

Natural Resources





Exploration & Production

>700 mmboe

new exploration equity resources discovered at a competitive cost of 1.3 \$/barrel

HyNet Project

for the CO₂ geological capture and storage in the UK. Signed 19 Memorandum of Understanding with local industries for the storage of their emissions

Net carbon footprint upstream -26% vs. 2018

In 2021 achieved progress in line with new target of -65% in 2025 and net zero in 2030



KEY PERFORMANCE INDICATORS

		2021	2020	2019
Total recordable incident rate (TRIR) ^(a)	(total recordable injuries/worked hours) X 1,000,000	0.25	0.28	0.33
<i>of which: employees</i>		0.09	0.18	0.18
<i>contractors</i>		0.30	0.31	0.37
Profit per boe ^{(b)(c)}	(\$/boe)	4.8	3.8	7.7
Opex per boe ^(d)		7.5	6.5	6.4
Cash flow per boe		20.6	9.8	18.6
Finding & Development cost per boe ^{(c)(d)}		20.4	17.6	15.5
Average hydrocarbon realization		51.49	28.92	43.54
Production of hydrocarbons ^(d)	(kboe/d)	1,682	1,733	1,871
Net proved reserves of hydrocarbons	(mmboe)	6,628	6,905	7,268
Reserves life index	(years)	10.8	10.9	10.6
Organic reserves replacement ratio	(%)	55	43	92
Employees at year end	(number)	9,409	9,815	10,272
<i>of which outside Italy</i>		6,045	6,123	6,781
Direct GHG emissions (Scope 1) ^(a)	(mmtonnes CO ₂ eq.)	22.3	21.1	22.8
Direct GHG emissions (Scope 1)/operated hydrocarbon gross production ^{(a)(e)}	(tonnes CO ₂ eq./kboe)	20.2	20.0	19.6
Methane fugitive emissions ^(a)	(ktonnes CH ₄)	9.2	11.2	21.9
Volumes of hydrocarbon sent to routine flaring ^(a)	(billion Sm ³)	1.2	1.0	1.2
Net carbon footprint upstream (Scope 1+2) ^(f)	(mmtonnes CO ₂ eq.)	11.0	11.4	14.8
Oil spills due to operations (>1 barrel) ^(a)	(barrels)	436	882	988
Re-injected production water ^(a)	(%)	58	53	58

(a) Calculated on 100% operated assets.

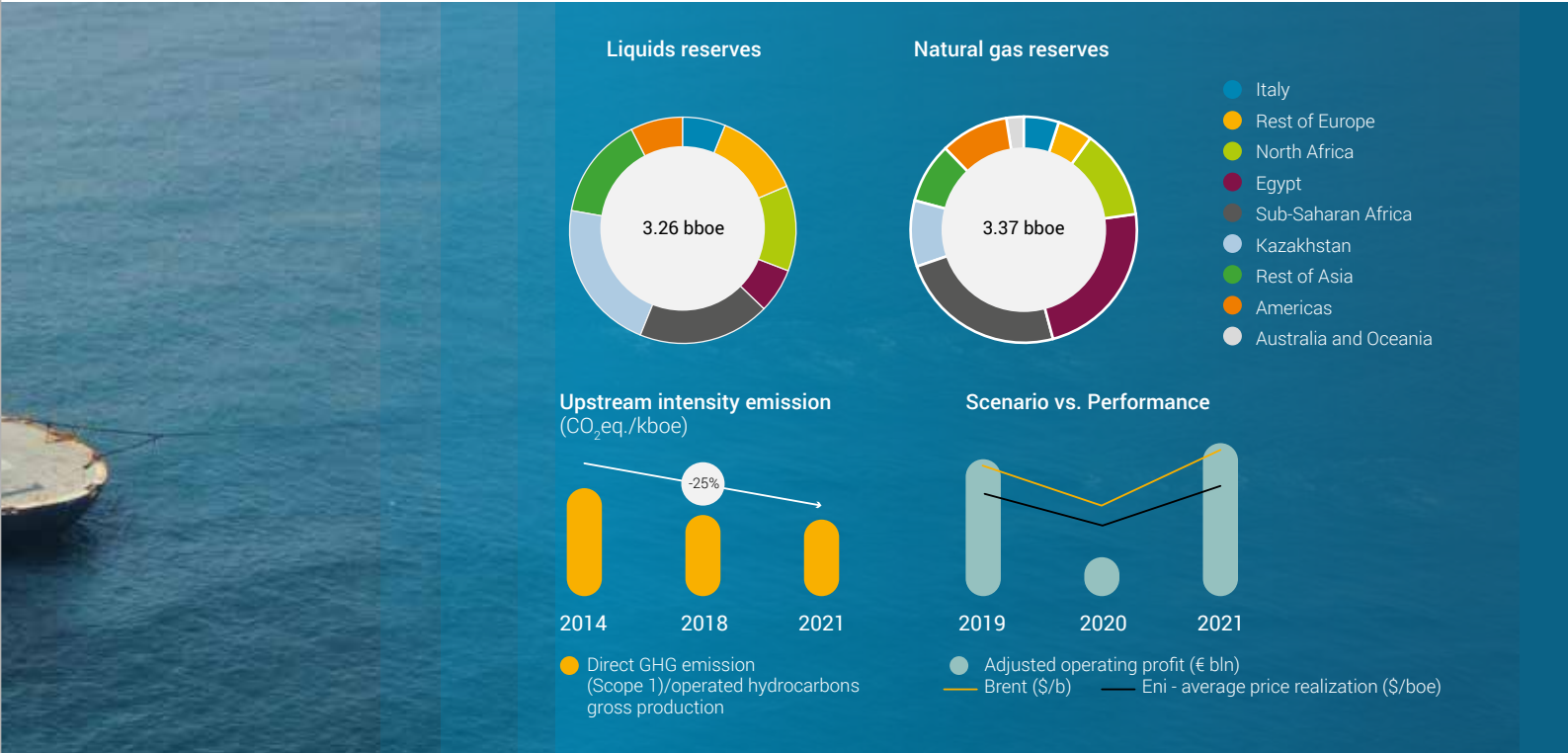
(b) Related to consolidated subsidiaries.

(c) Three-year average.

(d) Includes Eni's share of equity-accounted entities.

(e) Hydrocarbon gross production from fields fully operated by Eni (Eni's interest 100%) amounting to 1,041 mmboe, 1,009 mmboe and 1,114 mmboe in 2021, 2020 and 2019, respectively.

(f) Calculated on equity bases and included carbon sink.



Performance of the year

- ▶ Total recordable injury rate (TRIR) was 0.25, down by 9%, confirming Eni's commitment to reduce injuries in each of its operations.
- ▶ Direct GHG emissions (Scope 1) of the operated assets reported an increase of 6% from 2020, mainly due to the resumption of activities.
- ▶ Direct GHG emissions (Scope 1)/operated hydrocarbon gross production was 20.2 tonnes CO₂ eq./ kboe, substantially in line with 2020.
- ▶ Methane fugitive emissions of the operated assets were down by 18% from 2020 mainly as result of the constant commitment to periodic on-site monitoring and the related maintenance activities.
- ▶ Net Carbon Footprint upstream (GHG emissions Scope 1 + Scope 2 accounted for on an equity basis net of carbon sink) slightly decrease from 2020.
- ▶ Volumes of hydrocarbon sent to routine flaring of the operated assets increased by 12% from 2020, mainly due to the resumption of activities at the Abu-Attifel and El Feel plants in Libya, shut down in 2020.
- ▶ Oil spills due to operations more than halved from 2020, leveraging on to the technical measures adopted in the operating activities.
- ▶ Re-injected production water increased from 2020 thanks to the complete recovery of the re-injection activities in Congo and Libya.
- ▶ Oil and natural gas production was 1.7 million boe/d before price effects. Growth was fueled by continued production ramp-ups at the giant Zohr in Egypt and Merakes (Indonesia) gas fields, with the latter achieving first gas in April. Performance was negative impacted by greater maintenance activity in Norway, Italy and the UK, lower activity in Nigeria and mature fields decline.
- ▶ Net proved reserves at December 31, 2021 amounted to 6.6 bboe based on a reference Brent price of 69 \$/barrel. The all-sources replacement ratio was 55%; 73% three-year average all sources replacement ratio. The reserves life index was 10.8 years (10.9 years in 2020).

Decarbonization initiatives

- ▶ The projects of the CO₂ geological capture and sequestration using depleted fields as well as reusing in other production cycle are a key drivers of Eni transition strategy. In particular, the HyNet integrated project in the United Kingdom where Eni operates (100% interest) the transport and storage of CO₂ in depleted gas fields in the Liverpool Bay area. In October 2021 the project has been selected by UK authorities between the two priority CCS projects in the country and granted access to priority public funding by the UK government Carbon Capture Storage Infrastructure Fund (CCSIF) managed by BEIS (Business, Energy & Industrial Strategy department) to support with £1 billion the realization in the United Kingdom of at least 4 CCS hubs by 2030. The project will ensure significant support to the UK's decarbonisation process with 10 mmt/annum/year of CO₂ storage at full capacity compared to the recent ambition in the Net Zero Strategy (October 2021) of 20-30 mmt/annum/year of CO₂ storage capacity as well as with 80% to the 5 GW of low-carbon hydrogen, target set by the UK government for 2030. Other ongoing initiative concerned a plan to build a hub for the capture and storage of CO₂ in depleted fields off the coast of Ravenna which will be designed to store 500 mmt/annum. Leveraging on the development of CCS projects, the target is to reach a storage capacity of 7 mmt/annum/year net to Eni in 2030.
- ▶ Progressed Eni's initiatives within the Natural Climate Solutions, such as projects focusing on the forest's protection, conservation and sustainable management, mainly in developing Countries, by means of the REDD+ project scheme which was designed by the United Nations. In particular, in 2021, Eni launched other projects in the Republic of Zambia and Tanzania, in addition to Luangwa Community Forest project. Eni continues to evaluate further initiatives in different Countries by means of partnerships with governments and international players in Africa, Latin America, and Asia. Planned and defined initiatives will ensure the offsetting of residual emissions in the Eni's decarbonization strategy.
- ▶ In Africa signed agreements with the government of Kenya, Angola, Congo, Ivory Coast, Benin, Mozambique and Rwanda for biofuel projects through the set-up of integrated agro-biofeedstock supply chains to supply renewable feedstock to Eni's biorefineries, without impacting the local food chain and to decarbonize the local energy mix. In particular, these projects aimed at the production of such feedstock ensure security and strategic supply of sustainable feedstock (Low ILUC) and de-risking with respect to market purchases. The development model of these initiatives also enhances environmental issues, as it contributes to the decarbonization of marketed products and allows the recovery of degraded land and tackle deforestation, as well as social issues with positive impacts on the country such as employment, rural income and market access for farmers. The model enhances human rights protections and promotes the health, food security and access rights to land of country populations.
- ▶ Finalized the agreement with the Bonifiche Ferraresi Group aimed at establishing an equal joint venture for the development of agricultural research and experimentation projects of oil plant seeds to be used as feedstock in Eni's biorefineries. Based on the agreement, Eni purchased a minority stake in the subsidiary of BF Bonifiche Ferraresi and in BF SpA.
- ▶ Solenova, a joint venture between Eni and Sonangol, reached the Final Investment Decision (FID) and signed the EPC contract for the first phase start-up of Caraculo's photovoltaic project, located in Namibe, Angola, to be launched in fourth quarter of 2022. The plant will have a total capacity of 50 MW and will be implemented by stages, the first set to reach a capacity of 25 MW.
- ▶ Signed a Memorandum of Understanding with the Australian company Santos to jointly seek cooperation opportunities within CO₂ capture and storage or utilization project and to enhance partnership in the hydrocarbon developments in northern Australia. Other agreements finalized in Egypt and Norway.

Exploration

- ▶ Exploration activity achieved excellent results in 2021 with the discovery of 700 mmbbl of new resources at a competitive cost of 1.3 \$/bbl. Exploration is still a distinctive approach of Eni's upstream model, and the achieved results have allowed Eni to get the title of "explorer of the Year 2021" by the World Energy Capital Assembly.

- ▶ Exploration confirmed its track-record with the Baleine discovery in the CI-101 operated block, in the offshore Ivory Coast, which identified an estimated potential approximately 2 billion barrels of oil in place and 2.4 trillion cubic feet (TCF) of associated gas. The final investment decision for Phase I has been reached after five months from discovery. In particular, defined with the authorities of the Country the development plan of the Baleine discovery, through a phased fast-track development plan, with an expected start-up in early production in the first half of 2023 and a subsequent ramp-up. The project will be a Scope 1 and 2 net-zero development, the first of this kind in Africa. Carbon neutrality will leverage on certain emission reduction drivers by means of improved cookstoves (sustainable development) and forest conservation (REDD+) initiatives. Baleine confirms Eni's commitment to generate high value while reducing the carbon footprint and focus to improve the time-to-market of exploration discoveries.
- ▶ Achieved near-field exploration successes in Angola, where the Cuica-1 oil discovery will ensure to extend the useful life of the FPSO which operates the block, in Ghana, with the Eban oil discovery in the CTP 4 operated block near to the Sankofa production hub, and in Mexico, with the oil discovery in the Sayuilta exploration prospect following the Saasken discovery made in 2020. Other significant exploration successes were made in Egypt, Indonesia, Norway and the United Kingdom.
- ▶ Reloading exploration portfolio with the addition of approximately 15,800 square kilometers of new leases in Angola, the Ivory Coast, Egypt, the UAE, Norway, the UK and Vietnam.
- ▶ In 2021 exploration expenses were €558 million (€510 million in 2020) and included the write-off of unsuccessful wells amounting to €364 million (€314 million in 2020), which also related to the write-off of unproved exploration rights, if any, associated to projects with negative outcome. In particular, exploration and appraisal activities comprised write-offs of unsuccessful exploration wells costs for €331 million mainly in Gabon, Montenegro, Myanmar, Bahrain, Egypt and Angola. Write-offs of €35 million are related to exploration licenses due mainly to exiting from marginal areas for geopolitical or environmental issues. In addition, 100 exploratory drilled wells are in progress at year-end (52.4 net to Eni).

Development

- ▶ Achieved production start-up of the following projects:
 - in Indonesia, in the operated East Seppingaan block (Eni's interest 65%) in the deep offshore eastern Kalimantan with the Merakes gas project;
 - in Angola, with the tie-in of the satellite discoveries of Cuica and Cabaca North in offshore operated Block 15/06, leveraging on the existing FPSO in the area;
 - in the onshore Sharjah Emirate, with start-up of the Mahani gas and condensate project in the Area B concession (Eni's interest 50%), just two years after signing the concession agreement and one year since discovery.
- ▶ In Angola signed with BP an agreement for establishing the Azule Energy, a new jointly controlled venture, which will combine the two partners' upstream portfolio in the Country to accelerate the assets development.
- ▶ Eni and the private equity fund HitecVision, shareholders of Vår Energi, have finalized the process of listing the investee at the Norwegian stock exchange placing about 11.2% interest.
- ▶ Development expenditure amounted to €3.4 billion, directed mainly outside Italy, in particular in Egypt, Angola, the United States, Mexico, the United Arab Emirates, Indonesia and Iraq.
- ▶ Eni progressed its commitment to initiatives and programs to promote local development through a distinctive approach that is also based on collaborations with other internationally recognized players as well as with public-private partnerships. In particular, in January 2022 signed an agreement with the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Mexico to identify joint initiatives that contribute to the sustainable development of the domestic market; in February 2022 in collaboration with the European Union and UNICEF, launched a project in partnership with the Governorate of Basra in Iraq, aimed at improving water quality. In addition, initiatives advanced in Angola with Halo Trust, for the land demining in Benguela area, and the program with FAO to promote water access in Nigeria.
- ▶ In 2021, overall R&D expenditure amounted to €65 million (€59 million in 2020); a total of 6 new patents were filed.

RESERVES

OVERVIEW

The Company has adopted comprehensive classification criteria for the estimate of proved, proved developed and proved undeveloped oil and gas reserves in accordance with applicable US Securities and Exchange Commission (SEC) regulations, as provided for in Regulation S-X, Rule 4-10. Proved oil and gas reserves are those quantities of liquids (including condensates and natural gas liquids) and natural gas which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, under existing economic conditions, operating methods, and government regulations prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain.

Oil and natural gas prices used in the estimate of proved reserves are obtained from the official survey published by Platt's Marketwire, except when their calculation derives from existing contractual conditions. Prices are calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to the end of the reporting period. Prices include consideration of changes in existing prices provided only by contractual arrangements.

Engineering estimates of the Company's oil and gas reserves are inherently uncertain. Although authoritative guidelines exist regarding engineering criteria that have to be met before estimated oil and gas reserves can be designated as "proved", the accuracy of any reserves estimate is a function of the quality of available data and engineering and geological interpretation and evaluation. Consequently, the estimated proved reserves of oil and natural gas may be subject to future revision and upward and downward revisions may be made to the initial booking of reserves due to analysis of new information. Proved reserves to which Eni is entitled under concession contracts are determined by applying Eni's equity interest to total proved reserves of the contractual area, until expiration of the relevant mineral right. Eni's proved reserves entitlements under PSAs are calculated so that the sale of production entitlements cover expenses incurred by the Group for field development (Cost Oil) and recognize a share of profit set contractually (Profit Oil). A similar scheme applies to service contracts.

RESERVES GOVERNANCE

Eni retains rigorous control over the process of booking proved reserves, through a centralized model of reserves governance. The Reserves Department of the Exploration & Production segment is in charge of: (i) ensuring the periodic certification process of proved reserves; (ii) updating the Company's guidelines on reserves evaluation and classification and the internal procedures; and (iii) providing training of staff involved in the process of reserves estimation. Company guidelines have been reviewed by DeGolyer and MacNaughton (D&M), an independent petroleum engineering company, which has stated that those guidelines comply with the SEC rules¹. D&M has also stated that the Company guidelines provide reasonable interpretation of facts and circumstances in line with generally accepted practices in the industry whenever SEC rules may be less precise. When participating in exploration and production activities operated by other entities, Eni estimates its share of proved reserves on the basis of the above guidelines.

The process for estimating reserves, as described in the internal procedure, involves the following roles and responsibilities: (i) the business unit managers (geographic units) and Local Reserves Evaluators (LRE) are in charge with estimating and classifying gross reserves including assessing production profiles, capital expenditure, operating expenses and costs related to asset retirement obligations; (ii) the petroleum engineering department and the operations unit at the head office verify the production profiles of such properties where significant changes have occurred and operating expenses, respectively; (iii) geographic area managers verify the commercial conditions and the progress of the projects; (iv) the Planning and Control Department provides the economic evaluation of reserves; and (v) the Reserves Department, through the Headquarter Reserves Evaluators (HRE), provides independent reviews of

(1) The reports of independent engineers are available on Eni website eni.com section Publications/Integrated Annual Report 2016.

fairness and correctness of classifications carried out by the above mentioned units and aggregates worldwide reserves data.

The head of the Reserves Department attended the “Politecnico di Torino” and received a Master of Science degree in Mining Engineering in 2000. He has more than 20 years of experience in the oil and gas industry. Staff involved in the reserves evaluation process fulfil the professional qualifications requested by the role and comply with the required level of independence, objectivity and confidentiality in accordance with professional ethics. Reserves Evaluators qualifications comply with international standards defined by the Society of Petroleum Engineers.

RESERVES INDEPENDENT EVALUATION

Eni has its proved reserves audited on a rotational basis by independent oil engineering companies². The description of qualifications of the persons primarily responsible for the reserves audit is included in the third-party audit report. In the preparation of their reports, independent evaluators rely, upon information furnished by Eni without independent verifications with respect to property interests, production, current costs of operations and development, sales agreements, prices and other factual information and data that were accepted as represented by the independent evaluators. These data, equally used by Eni in its internal process, include logs, directional surveys, core and PVT (Pressure Volume Temperature) analysis, maps, oil/gas/water production/injection data of wells, reservoir studies, technical analysis relevant to field performance, development plans, future capital and operating costs.

In order to calculate the net present value of Eni’s equity reserves, actual prices applicable to hydrocarbon sales, price adjustments required by applicable contractual arrangements and other pertinent information are provided by Eni to third party evaluators. In 2021³ Ryder Scott Company, DeGolyer and MacNaughton and Société Generale de Surveillance provided an independent evaluation of approximately 27% of Eni’s total proved reserves at December 31, 2021⁴, confirming, as in previous years, the reasonableness of Eni internal evaluation.

In the 2019-2021 three-year period, 93%⁵ of Eni total proved reserves were subject to an independent evaluation. As at December 31, 2021, Belayim in Egypt and Area 1 in Mexico were the main Eni property, which did not undergo an independent evaluation in the last three years.

MOVEMENTS IN NET PROVED RESERVES

Eni’s net proved reserves were determined taking into account Eni’s share of proved reserves of equity-accounted entities. Movements in Eni’s 2021 proved reserves were as follows:

	(mmbobe)	Consolidated subsidiaries	Equity-accounted entities	Total
Estimated net proved reserves at December 31, 2020		5,984	921	6,905
Extensions, discoveries, revisions of previous estimates and improved recovery, excluding price effect		68	76	144
Price effect		48	148	196
Reserve additions, total		116	224	340
Portfolio		(3)		(3)
Production of the year		(526)	(88)	(614)
Estimated net proved reserves at December 31, 2021		5,571	1,057	6,628
Reserves replacement ratio, all sources	(%)			55

(2) From 1991 to 2002, DeGolyer and MacNaughton; from 2003, also Ryder Scott. In 2018 e 2021, the Société Generale de Surveillance (SGS) Company also provided an independent certification.

(3) The reports of independent engineers are available on Eni website eni.com section Publications/Annual Report 2021.

(4) Includes Eni’s share of proved reserves of equity accounted entities.

(5) The share of reserve subjected to independent evaluation increases to 94% also including the third-party evaluation provided by the Gaffney Cline company in 2020 on the reserves of the Angola LNG project (Eni’s interest 13.6%) required by the shareholders of the consortium operating company.

ESTIMATED NET PROVED HYDROCARBONS RESERVES

	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmbbl)	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmbbl)	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmbbl)
	2021			2020			2019		
Consolidated subsidiaries									
Italy	197	918	369	178	348	243	194	752	333
Developed	146	729	283	146	280	199	137	657	258
Undeveloped	51	189	86	32	68	44	57	95	75
Rest of Europe	34	247	81	34	208	73	41	262	89
Developed	34	242	80	31	194	68	37	242	82
Undeveloped		5	1	3	14	5	4	20	7
North Africa	393	2,272	820	383	2,201	798	468	2,738	974
Developed	225	781	373	243	1,014	434	301	1,374	553
Undeveloped	168	1,491	447	140	1,187	364	167	1,364	421
Egypt	210	4,152	992	227	4,692	1,110	264	5,191	1,225
Developed	164	3,656	852	172	4,511	1,022	149	4,777	1033
Undeveloped	46	496	140	55	181	88	115	414	192
Sub-Saharan Africa	589	2,953	1,145	624	3,864	1,352	694	4,103	1,453
Developed	435	1,759	766	469	1,751	799	519	1,858	863
Undeveloped	154	1,194	379	155	2,113	553	175	2,245	590
Kazakhstan	710	1,705	1,032	805	2,003	1,182	746	1,969	1,108
Developed	641	1,705	963	716	2,003	1093	682	1,969	1046
Undeveloped	69		69	89		89	64		62
Rest of Asia	476	1,522	762	579	1,589	879	491	1,349	742
Developed	262	971	445	297	674	424	245	685	372
Undeveloped	214	551	317	282	915	455	246	664	370
Americas	237	274	288	224	175	256	225	240	268
Developed	164	210	203	143	109	162	148	186	182
Undeveloped	73	64	85	81	66	94	77	54	86
Australia and Oceania	1	428	82	1	474	91	1	507	95
Developed	1	266	51	1	315	60	1	322	61
Undeveloped		162	31		159	31		185	34
Total consolidated subsidiaries	2,847	14,471	5,571	3,055	15,554	5,984	3,124	17,111	6,287
Developed	2,072	10,319	4,016	2,218	10,851	4,261	2,219	12,070	4,450
Undeveloped	775	4,152	1,555	837	4,703	1,723	905	5,041	1,837
Equity-accounted entities									
Rest of Europe	378	654	502	400	510	496	424	772	567
Developed	175	457	261	176	415	254	219	597	330
Undeveloped	203	197	241	224	95	242	205	175	237
North Africa	9	10	10	12	14	14	12	14	16
Developed	9	10	10	12	14	14	12	14	16
Undeveloped									
Sub-Saharan Africa	21	1,285	263	18	364	87	10	287	63
Developed	9	165	39	15	170	47	7	88	23
Undeveloped	12	1,120	224	3	194	40	3	199	40
Americas	6	1,460	282	30	1,559	324	31	1,648	335
Developed	6	1,460	282	30	1,559	324	31	1,648	335
Undeveloped									
Total equity-accounted entities	414	3,409	1,057	460	2,447	921	477	2,721	981
Developed	199	2,092	592	233	2,158	639	269	2,347	704
Undeveloped	215	1,317	465	227	289	282	208	374	277
Total including equity-accounted entities	3,261	17,880	6,628	3,515	18,001	6,905	3,601	19,832	7,268
Developed	2,271	12,411	4,608	2,451	13,009	4,900	2,488	14,417	5,154
Undeveloped	990	5,469	2,020	1,064	4,992	2,005	1,113	5,415	2,114

Net proved reserves as of December 31, 2021 were 6,628 mmboe, of which 5,571 mmboe of consolidated subsidiaries. Net additions to proved reserves were 340 mmboe and derived from: (i) revisions of previous estimates were up by 258 mmboe, and mainly derived from the E Structure fields in Libya, the Val d'Agri field in Italy, the Karachaganak field in Kazakhstan and the Zubair field in Iraq. Revisions to previous estimates include a positive price effect of 196 mmboe, mainly due to an increased Brent reference price (from 41 \$/barrel in 2020 to 69 \$/barrel in 2021) resulting in a recovery of volumes reserves which were uneconomical in the 2020 scenario partially offset by net lower reserves entitlements under PSA contracts; (ii) extensions and discoveries were up by 70 mmboe, mainly due to the final investment decision made for the New Gas Consortium project as well as the Cuica and the Ndungu projects in the operated Block 15/06 in Angola; the Tommeliten Alpha Development project in the PL044 license and other minor assets in Norway; and the BKNEP, Zas and Ret project in the Berkine North in Algeria; and (iii) improved recovery of 12 mmboe mainly related to the Ooguruk project in the United States.

Portfolio transactions include the disposal of the OML 17 block in Nigeria and acquisitions of the Lucius field in the United States and the Conwy field in the United Kingdom.

The organic⁶ and all sources reserves replacement ratio was 55%. The reserves life index was 10.8 years (10.9 years in 2020).

For further information, please see the additional information on Oil & Gas producing activities required by the SEC in the notes to the consolidated financial statements.

PROVED UNDEVELOPED RESERVES

Proved undeveloped reserves as of December 31, 2021 totaled 2,020 mmboe, of which 990 mmbbl of liquids mainly concentrated in Africa and Asia and 5,469 bcf of natural gas mainly located in Africa. Proved undeveloped reserves of consolidated subsidiaries amounted to 775 mmbbl of liquids and 4,152 bcf of natural gas.

Movements in Eni's 2021 proved undeveloped reserves were as follows:

(mmboe)

Proved undeveloped reserves as of December 31, 2020	2,005
Additions	(232)
Extensions and discoveries	62
Revisions of previous estimates	174
Improved recovery	11
Proved undeveloped reserves as of December 31, 2021	2,020

In 2021, Eni matured 232 mmboe of proved undeveloped reserves to proved developed reserves due to progress in development activities, production start-ups and project revisions. The main reclassifications to proved developed reserves are related to the following fields/projects: Merakes in Indonesia, Mitzon in Mexico, as well as LNG project in Nigeria.

For further information, please see the additional information on Oil & Gas producing activities required by the SEC in the notes to the consolidated financial statements.

In 2021, capital expenditures amounted to approximately €4.8 billion.

Reserves that remain proved undeveloped for five or more years are a result of several factors that affect the timing of the projects development and execution, such as the complex nature of the development project in adverse and remote locations, physical limitations of infrastructures or plant capacity and contractual limitations that establish production levels. The Company estimates that 0.45 bboe of proved undeveloped reserves have remained undeveloped for five years or more at the balance sheet date

(6) Organic ratio of changes in proved reserves for the year resulting from revisions of previously reported reserves, improved recovery, extensions and discoveries, to production for the year. All sources ratio includes sales or purchases of minerals in place. A ratio higher than 100% indicates that more proved reserves were added than produced in a year. The Reserves Replacement Ratio is not an indicator of future production because the ultimate development and production of reserves is subject to a number of risks and uncertainties. These include the risks associated with the successful completion of large-scale projects, including addressing ongoing regulatory issues and completion of infrastructure, as well as changes in oil and gas prices, political risks and geological and environmental risks.

and decreased from 2020. The proved undeveloped reserves that have remained undeveloped for five years or more at the balance sheet date mainly related to: (i) the Zubair field in Iraq (0.10 bboe), where development of PUDs area making continuing progress by means of drilling additional production wells that were hooked to the existing treatment facilities, which have been already dimensioned based on the expected full field production plateau of 700 kboe/d; (ii) certain Libyan gas fields (0.3 bboe) where development completion and production start-ups are planned according to the delivery obligations set forth in a long-term gas supply agreement currently in force and (iii) other fields in Italy (0.05 bboe) where development activities are in progress.

DELIVERY COMMITMENTS

Eni, through consolidated subsidiaries and equity-accounted entities, sells crude oil and natural gas from its producing operations under a variety of contractual obligations. Some of these contracts, mostly relating to natural gas, specify the delivery of fixed and determinable quantities.

Eni is contractually committed under existing contracts or agreements to deliver in the next three years mainly natural gas to third parties for a total of approximately 623 mmbboe from producing assets located mainly in Algeria, Australia, Egypt, Ghana, Indonesia, Kazakhstan, Libya, Nigeria, Norway and Venezuela.

The sales contracts contain a mix of fixed and variable pricing formulas that are generally indexed to the market price for crude oil, natural gas or other petroleum products. Management believes it can satisfy these contracts from quantities available mainly from production of the Company's proved developed reserves and supplies from third parties based on existing contracts. Production is expected to account for approximately 93% of delivery commitments.

Eni has met all contractual delivery commitments as of December 31, 2021.

OIL AND GAS PRODUCTION

In 2021, oil and natural gas production averaged 1.682 mmboe/d, down by 2.2% from 2020, net of price effects, due to higher maintenance activity at fields in Norway, Italy and the United Kingdom, lower activity in Nigeria and mature fields decline. These decreases were partly offset by continuing production ramp-ups in Egypt and Indonesia at the flagship projects of Zohr and Merakes, in a context of strong global demand for gas and LNG and also thanks to the restart of the Damietta liquefaction plant, as well as the progressive easing of OPEC+ production quotas particularly in the United Arab Emirates and Kazakhstan.

Liquids production amounted to 813 kbbbl/d, down by 4% from 2020. The price effects, the reduction in Nigeria and mature fields decline were partly offset by production growth in Egypt and the progressive easing of OPEC+ production quotas.

Natural gas production amounted to 4,613 mmcf/d down by 2% compared to 2020. Mature fields decline and lower production in Nigeria were partly offset by the ramp-ups at Zohr (Egypt) and Merakes (Indonesia) fields, boosted by strong global demand.

Oil and gas production sold amounted to 567 mmboe. The 47 mmboe difference over production (614 mmboe) mainly reflected volumes of natural gas consumed in operations (42 mmboe), changes in inventory levels and other variations. Approximately 63% of liquids production sold (295 mmbbl) was destined to Eni's Refining & Marketing business. About 16% of natural gas production sold (1,444 bcf) was destined to Eni's Global Gas & LNG Portfolio segment.

ANNUAL OIL AND NATURAL GAS PRODUCTION^{(a)(b)}

	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmboe)	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmboe)	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmboe)
	2021			2020			2019		
Consolidated subsidiaries									
Italy	13	92	30	17	116	39	19	137	45
Rest of Europe	7	43	15	8	58	19	8	64	20
United Kingdom	7	43	15	8	58	19	8	64	20
North Africa	45	263	95	41	278	93	61	419	138
Algeria	20	60	31	19	56	30	23	41	30
Libya	24	198	62	21	218	61	37	374	106
Tunisia	1	5	2	1	4	2	1	4	2
Egypt	30	538	131	24	440	106	27	551	129
Sub-Saharan Africa	73	179	106	80	249	127	91	227	133
Angola	33	20	37	33	22	37	37	25	42
Congo	16	49	25	18	48	27	22	54	32
Ghana	8	31	13	9	32	15	9	36	15
Nigeria	16	79	31	20	147	48	23	112	44
Kazakhstan	37	85	53	40	103	60	36	100	55
Rest of Asia	29	189	65	32	170	64	32	184	66
China							1		1
Indonesia		117	23		91	17		113	21
Iraq	9	26	14	11	28	17	10	29	15
Pakistan		22	4		28	5		37	7
Timor Leste	1	16	3	1	17	4			
Turkmenistan	2	2	3	3	2	3	3	2	3
United Arab Emirates	17	6	18	17	4	18	18	3	19
Americas	19	26	25	21	36	28	20	24	24
Ecuador							2		2
Mexico	4	5	6	4	4	5	1	1	1
United States	15	21	19	17	32	23	17	23	21
Australia and Oceania		31	6		33	6	1	51	10
Australia		31	6		33	6	1	51	10
	253	1,446	526	263	1,483	542	295	1,757	620
Equity-accounted entities									
Angola	1	31	7	1	36	8	2	35	8
Norway	41	118	63	42	134	68	27	66	40
Tunisia	1	1	1	1	1	1	1	2	1
Venezuela	1	88	17	1	77	15	1	70	14
	44	238	88	45	248	92	31	173	63
Total	297	1,684	614	308	1,731	634	326	1,930	683

(a) Includes Eni's share of equity-accounted equities.

(b) Includes volumes of hydrocarbons consumed in operations (42, 45 and 45 mmboe in 2021, 2020 and 2019, respectively).

DAILY OIL AND NATURAL GAS PRODUCTION^{(a)(b)}

	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmbbl)	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmbbl)	Liquids (mmbbl)	Natural gas (bcf)	Hydrocarbons (mmbbl)
	2021			2020			2019		
Consolidated subsidiaries									
Italy	36	251.0	83	47	316.6	107	53	376.4	123
Rest of Europe	19	119.3	41	23	159.1	52	23	174.6	55
United Kingdom	19	119.3	41	23	159.1	52	23	174.6	55
North Africa	124	720.1	259	112	758.4	255	166	1,149.2	379
Algeria	54	165.1	85	53	152.5	81	62	111.8	83
Libya	67	541.7	168	56	594.4	168	101	1,025.8	291
Tunisia	3	13.3	6	3	11.5	6	3	11.6	5
Egypt	82	1,474.8	360	64	1,203.0	291	75	1,509.0	354
Sub-Saharan Africa	198	489.5	291	218	679.0	345	249	621.2	363
Angola	91	53.9	101	89	58.2	100	102	67.3	113
Congo	44	135.5	70	49	131.1	73	59	147.7	87
Ghana	20	83.8	36	24	87.6	41	24	97.9	42
Nigeria	43	216.3	84	56	402.1	131	64	308.3	121
Kazakhstan	102	233.0	146	110	282.2	163	100	272.4	150
Rest of Asia	80	516.5	177	88	465.0	176	86	502.7	179
China	1		1	1		1	1		1
Indonesia	1	321.2	61	1	248.5	48	2	308.1	59
Iraq	24	70.7	37	31	76.3	45	27	78.7	41
Pakistan		59.8	11		76.8	15		101.2	19
Timor Leste	1	42.5	9	2	46.8	10			
Turkmenistan	6	6.3	7	7	6.2	9	7	6.0	8
United Arab Emirates	47	16.0	51	46	10.4	48	49	8.7	51
Americas	53	73.0	67	57	97.1	75	55	66.8	68
Ecuador							6		6
Mexico	11	14.8	14	12	10.9	14	4	2.8	4
United States	42	58.2	53	45	86.2	61	45	64.0	58
Australia and Oceania		85.0	16		91.0	17	2	139.6	28
Australia		85.0	16		91.0	17	2	139.6	28
	694	3,962.2	1,440	719	4,051.4	1,481	809	4,811.9	1,699
Equity-accounted entities									
Angola	3	85.8	19	4	98.8	23	4	97.3	23
Norway	111	322.7	172	116	365.0	185	74	182.4	108
Tunisia	3	3.2	3	2	2.9	2	3	3.4	3
Venezuela	2	239.2	48	2	211.0	42	3	192.0	38
	119	650.9	242	124	677.7	252	84	475.1	172
Total	813	4,613.1	1,682	843	4,729.1	1,733	893	5,287.0	1,871

(a) Includes Eni's share of equity-accounted equities.

(b) Includes volumes of hydrocarbons consumed in operations (116, 124 and 124 kboe/d in 2021, 2020 and 2019, respectively).

PRODUCTIVE WELLS

In 2021, oil and gas productive wells were 8,100 (2,788.6 of which represented Eni's share). In particular, oil productive wells were 6,649 (2,157.8 of which represented Eni's share); natural gas productive wells amounted to 1,451 (630.8 of which represented Eni's share). The following table shows the number of productive wells in the year indicated by the Group and its equity-accounted entities in accordance with the requirements of FASB Extractive Activities Oil and Gas (Topic 932).

PRODUCTIVE OIL AND GAS WELLS^(a)

	(units)	2021			
		Oil wells		Natural gas wells	
		Gross	Net	Gross	Net
Italy		201.0	155.2	331.0	293.4
Rest of Europe		655.0	115.2	184.0	48.4
North Africa		620.0	262.2	132.0	71.2
Egypt		1,263.0	539.8	134.0	43.5
Sub-Saharan Africa		2,401.0	506.5	199.0	26.3
Kazakhstan		208.0	56.9	1.0	0.3
Rest of Asia		1,043.0	388.6	183.0	63.7
Americas		258.0	133.4	285.0	82.0
Australia and Oceania				2.0	2.0
		6,649.0	2,157.8	1,451.0	630.8

(a) Includes 1,198 gross (315.1 net) multiple completion wells (more than one producing into the same well bore). Productive wells are producing wells and wells capable of production. One or more completions in the same bore hole are counted as one well.

DRILLING ACTIVITIES

EXPLORATION

In 2021, a total of 31 new exploratory wells were drilled (17.4 of which represented Eni's share), as compared to 28 exploratory wells drilled in 2020 (13.8 of which represent Eni's share) and 31 exploratory wells drilled in 2019 (16.3 of which represented Eni's share).

The following tables show the number of net productive, dry and in progress exploratory wells in the years indicated by the Group and its equity-accounted entities in accordance with the requirements of FASB Extractive Activities - Oil and Gas (Topic 932). The overall commercial success rate was 54% (49% net to Eni) as compared to 28% (30% net to Eni) in 2020 and 36% (47% net to Eni) in 2019.

EXPLORATORY WELL ACTIVITY

	(units)	Net wells completed ^(a)						Wells in progress at Dec. 31 ^(b)	
		2021		2020		2019		2021	
		productive	dry ^(c)	productive	dry ^(c)	productive	dry ^(c)	gross	net
Italy						0.5			
Rest of Europe		0.1	0.3	0.8	0.4	0.3	1.4	23.0	5.7
North Africa				0.5	1.5	0.5		11.0	8.5
Egypt		5.0	5.0	0.7	1.5	4.5	1.5	14.0	10.5
Sub-Saharan Africa		1.1	0.4	0.1	0.9	0.5	0.9	33.0	19.0
Kazakhstan					1.1				
Rest of Asia		0.7	1.0	0.8	0.9		1.7	15.0	6.5
Americas			0.7		0.6			3.0	1.9
Australia and Oceania						0.5		1.0	0.3
		7.0	7.4	2.9	6.9	5.8	6.5	100.0	52.4

(a) Includes number of wells in Eni's share.

(b) Includes temporary suspended wells pending further evaluation.

(c) A dry well is an exploratory, development, or extension well that proves to be incapable of producing either oil or gas sufficient quantities to justify completion as an oil or gas well.

DEVELOPMENT

In 2021, a total of 154 development wells were drilled (47.7 of which represented Eni's share) as compared to 182 development wells drilled in 2020 (57.4 of which represented Eni's share) and 241 development wells drilled in 2019 (85.4 of which represented Eni's share). The drilling of 80 development wells (25.3 of which represented Eni's share) is currently underway.

The following tables show the number of net productive, dry and in progress development wells in the years indicated by the Group and its equity-accounted entities in accordance with the requirements of FASB Extractive Activities - Oil and Gas (Topic 932).

DEVELOPMENT WELL ACTIVITY

(units)	Net wells completed ^(a)						Wells in progress at Dec. 31 ^(b)	
	2021		2020		2019		2021	
	productive	dry ^(b)	productive	dry ^(b)	productive	dry ^(b)	gross	net
Italy					3.0			
Rest of Europe	4.8		2.8		3.3		28.0	5.5
North Africa	2.5		4.3		5.0	1.1	1.0	0.5
Egypt	17.0	0.8	23.2		33.5		9.0	3.8
Sub-Saharan Africa	3.8		1.2		7.0		6.0	1.2
Kazakhstan			0.3		0.9		1.0	0.3
Rest of Asia	14.9		23.2	0.4	27.3	2.2	31.0	10.0
Americas	3.9		2.0		2.1		4.0	4.0
Australia and Oceania								
	46.9	0.8	57.0	0.4	82.1	3.3	80.0	25.3

(a) Includes number of wells in Eni's share.

(b) A dry well is an exploratory, development, or extension well that proves to be incapable of producing either oil or gas sufficient quantities to justify completion as an oil or gas well.

ACREAGE

In 2021, Eni performed its operations in forty-two Countries located in five continents. As of December 31, 2021, Eni's mineral right portfolio consisted of 771 exclusive or shared rights of exploration and development activities for a total acreage of 335,501 square kilometers net to Eni (336,449 square kilometers net to Eni as of December 31, 2020), of which 577 square kilometers related to the CCUS activities in the United Kingdom. Developed acreage was 27,697 square kilometers and undeveloped acreage was 307,804 square kilometers net to Eni.

In 2021, main changes derived from: (i) new leases were purchased or awarded in Vietnam, Angola, Norway, Ivory Coast, the United Kingdom, the United Arab Emirates and Egypt for a total increase in acreage of approximately 17,100 square kilometers; (ii) relinquishment for the year related mainly to Myanmar, Ivory Coast, Pakistan, Egypt, Norway, the United States, Italy and the United Kingdom covering an acreage of approximately 11,500 square kilometers; (iii) interest increases were reported mainly in Angola, Timor Leste, Italy and the United States for a total acreage of approximately 700 square kilometers; and (iv) partial relinquishment was reported mainly in Morocco, Kenya, Italy, the United Arab Emirates and Mozambique for approximately 7,250 square kilometers.

The gross undeveloped acreages that will expire in the next three years are related to exploration leases, blocks, concessions in: (i) Rest of Europe, in particular in Cyprus; (ii) Rest of Asia, in particular in Oman, Vietnam, Russia, the United Arab Emirates and Myanmar; (iii) North Africa, in particular in Morocco and Libya; (iv) Sub-Saharan Africa, in particular in Kenya, Mozambique and South Africa; and (v) Americas, in particular in Mexico. In most cases extension or renewal options are contractually defined and may or may not be exercised depending on the results of the studies and the planned activities. Management believes that a significant amount of acreage will be maintained following extension or renewal.

OIL AND NATURAL GAS INTERESTS

	December 31, 2020		December 31, 2021					
	Total net acreage ^(a)	Number of Interest	Gross developed acreage ^{(a)(b)}	Gross undeveloped acreage ^(a)	Total gross acreage ^(a)	Net developed acreage ^{(a)(b)}	Net undeveloped acreage ^(a)	Total net acreage ^(a)
EUROPE	39,841	308	14,224	65,679	79,903	8,246	31,612	39,858
Italy	13,632	123	8,087	6,810	14,897	6,786	5,332	12,118
Rest of Europe	26,209	185	6,137	58,869	65,006	1,460	26,280	27,740
Albania	587	1		587	587		587	587
Cyprus	13,988	7		25,474	25,474		13,988	13,988
Greenland	1,909	2		4,890	4,890		1,909	1,909
Montenegro	614	1		1,228	1,228		614	614
Norway	6,253	138	5,218	22,709	27,927	836	6,436	7,272
United Kingdom	975	34	919	1,280	2,199	624	863	1,487
Other Countries	1,883	2		2,701	2,701		1,883	1,883
AFRICA	129,167	277	48,879	233,042	281,921	12,896	115,290	128,186
North Africa	31,033	75	12,068	48,201	60,269	5,292	22,483	27,775
Algeria	4,732	51	6,809	3,982	10,791	2,851	1,914	4,765
Libya	13,294	11	1,963	24,673	26,636	958	12,336	13,294
Morocco	10,755	1		16,730	16,730		7,529	7,529
Tunisia	2,252	12	3,296	2,816	6,112	1,483	704	2,187
Egypt	7,384	56	4,983	13,729	18,712	1,782	4,994	6,776
Sub-Saharan Africa	90,750	146	31,828	171,112	202,940	5,822	87,813	93,635
Angola	5,639	66	10,680	22,749	33,429	2,010	8,800	10,810
Congo	1,306	21	1,164	1,320	2,484	678	628	1,306
Gabon	2,931	3		2,931	2,931		2,931	2,931
Ghana	495	3	226	930	1,156	100	395	495
Ivory Coast	3,372	5		3,840	3,840		3,385	3,385
Kenya	43,948	6		50,677	50,677		41,892	41,892
Mozambique	4,349	10		24,782	24,782		4,171	4,171
Nigeria	6,439	31	19,758	8,206	27,964	3,034	3,340	6,374
South Africa	22,271	1		55,677	55,677		22,271	22,271
ASIA	154,845	70	15,943	267,694	283,637	4,964	150,518	155,482
Kazakhstan	1,947	7	2,391	3,853	6,244	442	1,505	1,947
Rest of Asia	152,898	63	13,552	263,841	277,393	4,522	149,013	153,535
Bahrain	2,858	1		2,858	2,858		2,858	2,858
China	11	3	62		62	10		10
Indonesia	14,184	13	4,778	16,499	21,277	2,441	11,743	14,184
Iraq	446	1	1,074		1,074	446		446
Lebanon	1,461	2		3,653	3,653		1,461	1,461
Myanmar	10,015	2		7,192	7,192		4,113	4,113
Oman	58,955	3		102,016	102,016		58,955	58,955
Pakistan	2,313	13	4,009		4,009	1,072		1,072
Russia	17,975	2		53,930	53,930		17,975	17,975
Timor Leste	1,620	4	412	2,200	2,612	122	1,806	1,928
Turkmenistan	180	1	200		200	180		180
United Arab Emirates	18,680	12	3,017	29,603	32,620	251	18,520	18,771
Vietnam	20,956	5		31,290	31,290		28,338	28,338
Other Countries	3,244	1		14,600	14,600		3,244	3,244
AMERICAS	9,719	112	2,217	14,813	17,030	1,003	8,267	9,270
Mexico	3,106	10	14	5,455	5,469	14	3,092	3,106
United States	1,198	90	942	520	1,462	492	259	751
Venezuela	1,066	6	1,261	1,543	2,804	497	569	1,066
Other Countries	4,349	6		7,295	7,295		4,347	4,347
AUSTRALIA AND OCEANIA	2,877	4	728	2,608	3,336	588	2,117	2,705
Australia	2,877	4	728	2,608	3,336	588	2,117	2,705
Total	336,449	771	81,991	583,836	665,827	27,697	307,804	335,501

(a) Square kilometers.

(b) Developed acreage refers to those leases in which at least a portion of the area is in production or encompasses proved developed reserves.

MAIN PRODUCING ASSETS (GROUP SHARE IN %) AND THE YEAR IN WHICH ENI STARTED OPERATIONS

ITALY		(1926) Operated	Adriatic and Ionian Sea	Barbara (100%), Annamaria (100%), Clara NW (51%), Hera Lacinia (100%) and Bonaccia (100%)	
			Basilicata Region	Val d'Agri (61%)	
			Sicily	Gela (100%), Tresauero (45%), Giaurone (100%), Fiumetto (100%), Prezioso (100%) and Bronte (100%)	
REST OF EUROPE	Norway ^(a)	(1965) Operated	Goliat (45.40%), Marulk (13.97%), Balder & Ringhorne (62.87%) and Ringhorne East (48.88%)		
			Non-operated	Åsgard (15.41%), Mikkel (33.79%), Great Ekofisk Area (8.65%), Snorre (12.96%), Ormen Lange (4.43%), Statfjord Unit (14.92%), Statfjord Satellites East (10.16%), Statfjord Satellites North (17.46%), Statfjord Satellites Sygna (14.67%), Grane (19.78%)	
	United Kingdom	(1964) Operated	Liverpool Bay (100%) and Hewett Area (89.3%)		
			Non-operated	Elgin/Franklin (21.87%), Glenelg (8%), J Block (33%), Jasmine (33%) and Jade (7%)	
NORTH AFRICA	Algeria ^(b)	(1981) Operated	Sif Fatima II (49%), Zemlet El Arbi (49%), Ourhoud II (49%), Blocks 403a/d (from 65% to 100%), Block ROM North (35%), Blocks 401a/402a (55%), Block 403 (50%) and Block 405b (75%)		
			Non-operated	Block 404 (12.25%) and Block 208 (12.25%)	
	Libya ^(b)	(1959) Non-operated	Onshore contract areas	Area A (former concession 82 - 50%), Area B (former concession 100/ Bu-Attifel and Block NC 125 - 50%), Area E (El-Feel - 33.3%) and Area D (Block NC 169 - 50%)	
			Offshore contract areas	Area C (Bouri - 50%) and Area D (Blocco NC 41 - 50%)	
	Tunisia	(1961) Operated	Maamoura (49%), Baraka (49%), Adam (25%), Oued Zar (50%), Djebel Grouz (50%), MLD (50%) and El Borma (50%)		
EGYPT ^{(b)(c)}		(1954) Operated	Shorouk (Zohr - 50%), Nile Delta (Abu Madi West/Nidoco - 75%), Sinai (Belayim Land, Belayim Marine and Abu Rudeis - 100%), Meleiha (76%), North Port Said (Port Fouad - 100%), Tamsah (Tuna, Tamsah and Denise - 50%), Southwest Meleiha (100%), Baltim (50%), Ras Qattara (El Faras and Zarif - 75%), West Abu Gharadig (Raml - 45%) and West Razzak (100%)		
		Non-operated	Ras el Barr (Ha'py and Seth - 50%) and South Ghara (25%)		
SUB-SAHARAN AFRICA	Angola	(1980) Operated	Block 15/06 (36.84%)		
			Non-operated	Block 0 (9.8%), Development Areas in the Block 3 and 3/05-A (12%), Development Areas in the Block 14 (20%), Lianzi Development Area in the Block 14 K/A IMI (10%) and Development Areas in the Block 15 (18%)	
	Congo	(1968) Operated	Néné-Banga Marine and Litchendjili (Block Marine XII, 65%), Zatchi (55.25%), Loango (42.5%), Ikalou (85%), Djambala (50%), Foukanda (58%), Mwafi (58%), Kitina (52%), Awa Paloukou (90%), M'Boundi (83%) and Kouakouala (75%)		
			Non-operated	Yanga Sendji (29.75%) and Likouala (35%)	
	Ghana	(2009) Operated	Offshore Cape Three Points (44.44%)		
Nigeria	(1962) Operated	OMLs 60, 61, 62 and 63 (20%) and OML 125 (100%)			
		Non-operated ^(d)	OML 118 (12.5%)		
KAZAKHSTAN ^(b)		(1992) Operated ^(e)	Karachaganak (29.25%)		
			Non-operated	Kashagan (16.81%)	
REST OF ASIA	United Arab Emirates	(2018) Non-operated	Lower Zakum (5%), Umm Shaif and Nasr (10%) and Area B - Sharjah (50%)		
	Indonesia	(2001) Operated	Jangkrik (55%) and Merakes (65%)		
	Iraq	(2009) Non-operated ^(f)	Zubair (41.56%)		
	Pakistan	(2000) Operated	Bhit/Bhadra (40%) and Kadanwari (18.42%)		
			Non-operated	Latif (33.3%), Zamzama (17.75%) and Sawan (23.7%)	
Turkmenistan	(2008) Operated	Burun (90%)			
AMERICAS	Mexico	(2019) Operated	Area 1 (100%)		
	United States	(1968) Operated	Gulf of Mexico	Allegheny (100%), Appaloosa (100%), Pegasus (85%), Longhorn (75%), Devils Towers (75%) and Triton (75%)	
			Alaska	Nikaitchuq (100%) and Oooguruk (100%)	
			Non-operated	Golfo del Messico	Europa (32%), Medusa (25%), Lucius (11.1%), K2 (13.4%), Frontrunner (37.5%) and Heidelberg (12.5%)
			Texas	Alliance area (27.5%)	
Venezuela	(1998) Non-operated	Perla (50%), Corocoro (26%) and Junin 5 (40%)			

(a) Assets held by the Var energy equity-accounted entities (Eni's interest 69.85%). Following the closing of the process of listing the investee on February 16, 2022, Eni's interest in the company is 64.255%.

(b) In certain extractive initiatives, Eni and the host Country agree to assign the operatorship of a given initiative to an incorporated joint venture, a so-called operating company. The operating company in its capacity as the operator is responsible of managing extractive operations. Those operating companies are not controlled by Eni.

(c) Eni's working interests (and not participating interests) are reported. This includes Eni's share of costs incurred on behalf of the first party accordingly to the terms of PSAs in force in the Country.

(d) As partners of SPDC JV, Eni holds a 5% interest in 16 onshore blocks and in 1 conventional offshore block and with a 12.86% in 2 conventional offshore blocks.

(e) Eni and Shell are co-operators.

(f) Eni is leading a consortium of partners including international companies and the national oil company Missan Oil within a Technical Service Contract as contractor.

MAIN EXPLORATION AND DEVELOPMENT PROJECTS

Eni's exploration and production activities are conducted in many Countries and are therefore subject to a broad range of legislation and regulations. These cover virtually all aspects of exploration and production activities, including matters such as license acquisition, production rates, royalties, pricing, environmental protection, export, taxes and foreign exchange. The terms and condition of the leases, licenses and contracts under which these Oil & Gas interests are held vary from Country to Country. These leases, licenses and contracts are generally granted by or entered into with a government entity or state company and are sometimes entered into with private property owners. These contractual arrangements usually take the form of concession agreements or production sharing agreements.

Concessions contracts. Eni operates under concession contracts mainly in Western Countries. Concessions contracts regulate relationships between States and oil companies with regards to hydrocarbon exploration and production activity. Contractual clauses governing mineral concessions, licenses and exploration permits regulate the access of Eni to hydrocarbon reserves. The company holding the mining concession has an exclusive right on exploration, development and production activities, sustaining all the operational risks and costs related to the exploration and development activities, and it is entitled to the productions realized. As a compensation for mineral concessions, pays royalties on production (which may be in cash or in-kind) and taxes on oil revenues to the state in accordance with local tax legislation. Both exploration and production licenses are granted generally for a specified period of time (except for production licenses in the United States which remain in effect until production ceases): the term of Eni's licenses and the extent to which these licenses may be renewed vary by area. Proved reserves to which Eni is entitled are determined by applying Eni's share of production to total proved reserves of the contractual area, in respect of the duration of the relevant mineral right.

Production Sharing Agreement (PSA). Eni operates under PSA in several of the foreign jurisdictions mainly in African, Middle Eastern, Far Eastern Countries. The mineral right is awarded to the national oil company jointly with the foreign oil company that has an exclusive right to perform exploration, development and production activities and can enter into agreements with other local or international entities. In this type of contract, the national oil company assigns to the international contractor the task of performing exploration and production with the contractor's equipment (technologies) and financial resources. Exploration risks are borne by the contractor and production is divided into two portions: "Cost Oil" is used to recover costs borne by the contractor and "Profit Oil" is divided between the contractor and the national company according to variable schemes and represents the profit deriving from exploration and production. Further terms and conditions of these contracts may vary from Country to Country. Pursuant to these contracts, Eni is entitled to a portion of a field's reserves, the sale of which is intended to cover expenditures incurred by the Company to develop and operate the field. The Company's share of production volumes and reserves representing the Profit Oil includes the share of hydrocarbons which corresponds to the taxes to be paid, according to the contractual agreement, by the national government on behalf of the Company. As a consequence, the Company has to recognize at the same time an increase in the taxable profit, through the increase of the revenues, and a tax expense. Proved reserves to which Eni is entitled under PSAs are calculated so that the sale of production entitlements should cover expenses incurred by the Group to develop a field (Cost Oil) and recognize the Profit Oil set contractually (Profit Oil). A similar scheme applies to some service contracts.

ITALY

Within Eni's long-term strategy to minimize carbon footprint, a program was launched to build a hub for the capture and storage of CO₂ (Carbon Capture and Storage - CCS) in depleted fields off the coast of Ravenna which will be designed to store 500 million tonnes of CO₂. The development program includes a pilot project with expected start-up in 2023, following all necessary authorizations. The development on an industrial scale is expected in the next phase. The planned activities will benefit on the expected synergies on development cost leveraging on the offshore infrastructure of depleted fields and in addition to be significant impacted on the technology and competence areas.

In the gas assets of the Adriatic Sea, development activities concerned: (i) maintenance and production

optimization at offshore gas fields Annalisa (Eni's interest 100%) and Calipso (Eni's interest 51%); and (ii) Decommissioning plan to plug-in depleted wells and to remove idle platforms progressed in the year in compliance with Italian Ministerial Decree 15 February 2019 "Linee guida nazionali per la dismissione mineraria delle piattaforme per la coltivazione in mare e delle infrastrutture connesse". A total of six offshore platforms to be removed are currently under the ministerial authorization process. In the circular economy initiatives, a program in collaboration with national research institutions was launched to redevelop asset in the decommissioning phase. Activities started up to convert an offshore platform into a marine science park.

In 2021 the IX Collaboration Agreement was signed with the Municipality of Ravenna. The agreement includes: (i) environmental projects by means of studies, monitoring program and environmental protection activities at the coastline areas; (ii) energy efficiency measures; (iii) professional training initiatives, programs to support local market and activities; and (iv) social projects and environmental education and sustainable development projects in collaboration with several local stakeholders.

During 2021 the Val d'Agri production plant was shut down, being executed mandatory maintenance activities to be performed every ten years, with the support of local stakeholders and in compliance with relevant regulations and health, safety, and environmental protection issues. The activities were related to inspections and maintenance as well as to execute intervention of improvement and upgrading of the production facilities. The Energy Valley project activities progressed and concerned certain initiatives with the support of local stakeholders, in the area nearby at the Val d'Agri Oil Center, relating to environmental sustainability, innovation, rehabilitation and enhancement of the area, In particular: (i) in the agricultural rehabilitation programs with the "Agricultural Center for Experimentation and Training" project launched sustainable agricultural initiatives and the construction of agritech infrastructures; and (ii) start-up of biomonitoring programs with innovative techniques.

Within the strategic partnership with stakeholder, Eni, Shell and the Basilicata Region, have signed Preliminary Agreement to the Memorandum of Understanding of the Val d'Agri concession. The preliminary agreement, currently under negotiation, defines the main terms of a clearing programs linked to the concession work schedule in support of regional development, also by means of the action plan for the non-oil activities based on the sustainability principles.

In Sicily, following the Memorandum of Understanding for the Gela area, signed with the Ministry of Economic Development in November 2014, the construction activities of the gas treatment plant started up at the Argo and Cassiopeia project development (Eni's interest 60%). The project will be developed in about 3 years with an investment of over €700 million. Natural gas production start-up is expected in the first half of 2024. The project, through a significant reduction of the environmental impact, expects to achieve the carbon neutrality target.

Within the local support communities' initiatives, the final framework agreement was ratified with Fondazione Banco Alimentare Onlus, Banco Alimentare della Sicilia Onlus and the Municipality of di Gela to create a food storage and distribution center for disadvantaged communities.

REST OF EUROPE

Norway Eni and the private equity fund HitecVision, shareholders of Vår Energi, have finalized the process of listing the investee at the local stock exchange placing about 11.2% interest.

In September 2021, a Cooperation Agreement was signed with others Oil & Gas operators in the area to assess the feasibility of the Barents Blu-Ammonia Project. The project provides for the monetization of gas production at the Goliath field by means of the blue ammonia production and commercialization. The CO₂ captured in the process will be transported and stored in a depleted offshore field.

Exploration activities yielded positive results with the offshore oil discovery of: (i) Isflak in the PL 532 license (Eni's interest, 21%) in Barents Sea. The discovery will be linked to the Johan Castberg production hub (Eni's interest, 20.96%) under development; (ii) Blasto in the PL 090/090I license (Eni's interest, 17%), located in the northern North Sea, near the facility production of the Fram project (Eni's interest, 17.46%); (iii) Garantiana West in the PL554 license (Eni's interest 21%) in the North Sea. The activities provide the joint development with the Garantiana field by means of the linkage to nearby facilities of the Snorre field (Eni's interest 12.99%); (iv) King and Prince in the PL027 license (Eni's interest 62.86%) near to the Balder field (Eni's interest 62.87%);

(v) Tyrihans North Ile in the PL073 license (Eni's interest 8.4%) in the North Sea; and (vi) the Rodhette oil and gas discovery in the PL901 license (Eni's interest 34.9%) in the Barents Sea, located in the north of the Goliat field (Eni's interest 45.4%).

Recent discoveries confirm the successfully Infrastructure Led Exploration ("ILX") strategy focused on additional reserve with high value and shortly time-to-market.

The mineral interest portfolio increases were as follows: (i) in 2021 eight exploration licenses were acquired as operator and five licenses in partnership, mainly located in the North Sea and the Barents Sea; and (ii) in January 2022, 5 exploration licenses were acquired as operator and five licenses in partnership. The licenses are distributed over the three main sections of the Norwegian continental shelf.

The new acquired licenses are located in both near-fields already in production or development areas with high exploration mineral potential.

Development activities mainly concerned: (i) the Johan Castberg sanctioned project, with start-up expected in 2024; (ii) the Balder X sanctioned project (Eni operator with a 62.87% interest) in the PL 001 license, located in the North Sea. The Balder project scheme provides for drilling additional productive wells, to be linked to an upgraded FPSO unit that will be relocated in the area. Production start-up is expected in 2023; (iii) the Breidablikk sanctioned project with start-up in 2024. The project scheme provides for drilling production wells to be linked to existing treatment facilities in the area. Leveraging on high energy and operational efficiency technologies, the project development will minimize direct GHG emissions; and (iv) the final investment decision (FID) was sanctioned for the Tommeliten Alpha Development gas and condensates project in the PL044 licenses (Eni's interest 6.38%), in the Norwegian section of the North Sea.

United Kingdom In January 2021, Eni was awarded a 100% interest and operatorship in the exploration license P2511 in the North Sea and later a 50% farm-out agreement was finalized.

In July 2021, Eni finalized the acquisition of 100% interest in the Conwy production field located in the Liverpool Bay area, near existing production facilities. This acquisition currently increases the production in the Country by leveraging on the operational synergies while in the next years during the abandonment phase this asset could be included in possible transitions to CO₂ storage projects.

Exploration activity yielded positive results with the Talbot Appraisal (Eni's interest 33%) and Jade South (Eni's interest 7%) wells. The development activities will leverage on the existing production facilities in the area.

Within the HyNet North West integrated project where Eni is engaged with a consortium of local industries for the capture, transportation and storage of CO₂ emitted by them and for the realization of a low carbon hydrogen production plant in the future: (i) in March 2021, the project received funding of £33 million by the UK Research and Innovation (UKRI), Country's authority for research and innovation through the Industrial Decarbonisation Challenge (IDC) fund, including £21 million to finance 50% of engineering studies for the transport and storage phase; (ii) in May 2021, Eni signed a framework agreement with the Progressive Energy Limited to accelerate the project. Based on the agreement, Eni will develop and operate both the onshore and offshore transportation and storage of CO₂ in its Liverpool Bay assets, while Progressive Energy will lead and coordinate the CO₂ capture and hydrogen production on behalf of the Hynet North West consortium, thereby linking the CO₂ emissions to Eni's transportation and storage infrastructure; (iii) in October 2021, the project has been selected by the UK authorities between the two priority CCS projects in the country and granted access to priority public funding; (iv) signed 19 Memorandum of Understanding with local industries ("Emitters") to ensure the CO₂ storage capacity of the project.

The HyNet North West project start-up is expected at the end of 2025 with an initial CO₂ storage capacity of 4.5 mmt/tonnes/year, at a later stage from 2030 will be increased to reach 10 mmt/tonnes/year.

The HyNet North West project will support to achieve the decarbonisation goals define by the UK Government at 2030; as well as also will contribute to the 80% production of the 5 GW low carbon hydrogen target at 2030, announced by the Country, for further decarbonization of transport, industry and household utilities in the area.

In addition, in November 2021, Eni submitted to the UK authority of Oil & Gas (OGA) in the Country a request to award a new license for possible realization of a CO₂ storage project in Eni's exhausted offshore fields in the Hewett license, where production ended in 2020, to future develop the Bacton area as an hydrogen production hub.

In 2021 Eni announced exiting the Net Zero Teesside (Eni's interest 20%) and the North Endurance Partnership (Eni's interest 16.7%) projects where development activities are ongoing with other oil and gas partners in the

area, following Eni's rationalization strategy of CCS projects in the United Kingdom based on focusing on its operated upstream assets.

Other development activities mainly concerned: (i) production optimization, maintenance and asset integrity programs at the Liverpool Bay operated field (Eni's interest 100%); (ii) drilling of infilling wells and maintenance activity at the Elgin/Franklin (Eni's interest 21.87%) and J-Area (Eni's interest 33%) fields; and (iii) decommissioning activity of the Hewett Area project.

NORTH AFRICA

Algeria In March 2022 exploration activity yielded positive results with the HDLE oil and associated gas discovery in the Zemlet el Arbi concession (Eni's interest 49%), in the Berkine North area.

During 2021 Eni and Sonatrach signed several agreements in the exploration and production, research and development as well as decarbonization initiatives. In particular: (i) upgrading exploration and development activities in the Berkine area, also planning for the construction of an oil and gas development hub in synergy with the existing MLE-CAFC facilities. In addition, in December 2021, a new PSA contract was signed for the southern part of the Berkine area (Eni's interest 75%), near operated production assets; (ii) signed a Memorandum of Understanding to jointly develop initiatives in new technologies, renewable energies, hydrogen, CCUS project, biorefining, and other fields in line with Eni's commitment to achieve carbon neutrality in 2050.

Development activities mainly concerned: (i) the Berkine North area (Eni's interest 49%) with the drilling and hook-up of an additional gas production well and three additional oil production wells as well as workover activities; (ii) production optimization at the Zea field in the Block 403 a/d (Eni's interest from 65% to 100%) and the BRN/BRW field in the Block 403 (Eni operator with a 50% interest) as well as the Block 405b (Eni operator with a 75% interest) and the Block 404 (Eni's interest 12.25%); and (iii) maintenance activity at the Block 208 (Eni's interest 12.5%).

EGYPT

In January 2022, Eni was awarded five exploration licenses, of which four as operator in the Egyptian offshore and onshore, following the successful participation in the Egypt International Bid Round for Petroleum Exploration and Exploitation 2021. The licenses are in mining basins of great interest to Eni: offshore East Mediterranean, the Western Desert and the Gulf of Suez, for a total acreage of about 8,410 square kilometers.

In June 2021, Eni signed with the Egyptian General Petroleum Corporation (EGPC) and Lukoil a unitization agreement and extension of exploitation rights until 2036 of the Meleiha and the Meleiha Deep contractual areas. The agreement includes an option of additional extension term to 2041.

The agreement will allow to enhance the significant resource in the area by means of improved contractual terms and adding new exploratory mineral potential. In addition, the construction of a new gas treatment plant, which will be linked to the existing production facilities, will ensure a further possible development of the reserves in the area. In July 2021 an agreement was signed with the State energy, electricity and natural gas companies to assess the technical and commercial feasibility of projects for the blue and green hydrogen production also through the storage of CO₂ in depleted natural gas fields.

Exploration activities yielded positive results with near-field discoveries in: (i) the Sinai production concession (Eni operator with a 100% interest) with the BLSE 1 oil exploration well. The exploration well was started up by means of the linkage to the existing facilities; (ii) the Western Desert production concessions through eight oil and natural gas discovery wells and already in production.

The new discoveries confirm the positive track-record of Eni's exploration in the Country leveraging on the continuous technology progress in exploration activities that allows to re-evaluate the residual mineral potential in mature production areas.

During 2021 development activities concerned: (i) the completion of drilling development activities and production start-up in the Sinai and Western Desert production concessions as well as production optimization programs by means of work-over activities; (ii) asset integrity program in the Sinai concession with certain activities to improve plant safety and to retain environmental standards; (iii) study activities start-up to develop a photovoltaic plant of 15 MW in the area of the Abu Rudeis operated field (Eni's interest 100%) in order to reduce

electricity expenses by the national grid and related CO₂ emissions. Start-up is expected by the end of 2022; (iv) a development drilling plan of the Baltim operated concession (Eni's interest 50%); and (iv) the pre-FID activities of the Meleiha Phase 2 project.

Development activities of the Zohr project concerned: (i) EPCI activities for the construction of new submarine facilities and two additional treatment unit with a capacity of 6,000 barrels/d to manage and recovery production water. The construction of further three units with a capacity of 9,000 barrels/d is being studied; and (ii) development drilling activities with the completion of two additional production wells with start-up expected in 2022.

As of December 31, 2021, the aggregate development costs incurred by Eni for developing the Zohr project and capitalized in the financial statements amounted to \$5.6 billion (€5 billion at the EUR/USD exchange rate of December 31, 2021). Development expenditure incurred in the year were €93 million. As of December 31, 2021, Eni's proved reserves booked at the Zohr field amounted to 706 mmbbl.

Within the social responsibility initiatives, the programs defined by the Memorandum of Understanding signed in 2017 are currently to be implemented. The agreement, which supports the development activities of the Zohr project, defines two intervention projects to be implemented by the 2024. The first, already completed, included the renovation of the El Garabaa hospital, located nearby the onshore Zohr production facilities, and the supply of necessary medical equipment. The second project, for an overall expense of \$20 million, includes socio-economic, health and training programs to support local communities. In particular: (i) launched the phase 2 of the program upon completion of the health care center in Port Said in 2021. Planned activities include hospital equipment, healthcare staff training and health awareness campaigns; (ii) with the completion of youth center in 2020, Eni's training programs has been implemented. In particular, the Zohr Applied Technology School has been launched in partnership with the El Sewedy Electric Foundation and in cooperation with the local authority. Civil infrastructure renovation activities started and then completed during the first months of 2022; and (iii) at the end of 2021, a technical education program was identified. Training activities is expected to be launched in 2022.

SUB-SAHARAN AFRICA

Angola In March 2022, Eni and BP signed an agreement to combine the respective upstream portfolios in the country, aiming at establishing a new jointly controlled venture, Azure Energy. The agreement follows the memorandum of understanding between the companies agreed in May 2021. In particular, the new venture will ensure significant operational synergies, targeting an ambitious investment plan and increasing the growth rate in the area. The transaction highlights both companies' commitment to continue developing the country's upstream potential and to support the energy transition by means of natural gas and renewable energy developments projects. The closing of the deal is subject to certain conditions precedent, including approval from the local authorities in charge.

In October 2021, Eni signed a Memorandum of Understanding with ANPG and Sonangol for joint development of the circular economy and decarbonization projects, in particular by promoting agricultural initiatives for the cultivation of oil plants to be used as feedstock for Eni's biorefineries, without impacting the local food chain. In December 2021, Eni finalized a twenty-year extension of the offshore Block 0 (Eni 9.8%), with expiring date in 2050. Block 0 is located in the Cabinda area, in the north of the country.

In December 2021, the FID of Quiluma & Maboqueiro fields within the first development project of the New Gas Consortium (Eni's interest 25.6%) was sanctioned. The project includes two offshore platforms, an onshore gas processing plant and connection to A-LNG for the marketing of gas via LNG cargo, and condensates.

Exploration activities yielded positive results in the operated Block 15/06 (Eni 36.84%): (i) in 2021 through the Cuica-1 oil discovery in the Cabaça development area, so to extend the residual useful life of the FPSO which operates the block; and (ii) in March 2022 with the Ndungu-2 delineation well which allows to boost to 800-1,000 million boe in place the field resources.

In 2021 production start-up was achieved at the Cuica field, just four months after the discovery, and the Cabaça North field through the linkage to the Armada Olombendo FPSO targeting to increase and to support production plateau of the operated Block 15/06 development. In February 2022, in the operated Block 15/06, the Ndung Early Production project started up by means of linkage to the Ngoma FPSO. The Ngoma FPSO is designed with treatment capacity of approximately 100 kbbl/d and with zero-water discharge and zero-process flaring also through upgrading plant implemented in 2021, in line with Eni's decarbonisation strategy to achieve net zero.

Production start-up confirms the success of the Infrastructure Led Exploration (ILX) campaign progressed in the Country also by means of a modular and simplified development approach ensuring a shortly time-to-market of the discoveries.

Other development activities in the operated Block 15/06 concerned the Agogo Early Production Phase 2 development project with start-up of construction activities relating to the planned offshore facilities. The full field development of the Agogo project provides for the construction of an additional FPSO. Concept definition studies and FEED activity were completed and started up the activities for the assigning main contracts.

On the non-operated blocks, development activities progressed in the Block 0 with: (i) the Sanha Lean Gas Connection and Booster Gas Compressor project increasing associated gas production to feed the A-LNG liquefaction plant; (ii) the Lifua-A development project. The offshore facilities were completed, and start-up is expected in 2022; (iii) the FEED activity of the South Ndola e Sanha-Mafumeira connector projects for the construction of transportation facilities to put in production the residual reserves in the area.

Other development activities concerned: (i) the FEED activity of the Punja project in the Block 3/05-A (Eni's interest 12%); and (ii) reached the Final Investment Decision (FID) and signed the EPC contract for the first phase start-up of Caraculo's photovoltaic project, located in Namibe. The project follows the memorandum of understanding signed with Sonangol in 2019 with establishing a new jointly controlled venture, Solenova for the development of renewable energy projects. Start-up is expected in the fourth quarter of 2022. The plant will have a total capacity of 50 MW and will be implemented by stages, the first set to reach a capacity of 25 MW. The project will ensure to reduce diesel consumption for electricity generation and so the GHG emissions as well as supporting the Country's energy transition. Planned activities also include certain initiatives in the field of access to water, access to energy, health and education.

Local development programs and initiatives progressed during the year, in particular with: (i) the South West integrated project in Huila and Namibe area, to support local communities affected by drought; (ii) access to energy, with health centers electrification by means of solar panels installation; (iii) an agricultural development program in the Cabinda area in partnership with local institutions; (iv) ongoing support of the Halo Trust initiative for the land demining in the Benguela province; and (v) several health initiatives in the Luanda, Cabinda and Zaire areas with healthcare staff training programs as well as medical equipment supplies.

Congo In October 2021, Eni signed a Memorandum of Understanding with the Country's authorities for joint development of the circular economy and decarbonization projects, in particular by promoting agricultural initiatives for the cultivation of oil plants to be used as feedstock for Eni's biorefineries, without impacting the local food chain.

In addition, during 2021: (i) Eni relinquished the Loango II (Eni's interest 42.5%) and Zatchi II (Eni's interest 55.25%) production assets, effective from 1 January 2022, in line with Eni's strategy of production portfolio rationalization; and (ii) the PSA contract of the Marine XII production block (Eni operator with a 65% interest) was amended to include a new tax regime dedicated to LNG projects. Ongoing studies provides for a fast-track development project to monetize the associated and non-associated gas in the area both for the domestic power generation and LNG export, also targeting to support zero routine flaring. The export project consists of two modular and in phases LNG liquefaction plants with a capacity of approximately 2 million tonnes/year at plateau. Start-up is expected in 2023.

Other development activities concerned: (i) the additional development phase of the Nené-Banga production field in the Marine XII block with a construction of a new production platform. Start-up is expected in the second half of 2022; (ii) in the cultural initiatives to support local community, the construction activities progressed at the Oyo research center which is expected to be opened and in operation in 2022; (iii) the second phase of the Project Integrated Hinda (PIH) progressed with initiatives to support the economic and agricultural development, access to water, education programs and sanitary service program development; and (iv) the CATREP program to support domestic agricultural economy with initiatives in the innovative agronomic techniques application aiming to integrate local producers into supply chain of agri-biofeedstock within Memorandum of Understanding signed in 2021.

Mozambique In February 2022, Eni signed with the Ministry of Agriculture and Rural Development of the Republic of Mozambique an agreement for cooperation and development of agricultural projects in the Country, promoting agricultural initiatives for the cultivation of oil plants to be used as feedstock for biofuels production.

The development activities of Area 4 offshore (Eni's interest 25%) concerned the Coral South gas project and the

gas discoveries of Mamba Complex where Eni is expected to coordinate the upstream phase and ExxonMobil midstream phase (natural gas liquefaction).

The sanctioned Coral South project includes the construction, installation and commissioning and of an FLNG vessel that will be linked to six subsea gas producing wells, where the gas will undergo treatment, liquefaction, storage and export, with a capacity of approximately 3.4 mmt tonnes/y of LNG. The development activities are nearing completion. Production start-up is expected within 2022. The LNG produced will be sold by the Area 4 Concessionaires to BP under a long-term contract for a period of twenty years, with an option for an additional ten-year term.

Within the Mamba Complex discoveries, the Rovuma LNG project provides for the development of the straddled reserves of Area 1 according to its independent industrial plan, coordinated with the operator of Area 1 (TotalEnergies). The development project will include also a part of non-straddled reserves. The project provides the construction of two onshore LNG trains with capacity of approximately 7.6 mmt tonnes/y each, fed by 24 subsea wells and facilities for storing and exporting LNG. In 2019, the plan of development (POD) was approved by the relevant Authorities. The Area 4 operators progressed with reassessment of the project, including maximizing synergies with Area 1, in order to optimize costs.

In 2021, Eni's programs to support the local communities of the Country progressed with: (i) programs to support primary and infant scholarship. In particular, in city of Pemba, the infrastructural planned activities are completed and launched training initiatives also with study grants; (ii) launched the second phase of access to energy program also by means of clean cooking projects; (iii) support to disadvantaged populations in particular in the Cabo Delgado area and in the Maputo area, also with food assistance; and (iv) within the Coral South project development, certain activities were launched also through suppliers engagement aiming to increase workforce of local small e medium-size companies.

Nigeria In January 2021, Eni and the partners divested the onshore production and development block OML 17 (Eni's interest 5%).

Exploration activities yielded positive results in the operated OML 61 block (Eni's interest 20%) with the Obiafu 42 gas and condensates exploration well.

Development activities concerned: (i) production optimization programs also with work-over activities at the operated OMLs 60, 61, 62 and 63 blocks (Eni's interest 20%), the Kolo Creek gas field in the OML 28 block (Eni's interest 5%), the Forkados Yokri oil field in the OML 43 Block (Eni's interest 5%) and at the OML 118 block (Eni's interest 12.5%); and (ii) drilling of four oil wells in the OML 79, 35 and 36 blocks (Eni's interest 5%) and of six gas wells in the OML 21 and 22 blocks (Eni's interest 5%) as well as in the Assa North and Enhwe fields.

In 2021 the collaboration with the Food and Agriculture Organization (FAO) progressed to foster access to safe and clean water in Nigeria for local communities affected by humanitarian crisis in the north-east areas of Nigeria. In particular, during the year, maintenance activities were completed to ensure sustainable use of infrastructures implemented. Since 2018, start year of program, realized 22 wells powered with photovoltaic systems, both for domestic use and irrigation purposes, to benefit approximately 67,000 people. In March 2022, Eni and FAO, in partnership with NNPC, completed and delivered 11 water plants powered by photovoltaic systems in Borno and Yobo States in northeastern Nigeria. In addition, initiatives progressed with: (i) infrastructures projects with the realization of roads, schools, health centers, electrification and water works; (ii) training programs, also with study grants; (iii) access to energy programs; and (iv) the Green River Project to support local producers.

Eni holds a 10.4% interest in the Nigeria LNG Ltd joint venture, which runs the Bonny liquefaction plant located in the Eastern Niger Delta. The plant has a production capacity of 22 mmt tonnes/y of LNG associated to approximately 1,250 bcf/y of feed gas. Natural gas supplies to the plant are currently provided under a gas supply agreement from the SPDC JV (Eni's interest 5%), TEPNG JV and the NAOC JV (Eni's interest 20%). In 2021, the Bonny liquefaction plant processed approximately 970 bcf. LNG production is sold under long-term contracts and exported mainly to the United States, Asian and European markets by the Bonny Gas Transport fleet, wholly owned by Nigeria LNG, as well as is sold FOB by means of the fleet owned by third parties.

KAZAKHSTAN

Kashagan The development activities of the Kashagan field (Eni's interest 16.81%) concerned the phased expansion program of production capacity. The first development phase envisages increasing the production

capacity up to 450 kbbl/d by upgrading the existing associated gas compression handling. The ongoing activities, sanctioned in 2020, mainly concerned: (i) increasing gas reinjection capacity by means of upgrading the existing facilities; and (ii) delivering a part of gas volumes to a new onshore treatment unit operated by a third party, currently under construction.

In addition, during the year the redevelopment activity was completed with energy efficiency of a school in the Turkestan region, built in partnership with UNDP (United Nations Development Programme).

As of December 31, 2021, the aggregate costs incurred by Eni for the Kashagan project capitalized in the financial statements amounted to \$10 billion (€8.9 billion at the EUR/USD exchange rate of December 31, 2021). This capitalized amount included: (i) \$7.4 billion relating to expenditure incurred by Eni for the development of the oil field; and (ii) \$2.6 billion relating primarily to accrued finance charges and expenditures for the acquisition of interests in the Consortium from exiting partners upon exercise of pre-emption rights in previous years. Cost incurred in the year were €66 million.

As of December 31, 2021, Eni's proved reserves booked for the Kashagan field amounted to 633 mmbob, decreasing from 2020 due to price effect.

Karachaganak Within the gas treatment expansion projects of the Karachaganak field, activities concerned: (i) the Karachaganak Debottlenecking project was completed. The construction of a fourth gas reinjection unit is currently being finalized; and (ii) the Karachaganak Expansion Project (KEP) to increase gas re-injection capacity progressed. The project is scheduled to be achieved in several phases. The development program of the first phase, sanctioned at the end of 2020, provides the construction of a sixth injection line, the drilling of three additional injection wells and of a new gas compression unit. Start-up is expected in 2024. The project includes an additional phase with the installation of a new treatment and compression units.

Eni continues its commitment to support local communities in the nearby area of the Karachaganak field. In particular, initiatives progressed with: (i) professional training; and (ii) realization of kindergartens and schools, roads maintenance, construction of sport centers; and (iii) medical-health support also by means of the medicines distribution, following the health emergency resulting from the COVID-19 pandemic.

As of December 31, 2021, the aggregate costs incurred by Eni for the Karachaganak project capitalized in the financial statements amounted to \$4.4 billion (€3.9 billion at the EUR/USD exchange rate of December 31, 2021). Cost incurred in the year were €123 million.

As of December 31, 2021, Eni's proved reserves booked for the Karachaganak field amounted to 399 mmbob, decreasing from 2020 mainly due to price effect.

REST OF ASIA

Indonesia In June 2021, Eni signed a Memorandum of Understanding with the government entity SKK Migas for a partnership in hydrocarbons exploration in the Country. The agreement provides for the use of Eni's proprietary technologies, including the calculation and processing techniques of the Green DataCenter, for an exploration prospects interpretation data.

Exploration activities yielded positive results in the operated West Ganai block (Eni's interest 40%) with the Maha 2 delineation well, near the Jangkrik production field.

In 2021 production start-up was achieved at the offshore Merakes gas project in the operated East Sepinggan block (Eni's interest 65%), located in the deep offshore East Kalimantan. Production flows from five subsea wells which are tied-back to the Floating Production Unit (FPU) of the Jangkrik producing field (Eni operator with a 55% interest). Natural gas production is processed by the FPU and then delivered via pipeline to the onshore plant, which is connected to the East Kalimantan transport system to feed the Bontang liquefaction plant or sold to the domestic market.

Development activities comprised: (i) development program of the Merakes East and Maha projects with the completion of the concept selection activity and the start-up of the concept definition activity; and (ii) the activities and initiatives in the fields of access to water and renewable energy to support the local development areas of Samoja, Kutai Kartanegara and East Kalimantan.

Iraq Development activities comprised the execution of an additional development phase of the ERP (Enhanced Redevelopment Plan) at the Zubair field (Eni's interest 41.56%), which will allow to achieve a production plateau

of 700 kbbl/d. The production capacity and main facilities to treat the production plateau target have already been installed; the field reserves will be progressively put into production by drilling additional productive wells over the next few years.

In February 2022, consistently with the sustainable development goals, Eni in collaboration with the European Union and UNICEF, has launched a project in partnership with the Governorate of Basra, aimed at improving quality of water for 850,000 people in the city of Basra, including over 160,000 children as direct beneficiaries. Eni's commitment continues with projects in the fields of education, health, environment and access to water. In particular: (i) launched an integrated training program in the Zubair district, including specific training initiatives for school staff and establishing online educational platform following the COVID-19 pandemic impact; (ii) progressed construction activities of a new school in the Zubair area with completion expected in 2023, as well as renovation and material supply initiatives; (iii) pediatric training project, renovation and expansion of the Basra Cancer Children Hospital as well as the supply of specific medical oncology equipment; and (iv) upgrading activity at the Al Barjazia drinking water plant in the Zubair area as well as the construction of new plant in the Bassora area.

United Arab Emirates In 2022 exploration activities yielded positive results in the operated Block 2 (Eni's interest 70%) with the XF-002 well, in offshore Abu Dhabi. Drilling activities are ongoing, and upon completion expected in the second quarter of 2022 the size of the discovery will be evaluated.

In April 2021, Eni was awarded the operatorship of the Exploration Block 7 onshore Ras Al Khaimah with a 90% participating interest. Existing gas treatment facilities in the area with spare capacity will ensure to put in production any discoveries with shortly time-to-market.

In 2021, production start-up was achieved from the Mahani field located in the onshore Concession Area B (Eni's interest 50%) in the Emirate of Sharjah, just one year after Mahani 1 exploration well discovery and two years after signing the concession agreement. Development activities, sanctioned with the final investment decision, provide the progressive ramp-up with the tie-back of two additional productive wells.

During the year two development projects were sanctioned: the Dalma Gas Development in the offshore Gasha concession (Eni's interest 25%) and the Umm Shaif Long-Term Development Phase 1 in the Umm Shaif concession (Eni's interest 10%).

AMERICAS

Mexico In January 2022, was signed a four-year Memorandum of Understanding with the United Nations Educational, Scientific, and Cultural Organization (UNESCO) to identify potential jointly initiatives supporting local economy sustainable development by means of economic diversification, environmental and cultural heritage protection, access to primary services, human rights respect and inclusion.

Exploration activities yielded positive results with: (i) the Sayulita oil discovery in the offshore operated Block 10 (Eni's interest 65%) where the Saasken discovery was made in 2020. The new well identified 150-200 million barrels of oil in place that have boosted the commerciality prospects of the area; and (ii) the Yoti West oil discovery in the OBO AC12 block (Eni's interest 40%) with estimated resources in approximately 170 million barrels of oil in place.

The development activities in the year mainly concerned the full field development program of the operated license Area 1 (Eni's interest 100%), already in production. In particular: (i) the conversion and upgrading of an FPSO unit was completed including all linking facilities; (ii) the first production platform was installed in the Amoca field; and (iii) the development drilling activities progressed at the Mizton production field while the drilling activities started up in the Amoca field. The FPSO started operations on February 23, 2022 allowing the production ramp-up. Other development phase includes the construction and installation of two additional production platform at the Amoca and Teocalli field.

Within the cooperation agreement with the local Authorities to identify initiatives relating to health, education and environment, as well as economic diversification initiatives to support employment, during the year the activities concerned: (i) restructuring of school buildings and construction of roads; (ii) training and learning activities to support school programs; (iii) initiatives to improve socio-economic conditions of communities with development programs of fishing activity; (iv) completed the Human Rights Action Plan identifying activities plan; and (v) awareness campaigns in the field of access to energy.

FORESTRY PROJECTS

In Eni's decarbonization path, Natural Climate Solutions (NCS) area one of the levers in the residual emission reduction. Among these, in 2019 Eni launched the forest protection, conservation and sustainable management projects, in particular in developing Countries. The forest projects are considered the most significant at internationally level within climate change mitigation strategies.

These projects are framed in the REDD+ (Reducing Emissions from Deforestation and forest Degradation) scheme. The REDD+ scheme was designed by the United Nations (in particular within the UNFCCC - United Nations Framework Convention on Climate Change) and involves conservation forest activities to reduce emissions and improve the natural storage capacity of CO₂, as well as supporting, with a different development model, the local communities through socio-economic projects, in line with sustainable management, forest protection and biodiversity conservation.

In this scheme, Eni's protection forest activities support national governments, local communities and UN agencies in the REDD+ strategies, in line with the NDCs (Nationally Determined Contributions) and National Development Plans and, mainly, the Sustainable Development Goals (SDGs) of UN.

Eni built solid partnerships over time with recognized international developers of REDD+ projects, like BioCarbon Partners, Terra Global, Peace Parks Foundation, First Climate, Carbonsink and Carbon Credits Consulting, which allows to oversee every phase of the projects, from the design to the implementation up to verify the reduction emissions, with an active role in the governance of the project. The Eni's role is essential to allow the alignment with the REDD+ scheme and also the with highest standards for certification of the carbon emissions reduction and social and environmental effects (such as Verified Carbon Standard - VCS and Climate Community & Biodiversity Standards - CCB), internationally recognized and in line with the qualitative standards, target to be achieved by Eni.

Eni launched the forestry projects in 2019 by means of the agreement with BioCarbon Partners to become active member in the governance of the Luangwa Community Forests Project (LCFP) in Zambia. The LCFP covers an area of approximately 1 million hectares, involves approximately 200,000 beneficiaries, also with economic diversification initiatives, and is currently one of the largest REDD + projects in Africa. The LCFP achieved the CCB (Climate, Community and Biodiversity Standards) "triple gold" issued by international no-profit organization Verra, leader in the carbon credits certifying, for its outstanding social and environmental impact. Eni committed to purchase carbon credits generated by the LCFP project until 2038. During the year Eni finalized agreement to support the development of the Ntakata Mountains project in Tanzania and the Lower Zambezi project in Zambia, as well as launched the Amigos de Lakmul project in Mexico. In 2021 Eni achieved allowance of carbon credits by the projects to offset GHG emissions equivalent to over 2 million tonnes of CO₂.

Eni is currently considering further different initiatives in several countries, by means of partnerships with governments and international developers in Africa, Latin America, and Asia. The medium-long term target is a progressive growth of these initiatives and planned to reach a carbon credit portfolio on yearly basis to offset over 20 million tonnes of CO₂ in 2030.

AGRO-FEEDSTOCK PROJECTS

During the year Eni finalized agreement with the authorities of the Kenya, Congo, Angola, Rwanda and Ivory Coast as well as in Mozambique and Benin in 2022 aiming to decarbonize the local energy mix by means of biofuels value chain by promoting agricultural initiatives for the cultivation of oil plants to be used as feedstock (Low ILUC feedstock – Indirect Land Use Change) for Eni's biorefineries, enhancing marginal areas not destined to the food chain.

The development activities plan is focused on vertical integration and includes agreements to produce oilseeds by local farmers and cooperatives and the construction of oil collection and extraction centers by Eni (Agri Hubs). The supply chain byproducts will be aimed for domestic market and also for export.

These initiatives will also support rural development, land restoration through sustainable and regenerative agriculture, with positive impacts on socio-economic development and employment, access to market opportunities as well as human rights protection, health and food security.

Further programs is being evaluated in other countries with a model in analogy to the ones applied.

In particular, in the first step, industrial production start-up is expected in: (i) Kenya, where development program includes the construction of 20 agri ,hubs with start-up in 2022. In addition, the agreement provides

also for the engineering activities to conversion the Mombasa traditional refinery to biorefinery for HVO and Biojet production; as well as the collection of UCO (Used Cooking Oil) to be used as feedstock; (ii) Congo with activities start-up expected in 2023.

The full capacity production is expected to achieve 350 ktonnes from 2026 with engagement of 300,000 farmers. The overall production is expected to subsequently reach a agro-feedstock volume of over 800 thousand tonnes by 2030 leveraging on additional initiatives in other countries.

Within these development initiatives, in November 2021 Eni finalized strategic partnership agreement with the Bonifiche Ferraresi Group aimed at establishing an equal joint venture. Based on the agreement, Eni purchased a minority stake in the subsidiary of BF Bonifiche Ferraresi. In addition, the agreement include: (i) research and experimentation projects of oil plant seeds to be used as feedstock in biorefineries; (ii) support in the countries where Eni will develop agro-feedstock projects by means of know-how transfer and agriculture seeds and products supplies.

Global Gas & LNG Portfolio

€ 580 mln
Adjusted operating profit
vs. 2020: +78%

70.45 bcm
Worldwide natural gas sales
vs. 2020: +8% thanks
to higher LNG sales

Agreement in Taiwan with
CPC Corporation
for the supply of a LNG cargo
certified carbon neutral
in accordance with PAS2060 standard

Achieved ZERO
injury target
in 2021



KEY PERFORMANCE INDICATORS

		2021	2020	2019
TRIR (Total Recordable Injury Rate) ^(a)	(total recordable injuries/worked hours) x 1,000,000	0.00	1.15	0.56
of which: employees		0.00	0.99	0.96
contractors		0.00	1.37	0.00
Natural gas sales ^(b)	(bcm)	70.45	64.99	72.85
Italy		36.88	37.30	37.98
Rest of Europe		28.01	23.00	26.72
of which: Importers in Italy		2.89	3.67	4.37
European markets		25.12	19.33	22.35
Rest of world		5.56	4.69	8.15
LNG sales ^(c)		10.9	9.5	10.1
Employees at year end	(number)	847	700	711
of which outside Italy		571	410	418
Direct GHG emissions (Scope 1) ^(a)	(mmtonnes CO ₂ eq.)	1.01	0.36	0.25

(a) Calculated on 100% operated assets.

(b) Data include intercompany sales.

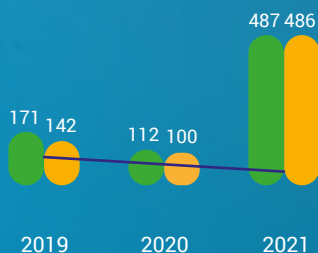
(c) Refers to LNG sales of the GGP segment (included in worldwide gas sales).

Performance of the year

- ▶ Achieved the zero-injury target for employees and contractors.
- ▶ Direct GHG emissions (Scope 1) equal to 1.01 million mmtonnes CO₂eq. reported an increase as a result of the growth in gas volumes transported by TTPC and TMPC pipelines and the consolidation of Damietta liquefaction plant.
- ▶ Eni worldwide gas sales amounted to 70.45 bcm, increased by 8% compared to 2020 (up by 5.46 bcm).
- ▶ LNG sales amounted to 10.9 bcm, representing an increase of 14.7% compared to 2020.

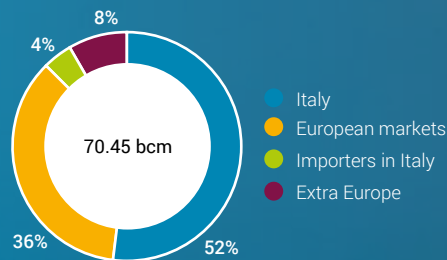


PSV-TTF trend

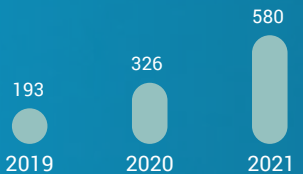


- PSV (€/kcm)
- TTF (€/kcm)
- Spread PSV-TTF (€/kcm)

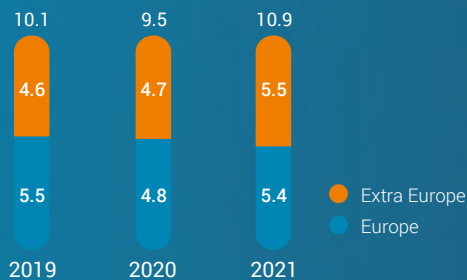
Gas sales by geographic area



Adjusted operating profit (€ mln)



LNG sales (bcm)



Business development

Signed an agreement with CPC Corporation, taiwanese utility, for the supply at the Yung An receiving terminal (Taiwan) of a LNG cargo certified carbon neutral according to the internationally recognized PAS2060 standard, sourced from the Bontang liquefaction terminal in Indonesia and supplied by the Jangkrik Eni's gas field.

The GHG emissions related to the entire value chain of the LNG cargo, including gas production, transmission, liquefaction, shipping, regasification, distribution and end use, were offset through the retirement of high quality nature based credits. In particular, the credits have been sourced from two projects REDD+: Luangwa Community Forest in Zambia and Kulera Landscape in Malawi.

As a part of the Eni's portfolio optimization strategy, aimed at growth in the areas related to the energy transition, was signed a sale agreement with Snam for the sale of 49.9% of Eni's stake (directly or indirectly) in the companies that manage the onshore gas pipelines running from the Algerian and Tunisian borders to Tunisia's coast (TTPC) and the offshore gas pipelines connecting the Tunisian coast to Italy (TMPC). The transaction includes the transfer of these investments to a JV of which a 49.9% share will be sold to Snam for approximately €385 million (Eni will continue to hold the remaining 50.1% stake). This operation allows to create synergies among the parties' expertise in gas transport on a strategic route for the security of the natural gas supply in Italy, enabling potential development initiatives within the hydrogen value chain from North Africa.

Announced by the management, the sale of 50% stake of Blue Stream gas pipeline, which carries the Russian gas marketed by Eni and Gazprom jointly, through Black Sea to Turkish State company Botas.

In march 2021 was completed the restructuring of Uniòn Fenosa Gas through the finalization of the agreements with the authorities of the Arab Republic of Egypt (ARE) and the Spanish partner Naturgy for the settlement of the Uniòn Fenosa Gas disputes with the Egyptian partners. The agreement included the 50% share recognition of Damietta's plant and the related liquefaction capacity, as well as the gas marketing activities in Spain held by UFG and the restart of Damietta liquefaction plant.

NATURAL GAS

SUPPLY OF NATURAL GAS

Eni's consolidated subsidiaries supplied 70.98 bcm of natural gas, increased by 8.82 bcm or by 14.2% from the full year 2020. Gas volumes supplied outside Italy from consolidated subsidiaries (67.39 bcm), imported in Italy or sold outside Italy, represented approximately 95% of total supplies, increased by 12.70 bcm or by 23% from the full year 2020. This mainly reflected higher volumes purchased in Russia (up by 7.72 bcm), in Algeria (up by 4.90 bcm), in the UK (up by 1.03 bcm) and in Indonesia (up by 0.66 bcm), partly offset by lower purchases in Libya (down by 1.26 bcm). Supplies in Italy (3.59 bcm) down by 51.9% from the full year 2020.

SUPPLY OF NATURAL GAS

	(bcm)	2021	2020	2019	Change	% Ch.
ITALY		3.59	7.47	5.57	(3.88)	(51.9)
Russia		30.21	22.49	24.36	7.72	34.3
Algeria (including LNG)		10.12	5.22	6.66	4.90	93.9
Libya		3.18	4.44	5.86	(1.26)	(28.4)
Netherlands		1.41	1.11	4.12	0.30	27.0
Norway		7.52	7.19	6.43	0.33	4.6
United Kingdom		2.65	1.62	1.75	1.03	63.6
Indonesia (LNG)		1.81	1.15	1.58	0.66	57.4
Qatar (LNG)		2.30	2.47	2.79	(0.17)	(6.9)
Other supplies of natural gas		2.39	5.24	7.90	(2.85)	(54.4)
Other supplies of LNG		5.80	3.76	3.40	2.04	54.3
OUTSIDE ITALY		67.39	54.69	64.85	12.70	23.2
TOTAL SUPPLIES OF ENI'S CONSOLIDATED SUBSIDIARIES		70.98	62.16	70.42	8.82	14.2
Offtake from (input to) storage		(0.86)	0.52	0.08	(1.38)	(265.4)
Network losses, measurement differences and other changes		(0.04)	(0.03)	(0.22)	(0.01)	(33.3)
AVAILABLE FOR SALE BY ENI'S CONSOLIDATED SUBSIDIARIES		70.08	62.65	70.28	7.43	11.9
Available for sale by Eni's affiliates		0.37	2.34	2.57	(1.97)	(84.2)
TOTAL AVAILABLE FOR SALE		70.45	64.99	72.85	5.46	8.4

In 2021, main gas volumes from equity production derived from: (i) certain Eni fields located in the British and Norwegian sections of the North Sea (2.6 bcm); (ii) Italian gas fields (2.2 bcm); (iii) Indonesia (0.9 bcm); (iv) Libyan fields (0.7 bcm). Supplied gas volumes from equity production were 6.4 bcm representing around 9% of total volumes available for sale. The available for sale by Eni's affiliates amounted to 0.37 bcm (down by 84.2% compared to 2020) and mainly referred to supplied volumes from Spain and Oman.

SALES

European gas market was characterised by extreme conditions due to tight supplies and uncertainties supply flows from Russia. In this scenario the raising in demand has highlighted increase consumption about up by 7% and up by 6% in Italy and in the European Union, respectively, compared to 2020, natural gas sales amounted to 70.45 bcm (including Eni's own consumption, Eni's share of sales made by equity-accounted entities), increased by 5.46 bcm or 8.4% from the previous year due to higher sales in Turkey and higher volumes sales of LNG.

GAS SALES BY ENTITY

	(bcm)	2021	2020	2019	Change	% Ch.
Total sales of subsidiaries		69.99	62.58	70.17	7.41	11.8
Italy (including own consumption)		36.88	37.30	37.98	(0.42)	(1.1)
Rest of Europe		27.69	21.54	25.21	6.15	28.6
Outside Europe		5.42	3.74	6.98	1.68	44.9
Total sales of Eni's affiliates (net to Eni)		0.46	2.41	2.68	(1.95)	(80.9)
Rest of Europe		0.32	1.46	1.51	(1.14)	(78.1)
Outside Europe		0.14	0.95	1.17	(0.81)	(85.3)
WORLDWIDE GAS SALES		70.45	64.99	72.85	5.46	8.4

Sales in Italy (36.88 bcm) decreased by 1.1% from 2020 mainly due to lower sales to hub and to thermoelectrical and industrial segments, partly offset by higher sales in wholesalers segment. Sales to importers in Italy (2.89 bcm) decreased by 21.3% from 2020 due to the lower availability of Libyan gas.

Sales in the European markets amounted to 25.12 bcm, an increase of 30% or 5.79 bcm from 2020.

Sales in the extra European markets of 5.56 bcm increased by 0.87 bcm or 18.6% from the previous year, due to higher volumes marketed in the Asian markets.

GAS SALES BY MARKET

	(bcm)	2021	2020	2019	Change	% Ch.
ITALY		36.88	37.30	37.98	(0.42)	(1.1)
Wholesalers		13.37	12.89	13.08	0.48	3.7
Italian gas exchange and spot markets		12.13	12.73	12.13	(0.60)	(4.7)
Industries		4.07	4.21	4.62	(0.14)	(3.3)
Power generation		0.94	1.34	1.90	(0.40)	(29.9)
Own consumption		6.37	6.13	6.25	0.24	3.9
INTERNATIONAL SALES		33.57	27.69	34.87	5.88	21.2
Rest of Europe		28.01	23.00	26.72	5.01	21.8
Importers in Italy		2.89	3.67	4.37	(0.78)	(21.3)
European markets:		25.12	19.33	22.35	5.79	30.0
<i>Iberian Peninsula</i>		3.75	3.94	4.22	(0.19)	(4.8)
<i>Germany/Austria</i>		0.69	0.35	2.19	0.34	97.1
<i>Benelux</i>		3.47	3.58	3.78	(0.11)	(3.1)
<i>United Kingdom</i>		2.65	1.62	1.75	1.03	63.6
<i>Turkey</i>		8.50	4.59	5.56	3.91	85.2
<i>France</i>		5.80	5.01	4.47	0.79	15.8
<i>Other</i>		0.26	0.24	0.38	0.02	8.3
Extra European markets		5.56	4.69	8.15	0.87	18.6
WORLDWIDE GAS SALES		70.45	64.99	72.85	5.46	8.4

LNG

LNG SALES

	(bcm)	2021	2020	2019	Change	% Ch.
Europe		5.4	4.8	5.5	0.6	12.5
Outside Europe		5.5	4.7	4.6	0.8	17.0
TOTAL LNG SALES		10.9	9.5	10.1	1.4	14.7

In 2021, LNG sales (10.9 bcm, included in the worldwide gas sales) increased by 14.7% from 2020 and mainly concerned LNG from Egypt, Qatar, Indonesia and Nigeria and marketed in Europe and Asia.

INTERNATIONAL TRANSPORT ACTIVITY

Eni, as shipper, has transport rights on a large European and North African networks for transporting natural gas in Italy and Europe, which link key consumption basins with the main producing areas (Russia, Algeria, the North Sea, including the Netherlands, Norway, and Libya).

The Company participates to both entities which operate the pipelines and entities which manage transport rights. The main international pipelines currently participated or operated by Eni are: (i) the TTPC pipeline, 740-kilometer long which transports natural gas from Algeria; (ii) the TMPC pipeline for the import of Algerian gas is 775-kilometer long; (iii) the GreenStream pipeline for the import of Libyan gas (520-kilometer long); and (iv) Eni holds an interest in the Blue Stream underwater pipeline linking the Russian coast to the Turkish coast of the Black Sea.

Energy Evolution





Refining & Marketing and Chemicals

1.1 mmt tonnes/y
Biorefinery capacity

€152 mln
Adjusted operating profit
vs. 2020: +€146 mln

4.5 mmt tonnes
Sales of petrochemical products vs. 2020:
+3% thanks to the recover in demand

228
tonnes CO₂ eq./ktonnes
Direct GHG emissions
(Scope 1)/Refinery throughputs
(raw and semi-finished materials)
vs. 2020: -8%



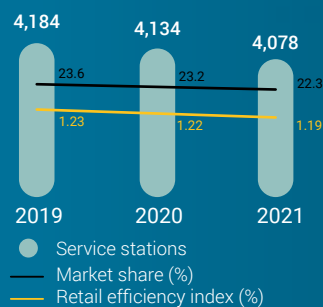
KEY PERFORMANCE INDICATORS

		2021	2020	2019
TRIR (Total Recordable Injury Rate) ^(a)	(total recordable injuries/worked hours) x 1,000,000	0.80	0.80	0.27
<i>of which: employees</i>		1.13	1.17	0.24
<i>contractors</i>		0.49	0.48	0.29
Bio throughputs	(ktonnes)	665	710	311
Capacity of biorefineries	(mmt tonnes/year)	1.1	1.1	1.1
Average biorefineries utilization rate	(%)	65	63	44
Conversion index of oil refineries		49	54	54
Average oil refineries utilization rate		76	69	88
Retail sales of petroleum products in Europe	(mmt tonnes)	7.23	6.61	8.25
Service stations in Europe at year end	(number)	5,314	5,369	5,411
Average throughput per service station in Europe	(kliters)	1,521	1,390	1,766
Retail efficiency index	(%)	1.19	1.22	1.23
Production of petrochemical products	(ktonnes)	8,476	8,073	8,068
Sale of petrochemical products		4,451	4,339	4,295
Average petrochemical plant utilization rate	(%)	66	65	67
Employees at year end	(number)	13,072	11,471	11,626
<i>of which: outside Italy</i>		4,044	2,556	2,591
Direct GHG emissions (Scope 1) ^(a)	(mmt tonnes CO ₂ eq.)	6.72	6.65	7.97
Direct GHG emissions (Scope 1)/Refinery throughputs (raw and semi-finished materials)	(tonnes CO ₂ eq./ktonnes)	228	248	248

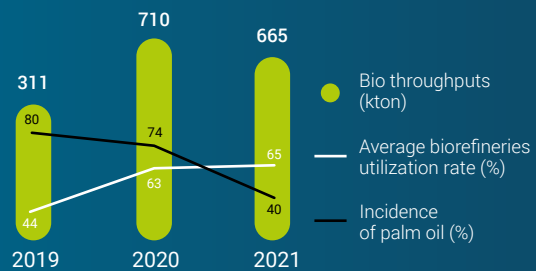
(a) Calculated on 100% operated assets.



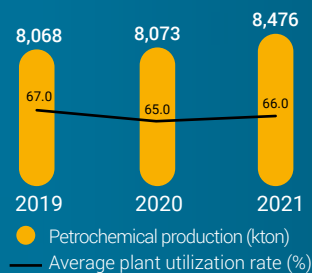
Evolution of retail network in Italy



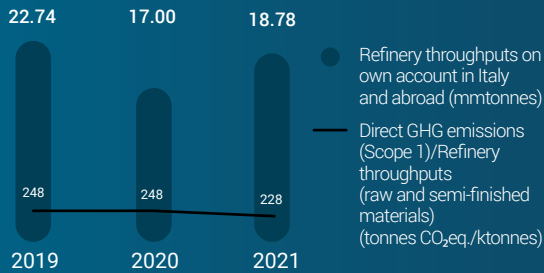
Biorefining system



Petrochemical production system



Refining energy efficiency



Performance of the year

- ▶ Total recordable injury rate (TRIR) of the workforce amounted to 0.80, substantially in line compared to the previous year.
- ▶ Direct GHG emissions (Scope 1) increased by 1% compared to 2020, following the resumption of activities mainly in the chemical business.
- ▶ Direct GHG emissions (Scope 1)/refining throughputs (raw and semi-finished materials) were down by 8% compared to the previous year, despite the increase of commodities processed at the Sannazzaro and Livorno sites.
- ▶ In 2021 Eni's refining throughputs on own account amounted to 18.78 mmtonnes (excluding the ADNOC Refining) up by 10.5% from 2020, benefitting from the 2021 economic recovery, supported by the resumption of the activities negatively affected in 2020 by the partial lockdown.
- ▶ Production of biofuels from vegetable oil amounted to 665 mmtonnes, down by 6% from 2020, affected by a particularly depressed scenario.
- ▶ Retail sales in Italy were 5.12 mmtonnes, increased by 12% from 2020 as a result of the progressive economy reopening and greater mobility of people. Market share was 22.3% (23.2% in 2020).
- ▶ Sales of petrochemical products were 4.45 mmtonnes, up by 3%, thanks to the macroeconomic growth, rebound in demand of leading sectors, such as packaging and the recovery of the automotive business.

Business developments and portfolio transaction

In order to expand the recycled polymers portfolio of Versalis Revive® and to consolidate the European leadership in styrenic polymers, Versalis acquired the technology and plants of Ecoplastic, company specialized in the recovery, recycling and transformation chain of styrenic polymers. This is the first step of the transformation project of Porto Marghera plant, which includes the installation in the next year of the plants acquired for the production of styrene polymers entirely obtained from recycle raw material. The overall capacity of the first phase will be approximately 20 ktonnes per year.

In September Versalis finalized the acquisition of the control in Finproject, exercising the call option to buy the remaining 60% of share capital, following the initial acquisition of a 40% participating interest in 2020. The acquisition is complementary to Versalis' specialties portfolio and will create an all-Italian leading platform with high-performance formulated polymer applications and compounding, less influenced by commodity fluctuations. In January Finproject has taken the ISCC Plus certification for compound productions and products from renewable raw materials.

Circular economy and green chemicals

Finalized the full share acquisition of FRI-EL Biogas Holding, Italian leader in biogas's production. The company, renamed EniBioCh4in, owns plants generating electricity from biogas and a plant for processing OFMSW, the organic fraction of municipal solid waste, which Eni intends to convert to produce biomethane, that will supply in Eni service stations.

Versalis, coherently with the Eni's decarbonization strategy, has launched a transformation plan which aims to make its activities and products diversified and sustainable, in accordance with the principles of the circular economy.

In 2021, Versalis expanded the "circular" products offering, manufactured with recycled raw materials. A new product called Versalis Revive® PS Air F – Series Forever was added to Versalis Revive® product line. It was addressed for food packaging and 75% made by recycled polystyrene from domestic waste sorting. The new product developed by Versalis and Forever Plast SpA, is the result of collaboration with various operators in the polystyrene industry such as Corepla, Pro Food e Unionplast.

Confirmed the commitment aimed at the development of sustainable innovative technologies, through the agreement signed with BTS Biogas, an Italian company engaged in the design and realization of biogas plants, to develop and market an innovative technology to produce biogas and biomethane from residual lignocellulosic biomass. The technology will focus on Versalis' technology integration for biomass thermo-mechanical pretreatment, with the BTS Biogas technology for biogas and biomethane production via fermentative ways.

Finally, signed an agreement between Matrica, a JV Versalis/Novamont company, and Lanxess, a leader in specialty chemicals for the production of biocides from renewable raw materials. In January 2022 started the supply of renewable-source raw materials obtained from vegetable oils to the Porto Torres plant. Lanxess will use these materials to produce biocidal industrial additives for the consumer goods sector.

Sustainable mobility

As part of Eni's sustainable mobility growth strategy, signed an agreement in order to offer the battery swapping service for XEV's city car at the Eni service stations. In addition, from 2022, the XEV YOYO zero-emission city car will become part of the Enjoy fleet.

In order to promote initiatives to decarbonize the aviation sector and accelerate the process of energy transition of airports, signed an agreement with SEA, the Milan Malpensa and Milan Linate airports operator, for the supply of sustainable fuels for aviation (SAF – Sustainable Aviation Fuel) and for ground handling

(HVO – Hydrotreated Vegetable Oil). This initiative is in line with the agreement finalized in January 2022 with Aeroporti di Roma which launched the first supplies of pure HVO hydrogenated biofuel, produced in Eni's biorefinery in Porto Marghera, to fuel the road vehicles for handling passengers with reduced mobility at the airport.

SAF production started in October, are produced exclusively from waste and residues, in line with the strategic decision of zeroing the use of palm oil from 2023.

As a step towards the transport decarbonization signed a letter of intent with Air Liquide for development of hydrogen mobility in Italy, in particular a feasibility and sustainability study for the development of the low carbon and renewable hydrogen supply chain to support the market of fuel cell vehicles for heavy and light mobility.

Finally signed a strategic agreement with BASF, related to a new technology that produces advanced bio-propanol from glycerin, obtained from the production of industrial biodiesel FAME (Fatty Acid Methyl Esters), intended for use as a bio component in fuel formulation.

Proprietary technologies

Proprietary technologies will play a key role in accelerating the “green” conversion of Versalis reducing dependence on oil feedstock; Eni is engaged in the chemical recycling of non-reusable plastics (HOOP technology) and the enhancement of forest biomass for production bioethanol and biogas (PROESA technology) in collaboration with qualified partners such as Saipem and BTS Biogas. As part of the valorization of proprietary technologies and the strengthening of Eni presence in the Asian continent, Versalis has licensed the mass continuous technology to Supreme Petrochem Ltd, an Indian market-leader in compact and expandable polystyrene, to create a plant in Maharashtra (India). This is a technology that allows one to produce styrene polymers with reduced environmental impact, thanks to low emission and low energy consumption.

REFINING & MARKETING

SUPPLY AND TRADING

In 2021, were purchased 18.85 mmtonnes of crude (compared with 17.37 mmtonnes in 2020), of which 3.85 mmtonnes by equity crude oil, 10.79 mmtonnes on the spot market and 4.21 mmtonnes by producer's Countries with term contracts. The breakdown by geographic area was as follows: 20% of purchased crude came from the Middle East, 18% from Russia, 15% from Central Asia, 15% from North Africa, 11% from Italy, 11% from West Africa, 2% from North Sea and 8% from other areas.

PURCHASES

	(mmtonnes)	2021	2020	2019	Change	% Ch.
Equity crude oil		3.85	3.55	4.24	0.30	8.5
Other crude oil		15.00	13.82	19.19	1.18	8.5
Total crude oil purchases		18.85	17.37	23.43	1.48	8.5
Purchases of intermediate products		0.26	0.11	0.26	0.15	136.4
Purchases of products		10.66	10.31	11.45	0.35	3.4
TOTAL PURCHASES		29.77	27.79	35.14	1.98	7.1
Consumption for power generation		(0.31)	(0.35)	(0.35)	0.04	11.4
Other changes ^(a)		(0.89)	(0.69)	(2.08)	(0.20)	(29.0)
TOTAL AVAILABILITY		28.57	26.75	32.71	1.82	6.8

(a) Include change in inventories, decrease due to transportation, consumption and losses.

REFINING

In 2021, Eni's refining throughputs on own account were 18.78 mmtonnes increased by 10.5% from 2020, due to the higher throughputs in Italy, in response to a lower impact of the COVID-19 pandemic compared to the comparative period which was negatively affected by the partial lockdown of the economy, partly offset by the impact of a depressed refining scenario.

In Italy, the refinery throughputs (16.51 mmtonnes) increased by 11.4% from 2020 following the depressed refining scenario, due to higher volumes processed at Sannazzaro refinery.

Outside Italy, Eni's refining throughputs on own account were 2.27 mmtonnes, up by approximately 90 ktonnes or 4.1% as a result of lower standstill compared to the previous year, partly offset by negative scenario. Total throughputs in wholly-owned refineries were 14.01 mmtonnes, increase by 1.29 mmtonnes or 10.1% compared with 2020.

The refinery utilization rate, ratio between throughputs and refinery capacity, is 76%.

Approximately 21% of processed crude was supplied by Eni's Exploration & Production segment, with a slight decrease from 2020 (21.2%).

BIOREFINERY

The volumes of biofuels processed from vegetable oil were 665 mmtonnes down by 6% from the previous period (40 ktonnes), as a result of standstill at Venezia biorefinery in a depressed scenario context.

In addition, the incidence rate of palm oil supplied for the production of biodiesel was reduced by approximately 34 percentage points compared to 2020, leveraging on the start-up of a new Biomass Treatment Unit (BTU) at the Gela biorefinery, enabling the use of up to 100% of biomass not in competition with the food chain for the production of biofuels. Confirmed the zeroing palm oil by 2023 in the refining processes.

In 2021 productions of biofuels (HVO) amounted to approximately 585 ktonnes (down by 6%) according to certifications in use (European RED and related directives).

AVAILABILITY OF REFINED PRODUCTS

	(mmtonnes)	2021	2020	2019	Change	% Ch.
ITALY						
At wholly-owned refineries		14.01	12.72	17.26	1.29	10.1
Less input on account of third parties		(1.71)	(1.75)	(1.25)	0.04	2.3
At affiliated refineries		4.21	3.85	4.69	0.36	9.4
Refinery throughputs on own account		16.51	14.82	20.70	1.69	11.4
Consumption and losses		(1.11)	(0.97)	(1.38)	(0.14)	(14.8)
Products available for sale		15.40	13.85	19.32	1.55	11.2
Purchases of refined products and change in inventories		7.38	7.18	7.27	0.20	2.8
Products transferred to operations outside Italy		(0.67)	(0.66)	(0.68)	(0.01)	(1.5)
Consumption for power generation		(0.31)	(0.35)	(0.35)	0.04	11.4
Sales of products		21.80	20.02	25.56	1.78	8.9
Bio throughputs		0.67	0.71	0.31	(0.04)	(5.6)
OUTSIDE ITALY						
Refinery throughputs on own account		2.27	2.18	2.04	0.09	4.1
Consumption and losses		(0.18)	(0.17)	(0.18)	(0.01)	(5.9)
Products available for sale		2.09	2.01	1.86	0.08	4.0
Purchases of refined products and change in inventories		3.41	3.39	4.17	0.02	0.6
Products transferred from Italian operations		0.67	0.66	0.68	0.01	1.5
Sales of products		6.17	6.06	6.71	0.11	1.8
Refinery throughputs on own account in Italy and outside Italy		18.78	17.00	22.74	1.78	10.5
<i>of which: refinery throughputs of equity crude on own account</i>		<i>3.86</i>	<i>3.55</i>	<i>4.24</i>	<i>0.31</i>	<i>8.7</i>
Total sales of refined products in Italy and outside Italy		27.97	26.08	32.27	1.89	7.2
Crude oil sales		0.60	0.67	0.44	(0.07)	(10.4)
TOTAL SALES		28.57	26.75	32.71	1.82	6.8

MARKETING OF REFINED PRODUCTS

In 2021, retail sales of refined products (27.97 mmt tonnes) were up by 1.89 mmt tonnes or by 7.2% from 2020, due to the lower impact of COVID-19 crisis on mobility.

PRODUCT SALES IN ITALY AND OUTSIDE ITALY

	(mmt tonnes)	2021	2020	2019	Change	% Ch.
Retail		5.12	4.56	5.81	0.56	12.3
Wholesale		6.02	5.75	7.68	0.27	4.7
Petrochemicals		0.52	0.61	0.83	(0.09)	(14.8)
Other sales		10.14	9.10	11.24	1.04	11.4
Sales in Italy		21.80	20.02	25.56	1.78	8.9
Retail rest of Europe		2.11	2.05	2.44	0.06	2.9
Wholesale rest of Europe		2.19	2.40	2.63	(0.21)	(8.8)
Wholesale outside Europe		0.52	0.48	0.48	0.04	8.3
Other sales		1.35	1.13	1.16	0.22	19.5
Sales outside Italy		6.17	6.06	6.71	0.11	1.8
TOTAL SALES OF REFINED PRODUCTS IN ITALY AND OUTSIDE ITALY		27.97	26.08	32.27	1.89	7.2

Retail sales in Italy

In 2021, retail sales in Italy were 5.12 mmt tonnes, with an increase compared to 2020 (0.56 mmt tonnes or up by 12.3%) as consequence of the restrictive measures implemented mainly in the second quarter during the pandemic peak. Average throughput per service station (1,362 kliters) increased by 156 kliters from 2020 (1,206 kliters). Eni's retail market share of 2021 was 22.3%, slightly down from 2020 (23.2%).

As of December 31, 2021, Eni's retail network in Italy consisted of 4,078 service stations, lower by 56 units from December 31, 2020 (4,134 service stations), resulting from the negative balance of acquisitions/releases of lease concessions (65 units), a decrease of 4 motorway concession/acquisitions, partly offset by the positive balance of acquisitions/releases of network owned stations (13 units).

RETAIL AND WHOLESALSALES SALES OF REFINED PRODUCTS

	(mmt tonnes)	2021	2020	2019	Change	% Ch.
Italy		11.14	10.31	13.49	0.83	8.1
Retail sales		5.12	4.56	5.81	0.56	12.3
Gasoline		1.38	1.16	1.44	0.22	19.0
Gasoil		3.38	3.10	3.95	0.28	9.0
LPG		0.31	0.27	0.38	0.04	14.8
Others		0.05	0.03	0.04	0.02	66.7
Wholesale sales		6.02	5.75	7.68	0.27	4.7
Gasoil		3.11	3.11	3.41	0.00	0.0
Fuel Oil		0.03	0.02	0.06	0.01	50.0
LPG		0.17	0.18	0.18	(0.01)	(5.6)
Gasoline		0.34	0.30	0.47	0.04	13.3
Lubricants		0.08	0.08	0.08	0.00	0.0
Bunker		0.59	0.63	0.77	(0.04)	(6.3)
Jet fuel		0.92	0.70	1.92	0.22	31.4
Other		0.78	0.73	0.79	0.05	6.8
Outside Italy (retail+wholesale)		4.82	4.93	5.55	(0.11)	(2.2)
Gasoline		1.06	1.13	1.31	(0.07)	(6.2)
Gasoil		2.78	2.73	3.02	0.05	1.8
Jet fuel		0.07	0.09	0.29	(0.02)	(22.2)
Fuel Oil		0.08	0.13	0.09	(0.05)	(38.5)
Lubricants		0.11	0.09	0.09	0.02	22.2
LPG		0.53	0.50	0.50	0.03	6.0
Other		0.19	0.26	0.25	(0.07)	(26.9)
TOTAL RETAIL AND WHOLESALSALES SALES		15.96	15.24	19.04	0.72	4.7

Retail sales in the Rest of Europe

Retail sales in the Rest of Europe were 2.11 mmt tonnes, recorded an increase from 2020 (up by 2.9%) as a result of higher sold volumes in Austria, France and Spain benefitting from the economic recovery and greater mobility of people.

At December 31, 2021, Eni's retail network in the Rest of Europe consisted of 1,236 units, increasing by 1 unit from December 31, 2020, mainly in Spain balanced by the retail network closer in Switzerland and France. Average throughput (2,025 kliters) increased by 45 kliters compared to 2020 (1,980 kliters).

Wholesale and other sales

Wholesale sales in Italy amounted to 6.02 mmt tonnes, increasing by 4.7% from the full year of 2020, due to lower impact of the restrictive measures and the resumption of air transport.

Wholesale sales in the Rest of Europe were 2.19 mmt tonnes, down by 8.8% from 2020 particularly in Germany, Switzerland and Austria.

Supplies of feedstock to the petrochemical industry (0.52 mmt tonnes) decreased by 14.8%. Other sales in Italy and outside Italy (11.49 mmt tonnes) increased by 1.26 mmt tonnes or up by 12.3% mainly due to higher volumes sold to oil companies.

CHEMICALS

PRODUCT AVAILABILITY

	(ktonnes)	2021	2020	2019	Change	% Ch.
Intermediates		6,284	5,861	5,818	423	7.2
Polymers		2,184	2,211	2,250	(27)	(1.2)
Biochem		8	1		7	..
Production of petrochemicals		8,476	8,073	8,068	403	5.0
Moulding & Compounding		20			20	
Total productions		8,496	8,073	8,068	423	5.2
Consumption and losses		(4,590)	(4,366)	(4,307)	(224)	(5.1)
Purchases and change in inventories		565	632	534	(67)	(10.6)
Total availability		4,471	4,339	4,295	132	3.0
Intermediates		2,648	2,539	2,519	109	4.3
Polymers		1,771	1,790	1,766	(19)	(1.1)
Oilfield chemicals		24	9	10	15	..
Biochem		8	1		7	..
Sales of petrochemicals		4,451	4,339	4,295	112	2.6
Moulding & Compounding		20			20	
TOTAL SALES		4,471	4,339	4,295	132	3.0

Petrochemical sales of 4,451 ktonnes slightly increased from 2020 (up by 112 ktonnes, or 2.6%) thanks to the macroeconomic growth and the rebound in demand in leading sectors, such as packaging, durable goods sector and the recovery of the automotive sector.

This performance also reflects the ability to capture additional sales volumes thanks to the greater availability of the plants obtained by reprogramming the multi-year standstill, to reap the benefits from the recovery in demand and the reduction in imports from producer countries (USA and Middle East), also as result of temporary product shortages.

Average unit sales prices of the intermediates business increased by 56.3% from 2020, with aromatics and olefins up by 84.7% and 52.9%, respectively. The polymers reported an increase of 66.6% from 2020.

Petrochemical production of 8,476 ktonnes up by 403 ktonnes from 2020 due to higher production of intermediates business (up by 423 ktonnes), in particular olefins; these higher volumes were partially offset by lower productions of styrenics down by 78 ktonnes from 2020.

The main increases in production were registered at the Priolo site (up by 527 ktonnes) and in Dunkerque (up by 221 ktonnes), offset by lower volumes processed at Brindisi (down by 201 ktonnes) and Porto Marghera (down by 140 ktonnes).

Nominal capacity of plants were substantially unchanged from 2020. The average plant utilization rate calculated on nominal capacity was 66%, (65% in 2020).

BUSINESS TRENDS

Intermediates

Intermediates revenues (€2,166 million) increased by €837 million from 2020 (up by 63%) reflecting both the increase of commodity prices scenario and the higher product availability. Sales increased, in particular for olefins (up by 7.6%). Average unit prices increased by 56.3%, in particular aromatics (up by 84.7%), olefins (up by 52.9%) and derivatives (up by 50.1%). Intermediates production (6,284 ktonnes) registered an increase of 7.2% from 2020. Significant increases were recorded in aromatics (up by 14.2%) and in olefins (up by 7.2%). In reduction derivatives (down by 7.3%).

Polymers

Polymers revenues (€3,114 million) increased by €1,226 million or 64.9% from 2020 due to the decrease of the average unit prices (up by 66.6%). The styrenics business benefitted of the increase of prices sale (up by 68.9%) despite the decrease of sold volumes (-7.9%) due to the lower product availability as a result of the maintenance standstills in Mantova.

The decrease of volumes were mainly attributable to GPPS (down by 23%), ABS (down by 16.6%) and compact polystyrene (down by 3.3%), these lower volumes were partly offset by higher sales of styrene (up by 13.4%).

In the elastomers business, an increase of sold volumes (up by 11.4%) was attributable to lattices (up by 23.6%), EPR (up by 40.5%), and SBR rubbers (up by 14.8%). Overall, the sold volumes of polyethylene business reported a slight reduction (down by 1.4 %) with lower sales of HDPE and LDPE (down by 10.3% and 3.4%, respectively), partly offset by higher sales of EVA (up by 6.4%); in addition, average sales prices increased (up by 73.9%). Polymers productions (2,184 ktonnes) decreased from the 2020 due to the lower productions of styrenics (down by 7.9%), partly offset by higher production of elastomers (up by 13.4%).

Oilfield Chemicals, Biochem e Moulding & Compounding

Oilfield chemicals revenues (€65 million) increased by 16.1% (up by €9 million compared to 2020) as a result of the increase in sales volumes (15 ktonnes) following the effect of the new contracts signed.

Biochem business revenues (€60 million) increased by €54 million from 2020 and mainly refer to sales of disinfectant produced at the Crescentino plant. The amount also includes the share of revenue from sales of energy produced at the biomass power plant at the Crescentino hub.

Moulding & Compounding business revenues of €70 million refer to 20 ktonnes of products sold, following the consolidation of the Finproject group on October 1, 2021. The amount includes compounding activities for €21 million, moulding for €24 million and the Padanaplast activities for €25 million.

Plenitude & Power

Ebitda Plenitude

€0.6 bln

Achieved the target of >2GW of installed capacity and under construction

7.85 bln cm

Retail gas sales vs. 2020: +2%

16.49 TWh

Retail power sales to end customers vs. 2020: +32% thanks to the growth of activities in Italy and abroad

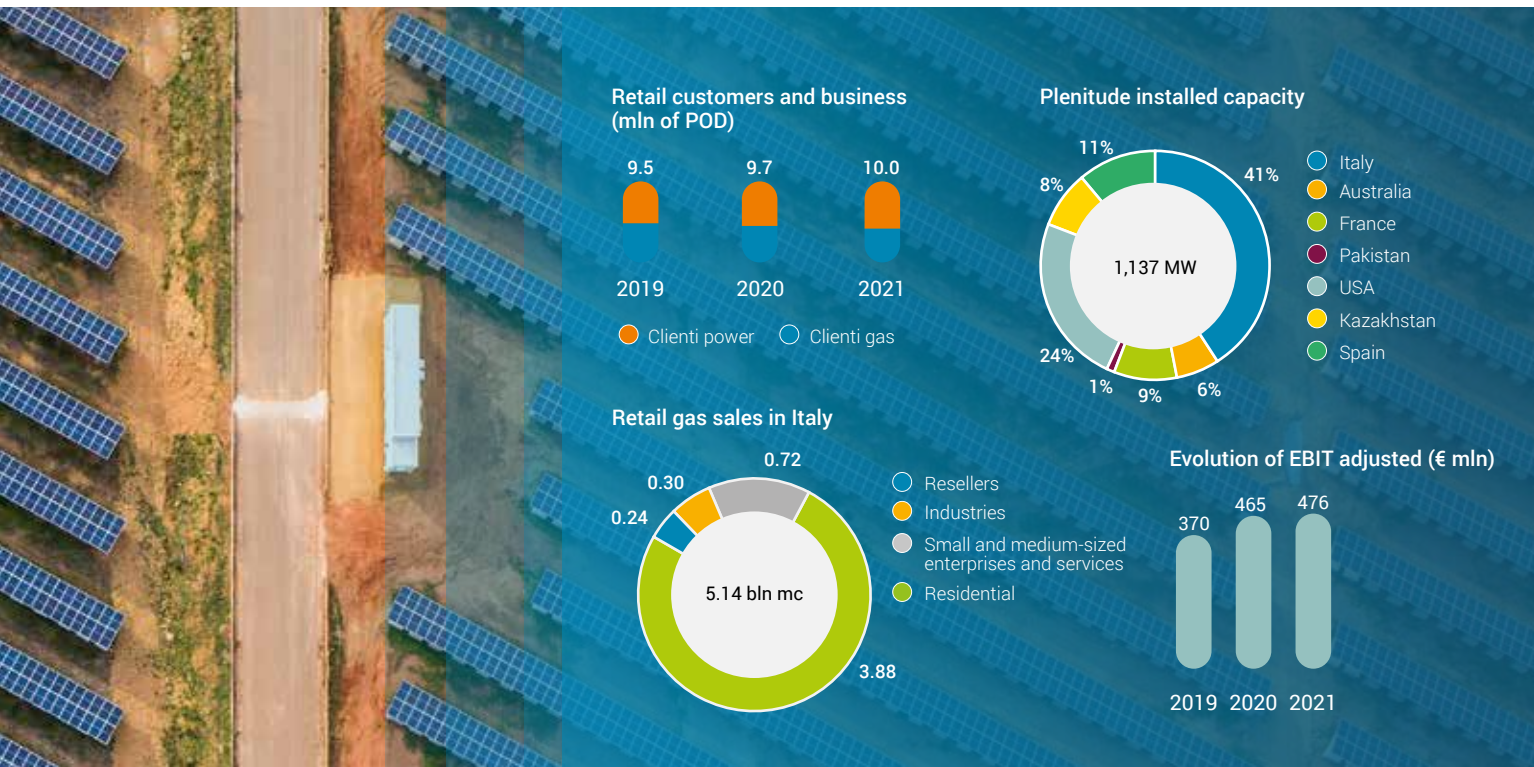
986 GWh

Production from renewables sources almost tripled vs. 2020

KEY PERFORMANCE INDICATORS

		2021	2020	2019
Total recordable incident rate (TRIR) ^(a)	(total recordable injuries/worked hours) x 1,000,000	0.29	0.32	0.62
<i>of which: employees</i>		0.49	0.00	0.30
<i>contractors</i>		0.00	0.73	0.95
Plenitude				
Retail and business gas sales	(bcm)	7.85	7.68	8.62
Retail and business power sales to end customers	(TWh)	16.49	12.49	10.92
Retail/business customers	(million of POD)	10.04	9.70	9.55
Energy production from renewable sources	(GWh)	986	340	61
Installed capacity from renewables at period end	(MW)	1,137	335	174
Power				
Power sales in the open market	(TWh)	28.54	25.33	28.28
Thermoelectric production		22.36	20.95	21.66
Employees at year end	(number)	2,464	2,092	2,056
<i>of which: outside Italy</i>		600	413	358
Direct GHG emissions (Scope 1) ^(a)	(mmtonnes CO ₂ eq.)	10.03	9.63	10.22
Direct GHG emissions (Scope 1)/equivalent produced electricity (Eni Power) ^(a)	(gCO ₂ eq./kWh eq.)	380	391	394

(a) Calculated on 100% operated assets.



Performance of the year

- ▶ The total recordable injury rate (TRIR) of the workforce improved by 9.3% compared to the 2020, as a result of the excellent performance obtained by contractors.
- ▶ Direct GHG emissions (Scope 1) reported an increase (up by 4% compared to 2020), due to the growth of the productions at the power generation sites.
- ▶ Direct GHG emissions (Scope 1)/equivalent produced electricity reported a decreasing trend from 2020 (down by 3%) following the reduced use of syngas at the Ferrera Erbognone plant.
- ▶ Energy production from renewable sources amounted to 986 GWh, almost tripled from the comparative period (340 GWh in 2020) due to the contribution of the acquired assets in operation in Italy, the United States, France and Spain.
- ▶ As of December 31, 2021, the installed capacity from renewables was 1.137 MW: 51% attributable to wind farms and 48% attributable to photovoltaic plants (installed storage capacity of 1%).
- ▶ Retail and business gas sales amounted to 7.85 bcm, up by 2% compared to 2020, as a result of the lower impact of COVID-19 and Aldro Energía acquisition.
- ▶ Retail and business power sales to end customers amounted to 16.49 TWh, recording an increase of 32% benefitting from Aldro Energía acquisition, as well as the development of the activities in Italy and abroad.
- ▶ Power sales in the open market amounted to 28.54 TWh, up by 13% following the higher volumes sold to the Power Exchange.

Portfolio valorization

As part of initiatives to extract value from portfolio restructuring by creating independent vehicles focused on attracting capital, creating value and accelerating growth, started the listing process for Plenitude, the Eni's subsidiary which comprises Gas & Power retail activities, renewables and e-mobility, with the strategic goal of

decarbonizing Eni's customer portfolio, contributing to achieve the reduction target on GHG Scope 3 emissions. The establishment of the new company Plenitude is part of the Eni's strategy and long-term commitment to be a decarbonization energy company and focused on sustainability. The decision is in line with a favorable industrial scenario, with the growth in demand of renewables energies and green energy products for retail client.

On 14 March 2022, Eni signed an agreement with the investment company Sixth Street for the sale of the 49% share in EniPower which owns six gas power plants. This agreement, subject to certain conditions precedent and authorizations of the competent Authorities, is part of Eni's strategy to enhance its assets and generate resources for the energy transition. Eni will maintain the operative control of EniPower as well as the consolidation of the company.

Portfolio developments

- ▶ In line with the strategy of decarbonization and energy transition of product and process, finalized the acquisition of 100% of Be Power Spa, a company that through its subsidiary Be Charge is the second Italian operator for installing and operating EV charging columns with over 6,000 charging points. Be Power manages its own charging stations and those of other operators through a proprietary technology platform and provides charging services to drivers of electric vehicles on its own or third-party charging stations through a dedicated app.
- ▶ Evolvere, Plenitude's subsidiary, completed the acquisition of a 100% stake in PV Family, an innovative start-up that manages My Solar Family, the largest digital community of prosumer (consumers/energy producers), in Italy with over 80 thousand subscribers. The acquisition of the capital has the objective to combine the Evolvere's supply and digital community services, in a market context that promotes a new energy model where the customer evolves from a consumer to an energy producer. With this acquisition Evolvere confirms the leadership in distributed generation from renewable sources in Italy and reaffirms the promotion of a new energy model, decentralized and sustainable, contributing to the ongoing energy transition.
- ▶ Entry into the Iberian Peninsula through the 100% acquisition of Aldro Energía, active in the market of the sale of electricity, gas and services in the residential segment with a portfolio of over 300,000 customers.
- ▶ Eni and CDP Equity established GreenIT, a new joint venture for the development, construction and management of plants for the production of electricity from renewable sources in Italy. The JV's aim is to reach a level of installed capacity of approximately 1 GW.

Business developments

Growth of the retail/business portfolio to 10 million points of delivery, up by over 300 thousand points compared to December 31, 2020 (up 4%) leveraging on the growth in Greece and the acquisition of Aldro Energía, engaged in the Spanish and Portuguese retail markets.

In 2021 continued the expansion in the national and international renewable energy market, with strong acceleration in the build-up of renewable generation capacity, leveraging targeted tuck-in acquisitions that can be quickly integrated into Eni's portfolio:

- ▶ In Italy finalized the acquisition from Glenmont Partners ("Glenmont") and PGGM Infrastructure Fund ("PGGM") of a portfolio of 13 onshore wind farms in Italy, for a total capacity of 315 MW;
- ▶ In Spain, finalized in October the acquisition from Azora Capital of 9 renewable energy projects consisting of 3 wind facilities in operation and 1 under construction for a total of 234 MW and 5 photovoltaic projects at an advanced stage of development for about 0.9 GW;
- ▶ In France and Spain finalized in October the acquisition of Dhamma Energy Group, owner of a pipeline of photovoltaic projects with a target installed capacity of about 3 GW, and installations already in operation or under construction with a capacity of approximately 120 MW;
- ▶ In Greece, in January 2022, acquired the Greek company Solar Konzept Greece "SKGR", owner of a portfolio of photovoltaic plants in Greece with a pipeline of projects targeting about 800 MW, which will form the basis for further development of the renewable portfolio in the country;
- ▶ In the UK offshore wind market finalized the agreement with Equinor and SSE Renewables for the acquisition of the 20% interest in Dogger Bank C project worth (1.2 GW), the third phase of the largest offshore wind farm in the world (3.6 GW) currently under construction in the UK North Sea. Production will start in different stages in the 2023-2025 period.

In February 2022 was expanded portfolio of renewable capacity in the United States through the acquisition from BayWa r.e. with a total capacity of 466 MW in Texas, of which 266 MW referred to Corazon I Solar plant. The plant began operations in August 2021, it will produce about 500 GWh each year, equivalent to eliminating about 250 ktonnes of CO₂ emissions annually into the atmosphere. In the same location, acquired Guajillo storage project, in advanced stage of development, with a capacity of around 200 MW/400 MWh.

In 2021, were signed a collaboration agreements to develop renewable plants with: Equinor (through Vårgrønn) for the development of an offshore wind project in the Utsira Nord, with Red Rock Power in order to make a joint bid to ScotWind proposition, and with Copenhagen Infrastructure Partners (CIP), as part of the competition for allocation of marine concessions for the offshore wind farm development in Polonia and for the subsequent participation in incentive mechanisms (contract-for-difference), which will be auctioned between 2025 and 2027.

E-mobility

As a part of the initiative for the development of the e-mobility sector in Italy, signed an agreement with Hyundai with the aim to expand the range of products for recharging electric cars and to encourage energy efficiency. Thanks to this agreement, Hyundai dealers will be able to offer their customers the purchase and the installation of the Plenitude E-start charging stations. Hyundai can also install charging stations and photovoltaic plants at their own dealerships, and adopt Plenitude's energy efficiency solutions.

The agreements signed in December with Enel X and Be Charge will permit to activate grid interoperability, allowing access to the widest national charging network of about 20,000 charging points. This synergy is part of Eni's broader strategy for the mobility of the future, which includes the evolution of the current service stations, mobility points at which we plan, among other things, to offer fast and ultra-fast charging for electric mobility.

PLENITUDE

RETAIL GAS & POWER

GAS DEMAND

Eni operates in a liberalized market where energy customers are allowed to choose the gas supplier and, according to their specific needs, to evaluate the quality of services and offers. Overall Eni supplies 10 million retail clients (gas and electricity) in Italy and Europe. In particular, clients located all over Italy are 7.8 million.

GAS SALES BY MARKET

	(bcm)	2021	2020	2019	Change	% Ch.
ITALY		5.14	5.17	5.49	(0.03)	(0.6)
Resellers		0.24	0.23	0.33	0.01	4.3
Industries		0.30	0.28	0.30	0.02	7.1
Small and medium-sized enterprises and services		0.72	0.70	0.87	0.02	2.9
Residential		3.88	3.96	3.99	(0.08)	(2.0)
INTERNATIONAL SALES		2.71	2.51	3.13	0.20	8.0
European markets:						
France		2.17	2.08	2.69	0.09	4.3
Greece		0.39	0.34	0.35	0.05	14.7
Other		0.15	0.09	0.09	0.06	66.7
RETAIL AND BUSINESS GAS SALES		7.85	7.68	8.62	0.17	2.2

RETAIL AND BUSINESS GAS SALES

In 2021, retail and business gas sales in Italy and in the rest of Europe amounted to 7.85 bcm, up by 0.17 bcm or 2% from the previous year. Sales in Italy amounted to 5.14 bcm were substantially unchanged from 2020, the reduction reported in the residential segment was mitigated by the higher volumes marketed at small and medium enterprises and resellers segments.

Sales in the European markets (2.71 bcm) are increasing of 8% or 0.20 bcm compared to 2020. Highest sales were recorded in France, Greece and Spain benefiting from the lower impact of the COVID-19 from the comparative period as well as the acquisition of Aldro Energía.

RETAIL AND BUSINESS POWER SALES TO END CUSTOMERS

In 2021, retail power sales to end customers amounted to 16.49 TWh, managed by Plenitude and the subsidiaries in France and Greece and Spain increase by 32% from 2020, due to growth of retail customers portfolio (up by 4% customers vs. 2020) thanks to the acquisition of Aldro Energía and the development of activities in Italy and abroad.

RENEWABLES

Eni is engaged in the renewable energy business (solar and wind) aiming at developing, constructing and managing renewable energy producing plant. Eni's targets in this field will be reached by leveraging on an organic development of a diversified and balanced portfolio of assets, integrated with selective asset and projects acquisitions as well as international strategic partnership.

ENERGY FROM RENEWABLE SOURCES

		2021	2020	2019	Change	% Ch.
Energy production from renewable sources	(GWh)	986	340	61	646	..
of which: photovoltaic		398	223	61	175	..
wind		588	116		472	
of which: Italy		400	112	53	288	..
outside Italy		586	227	7	359	..
of which: own consumption ^(*)		8%	23%	60%		

(*) Electricity for Eni's production sites consumptions.

Energy production from renewable sources amounted to 986 GWh (of which 398 GWh photovoltaic and 588 GWh wind) up by 646 GWh compared to 2020. The increase in production compared to the previous year benefitted from the entry in operations of new capacity, mainly for the contribution of assets already operating in Italy, France, Spain and United States.

Follows breakdown of the installed capacity by Country and technology:

INSTALLED CAPACITY AT PERIOD END (ENI'S SHARE)

		2021	2020	2019	Change	% Ch.
Installed capacity from renewables at period end	(MW)	1,137	335	174	802	239.4
of which: photovoltaic		48%	77%	76%		
wind		51%	20%	20%		
installed storage capacity		1%	3%	4%		

	(technology)	(MW)	2021	2020	2019
Italy	photovoltaic		116	112	82
Outside Italy			436	160	58
Algeria ^(*)	photovoltaic			5	5
Australia	photovoltaic		64	64	39
France	photovoltaic		108		
Pakistan	photovoltaic		10	10	10
Tunisia ^(*)	photovoltaic			9	4
United States	photovoltaic		254	72	
TOTAL PHOTOVOLTAIC INSTALLED CAPACITY			552	272	140
Italy	wind		350		
Outside Italy			235	63	34
Kazakhstan	wind		91	48	34
Spain	wind		129		
United States	wind		15	15	
TOTAL WIND INSTALLED CAPACITY			585	63	34
TOTAL INSTALLED CAPACITY AT PERIOD END (INCLUDING INSTALLED STORAGE POWER)			1,137	335	174
of which installed storage power			7	8	7

(*) Assets transferred to other segments in the fourth quarter of 2021.

At the end of 2021, the total installed and sanctioned capacity amounted to 1,137 MW +802 MW from 2020 mainly relating to acquisition in Italy (+315 MW, onshore wind), Spain (+129 MW, onshore wind) e France (+108 MW, photovoltaic), carried out during the second half of 2021, as well as the acquisition in United States (+182 MW, photovoltaic), and the completion of three plants in Puglia (+35 MW, onshore wind).

E-MOBILITY

In a context of the mobility market that includes a constant increase in the number of electric vehicles in circulation in Italy and in Europe, Plenitude, thanks to the acquisition of Be Charge, disposes one of the largest and most widespread networks of public charging infrastructure for electric vehicles.

As of December 31, 2021, there are more than 6,200 charging points distributed throughout the country. These stations are smart and user-friendly, monitored 24 hours a day by a help desk and accessible via the mobile app. Within the sector chain, Be Charge plays both the role of manager and owner of the charging infrastructure network (CPO - Charge Point Operator), and that of charging and electric mobility service provider working directly with electric vehicle users (EMSP - Electric Mobility Service Provider). Be Charge charging stations are Quick (up to 22 kW) alternating current, Fast (up to 150 kW) or HyperCharge (above 150 kW) direct current type.

POWER

AVAILABILITY OF ELECTRICITY

Eni's power generation sites are located in Brindisi, Ferrera Erbognone, Ravenna, Mantova, Ferrara and Bolgiano. As of December 31, 2021, installed operational capacity of Enipower's power plants was 4.5 GW. In 2021, thermoelectric power generation was 22.36 TWh, increase 1.41 TWh from the previous year. Electricity trading (22.79 TWh) reported an increase of 33% from 2020, thanks to the optimization of inflows and outflows of power.

POWER SALES IN THE OPEN MARKET

In 2021, power sales in the open market were 28.54 TWh, representing an increase of 13% compared to 2020, due to higher volumes marketed at Power Exchange.

		2021	2020	2019	Change	% Ch.
Purchases of natural gas	(mmcm)	4,670	4,346	4,410	324	7.5
Purchases of other fuels	(ktoe)	93	160	276	(67)	(41.9)
Power generation	(TWh)	22.36	20.95	21.66	1.41	6.7
Steam	(ktonnes)	7,362	7,591	7,646	(229)	(3.0)

AVAILABILITY OF ELECTRICITY

	(TWh)	2021	2020	2019	Change	% Ch.
Power generation		22.36	20.95	21.66	1.41	6.7
Trading of electricity ^(a)		22.79	17.09	17.83	5.70	33.4
Availability		45.15	38.04	39.49	7.11	18.7
Power sales in the open market		28.54	25.33	28.28	3.21	12.7

(a) Includes positive and negative imbalances (difference between the electricity effectively fed-in and as scheduled).

Environmental activities

around **2** mln tonnes
total waste managed

around **73%** recovered
vs. recoverable waste

around **95%** areas
with approved decree
on total contaminated areas
in sites of national priority

present in over **100**
sites of regional
and national priority
Eni global contractor



The Group's environmental activities are developed by Eni Rewind, the Eni's company that operates in line with the principles of the circular economy to give new life to land, water and waste resources, industrial or deriving from reclamation activities, through sustainable reclamation and revaluation projects, both in Italy and abroad.

Through its integrated end-to-end model, Eni Rewind guarantees the supervision of every phase of the process reclamation and waste management, planning, from the early stages, the projects of enhancement and reuse of resources (soils, water, waste), making them available for new development opportunities.

Reclamation activities

Coherently with the expertise gained and in agreement with the institutions and stakeholders, Eni Rewind identifies the projects for enhancement and reuse of reclaimed areas, allowing the environmental recovery of former industrial area and the resumption of the local economy. In this context, during 2021, were identified suitable areas for the installation of photovoltaic and wind plants.

In 2021, Eni Rewind, owner of the Ponticelle area in Ravenna, a disused industrial area outside the petrochemical plant of Ravenna, obtained the certification for the activities of Permanent Safety Measures (MISP), with the realization of a capping. In addition, was started a redevelopment plan production that includes the application of innovative, sustainable and recovery technologies, as well as to the urbanization works of the area. In the area object of MISP is planned the construction of a photovoltaic plant and a biorecovery platform for the subsequent reuse of land and management of industrial waste. In particular, the latter will be managed by HEA SpA, a joint venture between Eni Rewind and Herambiente Servizi Industriali established in March 2021.



Water & Waste Management

Eni Rewind manages water treatment, aimed at reclamation activities, through an integrated aquifer interception system and the conveyance of water for purification to treatment plants.

Currently 42 treatment plants are fully in operation and in Italy, with over 36 million cubic meters of treated water in 2021. Continued the activities of automation and digitalization of groundwater treatment plants and implementation of the remote control. The activity of recovery and reuse of treated water for the production of demineralized water is ongoing for industrial use, as part of the operational plans for the remediation of contaminated sites. In 2021 about 9 million cubic meters of water have been reused after treatment, with an increase of over 3 million cubic meters compared to 2020.

During 2021, completed the installation of 44 devices using the proprietary technology E-Hyrec® for the selective removal of hydrocarbons from groundwater, allowing the improvement of the effectiveness and efficiency of groundwater reclamation, with significant reductions in extraction times and avoiding the disposal of more than 1,000 tons of waste equivalent.

In addition, are ongoing the activities related to the application of Blue Water technology, aimed at treatment and the recovery of production water deriving from crude oil extraction activities. It's underway the preliminary inquiry for obtaining authorizations from Local Authorities to carry out the first plant on an industrial scale in the Val d'Agri Oil Center in Viggiano, in the Region of Basilicata.

Eni Rewind also operates as Eni's competence center for management of waste deriving from Eni's environmental remediation activities and production activities in Italy, thanks to its model that, by adopting the best technological solutions available on the market, allows to minimize costs and environmental impacts.

During 2021, Eni Rewind managed a total of approximately 1.9 million tonnes¹ of waste by sending for recovery or disposal at external plants.

In particular, the recovery index (ratio of recovered/recoverable waste) in 2021 was 73%: the slight decrease compared to 2020 (78%) is due to the qualitative and particle size characteristics of the reclamation waste, detected during characterization, which prevented and/or limited its recovery compared to the previous year, as well as a reduction in availability from external plants, in order to recovery, in specific regions of Italy.

Relating to waste management in line with the principles of the circular economy, the valorization of resources and synergy with the territory, continues the company's commitment to the development of the Eni's proprietary 'Waste to Fuel' technology that treats the organic fraction of municipal waste to produce bio-oil and biomethane, as well as recovering the water that constitutes the main component of the so-called "wet", for new industrial and irrigation uses.

Certification

In 2021 Eni Rewind obtained SOA Certification, the mandatory certification for participation in tenders to execute public works contracts with a basic auction amount exceeding €150,000, for its core activities in the OG 12 Reclamation and protection works and plants environmental and in the specialized categories OS 22 Drinking water and purification plants and OS 14 – Waste disposal and recovery plants.

Not-captive initiatives

Starting from 2020, Eni Rewind has expanded the scope of its activities outside the group. In 2021, continued the activities related to the finalization of contracts with Edison, for the reclamation of the Mantova site and Altomonte (Cosenza) and with Acciaierie d'Italia, for the design of reclamation interventions of the former Ilva area in Taranto.

In addition completed the qualification processes as a supplier for important national and international operators (Arcadis, MOL Group, Edison, Tamoil, TOTAL, Q8, ADNOC).

Started the participation in several tenders with leading national operators, awarding the contract with ANAS, for survey and characterization services in the Adriatic area (Emilia Romagna, Marche, Abruzzo, Molise, Puglia), where Eni Rewind will provide chemical analysis service, through its environmental laboratories.

Signed collaboration agreements with main Italian companies that manage collection and processing of urban waste and with key players in the supply chain (CONAI). These agreements are aimed at assessing the opportunity of setting up new waste treatment and recovery plants on reclaimed land or will become available following the progressive conversion of Eni's refining and chemical sites.

(1) The volume includes waste deriving from the management of the environmental activities of the points of sale network (about 92 ktonnes), whose "producer" is the same environmental company in charge of the execution out the work.

Eni Rewind outside Italy

Eni Rewind, starting from 2018, has made its expertise available to Eni's subsidiaries located in foreign countries for environmental issues, in particular for management and enhancement activities of the water resource, soil, as well as training and knowledge sharing.

In January 2021, Eni Rewind signed a Memorandum of Understanding (MoU) with the National Authority for oil and gas of the Kingdom of Bahrain (NOGA) with the target to identify and promote joint initiatives for the management, recovery and reuse of water and soil resources and waste in the country. In October, an assessment was carried out at the petrochemical plants and refining of the Kingdom of Bahrain which has identified three possible areas of activity for Eni Rewind related to groundwater modeling, waste management and field testing of the proprietary E-Hyrec® technology.

Eni Rewind obtained the qualification as a supplier to Abu Dhabi Oil Company (ADNOC) for the activities of demolition and reclamation.

Completed the feasibility studies on the optimization of waste water management and process water through its reuse for plants located in Algeria and Libya and extended the design services to foreign subsidiaries for environmental activities and decommissioning of the operative and disposed points sales.