdrawals, achieved a fresh water re-circulation/ re-utilization rate of 88% in 2016.

58%

reinjected water in 2016

72%

target by 2020

→ Over 83% of fresh water withdrawals are recycled

→ +10% over the last 5 years

research and development

Over the next 10 years, Eni estimates spending €700 million to improve the performance of current water treatment technologies, in terms of efficiency and costs. Eni has developed a research program that aims to: reduce the energy consumption required, reduce waste volumes, reduce the consumption of soil and increase water recycling. The proprietary device for aquifer reclamation was improved in 2016 and two innovative materials for absorbing hydrocarbon spills were tested.

The application protocol for Eni's passive biomimetic samples was made the official method of analysis by the CNR's Istituto di Ricerca sulle Acque (IRSA).

## Oil spill management

The volume of operational oil spills is decreasing thanks to various interventions carried out on the assets, such as the gradual replacement of the pipelines and work on the tanks (double bottoms, tank vitrification).

€37.1 million

Invested in 2016 in oil spill prevention

→ Oil spill (>1bbl)

Operational From sabotage



Volumes of oil spills  
bbl

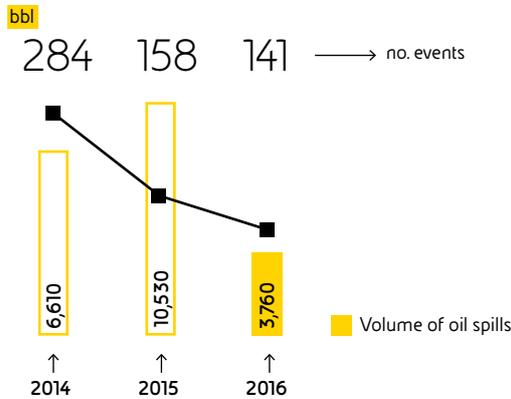


Number of events

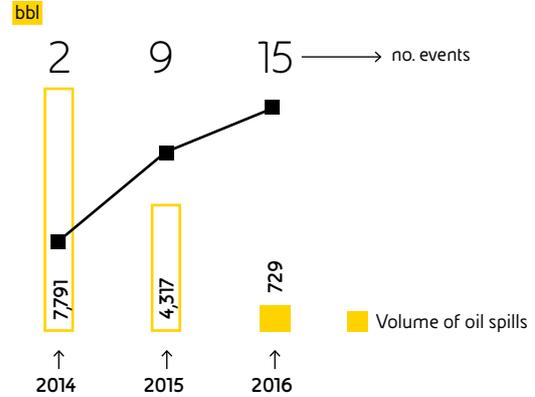




→ Volumes of oil spills (>1bbl) caused by sabotage in Nigeria



→ Volumes of oil spills (>1bbl) caused by sabotage in Italy

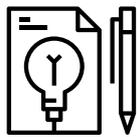


There was a drastic reduction in chemical spills from 1,211 barrels in 2015 to 18 barrels this year



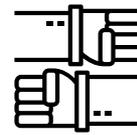
### Main results

- In 2016 volumes spilled due to sabotage are in sharp decline:
  - in Nigeria thanks to stepped-up direct surveillance<sup>30</sup>
  - in Italy thanks to the growing ability to react and intervene and the installation (1<sup>st</sup> half of 2016) of the eVPMS system (Eni Vibro Acoustic Monitoring System) along the entire national network of finished product oil pipelines, in operation



### New projects

- The Safety Security Pipeline System, for detecting operational leaks on the fuel network, is expected to be completed by mid 2017
- Application of advanced technologies for oil pipeline safety
- Pilot project "Support for oil pipeline emergency spill network" to improve the quality and rapidity of the intervention response
- In Congo, the application of the IPIECA-IOGP guidelines on NEBA<sup>31</sup> for the prevention and management of spills into the sea under various emergency scenarios



### Participation in international initiatives

- Joint Industry Programme in the critical Arctic context
- Second stage of the IPIECA-IOGP's Oil Spill Response Joint Industry Programme with the publication of the Good Practices Guidelines
- Participation in IPIECA's Oil Spill Working Group and Global Initiative (West Africa, Caspian Sea, etc.)

30) More details on the NAOC site [https://www.eni.com/en\\_NG/home.html](https://www.eni.com/en_NG/home.html)

31) Net Environmental Benefit Analysis: Technique that allows various oil spill response options (onshore and offshore) to be compared and balanced, weighting the advantages and disadvantages according to the specific context of analysis.



## Biodiversity and Ecosystem Services

Eni's commitment to Biodiversity and Ecosystem Services (BES) is an integral part of the Company's sustainability policy published in 2011.

In line with this policy Eni operates according to internationally recognized

best practices in order to protect biodiversity and the ecosystem services from the first exploration stages to the end of the project cycle.

Principles in line with the Convention of Biological Diversity (CBD),

the Energy and Biodiversity Initiative's guidelines and the tools developed by IPIECA and IOGP are applied.

Moreover, Eni is working with UNEP-WCMC<sup>32</sup> to publish an ad hoc policy on biodiversity and ecosystem services.

Distinctive management model	Integrated Biodiversity Assessment Tool (IBAT)	Impact assessment	Participation in:
<ul style="list-style-type: none"> <li>• Management model developed in collaboration with Fauna and Flora International</li> <li>• Model is applied in priority operating sites and in all new projects, throughout the project cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Use of the UNEP-WCMC's IBAT tool to map the position of protected areas and the presence of species at risk of extinction</li> <li>• IBAT is used to identify the priority operating sites where action plans need to be developed</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated impact assessment: Environmental, Social &amp; Health Impact Assessment (ESHIA) in all new projects</li> </ul>	<ul style="list-style-type: none"> <li>• Industry associations such as IPIECA-IOGP and the Cross-Sector Biodiversity Initiative (CSBI)</li> <li>• UNEP-WCMC's Proteus Partnership</li> <li>• WBCSD's Natural Capital &amp; Ecosystem Working Group</li> </ul>

Eni's goal of increasing the number of priority sites for which biodiversity action plans are defined in order to mitigate

the potential impact associated by the activities by 20% was achieved in 2016. Currently BES activities are ongoing in:

Italy, Mozambique, Ecuador, Republic of Congo, Ghana, Kazakhstan, Egypt and the United States.

<sup>32</sup> United Nations Environment Programme's World Conservation Monitoring Centre.



## Arctic operations

Eni's technological and operational excellence guarantees safety even in extreme environments such as the Arctic, whose

environmental and climatic aspects require a sustainable and responsible approach. Eni's approach involves:

Offshore drilling operations in ice-free areas only, which are considered workable areas where operational risk is minimum and manageable with the know-how and best technologies currently available.

The use of the best drilling technologies, reducing the diameter of wells, managing pressure, blow-out preventer and robotic systems to prevent and contain any oil spills.

Local native populations are involved, they are informed and their activities are protected. Their skills in managing emergencies are enhanced.

Activities are carried out only in periods that have a minimum impact on the surrounding habitat, with the application of specific biodiversity conservation models for the local realities and pioneering oil spill prevention plans.

Eni produces hydrocarbons mainly in Alaska and in the Barents Sea, where, in 2016, off the coast of Norway, the Goliat<sup>33</sup> reservoir started production.

It is the world's most northern reservoir and was developed using a sophisticated cylindrical floating production and storage unit (FPSO), with a capacity of 1 million barrels of oil. The unit was built to operate in particularly sensitive environments, such as the Arctic, in a sustainable way.

Production is carried out using submarine

wells and some of them are used to reinject water and gas. Goliat receives renewable electricity using submarine cables connected to the mainland, this means CO<sub>2</sub> emissions are half those of other solutions.

The project also has an advanced system for managing and preventing oil spills, like the Coastal Oil Spill Preparedness Improvement Program (COSPIP), which Eni launched in collaboration with other major oil companies and international and national research institutes.

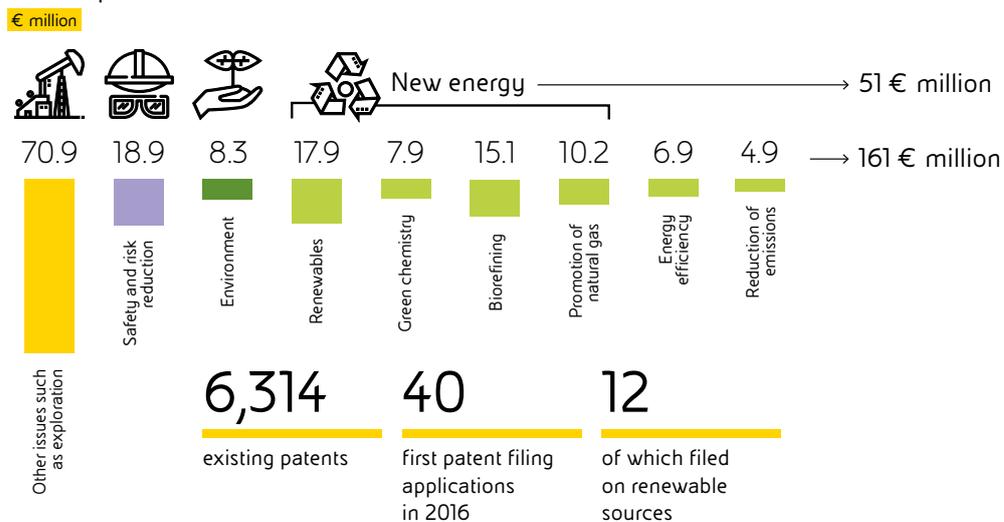
33) Eni 65%, operator, with Statoil 35%.



# Research and development

Research and Development (R&D) is a key element for making access to new energy resources effective and efficient, improving the use of existing resources by continually minimizing risks throughout the production cycle.

→ R&D expenditure in 2016



## Tangible value generated by R&D

For many years Eni has been committed to identifying the value generated by applying innovative technologies developed in-house and with third parties. In 2016 the estimate exceeded €1.3 billion (+90% vs 2015), attributable to:

Application of innovative technologies for the discovery and development of the giant Zohr in Egypt.	Better definition of the exploration discoveries thanks to proprietary seismic processing technologies which have increased the reserves associated with the reservoirs.	The reduction of oil well abandonment estimates for activities in Italy, United States, Nigeria and Angola.	Start-up of three Enhanced Oil Recovery (EOR) pilots in the giant Belayim field (Egypt) to maximize the recovery of hydrocarbons in the subsoil.	The development and marketing of Eni Diesel+ in 2016, increasing sales of Premium Eni diesel by 20%.
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## Knowledge sharing

To enhance internal skills, Eni is committed to spreading knowledge across all the structures. In 2016, the "Knowledge Management System" (#KMS) saw active participation in

the Knowledge Management processes almost double over the year, which confirms:

- commitment to generating, spreading and applying know-how;

- focus on processes to enhance corporate identity;
- awareness of the importance of a sharing culture, referred to in the Code of Ethics.



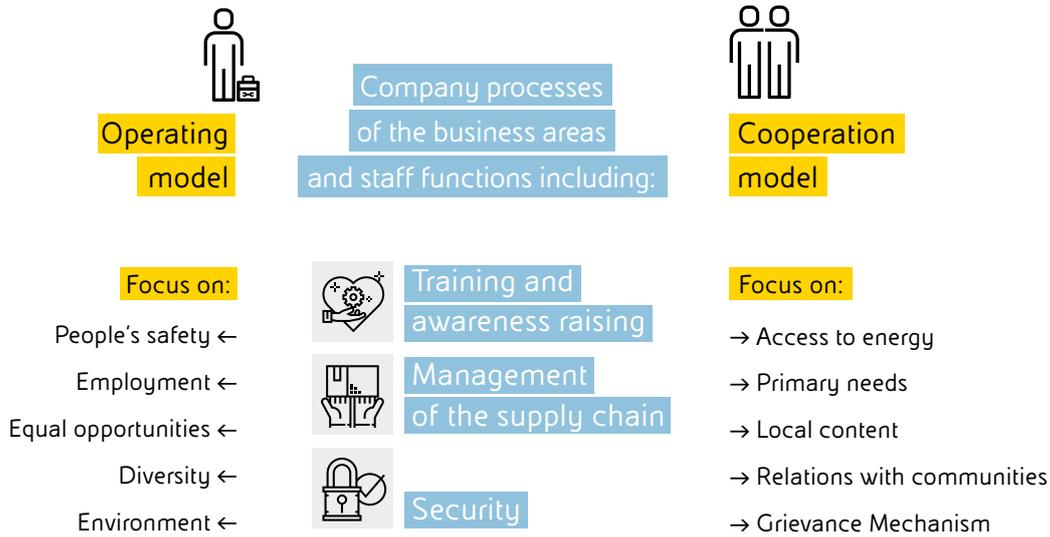
# Human rights

Eni is committed to respecting the international principles on human rights, starting with the UN's Guiding Principles, with a view to continuously

improving its due diligence system. Human rights are a transversal issue that affects the approach Eni uses to manage its activities

and the way in which it relates with local communities (see "Human rights in relationships with communities" on page 51).

→ Human rights are transversal to all the activities



## The regulatory system integrates human rights

Code of Ethics, Sustainability Policy and Eni Guidelines for the Protection and Promotion of Human Rights are the key references.	Policy on Indigenous Populations, Land Management and Grievance Mechanism Procedures.	Integration of the Procedures and Management tools in the processes with significant impacts on human rights.
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Risks and impacts were assessed using various processes including checking compliance with the UNI ISO 26000 Guidelines which define

the principles and priority issues to be followed in order to act in a socially responsible way, recognizing human rights as one of the key issues.

From 2015 to 2016, 12 Eni subsidiaries/ districts have been assessed by third parties.<sup>34</sup>

<sup>34</sup> Eni Pakistan, EEA (Mozambique), Eni Congo, Agip Karachaganak (Kazakhstan), EniMed (Italy), Eni Angola, NAOC-AENR-NAE (Nigeria), IEOC (Egypt), Eni Ghana, Eni Indonesia, AOE (Ecuador) and DICS (Italy).



→ Main results from the ISO 26000 assessment on aspects concerning human rights

Strengths	Areas for improvement
<ul style="list-style-type: none"> <li>• Specific agreements exist that promote social dialogue</li> <li>• Application of an integrated health, safety and environment management system</li> <li>• Attention to the needs of local communities and their involvement</li> </ul>	<ul style="list-style-type: none"> <li>• Approach for assessing the impacts on human rights</li> <li>• Definition of positions dedicated to the management of Social Responsibility</li> <li>• System for monitoring the effectiveness of social initiatives</li> </ul>



## Awareness activities on human rights

The "Raising awareness on human rights in Eni's activities" event took place in 2016. It was aimed at Eni management with the goal of raising and creating awareness on business and human rights. The event was chaired by the CEO and involved a panel of international experts, such as

the Danish Institute for Human Rights, Amnesty International, the Institute for Human Rights and Business, University of Notre Dame (Indiana, US) and IPIECA. Members of Eni's Board of Directors and Board of Statutory Auditors and management representatives attended the

event (200 in person and 200 in streaming from abroad). Subsequently an e-learning training course called "Business and Human Rights" was set up. It had been developed with the Danish Institute for Human Rights and recorded around 22,000 participants.

Human Rights event in 2016: the CEO met with the Danish Institute for Human Rights, Amnesty International, the Institute for Human Rights and Business, University of Notre Dame and IPIECA



## Management of the supply chain

In the context of its supply chain, Eni subjects suppliers to:

Structured assessment, aimed at checking and monitoring compliance with the main standards on aspects concerning human rights.

Acceptance of the Code of Ethics, Eni Guidelines for the Protection and Promotion of Human Rights and Model 231 (also subcontractors).

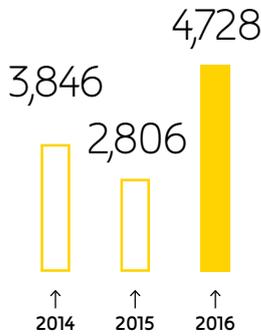
Supplier performance monitoring using feedback also on aspects concerning human rights.

Assessment program on actual compliance with ILO standards on suppliers with activities that are more at risk or in critical Countries.

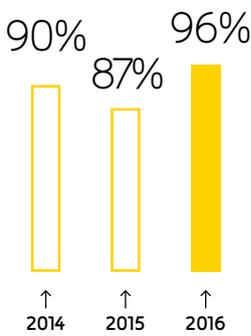


→ Human rights in the supply chain

Number of suppliers subjected to qualification procedures including screening on human rights



% procurement from vendors subjected to qualification procedures including screening on human rights



# 16 audits

under SA8000 approach (+50% vs 2015) on suppliers in Italy, Kazakhstan and Mozambique conducted in 2016

# 8 follow ups

carried out in 2016 on audits conducted in Algeria, Ecuador, Ghana and Vietnam in 2015



## Security

Eni manages its Security operations in accordance with international principles

on human rights and also in line with the indications in the Voluntary Principles on Security

& Human Rights. On this point in 2016 Eni carried out the following actions:

<p>Insertion and monitoring the application of conduct clauses for the respect of human rights in contracts signed with suppliers of Security Services.</p>	<p>Mapping equipment and instruments for managing Security activities available to public and/or private security forces.</p>	<p>Practical training programs on Human Rights and Security which have involved 14 subsidiaries since 2009.</p>	<p>Specific training aimed at newly appointed Security Managers and Security Officers.</p>
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In July 2016 Eni renewed the global framework agreement on international industrial relations and corporate social responsibility with IndustriALL Global Union and with the main Italian trade union organizations, with which Eni undertakes to support and conduct

business while respecting the United Nations Universal Declaration on Human Rights, ILO Conventions, the OECD Guidelines for Multinational Enterprises, the principles of Global Compact and the UN Guiding Principles for Business & Human Rights. Aware of the need for continuous discussion

and dialogue in order to develop the human rights issue, Eni collaborates on a regular basis with authoritative international entities such as the Danish Institute for Human Rights, the Institute for Human Rights and Business, Global Impact, the WBCSD and IPIECA.



# Transparency and anti-corruption

In line with the zero tolerance principle in the Code of Ethics, Eni has a structured system of rules and controls to prevent

corruption ("Anti-Corruption Compliance Program") and a specific anti-corruption unit, in line with the current

applicable anti-corruption provisions and with international conventions.

→ Eni's Anti-Corruption Compliance Program

					
<b>LEGAL BASES OF ENI'S ANTI-CORRUPTION COMPLIANCE PROGRAM</b>	Italian Legislative Decree 231/2001; Anti-corruption Laws	US Foreign Corrupt Practices Act (FCPA)	UK Bribery Act	United Nations Convention Against Corruption (UNCAC)	Convention on Combating Bribery of Foreign Public Officials in International Business Transactions

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Top Level Commitment</b>	<b>Adoption and implementation</b>	<b>Eni Anti-Corruption Compliance Unit</b>	<b>Communication and Training</b>	<b>Due diligence on the potential counterparty</b>	<b>Disciplinary measures and contractual remedies for employees</b>
Eni's Board of Directors approves the Anti-Corruption Management System Guideline	Unlisted subsidiaries adopt the Anti-Corruption MSG and the Anti-Corruption Regulatory Instruments by Board resolution	Provides specialist assistance on anti-corruption to Eni SpA and unlisted subsidiaries in Italy and abroad	In 2016 of resources trained in Italy and abroad: <ul style="list-style-type: none"> <li>• 10,229 through e-learning;</li> <li>• 1,269 with workshops;</li> <li>• 1,214 with job specific training for specific professional areas at risk</li> </ul>		

INTERNAL AUDITS ON ACTIVITIES AT RISK OF CORRUPTION → In 2016, 34 audits were carried out in 27 Countries

Eni's experience in anti-corruption has also been gained using **participation in international conferences and working groups**: in 2016 Eni participated in PACI, B20 China and Germany, United Nations Global Compact, Fondazione Global Compact Network Italia, ABC Benchmarking Group (Steptoe & Johnson LLP) and OCSE. Eni has successfully concluded an audit conducted by RINA Services SpA, Italy's leading certification company,

on the compliance of Eni SpA's Anti-Corruption Compliance Program with the requirements of ISO 37001:2016 "Antibribery Management System", the first international standard on anti-corruption management

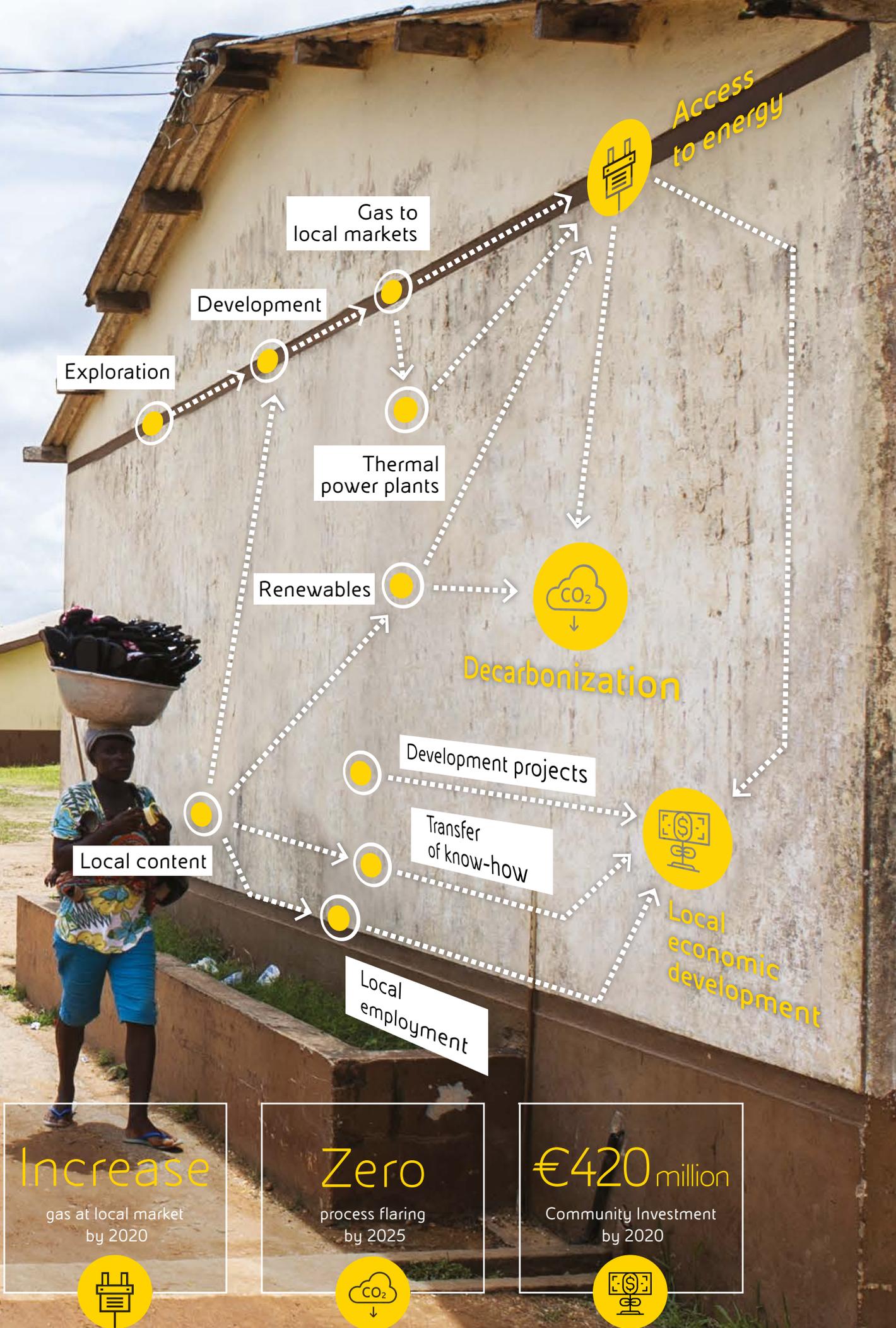
systems. For information on the Anti-Corruption MSG, the tax strategy pursued by Eni and organizational transparency, please see the specific section on the Eni website.

**Eni SpA is the first Italian Company to achieve ISO 37001:2016 "Antibribery Management System" certification**



## Cooperation model

Eni's objective is to gain access to energy in an efficient and sustainable way, also by focusing on developing local markets. Eni has always invested in the construction of infrastructures for the development of local markets, aware that growing together reinforces the Company's credibility and opens new business opportunities, while consolidating long-term partnerships with the host Countries.



**Increase**  
gas at local market  
by 2020



**Zero**  
process flaring  
by 2025



**€420 million**  
Community Investment  
by 2020





# Access to energy

The strategy to reduce social and economic gaps by developing energy sources has become an integral part of the business model. Eni invests in the development of infrastructure for the production and transport of gas for both export and local consumption. This has allowed Eni to reach new local markets and guarantee these Countries energy independence, which is necessary for economic growth. For example:

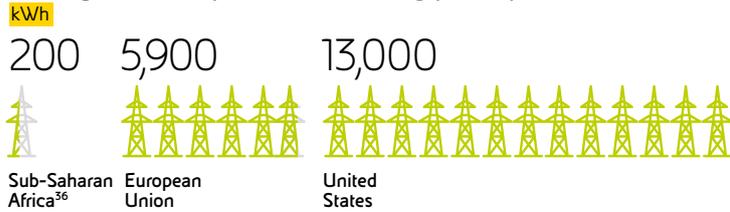
- in Libya, Eni supplies almost all the gas needed by power stations, i.e. 6.9 billion m<sup>3</sup> of gas;
- in Egypt, where all the gas production stays in the Country (10.3 billion m<sup>3</sup> of gas), due to the discovery of the Zohr reservoir, the largest

in the area (850 billion m<sup>3</sup> of gas), the conditions for energy independence will be created.

Overall Eni supplies the domestic markets in 14 Countries thanks to a supply of gas<sup>35</sup> of 48 billion m<sup>3</sup> in 2016. In 10 Countries Eni sells its entire production to supply the local market. In Africa, Eni invests in the construction

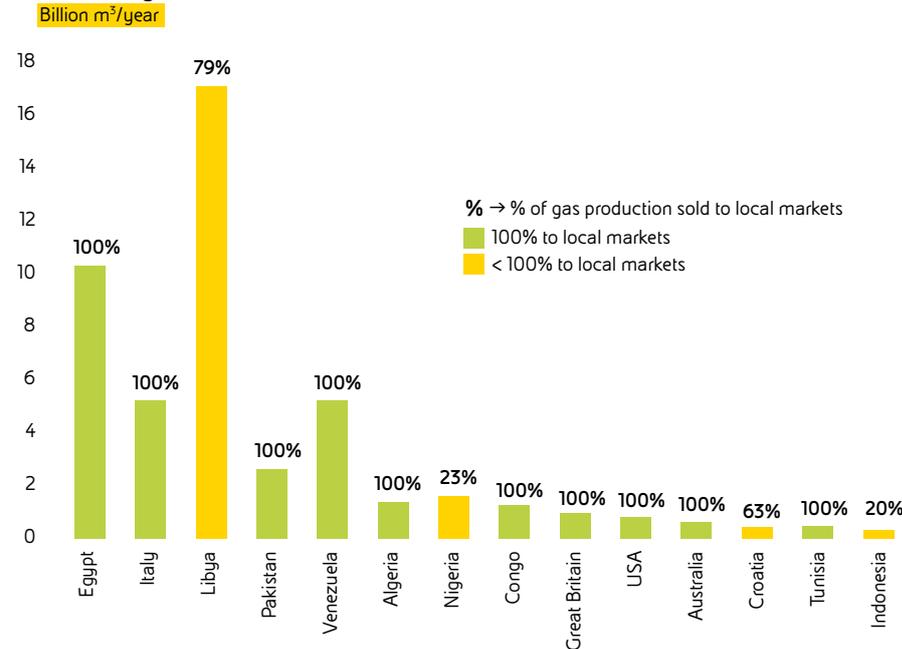
of thermal power stations by using the associated gas which traditionally used to be flared. The aim is to diversify the energy mix, which is currently composed of 50% biomass and 50% coal, introducing a cleaner source such as natural gas. In this way Eni has become the biggest producer of electricity out of all the oil companies.

## → Average consumption of electricity per capita<sup>35</sup>



**In Sub-Saharan Africa 600 million people do not have access to electricity**

## → Sales of gas to local markets<sup>37</sup>



35) Source: International Energy Agency.

36) Excluding South Africa.

37) Sales of gas from gross operated production.



Eni has invested a total of approximately \$2 billion to date in Sub-Saharan Africa in the construction and restoration of networks and power plants which represent 20% and 60%

of the installed capacity in Nigeria and Congo respectively, with a significant reduction of gas flaring in both Countries. In Nigeria, Eni promotes access to electricity through:

# 1 GW

installed capacity for over 18 million people in the Sub-Saharan area

<p>The Kwale Okpai power station which uses natural gas with an installed capacity of 480 MW, employing approximately 547 MMScm and generating 2,556 GWh.</p>	<p>Supplying 128MMScm of gas to the River State Government's 150 MW power station.</p>	<p>Networks connected to oil centres and 36 villages (38 MW installed to reach 320,000 beneficiaries).</p>	<p>The national power grid has been extended to arrive at total of 40,000 beneficiaries.</p>	<p>Stand-alone (off-grid) electricity systems serving 44 communities (170,000 beneficiaries), with an installed capacity of 16 MW.</p>
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From 2012 to 2016 in Ghana the power station's electricity production has grown 25% every year on average, bringing electricity production to over 1,660 GWh in 2016.



## The OCTP project in Ghana

Ghana is a Country where developing the national gas resources is an opportunity to improve access to energy due to the vast availability of natural gas. Here Eni has launched the Oil & Gas Integrated Project called Offshore Cape Three Points (OCTP) which guarantees a supply of cleaner, safer and continuous energy. Work was started in 2016 on the construction of the onshore gas collection plant for the OCTP project of the Eni - Vitol - Ghana National Petroleum Corporation Joint Venture, of which Eni is operator. The project involves oil production of approximately 45,000 barrels/day for the international market and non-associated gas production of 180 MMSCF/day for around 17 years which will be sent to the Ghanaian national network. This project

envisages a total investment of \$7.9 billion and is one of the largest foreign investments in Ghana. This supply will generate around 1,000 MW, enough to increase the Country's electricity production by 50%. Considering the strategic importance for the Country's economic development, the World Bank, through the International Development Association (IDA) and the International Bank for Reconstruction and Development (IBRD), has arranged \$700 million of guarantees to support the project and the government. These guarantees include: \$500 million by the IDA to guarantee coverage of payments by the GNPC state company for the purchase of the sold gas, plus a guarantee of \$200 million by the IBRD to cover repayment of the funding.



# Local development projects

Eni promotes a broad portfolio of initiatives for local communities in those Countries in which it operates with the aim of

producing a positive impact over the long term. These initiatives are agreed with stakeholders and are designed

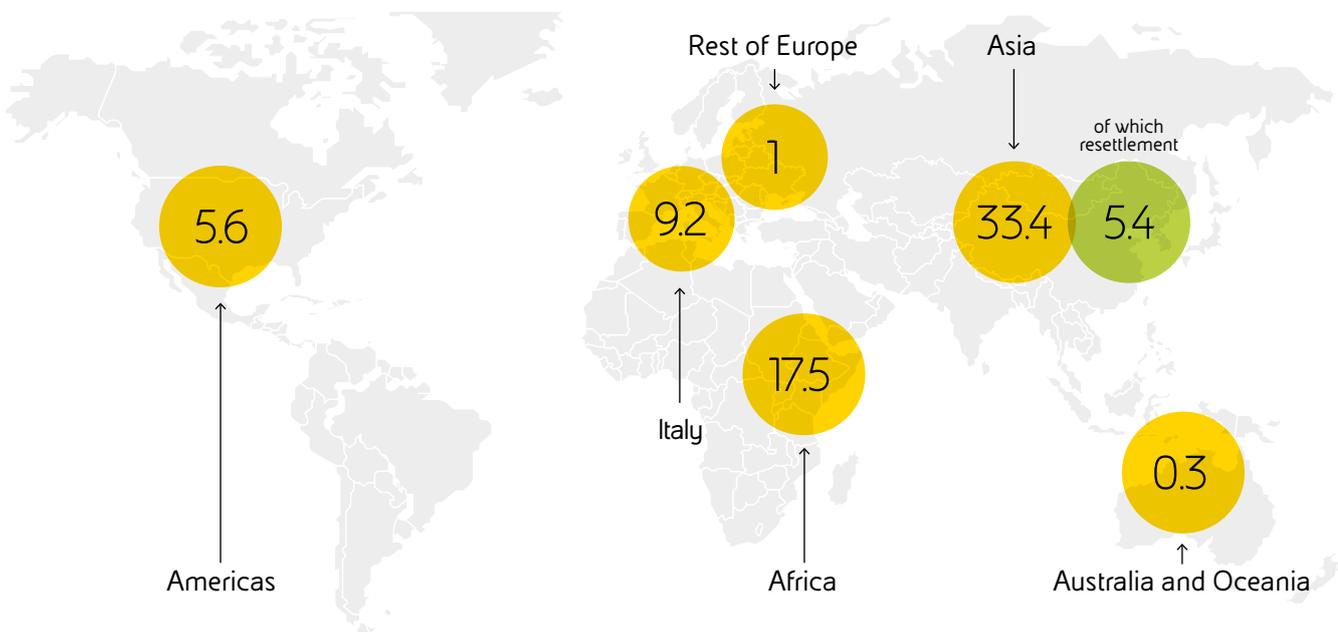
to create independent and sustainable development paths based on local needs, in synergy with the business objective.

SECTOR OF INTERVENTION	2016 Community Investment (€ million)	Beneficiaries of 2016 projects
→ Access to energy off-grid	4.3	Over 10,000 people reached by off-grid electricity projects
→ Economic diversification	29.1	Over 41,000 people involved in agriculture, fishing and local entrepreneurial projects
→ Education and training	15.8	Over 29,000 students involved in primary and secondary education programs
→ Health	3.1	Over 240,000 people involved in health projects
→ Water and sanitation	0.9	Over 50,000 people with access to water and better hygiene and sanitary conditions
→ Other activities <sup>(a)</sup>	13.8	
<b>Overall total</b>	<b>67</b>	<b>Over 370,000 people involved in development projects</b>

(a) Other activities include: €6.9 million Life on land, €5.4 million Livelihood restoration and resettlement, €1.5 million stakeholders and sustainability management.

## → Community investment 2016 by geographical area

€ million





## Types of development projects

### → Access to energy – off-grid



To reach populations in remote areas or far from national distribution networks, Eni has developed a series of initiatives that include the off-grid application of generators and solar power plants or advanced technologies to improve lifestyles (e.g. for food preparation).

### → Economic diversification



Eni promotes actions to boost local socio-economic development in an independent and sustainable way, facilitating economic diversification using actions to develop activities such as agriculture, micro-entrepreneurship and construction of infrastructure. These actions allow new job opportunities to be created and promote female and young people empowerment.

### → Education and training



Eni's commitment is accomplished through education programs aimed at promoting and improving access to primary and secondary education, in close collaboration with local communities and authorities, contributing to guaranteeing the right to education and boosting the Country's growth by educating new generations.

### → Health



Eni develops community health initiatives, in line with local health policies and international best practices, which include actions aimed at improving health conditions (e.g. vaccination campaigns) and strengthening the management capacity of public health services.

### → Water and sanitation



Access to water and basic sanitation is recognized as a human right by the UN General Assembly and Human Rights Council and is a priority for development. Eni initiatives promoting access to water resources and improve hygiene and sanitation conditions include the building of wells, water purifying plants, water distribution networks and sewers.



## Human rights in the relationships with communities

In new projects human rights are considered from the earliest feasibility assessments to avoid harmful conduct and identify intervention areas to help improve access to fundamental rights. For local development projects, Eni uses tools such as:

- integrated environmental, social and health impact studies on operations (ESHIA);
- specific analyses called HRIA (Human Rights Impact Assessment), such as those carried out in Myanmar in 2016, in priority areas<sup>38</sup>;
- analysis of any alternative projects to avoid land acquisition. If it is unavoidable, Eni undertakes to

- minimize socio-economic impact by applying specific instructions that comply with international standards (such as IFC) to manage resettlement. Eni is currently involved in resettlement operations in Kazakhstan and Mozambique;
- the Grievance Mechanism (GM) is a mechanism for gathering claims and complaints. It has been active since 2014, was updated in 2016, and is compulsory for all subsidiaries. Methods have been defined for collecting, managing and identifying cases for central analysis. GM has already been adopted by 21 subsidiaries.

38) Results are available on the website: [https://www.eni.com/docs/en\\_IT/enipedia/international-presence/myanmar/dihr-eni-myanmar-rsf-5-human-rights-report-final.pdf](https://www.eni.com/docs/en_IT/enipedia/international-presence/myanmar/dihr-eni-myanmar-rsf-5-human-rights-report-final.pdf)



## Main development projects worldwide

### Ecuador



#### → SUPPORTING EDUCATION

**Objective**  
Promoting education from primary school to university level.

**Activities and Results**  
Involvement of 1,449 students in 28 communities.

#### → HEALTHCARE PROJECT

**Objective**  
Guaranteeing basic healthcare by supporting 18 health centers.

**Activities and Results**  
Guaranteed medical care for 4,176 inhabitants in 28 communities.

### Venezuela



#### → ENERGY FOR PUNTA MACOLLA

**Objective**  
Supplying electricity to the Punta Macolla community.

**Activities and Results**  
Installation of 23 1.5kW wind turbines which will produce approximately 104 MWh of power for homes in remote areas.

### Libya



#### → ACCESS TO HEALTHCARE AND EMERGENCY HEALTHCARE

**Objective**  
Strengthening healthcare services for the areas around Mellitah, improving emergency response in some hospitals.

**Activities and Results**  
Supply of emergency medical materials, ambulances, diagnostic equipment, capacity building activities and technical assistance with the installation of an MRI scanner for the Sabratha Hospital.

#### → LIVELIHOOD RESTORATION PLAN

**Objective**  
Improving the living conditions of families affected by the operating activities of the OCTP project.

**Activities and Results**  
Economic diversification activities concerning agro-zootechnical areas have been developed for 200 families.

#### → GREEN RIVER PROJECT

**Objective**  
Guaranteeing entrepreneurial agro-zootechnical development using technological transfer, training and career guidance.

**Activities and Results**  
To date there have been 500,000 indirect beneficiaries in 120 communities around the Niger Delta affected by economic diversification activities. 225 cooperatives have been helped with micro credit.

#### → HINDA INTEGRATED PROJECT

**Objective**  
Promoting local development in the district of Hinda.

**Activities and Results**  
Implementation of activities for access to education and primary healthcare, access to water and socio-economic development to date have reached 25,000 beneficiaries in 22 villages.

### Ghana



### Nigeria



### Congo





## Italy - Gela

ET

### → OBJECTIVE: SCHOOL

**Objective**  
Implementing an integrated plan of comprehensive education initiatives.

**Activities and Results**  
Over 270 students involved in the School-work alternation projects, 22 students hired under 1<sup>st</sup> level apprenticeship contracts, pilot projects have been launched to counteract dropping out of school and to assign scholarships to deserving students and initiatives in primary schools concerning biodiversity.

## Iraq

ET

### → SCHOOLS PROJECT IN ZUBAIR

**Objective**  
Building and restoring school infrastructure with the distribution of teaching materials.

**Activities and Results**  
A primary school for 300 girls was built and teaching materials were distributed to 15 schools.

## Pakistan

WS

### → ACCESS TO WATER IN BHIT AND BADHRA

**Objective**  
Ensuring access to clean water for local communities.

**Activities and Results**  
To date 19,000 people have access to 20-25 litres of water per person per day, less than 10m from their homes.



### → PAQUITEQUETE PRIMARY SCHOOL

**Objective**  
Setting up a teaching program to encourage students' curiosity, imagination and interest.

**Activities and Results**  
500 students have been involved thanks to the "Aprendemos brincando" program.

### → WATER WELLS PROJECT IN PALMA

**Objective**  
Promoting access to drinking water.

**Activities and Results**  
The supply of 20 litres per person per day is guaranteed to 4,000 families.

### → ENI BRINGS LIGHT TO DADAAB

**Objective**  
Providing renewable energy to selected education centers and introducing IT tools.

**Activities and Results**  
By 2017, 11 schools, 7,000 students and 150 teachers have been involved and solar power systems have been installed in schools in the Ifo and Hagadera refugee camps.

### → WATER IN PATE ISLAND

**Objective**  
Supplying clean, fresh water to the island population.

**Activities and Results**  
1 well has been built which is nearly 200m deep and a desalination system is currently under tender.

- AE Access to energy
- ED Economic diversification
- ET Education and training
- H Health
- WS Water and sanitation

## Mozambique

ET WS

## Kenya

AE ET WS



## Transparency of payments

Improving governance and transparency in the extraction sector is crucial in order to foster good use of resources and prevent corruption. It increases the awareness of local communities and encourages governments to publish more complete information on payments, investments and revenues generated by Oil & Gas activities. To achieve these objectives, Eni:

Starting from 2015 (2014 data), Eni started to voluntarily disclose payments made to governments. Since 2017, in compliance with European Directive 2013/34 EU which came into force in Italy, data on such payments made in 2016 will be published in a special document (Report on payments to governments).

Eni has been part of the Extractive Industries Transparency Initiative (EITI) since 2005. This global initiative promotes responsible and transparent use of the financial resources generated in the extractive sector.

Eni supports EITI's local Multi-Stakeholder Groups in member Countries by helping to prepare the annual Reports and is a member in Congo, Mozambique, East Timor, Ghana, Ukraine, and in Kazakhstan, Nigeria and Norway through local industry associations.





# Local content

Local content is the added value that the Company can bring to the socio-economic system of its host Countries. It is the way in which the Company, in conducting its business, can be a driver of development in the contexts in which it operates. Eni believes that enhancing local content and its monitoring is a tool which is useful for better planning activities inside the Company and, outside, it helps Countries to direct investments in economic development.

As a result, in 2016, Eni launched the inter-departmental project "Model for local content assessment" with the aim of developing a simple model that can easily be replicated to assess direct, indirect and induced effects of Eni's activities in operational contexts. These effects are attributable

to economic, employment and intellectual capital impacts that Eni's business generates directly at local level and indirectly along the supply chain. The model was applied for the first time to a pilot project in Ghana, helping to define a local content plan that is in line with the IFC and World Bank requirements.

The Politecnico di Milano has given its scientific support, validating the Model for local content assessment

IMPACT CATEGORY	Direct Effect	Indirect Effect	Induced Effect
→ Economic impacts	<ul style="list-style-type: none"> <li>• Eni purchases expenditure for local goods/services</li> <li>• Eni wages paid to local employees</li> <li>• Eni taxes paid</li> </ul>	<ul style="list-style-type: none"> <li>• Backward expenditure for local goods/services along the supply chain</li> <li>• Wages of supply chain local employees</li> <li>• Taxes paid by suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Effect of household consumption, as direct and indirect employees spend their wages within the local economy</li> </ul>
→ Employment impacts	<ul style="list-style-type: none"> <li>• Local jobs directly involved in the Project</li> </ul>	<ul style="list-style-type: none"> <li>• Local jobs along the supply chain directly involved in the project</li> </ul>	<ul style="list-style-type: none"> <li>• Local jobs created in the private sectors, due to household consumption</li> <li>• Local jobs created in the public sector, due to Government revenues</li> </ul>
→ Human Capital Development	<ul style="list-style-type: none"> <li>• Eni training expenditure for local employees</li> </ul>	<ul style="list-style-type: none"> <li>• Differential present value of lifetime earnings expectancy between trained and not trained employees</li> </ul>	<ul style="list-style-type: none"> <li>• Household consumption generated by differential lifetime earnings expectancy</li> <li>• Government revenues (additional taxes)</li> </ul>



# Materiality analysis

Materiality is the result of a process of identifying, evaluating and prioritizing relevant sustainability issues that impact on the Company's ability to create value over the

short, medium and long term. The materiality process is based on the analysis of 3 lines:

- the CEO's guidelines for preparing the four-year strategic plan;

- potential ESG risks identified by internal risk assessment analysis;
- the evaluation of the main issues raised by stakeholders on sustainability.

CEO Guidelines for the 2017-2020 Strategic Plan	Risk assessment results	Key stakeholders
<ul style="list-style-type: none"> <li>• Attention to workplace safety</li> <li>• Access to energy for local development projects</li> <li>• Monitoring and assessment of local content</li> <li>• Fighting climate change</li> <li>• Supporting employee volunteering initiatives</li> <li>• Culture of integrity</li> <li>• Respect for human rights</li> <li>• Equal opportunities for people</li> </ul>	<ul style="list-style-type: none"> <li>• Political and social instability in areas of presence</li> <li>• Blow outs and other accidents in extraction plants</li> <li>• Negative impact on corporate image in matters of compliance and anti-corruption</li> <li>• Disputes in environmental and health matters linked to reclamation activities</li> <li>• Climate change</li> <li>• Negative perception by local and international stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Governments</li> <li>• Local communities</li> <li>• Financial community</li> <li>• Civil society organizations (NGOs, Associations, etc.)</li> </ul>
		Main issues
		<ul style="list-style-type: none"> <li>• Environmental performance</li> <li>• Creation and dissemination of value</li> <li>• Management of social impacts</li> <li>• Transparency and disclosure</li> </ul>

The combination of results from the three previous evaluations help to identify the following priority issues for 2016:

Integrity in business management (transparency, anti-corruption)	People's safety and asset integrity	Human rights and equal opportunities for everyone	Fighting climate change and reduction of impacts <sup>39</sup>	Local development/ local content	Technological innovation
--	-------------------------------------	---	--	----------------------------------	--------------------------

39) Fighting climate change includes the reduction of GHG emissions, energy efficiency and renewables; the reduction of environmental impacts involves protecting water resources, biodiversity and reducing oil spills.

# Reporting principles and criteria

## Reporting system

In 2016, Eni drew up the Integrated Annual Report (IAR 2016) in accordance with the principles of the International Integrated Reporting Council's (IIRC) framework. In order to provide a more in-depth and comprehensive view of the contribution made to achieving the local and global development goals, in 2016 Eni produced "Eni for 2016 - Sustainability Report" (hereinafter "Eni for 2016"). The document is prepared in accordance with the "G4 Sustainability

Reporting Guidelines and Oil & Gas Sector Disclosures" issued by the Global Reporting Initiative (GRI) with a self-declared level of compliance "in accordance - core" and taking into consideration the "Oil & Gas industry guidance on voluntary sustainability reporting" produced by IPIECA/API/OGP. Lastly, Eni.com provides further information on sustainability issues in order to supplement the information provided in its reports.

## Materiality, boundary and quality principles

Materiality is the result of a process of identification, evaluation and prioritization of sustainability issues that significantly impact on the Company's capacity to create value in the short, medium and long term (please see page 56 Materiality Analysis). The process involves an analysis aimed at identifying the boundary of the various aspects in relation to the potential impact both inside and outside Eni. In the coming years Eni will focus on the identification of specific actions aimed at expanding the scope of this boundary.

The performance indicators are related to the 2014-2016 period and concern Eni SpA and its consolidated subsidiaries. The boundary is the same as that for the 2016 Integrated Annual Report, with the exception of certain data expressly mentioned in the text.

Data are presented for the three-year period net of Saipem, due to the sale of 12.503% of

Saipem SpA to the Fondo Strategico Italiano SpA in January 2016.

The HSE data are defined according to the operations control criterion.

Data related to people refer only to consolidated companies based on the line-by-line method.

The detection of the information

and data is structured in a way to ensure comparability of data across several years.

The Report was subject to a limited assurance by an independent company, auditor of Eni Group's consolidated financial statements as of 31 December, 2016.

	Aspect boundary		
	Inside	Outside	Limitations
Economic performance	•		
Market presence	•		
Indirect economic impact	•		
Procurement practices	•	S	RNES
Energy	•		
Water	•		
Effluents, Biodiversity, Ecosystem Services	•		
Emissions	•	S,C	RPES
Occupational health and safety	•	S, Contrac	
Diversity and equal opportunities	•		
Equal remuneration for women and men	•		
Training and education	•		
Human Rights Investment	•		
Security practices	•	LSF	
Supplier Human Rights Assessment	•	S	RNES
Supplier Environmental Assessment	•		
Supplier Assessment for Labour Practices	•		
Local communities	•		
Anti-Corruption	•	S	RPES
Asset Integrity and Process Safety (sector disclosure)	•		
Fossil fuel substitutes (sector disclosure)	•		

Legend: C = Customers; S = Suppliers; LSF = Local security forces; RNES = Reporting not extended to suppliers; RPES = Reporting partially extended to suppliers.



# Independent Auditors' Report



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## Independent auditors' report on "Eni for 2016 - Sustainability Report" (Translation from the original Italian text)

To the Board of Directors of  
Eni S.p.A.

We have carried out a limited assurance engagement of "Eni for 2016 - Sustainability Report" (hereinafter also the "Report") of Eni S.p.A. and its subsidiaries (hereinafter "Eni Group") as of December 31, 2016.

### Directors' responsibility on the Report

The Directors are responsible for the preparation of the Report in accordance with the "G4 Sustainability Reporting Guidelines" and "Oil & Gas Sector Disclosures", issued in 2013 by GRI - Global Reporting Initiative, that are detailed in the paragraph "Reporting principles and criteria" of the Report, as well as for that part of internal control that they consider necessary in order to allow the preparation of a Report that is free from material misstatements, even caused by frauds or not-intentional behaviors or events. The Directors are also responsible for defining the Eni Group's commitments regarding the sustainability performance and for the reporting of the achieved results, as well as for the identification of the stakeholders and of the significant matters to report.

### Auditors' responsibility

It is our responsibility the preparation of this report on the basis of the procedures carried out. Our work has been conducted in accordance with the criteria established by the principle "International Standard on Assurance Engagements 3000 - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000"), issued by the International Auditing and Assurance Standards Board for the engagements that consist in a limited assurance. This principle requires the respect of relevant ethical principles, including those related to independence, as well as the planning and the execution of our work in order to obtain a limited assurance that the Report is free from material misstatements. These procedures included inquiries, primarily with company's personnel responsible for the preparation of the information included in the Report, documents analysis, recalculations and in other procedures in order to obtain evidences considered appropriate.

The procedures performed on the Report were related to the compliance with the principles for defining report content and quality, as articulated in the "G4 Sustainability Reporting Guidelines", and are summarized below:

- a. Comparison of the economic and financial data and information included in the Report with those included in the Eni Group's consolidated financial statements as of December 31, 2016 on which we issued our audit report, pursuant to art. 14 and 16 of Legislative Decree dated January 27, 2010, n.39, on March 22, 2017;

EY S.p.A.  
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- b. Analysis, through interviews, of the governance system and management process of the issues related to sustainable development regarding Eni Group's strategy and operations;
- c. Analysis of the process relating to the definition of material aspects included in the Report, with reference to the identification modalities in terms of their priority for the different stakeholders' categories and to the internal validation of the process outcome;
- d. Analysis of the operation of the processes that support the generation, recording and management of the quantitative data reported in the Report. In particular, we have carried out the following procedures:
  - interviews and discussions with personnel of the Corporate and Business Units of Eni S.p.A., and of the subsidiary Eni U.S. Operating Co. Inc., to obtain an understanding about the information, accounting and reporting system in use for the preparation of the Report, as well as about the internal control processes and procedures supporting the collection, aggregation, data processing and transmission of data and information to the department responsible for preparation of the Report;
  - on-site verifications at Mantova plant of Versalis S.p.A., production sites Garibaldi C and K of Distretto Centro Settentrionale (DICS) of Eni S.p.A. and production site Allegheny of Eni U.S. Operating Co. Inc.;
  - analysis on a sample basis of the documentation supporting the compilation of the Report, in order to confirm the processes in use, their adequacy and the operation of the internal control for the correct reliability of data and information in relation to the objectives described in the Report;
- e. Analysis of the compliance and internal consistency of the qualitative information included in the Report to the guidelines identified in paragraph "Directors' responsibility on the Report" of the present report;
- f. Analysis of the process relating to the stakeholders engagement, with reference to the procedures applied, through the review of summary minutes or any other existing documentation relating to the main topics emerged from discussions with them;
- g. Obtaining of the representation letter, signed by the legal representative of Eni S.p.A., relating to the compliance of the Report with the guidelines indicated in paragraph "Directors' responsibility on the Report", as well as to the reliability and completeness of the information and data presented in the Report.

Our examination has entailed a lower extension of work compared to the work to be performed for a reasonable assurance engagement in accordance with ISAE 3000 and, as consequence, we may not have become aware of all the significant events and circumstances which we could have identified had we performed a reasonable assurance engagement.

### Conclusion

Based on our work, nothing has come to our attention that causes us to believe that "Eni for 2016 - Sustainability Report" of Eni Group as of December 31, 2016 is not in compliance, in all material aspects, with the guidelines "G4 Sustainability Reporting Guidelines" and "Oil & Gas Sector



Disclosures" issued in 2013 by the GRI - Global Reporting Initiative, as stated in the paragraph "Reporting principles and criteria" of the Report.

Rome, April 6, 2017

EY S.p.A.  
Signed by: Massimo Antonelli, Partner

*This report has been translated into the English language solely for the convenience of international readers*



## Eni SpA

### Registered Office

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Share capital: € 4,005,358,876.00 fully paid-up  
Business Register of Rome  
taxpayer's code 00484960588

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