

Welcome to your CDP Water Security Questionnaire 2019

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

Eni is an integrated company that operates across the entire energy chain in 67 Countries around the world and employing around 31,000 people. Eni's portfolio of conventional assets with a low break-even price at 25\$/bl, as well as the quality of the resource base with options for anticipated monetization represent the competitive advantages of Eni's upstream business. The large presence in the gas and LNG markets and know how in the refining business enable the company to catch joint opportunities and projects in the hydrocarbon value chain. Eni's fundamentals, such as the high portion of gas reserves and the opportunity to grow in the renewable sources segment leveraging on synergies with Eni's industrial plants, will sustain the path of the business model to a low carbon scenario. In this respect, this year, Eni has set the target to achieve net zero emissions in the upstream business by 2030, with the ambition to achieve it in the long term in all business segments.

Electric Utilities (EU) are referred to the activities of Enipower SpA, which is 100% controlled by Eni.

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation
Distribution

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each power source.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross generation (MWh)
Coal – hard			
Lignite			
Oil			
Gas	5,000	99.9	25,000,000
Biomass			
Waste (non-biomass)			
Nuclear			
Geothermal			
Hydroelectric			
Wind			
Solar	10.23	0.1	14,000
Other renewable			
Other non-renewable			
Total	5,010		25,014,000

W-OG0.1a

(W-OG0.1a) Which business divisions in the oil & gas sector apply to your organization?

- Upstream
- Downstream
- Chemicals

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2018	December 31, 2018

W0.3

(W0.3) Select the countries/regions for which you will be supplying data.

- Algeria
- Angola
- Argentina
- Australia
- Austria
- Bahrain
- Belgium
- Canada
- China
- Congo
- Côte d'Ivoire
- Cyprus
- Czechia
- Democratic People's Republic of Korea
- Denmark
- Ecuador
- Egypt
- France
- Gabon
- Germany

Ghana
Greece
Greenland
Hungary
India
Indonesia
Iraq
Ireland
Italy
Japan
Kazakhstan
Kenya
Kuwait
Lebanon
Libya
Luxembourg
Mexico
Montenegro
Morocco
Mozambique
Myanmar
Netherlands
Nigeria
Norway
Oman
Pakistan
Poland
Romania
Russian Federation
Saudi Arabia

Singapore
Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
Taiwan, Greater China
Timor-Leste
Tunisia
Turkey
Turkmenistan
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Venezuela (Bolivarian Republic of)
Viet Nam

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Direct use: vital for all sectors as it is needed for cooling and for steam production, as well as for its process activities; Eni intends to decrease good quality freshwater withdrawals through efficiency programs and replacing it with low quality sources in the future, i.e., contaminated groundwater after treatment (TAF water), desalinated water, rainwater or wastewater. Eni is aware of the importance of water related risks existing along its supply chain, as freshwater use is important for some item production (e.g. steel or pipes production) and for some industrial process (e.g. cooling purposes or hydrodynamic washing). However, Eni in order to mitigate these risks is already adopting procedures and specific instruments for managing indirect water use and will soon implement further consolidated methodologies to measure the environmental impacts of its supply chain.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Not very important	Direct use: brackish water is used and important only in upstream operations when sufficient amounts of produced water is not available for reinjection to maintain the reservoir pressures. Produced water is an important resource as it is used to maintain the reservoir pressures and Eni intends to increase its use for reinjection. Recycled water is important to reduce the freshwater withdrawals and Eni intends to increase its use in the future. The use

			of seawater is important for cooling purposes and for reservoir pressure maintenance and its use is expected to be stable or to increase slightly.
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W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	<p>HSE indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system. The frequency of collecting each indicator is specified in individual tables found in the technical annex entitled “Criteria and methodologies for acquiring HSE indicators”.</p> <p>The methodology comprises an annex for Water Resource Management and a specific Professional Operating Instruction for the Acquisition methodologies for HSE indicators, where are identified the indicators, metrics, evaluation methods and frequency of water flows accounting. The reporting takes into account what indicated in the "Oil and gas industry guidance on voluntary sustainability reporting" issued by IPIECA/API/IOGP in 2015.</p> <p>Method of measurement: Computation (sum of withdrawals from saline and fresh sources).</p> <p>Frequency of measurement: six months.</p>
Water withdrawals – volumes from water stressed areas	100%	<p>According to the Management system guideline annex "Water Resource Management", water withdrawals are mapped annually using internationally recognized tools, in order to evaluate the exposure to water stressed areas.</p> <p>Method of measurement: Computation (sum of freshwater withdrawals from water stressed areas). Knowing the coordinates of withdrawals it is calculated the portion located in areas with a Baseline Water Stress >40%</p> <p>Frequency of measurement: year.</p>

<p>Water withdrawals – volumes by source</p>	<p>100%</p>	<p>HSE indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system. The frequency of collecting each indicator is specified in individual tables found in the technical annex entitled “Criteria and methodologies for acquiring HSE indicators”.</p> <p>The methodology comprises an annex for Water Resource Management and a specific Professional Operating Instruction for the Acquisition methodologies for HSE indicators, where are identified the indicators, metrics, evaluation methods and frequency of water flows accounting. The reporting takes into account what indicated in the "Oil and gas industry guidance on voluntary sustainability reporting" issued by IPIECA/API/IOGP in 2015.</p> <p>Method of measurement: Measure (flowmeters), estimation (from pump capacity).</p> <p>Frequency of measurement: Six months.</p>
<p>Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]</p>	<p>100%</p>	<p>HSE indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system. The frequency of collecting each indicator is specified in individual tables found in the technical annex entitled “Criteria and methodologies for acquiring HSE indicators”.</p> <p>The methodology comprises an annex for Water Resource Management and a specific Professional Operating Instruction for the Acquisition methodologies for HSE indicators, where are identified the indicators, metrics, evaluation methods and frequency of water flows accounting. The reporting takes into account what indicated in the "Oil and gas industry guidance on voluntary sustainability reporting" issued by IPIECA/API/IOGP in 2015.</p> <p>Method of measurement: Measure, computation, estimation. The total volume is calculated as the sum of discharged and re-injected that, in turn are measured or estimated on the basis of the pump capacity.</p> <p>Frequency of measurement: Quarter.</p>
<p>Water withdrawals quality</p>	<p>100%</p>	<p>HSE indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system. The frequency of collecting each indicator is specified in individual tables found in the technical annex entitled “Criteria and methodologies for</p>

		<p>acquiring HSE indicators”</p> <p>Method of measurement: It is generally measured (flowmeters). In rare cases: computation (from mass balance) or estimation (from pump capacity).</p> <p>Frequency of measurement: Six months.</p>
Water discharges – total volumes	100%	<p>HSE indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system. The frequency of collecting each indicator is specified in individual tables found in the technical annex entitled “Criteria and methodologies for acquiring HSE indicators”.</p> <p>The methodology comprises an annex for Water Resource Management and a specific Professional Operating Instruction for the Acquisition methodologies for HSE indicators, where are identified the indicators, metrics, evaluation methods and frequency of water flows accounting. The reporting takes into account what indicated in the "Oil and gas industry guidance on voluntary sustainability reporting" issued by IPIECA/API/IOGP in 2015</p> <p>Method of measurement: Computation (sum of discharges).</p> <p>Frequency of measurement: Six months.</p>
Water discharges – volumes by destination	100%	<p>HSE indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system. The frequency of collecting each indicator is specified in individual tables found in the technical annex entitled “Criteria and methodologies for acquiring HSE indicators”.</p> <p>Method of measurement: It is generally measured (flowmeters). In rare cases: computation (from mass balance) or estimation (from pump capacity).</p> <p>Frequency of measurement: Six months.</p>
Water discharges – volumes by treatment method	100%	<p>All water discharges are treated as to fulfill local or international limits or, in absence of both, to the best available practices internationally (e.g. IPIECA, IMO) recognized</p>

Water discharge quality – by standard effluent parameters		<p>All water discharges are treated as to fulfill local or international limits or, in absence of both, to the best available practices internationally (e.g. IPIECA, IMO) recognized. Quality indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system.</p> <p>Method of measurement: Measure (chemical analysis or instrumental measurement depending on the parameter).</p> <p>Frequency of measurement: Year.</p>
Water discharge quality – temperature	100%	<p>All water discharges are treated as to fulfill local or international limits or, in absence of both, to the best available practices internationally (e.g. IPIECA, IMO) recognized. Method and frequency of measurement: temperature is generally monitored in continuous using probes in situ.</p>
Water consumption – total volume	100%	<p>HSE indicators are acquired from the Corporate HSEQ function through the Integrated HSE Database (BDHSE) IT system. The frequency of collecting each indicator is specified in individual tables found in the technical annex entitled “Criteria and methodologies for acquiring HSE indicators”.</p> <p>The methodology comprises an annex for Water Resource Management and a specific Professional Operating Instruction for the Acquisition methodologies for HSE indicators, where are identified the indicators, metrics, evaluation methods and frequency of water flows accounting. The reporting takes into account what indicated in the "Oil and gas industry guidance on voluntary sustainability reporting" issued by IPIECA/API/IOGP in 2015.</p> <p>Method of measurement: computed as difference from input and output</p> <p>Frequency of measurement: Six months.</p>
Water recycled/reused	51-75	<p>The water volumes recycled do not include water volumes for cooling except for the chemical sector, responsible for over 60 % of Eni's total freshwater withdrawals.</p> <p>Method of measurement: Measure (flowmeter) or estimation (mass balance or project design data).</p> <p>Frequency of measurement: Six months</p>

The provision of fully-functioning, safely managed WASH services to all workers	100%	Core strategy and methodological approach, of Eni initiatives concerning public health, based on Company experience and developed in line with international guidelines on Global Health (Health for All), are described in the Annex "Global Health" of Eni's Human Resources Management System Guidelines. The health management system is implemented in all Eni companies, in Italy and abroad.
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W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	1,843,583	About the same	During 2018 the total volumes of water withdrawn remained almost constant with respect to the previous reporting year (+1%). However there is a decrease in the use of freshwater sources that is in line with the four-year intends of Eni to launch initiatives for the use of low-quality water and seawater to replace freshwater. Seawater and produced water are expected to slightly increase as a consequence of upstream increase in production in the near future.
Total discharges	1,774,208	About the same	During 2018 the total volumes of water discharged remained almost constant with respect to the previous reporting year (+1%). The objective to inject the produced water into the subsoil will contribute to an increase of total discharges. Seawater discharges are expected to increase due to an increase of upstream activities
Total consumption	69,375	About the same	Total consumption remained constant over the reporting period and relevant variations are not expected in the near future as a consequence of an increase of both withdrawals and discharges

W-OG1.2c

(W-OG1.2c) In your oil & gas sector operations, what are the total volumes of water withdrawn, discharged, and consumed – by business division – and what are the trends compared to the previous reporting year?

	Volume (megaliters /year)	Comparison with previous reporting year %	Please explain
Total withdrawals - upstream	215,321	Much higher	An increase, have been observed (> 20%), due to higher activities, especially in Ghana and Egypt. A higher seawater withdrawal is expected due to an increase of off-shore activities and to the intends to reduce freshwater sources. Total withdrawals are expected to slightly increase as a consequence of seawater and produced water volumes increase associated to the increase of activities
Total discharges – upstream	184,729	Much higher	The observed increase (> 20%) is due to once-through cooling purposes and we expect an increase associated to an increment of the activities
Total consumption – upstream	30,592	About the same	The total consumption didn't change as the main water use is for once through cooling and for injection into subsurface bodies. No substantial changes were observed nor are expected in the near future as a consequence of an increase of both withdrawals and discharges
Total withdrawals - downstream	274,954	About the same	The activities of the refining and marketing remained unchanged during the reporting period, so little variations (< 10%) have been observed and are expected in the near future. Furthermore, the refining, chemical and power processes are already optimized and characterized by a complex system of water (industrial, demineralized and steam) volumes exchanges among productive sites in order to maximize the efficient use of water and energy, therefore, no big enhancements can be foreseeable.
Total discharges – downstream	273,537	About the same	The activities of the refining and marketing remained unchanged during the reporting period, so little variations (< 10%) have been observed and are expected in the near future.

Total consumption – downstream	1,417	Much Lower	The variation is big in relative terms (> 20%), but little in absolute terms (little more than 1000 megaliters), if compared to the total water used in the downstream. No substantial changes have been observed in absolute terms nor are expected in the near future
Total withdrawals – chemicals	967,685	Higher	The observed variation (about 10%) is due to a higher increase to Priolo and Porto Marghera, where last year an increase has been observed. These changes (+ or -) are normal variations due to programmed stop of production and are expected to be observed in the future. Furthermore, the refining, chemical and power processes are already optimized and characterized by a complex system of water (industrial, demineralized and steam) volumes exchanges among productive sites in order to maximize the efficient use of water and energy, therefore, no big enhancements can be foreseeable.
Total discharges – chemicals	949,350	Higher	The observed variation (about 10%) is due to a higher increase to Priolo and Porto Marghera, where last year an increase has been observed. These changes (+ or -) are normal variations due to programmed or stop of production and are expected to be observed in the future
Total consumption – chemicals	18,335	About the same	As the main use of water is for once-through purposes, not relevant changes are observed or predicted

W1.2d

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	2	About the same	WRI Aqueduct	Only a little proportion of total Eni's withdrawals regards freshwater (less than 7%) and, of these, only less than one third is located in water stressed areas (i.e. characterized by a baseline water stress greater than 40%). Eni intends to decrease freshwater withdrawals, however the volumes withdrawn in stressed areas are already very small if compared to total withdrawals, so that those reductions cannot be appreciated in the total proportion.

				<p>Consequently, the comparison with the previous reporting year is about the same and it is expected to be about the same also next year.</p> <p>Aqueduct is used as a first screening tool to identify and, consequently, calculate the quantity of freshwater withdrawn in stressed areas; however,, some sites indicated as stressed by Aqueduct, resulted not at risk by a local analysis, that could better investigate the actual freshwater availability on a local basis. In some sites, the analysis has been conducted using the GEMI Local Water Tool for Oil and Gas. Therefore, the actual figure should be regarded as even lower than 2%. Eni intends to use low quality water and seawater for its operations, however no relevant changes can be expected in the total exposure figures in the near future.</p>
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W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	81,503	About the same	Freshwater is essential for demineralized water production and steam production, both fundamental in any industrial O&G process. It is also used as firefighting water. In line with the trend recorded in recent years, in 2018 Eni reduced its total freshwater withdrawals by 2% compared to 2017. This result was made possible by new steam generators installed in the Porto Marghera petrochemical plant, which made it possible to reduce the amount of freshwater used in the cooling cycles. Through the four-year Eni intends to increase the groundwater treated and reused for civil or industrial purposes and, likewise, to launch initiatives for the use of low-quality water to replace freshwater.
Brackish surface water/Seawater	Relevant	1,640,006	About the same	Seawater is relevant for its use as cooling water and for injection in upstream operations. It is also used as firefighting water. In 2018 we

				observed a slight increase of seawater withdrawals (+1%). Wherever possible, saline water sources are preferred to freshwater but, in the same way, produced water is a preferred source with respect to seawater, therefore we do not expect significant changes in the future. Eni does not use brackish surface water.
Groundwater – renewable	Relevant	22,676	About the same	Freshwater is essential for demineralized water production and steam production, both fundamental in any industrial O&G process. It is also used as firefighting water. In 2018 we observed a slight decrease of groundwater withdrawals (-3%). Wherever possible, saline water sources are preferred to freshwater, therefore a trend to decrease this source is foreseeable and pursued by Eni.
Groundwater – non-renewable	Relevant	19,314	Higher	Non renewable water in Eni is only brackish deep groundwater; this is a preferred sources wherever available as an alternative to freshwater. It is a relevant source where no alternatives are available. such as in north Africa. An increase has been observed as a consequence of EOR use in north Africa and is predictable an increment of its use as a consequence of wells ageing and the need to maintain the reservoir pressure. However, in consideration of this aspect, the brackish water increase will be anyway restrained through dedicated produced water reuse projects, (some already started).
Produced/Entrained water	Relevant	67,768	About the same	Produced water Increased by 2% over the last reporting year and an increment is foreseeable as a consequence of ageing and increase of oil and gas production. Produced water is considered an essential resource to maintain the reservoir pressure and Eni has the objective to increase its reinjection over time for this purpose.
Third party sources	Relevant	12,316	About the same	A slight increase has been observed in 2018 vs 2017. It remained almost constant in the past years and it is foreseeable to remain almost constant. It is relevant as it is used for civil purposes (drinkable water) or

				can be necessary for industrial purposes (demineralized water or purchased vapour). It is mainly used in the downstream, and no relevant changes in the productive asset are predicted in the near future, so its use is predicted to remain about the same.
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W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	71,748	About the same	Most of freshwater discharge relates to a once-through cooling system in the petrochemical plant of Mantua. It is relevant as Eni needs to discharge this volumes both for cooling purposes and of industrial wastewater after treatment. Freshwater is mainly used in the downstream, whose productive assets remained almost unchanged in the reporting year
Brackish surface water/seawater	Relevant	1,597,360	About the same	It is mainly constituted by seawater discharges, necessary for cooling purposes and of produced water treated and discharged. It is the largest discharge by volume and as such it is relevant to Eni. This value remained about the same as a consequence of the increase of seawater discharges connected to an increase of upstream activities, an increase of produced water reinjected (and not discharged to sea) and a decrease of freshwater discharged (as a consequence of our policy to decrease freshwater use). This combination of trends is expected also for the future.
Groundwater	Relevant	84,459	Higher	Discharge to deep formations is relevant as it is water injected for enhanced oil recovery. It is a higher value with respect of previous yeas (>10%) as an effect of the intend to increase produced water reinjection; as such, its value is expected to increase

Third-party destinations	Relevant	20,641	About the same	Third party destinations are a relevant destination as these include the discharge, via sewer, to a treatment facility and the delivery of demineralized and industrial water as well as vapor to third parties. These streams have remained constant and not relevant changes are expected in the near future. This destination is mainly used in the downstream, and no relevant changes in the productive asset are predicted in the near future, so its use is predicted to remain about the same in the near future
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W1.2j

(W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	76-99%	About the same	The main part of recycled fresh water is in cooling systems in the petrochemical sector (where recycled water is 90%). There are several projects to recover and reuse water, such as the condensed water recovery at the Enipower plant of Ferrera Erbognone, and to increase the amount of groundwater treated and reused. Eni, through the four-year intends to launch initiatives for the use of low-quality water to replace freshwater. One example is the new desalination plant operating since the second half of 2018 in the industrial site of Brindisi, that allows for a saving of total water withdrawals in a water stressed area. However, given the high % already achieved, these initiatives cannot produce big changes in the total recycled/reused value. As a consequence of Eni intends to increase the recycle and reuse of freshwater a slight increase (<1%) was observed in 2018 and is predictable for the future

W-OG1.2j

(W-OG1.2j) What proportion of your total water use do you recycle or reuse in your operations associated with the oil & gas sector?

	% recycled and reused	Comparison with previous reporting year	Please explain
Upstream	1-25	Lower	It includes produced water reinjection, which increased by over one million cubic meters in the last reporting year. However, the observed proportion decrease is a consequence of seawater withdrawals increase in the last reporting period, due to an increase of activities. The upstream has an objective to increase its produced water reinjection from current 60% to 86% by 2022. The reinjection of produced water allows for a saving of water resources withdrawals (sea, brackish or fresh water) and represents a best practice for produced water management.
Downstream	26-50	About the same	The value in the refining sector is quite constant over the last 5 years as no significant changes in the processes have occurred. In line to its strategic vision to reduce its impacts on the water resources, R&M is planning to reuse wastewater in order to reduce freshwater withdrawals at the Refinery of Livorno
Chemicals	76-99	About the same	In the petrochemical sector, responsible for about 60% of Eni's freshwater withdrawals, the total volume recycled are significant and stabilized at around 90% in the last two years, as the result of a constant increase over the last years (it was 86.1 in 2013) that reduced the impact on that water source. No substantial changes are predictable in the near future.

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

Yes

W-EU1.3a

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value (m3)	Numerator: water aspect	Denominator: unit of production	Comparison with previous reporting year	Please explain
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0.79	Freshwater withdrawals D ₁	Other, please specify MWheq	About the same	The intensity is constantly decreasing over the last years, and remained constant in the last two years. As a consequence of interventions for freshwater savings at the Ferrera Erbognone and Brindisi power-plants, a slight decrease is predicted in the near future. The Eni intends to reduce freshwater withdrawals were and will be reflected in future water intensity. The data do not take into account the photovoltaic production
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D₁cubic meters

W-OG1.3

(W-OG1.3) Do you calculate water intensity for your activities associated with the oil & gas sector?

Yes

W-OG1.3a

(W-OG1.3a) Provide water intensity information associated with your activities in the oil & gas sector.

Business division

Upstream

Water intensity value (m3)

0.01

Numerator: water aspect

Total freshwater withdrawals

Denominator: unit of production

Barrel of oil equivalent

Comparison with previous reporting year

About the same

Please explain

The water intensity of upstream productions decreased constantly over the past 6 years. In 2018 it reached a low 0.008 m3/boe as a consequence of our efforts to reduce or replace freshwater withdrawals, e.g. with produced or sea water. The Eni intends to reduce freshwater withdrawals are expected to decrease future water intensity

Business division

Downstream

Water intensity value (m3)

0.73

Numerator: water aspect

Total freshwater withdrawals

Denominator: unit of production

Other, please specify

ton of refinery throughputs

Comparison with previous reporting year

About the same

Please explain

The figure remained constant over the last two years as the production asset remained almost constant. The Eni intends to reduce freshwater withdrawals are expected to decrease future water intensity

Business division

Chemicals

Water intensity value (m3)

10

Percent

Numerator: water aspect

Total freshwater withdrawals

Denominator: unit of production

Other, please specify
freshwater use

Comparison with previous reporting year

About the same

Please explain

Chemical production is characterized by very different processes, so that a cumulative index of water withdrawn vs. ton of product is not very useful to understand the efficiency in water use and management over time. In Eni we introduced an index aimed at highlighting the efficiency of water use, dependent on the volume of recycled water, that is freshwater withdrawals / freshwater use, where freshwater use is given by: freshwater withdrawal + freshwater recycle. In this way, the water intensity can be lowered by a decrease of withdrawals as well as by an increase of recycled water. In the last year a slight decrease was observed as a consequence of an increment of water recycling. No substantial changes are expected in the near future..

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

76-100%

% of total procurement spend

76-100

Rationale for this coverage

The percentages were calculated with respect to the total number of suppliers subject to qualification assessment about HSE aspects carried out by Eni Spa in 2018. All suppliers are subject to a qualification assessment and the qualification assessment is fundamental to be eligible as a supplier for Eni. The process assures the quality of suppliers and their compliance to Eni's requirements.

Impact of the engagement and measures of success

Suppliers are required to report us information on their water management by means of a qualification questionnaire (e.g. own policy or guidelines on water use, ability to provide data on the water consumption in own operations, etc.) as a part of a wider investigation of the vendor's HSE aspects. This analysis makes it possible to identify suitable feedbacks within the framework of the procurement processes that can be used in the "Vendor Performance Assessment and Vendor Rating" procedure. The information and the feedback collected are used to detect situations that may require a deeper evaluation, such as an audit, and can be used to launch improvement plans and define actions on the supplier qualification status. In this way we ensure the availability of a list of selected, qualified and constantly monitored suppliers. A feedback process is defined to assess and monitor HSE aspects within the broader process of assessing and measuring the overall performance of the vendor

Comment

In the vendor qualification process Eni assesses suppliers Water Management. Scope of the vendor qualification process is to: check if self-candidates meet the Eni mandatory HSE requirements for admittance into the Register of Vendors; assess the adequacy of the models for

managing HSE and Quality aspects used by the vendor and their level of application. To measure the success of the procedure, it is defined an HSE feedback process to assess and monitor HSE aspects.

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Onboarding & compliance

Details of engagement

Requirement to adhere to our code of conduct regarding water stewardship and management

% of suppliers by number

76-100

% of total procurement spend

76-100

Rationale for the coverage of your engagement

Eni is ready to publish, by the end of the year 2019, its supplier Code of Conduct that requires to all suppliers their commitment in managing and monitoring the most significant environmental aspects and integrate, whenever possible, the green sourcing principles into their supply chain management (between them, the consumption and of the impact on water resources)

Impact of the engagement and measures of success

The scope of Eni Supplier Code of Conduct is to develop a relationship with suppliers and subcontractors of proven professionalism, capable of operating according to the highest quality standards and who share its corporate values, including those related to sustainable development. Indeed, the selection of reliable partners is an essential activity for the value creation for Eni's stakeholders in order to guarantee innovation, continuous improvement and to protect Eni's integrity and reputation on the market. By requiring the suppliers to commit to the principles expressed in the Code of Conduct, Eni wants to build a long-term relationship with them and thus create a virtuous cycle of continuous

improvement. The submission and signature of Code of Conduct can take place in different phases of supplier management process, depending on the supplier status as: self-candidacies, qualification or tender process. The process assures the suppliers compliance to Eni's requirements.

Comment

In addition to Supplier Code of Conduct, Eni is working to get on board on an International assessment platform, through which Eni will be able to easily assess supplier performances about environmental issues, included water management.

Type of engagement

Onboarding & compliance

Details of engagement

Inclusion of water stewardship and risk management in supplier selection mechanism

% of suppliers by number

1-25

% of total procurement spend

1-25

Rationale for the coverage of your engagement

Eni is developing a green sourcing project to measure the commodity Eni buys'impacts and evaluates suppliers according to their contribution to environmental impacts.

The coverage of suppliers engagement is still difficult to measure as we are in a pilot phase of the project and the number of investigated commodity codes constantly evolves. However, this analysis is based on the Life Cycle Assessment methodology which evaluates the environmental footprint of selected Eni's commodity codes and deals with the potential environmental impacts during the product lifecycle, according to the principle "from cradle to grave". LCA methodology relies upon PEF (Product Environmental Footprint), the most robust method in order to conduct an LCA analysis and guarantees a wide measurement of the environmental impacts of products and services. This analysis takes into account 17 impact categories, including: freshwater and marine eutrophication, freshwater ecotoxicity, water resource depletion,

Impact of the engagement and measures of success

The outcome of the project is the measurement, through LCA methodology, of the environmental impacts of Eni' purchases through the supply chain: this will allow Eni to verify how much an engagement initiative can help to decrease the suppliers' share of Eni's environmental footprint (included water consumption). In an advanced stage of the Project, there will be the insertion of environmental-related requirements in the tenders' scoring model: in this way, suppliers will be encouraged and engaged to act in a "greener" way.

Comment

A feedback process is defined to assess and monitor HSE aspects within the broader process of assessing and measuring the overall performance of the vendor

Type of engagement

Incentivizing for improved water management and stewardship

Details of engagement

Water management and stewardship is integrated into supplier evaluation processes

% of suppliers by number

1-25

% of total procurement spend

Less than 1%

Rationale for the coverage of your engagement

Eni is working, by the end of the year, to get on board on an International assessment platform, through which it will be able to easily assess supplier performances about environmental issues, included water management.

However not all the suppliers will be evaluated through this method, but just the ones considered as critical according to Risk-Based-Model implemented by Eni, which assess suppliers' risks with different process in different stages of evaluation.

Impact of the engagement and measures of success

Suppliers will be demanded to complete a self-assessment questionnaire on the platform and then they will receive a rank about their environmental performance. This ranking will help Eni to identify which are the riskiest suppliers for what concerns environmental performance.

Comment

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

No

W3. Procedures

W-EU3.1

(W-EU3.1) How does your organization identify and classify potential water pollutants associated with your business activities in the electric utilities sector that could have a detrimental impact on water ecosystems or human health?

Eni's New Regulatory System was designed with the objective to rationalize and simplify our Regulatory System. The fundamental guidelines of the New System consist of **four main principles**:

- from an organization based approach to a business process based approach with a key role for the Process Owner as responsible of the whole process throughout Eni;
- more emphasis on the role of direction, coordination and control performed by eni over its subsidiaries, while safeguarding their corporate and business independence;
- the integration of the Compliance Principles into the business processes;
- a simple architecture with plain language and a user-friendly search menu.

The architecture of the new system is divided into four levels:

- 1st level **POLICY**
- 2nd level **MANAGEMENT SYSTEM GUIDELINE**
- 3rd level **PROCEDURE**
- 4th level **OPERATING INSTRUCTION**

The Management System Guideline of HSE, Annex F "Risk Management", provides general criteria for HSE risk management, i.e. the process which identifies and assesses HSE risk and develops strategies to regulate it, to preserve the safety and health of people (employees, third parties, the local community) as well as the integrity of assets and to safeguard the environment in a life-cycle perspective. It considers the processes for: risk analysis, assessment and governance. The HSE risk management process includes monitoring the implementation and effectiveness of measures identified to reduce risk.

The Operating Professional Instruction "Analysis and assessment of environmental risks with potential effects for administrative liability in accordance with the Italian Legislative Decree 231/01" is designed to describe the methods used to identify and assess environmental risks with potential effects for administrative liability. The Management System Guideline of HSE (Annex E-D Water Resource Management) reports that not only must be compliant to legal limits, but preventive programs should be enforced and operational management procedures and innovative technologies must be implemented, in order to minimize polluting discharges, through monitoring quality and quantity in compliance with sustainable environmental responsibilities, in line with, where technically and economically possible, best available technologies (BAT - Best Available Technologies).

The Annex E-D requires that each plant must have a sampling plan so that, for each discharge point, the characteristic parameters and typical pollutants are analyzed. In the specific case of electric generation, Eni plants are located only in Italy, where the law identifies the parameters and the related limits according to the type of discharge and of the receptor body (reference D.lgs. 152/2006 part III, Annex 5). If a value above permitted limits is observed, each plant must activate an investigation on the causes of the exceeding values found and define a corrective action.

When it is necessary to provide for the disposal of an aqueous waste, deriving from, for example, remediation operations, compliance with the specific applicable legislation is guaranteed (reference Legislative Decree 152/2006 part IV), committing authorized personnel for the transportation and treatment of said waste.

The Annex E-D requires that annually the pertinent Eni corporate functions gather information from all the business units regarding the presence of sensitive watersheds and connected habitats potentially influenced by the industrial operations. These aspects are not evaluated in the value chain, besides what regards the qualification process described in W1.4, as they are considered not to have substantial impacts

W-EU3.1a

(W-EU3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants associated with your activities in the electric utilities sector on water ecosystems or human health.

Potential water pollutant	Description of water pollutant and potential impacts	Management procedures	Please explain
Thermal pollution	Thermal pollution is the main potential impact of Enipower activities, as all power plants are “combined cycle” facilities fired by natural gas. Due to the nature of the “pollutant”, its potential impact is considered low, as it is easily and naturally recoverable	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Emergency preparedness	The potential mitigating actions are listed in Annex E-D, Water Resource Management: installation devices that measure volume, pressure and pollutants; leak control and maintenance; employee training and education; procedure for anomalous or emergency situations; data collection and monitoring; specific audits; certification and transparency of reporting. As all plants are located in Italy, applies Italian law regarding the water discharges (reference D.lgs. 152/2006 part III Annex 5). The success of the application of internal procedures is clearly demonstrated by the fact that Enipower is EMAS registered since 2006. Enipower monitors any impacts, identified as any modification of the environment, negative or beneficial, caused totally or partially by the organization. (UNI EN ISO 14001). For the purposes of internal procedures, reference is made to the volume of water discharged and used by an organization from a source, which influences

		<p>availability or quality for other uses or which causes damage to health or ecosystems. Eni establishes a system for monitoring the quantity and quality of the discharges, in order to reduce the impacts and guarantee the correct functioning of the production cycle, adopting the best practices in the sector and taking into account the sensitivity and vulnerability of the local context and of the receiving water bodies.</p> <p>Specific points indicated in the procedure:</p> <ul style="list-style-type: none"> • conducting periodic visual inspections in the plant and monitoring the state of preservation of pipes, sewerage system, containment basins and paving • identification and periodic updating of sampling points for control activity • the definition of the sampling program, the identification of the methods of analysis of wastewater discharges, the control of the relative analytical certificates of the analysis • verification of compliance with legal limits and / or those provided for in the discharge authorization and / or provided for by the sewer regulation • reporting of the indicators relating to withdrawals and discharges, as provided for internal planning, monitoring and reporting procedures • internal investigation of any exceedances of the authorized limits detected by the analyses carried out, according to the corporate procedure for managing non-conformity, of corrective and preventive actions; • timely information to the competent control authority, to the HSEQ Enipower office and to the competent functions of the head office
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W-OG3.1

(W-OG3.1) How does your organization identify and classify potential water pollutants associated with its activities in the oil & gas sector that may have a detrimental impact on water ecosystems or human health?

Eni's New Regulatory System was designed with the objective to rationalize and simplify our Regulatory System. The fundamental guidelines of the New System consist of **four main principles**:

- from an organization based approach to a business process based approach with a key role for the Process Owner as responsible of the whole process throughout Eni;
- more emphasis on the role of direction, coordination and control performed by eni over its subsidiaries, while safeguarding their corporate and business independence;
- the integration of the Compliance Principles into the business processes;
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The architecture of the new system is divided into four levels:

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- 4th level **OPERATING INSTRUCTION**

The Management System Guideline of HSE, Annex F "Risk Management", provides general criteria for HSE risk management, i.e. the process which identifies and assesses HSE risk and develops strategies to regulate it, to preserve the safety and health of people (employees, third parties, the local community) as well as the integrity of assets and to safeguard the environment in a life-cycle perspective. It considers the processes for: risk analysis, assessment and governance. The HSE risk management process includes monitoring the implementation and effectiveness of measures identified to reduce risk.

The Operating Professional Instruction "Analysis and assessment of environmental risks with potential effects for administrative liability in accordance with the Italian Legislative Decree 231/01" is designed to describe the methods used to identify and assess environmental risks with potential effects for administrative liability.

The Management System Guideline of HSE (Annex E-D Water Resource Management) reports that not only must be compliant to legal limits, but preventive programs should be enforced and operational management procedures and innovative technologies must be implemented, in order to



minimize polluting discharges, through monitoring quality and quantity in compliance with sustainable environmental responsibilities, in line with, where technically and economically possible, best available technologies (BAT - Best Available Technologies).

The Annex E-D requires that each plant must have a sampling plan so that, for each discharge point, the characteristic parameters and typical pollutants are analyzed. If a value above permitted limits is observed, each plant must activate an investigation on the causes of the exceeding values found and define a corrective action.

When it is necessary to provide for the disposal of aqueous waste, deriving from, for example, remediation operations, compliance with the specific applicable legislation is guaranteed (in Italy Legislative Decree 152/2006 part IV), using authorized persons for the transportation and treatment of such waste.

The Annex E-D requires that annually the pertinent Eni corporate functions gather information from all the business units regarding the presence of sensitive watersheds and connected habitats potentially influenced by the industrial operations.

Annex E-F, Biodiversity and Ecosystems (BES), requires that Eni identifies and evaluates all potential impacts on BES deriving from its operations and implements appropriate mitigation actions to minimize any adverse effects, by applying principles consistent with the Convention of Biological Diversity, the guidelines of the Energy and Biodiversity Initiative and the implementation tools developed by the IPIECA-OGP Biodiversity Working Group. In order to deliver on the ground an effective management of BES issues, Eni Business Units need to include in their operating practices BES considerations and, possibly, the implementation of the BES action plan, containing the site-specific indicators used to monitor the effectiveness of the mitigation activities; the BES assessment should be repeated periodically, throughout the whole project/operating site/facility life-cycle and, if necessary, updated.

W-OG3.1a

(W-OG3.1a) For each business division of your organization, describe how your organization minimizes the adverse impacts on water ecosystems or human health of potential water pollutants associated with your oil & gas sector activities.

Potential water pollutant	Business division	Description of water pollutant and potential impacts	Management procedures	Please explain
Hydrocarbons	Upstream Downstream	The main potential pollutants of upstream and downstream operations are crude oil and its refined products. The main potential impact are linked to potential spills due to accident or	Compliance with effluent quality standards	Potential mitigating actions are listed in Annex E-D, Water Resource Management: installation devices that measure volume, pressure and pollutants; leak

		<p>sabotage. Both events, in terms of number and spilled volumes, are recorded in Eni HSE database. The magnitude of a spill impact can be low, medium or high, depending on the volume and quality of the hydrocarbons spilled and on the vulnerability of the area where it occurs</p>	<p>Measures to prevent spillage, leaching and leakages Community/stakeholder engagement Emergency preparedness</p>	<p>control and maintenance; employee training and education; procedure for anomalous or emergency situations due to pollution event; data collection and monitoring; specific audits; certification and transparency of reporting; BES action plan, containing site-specific indicators. Regarding oil spill, prevention is pursued by actions in all areas: research, technical areas, increase of controls and interventions on assets. Over 29,6 million € invested in 2018 in oil spill prevention. Eni has adopted the best available technologies, in accordance with national laws and international standards. In particular, innovative techniques were introduced to improve the early identification of losses along the pipelines: use of optical fibers; e-VPMS, Eni Vibroacoustic Pipeline Monitoring System, a proprietary patent with proved effectiveness and with future developments (eVPMS-TIP, to detect vibrations from excavation in the ground and anticipate intervention); ground-trotting (also involving community); use of "Chopper Overflies" and short-range drones for asset surveillance and to discourage the activity of oil theft. Regarding drilling, Eni's approach involves: the use of the best drilling technologies, reducing the diameter of wells, managing pressure, blow-out preventer and robotic systems to prevent</p>
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				<p>and contain any oil spills.</p> <p>To enhance internal skills, Eni is committed to spreading knowledge across all the functions. Eni developed an innovative system of well barriers to decrease by one order of magnitude the probability of a blow-out event (10^{-6}). The success is measured in terms of number and volume of spills and is disclosed in our annual DNF</p>
Chemicals	Chemicals	<p>The main potential impact are linked to potential spills due to accident. All events, in terms of number and spilled volumes, are recorded in Eni HSE database.</p> <p>The magnitude of a spill impact can be low, medium or high, depending on the volume and quality of the chemicals spilled and on the vulnerability of the area where it occurs.</p>	<p>Compliance with effluent quality standards</p> <p>Measures to prevent spillage, leaching and leakages</p> <p>Emergency preparedness</p>	<p>List of potential mitigating actions listed in Annex E-D, Water Resource Management: installation devices that measure volume, pressure and pollutants; leak control and maintenance; employee training and education; procedure for anomalous or emergency situations due to pollution event; data collection and monitoring; specific audits; certification and transparency of reporting. To enhance internal skills, Eni is committed to spreading knowledge across all the functions.</p> <p>The success is measured in terms of number and volume of spills and is disclosed in our annual DNF.</p>

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market

Enterprise Risk Management

International methodologies

Databases

Tools and methods used

GEMI Local Water Tool

WRI Aqueduct

FAO/AQUASTAT

Comment

The procedures for identifying and assessing water-related risks have different level of approach. Starting from the general HSE Management System Guideline to the more detailed annexes "Risk Management" and "Water Resource Management". Annually, a report dedicated to

evaluate the water risk is carried out for each business unit (refining, power, upstream and chemicals), applying international tools and databases. Where deemed necessary, local assessment are carried out.

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

3 to 6 years

Type of tools and methods used

International methodologies

Databases

Other

Tools and methods used

Life Cycle Assessment

Internal company methods

External consultants

Comment

Eni operates along its supply chain and knows that water risks exist along its supply chain (e.g. water scarcity or water contamination).

Eni is aware of water related issues and risks thanks to an environmental risk monitoring along the supplier qualification process, driven by level of commodity code's HSE criticality. The frequency of assessment for a supplier recurs each five years, but there could be some cases where is necessary to update qualification and to do the assessment again.

Moreover these elements are going to be integrated in the group's risk strategy, through value chain specific analysis (e.g. products' lifecycle analysis) and through the implementation of the Green Sourcing Project.

Other stages of the value chain

Coverage

None

Comment

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Water is essential for our operations and its availability is thus constantly monitored, also to drive decisions regarding the most reliable water sources. In this regard is an example the EniPower power plant of Brindisi, where a program to use more reliable water sources has been put in place (see W4.3a). The central HSE function, in collaboration with the business units, carries out annually an analysis of water risk exposure taking into account the absolute quantity and the trend of water needs for the industrial operations and the availability at basin/catchment level. For this purpose we use our internal data and international tools, such as Aqueduct and FAO/Aquastat. It is noteworthy to add that results of herein technical assessments are integrated into Integrated Risk Management (IRM) process (as better explained under W3.3d and W.4.1.a)
Water quality at a basin/catchment level	Relevant, always included	The availability of good quality water is relevant as a source to produce demineralized water and steam. It is constantly monitored as part of water management at every site and the trend of quality over time is an element taken into account to elaborate, when needed, projects to replace unreliable sources. Eni, in order to preserve high quality water sources, intends to increase, over its four-year plan, the treated groundwater (TAF water) for reuse for civil or industrial purposes and, likewise, to launch initiatives for

		<p>the use of low-quality water to replace freshwater. The central HSE function, in collaboration with the business unit, carries out annually an analysis of water risk exposure taking into account the absolute quantity and the trend of water needs for the industrial operations and the availability at basin/catchment level. For this purpose, we use our internal data and international tools, such as Aqueduct and FAO/Aquastat. As under previous reply, it is noteworthy to add that results of herein technical assessments are integrated into IRM process (as better explained under W3.3d and W4.1a)</p>
<p>Stakeholder conflicts concerning water resources at a basin/catchment level</p>	<p>Relevant, always included</p>	<p>Stakeholder expectations are always considered by Eni and they are always considered in the HSE risk management process, also to preserve the safety and health of people (employees, third parties, the local community) and to safeguard the environment. During local assessment of water risk, carried out according to GEMI Local Water Tool or using internally developed questionnaires, competition for the water resources is always included.</p> <p>Moreover, as stated in Eni’s Statement on respect for Human rights, “Eni respects the rights of individuals and the local communities in which it operates, with particular reference to [...] the right to water [...]. Eni operates according to advanced criteria for environmental and public safety protection and takes human rights issues into account from the very first feasibility evaluation phases of new projects and relevant operational changes. Eni informs and engages local communities by promoting free, prior and informed consultations, in order to consider their legitimate expectations in conceiving and conducting business activities, including community investments. Eni designs and implements community grievance mechanisms as part of its efforts to foster dialogue with local communities over project developments and potential impacts.” For these reasons, Eni has set up a platform, the Stakeholder Management System, dedicated to support the management of the complex network of relationships in the territories, monitoring the expectations of the populations and the results of development projects. This tool allows to survey and visualize, through a map, the relations with each category of stakeholder, highlighting any areas for improvement, with the possibility of better investigating the potential impacts, current and emerging, tracing the presence of vulnerable groups and the presence of areas of naturalistic and/or cultural value around the areas of activity, enabling a more conscious management of the operational realities.</p>

Implications of water on your key commodities/raw materials	Not relevant, explanation provided	Oil and gas commodities/raw materials are not water intensive. However, in view of an increase of the green activities (green chemistry and green refinery), this aspect is expected to become relevant and will be included.
Water-related regulatory frameworks	Relevant, always included	Regulatory frameworks are critical and always included in the risk analysis as licenses and permits for water withdrawals and discharge are an essential aspect of operative permitting. Licenses to withdraw water and any changes in the regulatory quality limits for water discharge can ask for more expensive treatment or the need to use low quality water, which also can increase the costs of treatment to guarantee a sufficient quality for use. The tools used (for example, procedures, instructions and records) are defined, updated and archived with a diversified frequency depending on the activities to ensure their constant adequacy and effectiveness, to ensure constant monitoring of the activities and their potential impacts on the environment, also taking into account possible variations in the conduct of activities, products or existing services, regulatory developments (legal and/or voluntary) of environmental conditions and the needs and expectations of stakeholders.
Status of ecosystems and habitats	Relevant, always included	<p>Protection of the environment, based on the principles of prevention, protection, information and participation, is an essential component of how Eni operates. Particular attention is paid to the efficient use of natural resources, like water; to reducing operational oil spills; to managing waste through process traceability and control of the entire supply chain; and to managing the interaction with biodiversity and ecosystem services. The Annex E-D “Water resources management” of the HSE Management System Guidelines requires that annually the pertinent Eni corporate functions gather information from all the business units regarding the presence of sensitive watersheds and connected habitats potentially influenced by the industrial operations.</p> <p>Through the Annex E-F “Biodiversity and Ecosystems”, Eni adopts a Biodiversity and Ecosystem Services (BES) management model which incorporates the principles of the Convention of Biological Diversity, the guidelines of the main international initiatives and the implementation tools developed by the IPIECA-IOGP Biodiversity Working Group. Eni BES management model requires that biodiversity risk exposure is routinely monitored by screening new and existing sites for proximity to protected areas, key biodiversity areas and for the presence of threatened species (according to the IUCN Red List). Eni uses the results of the screening to identify the priority sites where to intervene with higher resolution investigations, by characterizing the operational and environmental context and assessing</p>

		any BES dependencies along with direct, indirect and cumulative impacts potentially associated with company's activities. Based on the outcomes of the above assessments, BES Action Plans are implemented on site to ensure the effective management of biodiversity risk.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	<p>Core strategy and methodological approach, of Eni initiatives concerning public health, based on Company experience and developed in line with international guidelines on Global Health (Health for All), are described in the Annex "Global Health" of Eni's Human Resources Management System Guidelines.</p> <p>Eni realizes the advantages which derive from health promotion activities, in terms of greater psycho-physical wellbeing for workers, an increase in the quality of work, greater attention to safety procedures and the reduction of injuries. Therefore Eni carries out health promotion activities, with the aim of increasing the Company's social responsibility, improving its image, building up employee loyalty and, last but not least, reducing the loss of work and production through injury or illness.</p>
Other contextual issues, please specify	Not considered	

W3.3c

(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always included	<p>A continuous relations with consumer associations is relevant in order to build a relationship based on transparency and trust through dialogue, cooperation and problem solving.</p> <p>Our stakeholders are first and foremost people who live in the areas where Eni works: their knowledge and sharing of their concerns and expectations are the basis of our commitment to build lasting relationships in order to contribute, together, to a sustainable development. The direct involvement of stakeholders in each phase of the activities, the promotion and sharing of common principles and dialogue are at the basis of the creation of long-term value. In carrying out the activities, the daily and proactive dialogue, in place with different stakeholders, is essential in order to establish a solid and transparent relationship of trust, which can be a promoter for shared development</p>

		<p>processes. For instance, in Eni petrochemical sector, Versalis adopts Responsible Voluntary Programs such as the Responsible Care, that is the global chemical industry’s unique initiative to improve health, environmental performance, enhance security, and to communicate with stakeholders about products and processes.</p> <p>Main customers engagement activities during the year:</p> <p>Meetings and workshops with Presidents and managers of the energy sector of national and local CA (Consumer associations) on topics such as sustainability, circular economy, reclamation and environmental remediation</p> <p>Sponsorization of CA initiatives on the issues of sustainability and the circular economy to which Eni’s senior officials have taken part, bearing witness to our initiatives in this regard</p> <p>Territorial meetings organized with the Customers’ Associations of the CNCU (Italian National Council of Consumers and Users)</p>
Employees	Relevant, always included	<p>As recognised in Eni’s mission, “Our work is based on passion and innovation, on our unique strengths and skills, on the quality of our people and in recognising that diversity across all aspects of our operations and organisation is something to be cherished.” As a consequence, Eni’s employees are regularly engaged and consulted (see also Eni’s internal communication section on Eni’s website (https://www.eni.com/enipedia/en_IT/business-model/people/enis-internal-communication.page)). To further integrate sustainability in the Board’s agenda and to reinforce awareness of the importance of sustainability for both the strategy and day-to-day business of the company, Eni signed up to the pilot phase of the UN Global Compact LEAD Board Programme, aimed at training directors on sustainability issues.</p> <p>A specific process safety standard is going to be implemented in order to give instructions related to natural risk (weather, hydraulic, hydrogeologic, seismic, volcanic and tsunami) and how to evaluate and include it in operative safety reports.</p> <p>Moreover, to engage those operating units that have achieved major improvements and the people and teams that have developed the best ideas and projects in the areas of Safety and the Environment, Eni has also put in place a special Safety and Environment Day hold yearly at the presence of the CEO, the Chairman and the HSE&Q Director.</p>
Investors	Relevant, always included	<p>The direct involvement of stakeholders in each phase of the activities, the promotion and sharing of common principles and dialogue are at the basis of the creation of long-term value for Eni. Among the main investor engagement activities during the year ESG (Environmental, Social, Governance) where themes also relating to Shareholders’ Annual meetings. Eni makes quarterly presentations of results and an annual strategy report to</p>

		<p>shareholders, engaging in one-to-one meetings and conference calls to illustrate the company's economic and operating performance and the targets of the four-year strategic plan. The investor relations department also manages the relationship with socially-responsible investors outlining the company's social and environmental performance, corporate governance and risks, the characteristics of integrated management systems and the model of co-operation with the countries in which Eni is active. After the new Board of Directors took office in 2014, the commitment to the management of sustainability issues was further strengthened through a greater diversification in terms of the professionalism, managerial experience and international outlook of the Directors, as well as via the establishment of the Sustainability and Scenarios Committee.</p>
Local communities	Relevant, always included	<p>As stated in Eni for 2018, Our stakeholders are first and foremost people who live in the areas where Eni works. This is because we are aware of the potential and actual impacts (either positive and negative) that we can exert on them and we are committed to meet their development needs, Eni includes risks affecting local communities (including water-related risks) within its Integrated Risk Assessment Process (see Eni for page 12). Water scarcity and relevant risks from the point of view of local communities are also integrated in Eni's operational Excellence Model (see Eni for page 22). This attention is also mirrored in several projects and partnerships aimed at improving access to water for local communities (see Eni for pages 60 and 61).</p> <p>Main engagement activities during the reporting year:</p> <p>Involvement of over 200 communities in the territories in which Eni operates</p> <p>Consultation activities with authorities and local communities for new exploration activities or for the development of new projects</p> <p>Collaboration with the authorities and the local communities for planning, management and realization of initiatives for the community</p>
NGOs	Relevant, always included	<p>Eni promotes a proactive dialogue with NGOs and international associations on issues of corporate responsibility and sustainability. This commitment is part of the broader relationship that we establish with all our stakeholders, aimed at creating value and sharing strategies. In this context, Eni promotes meetings and, where possible, responds to stakeholders' requests by presenting its own approach to sustainability as well as specific projects of particular relevance.</p>

		<p>One example is the dialogue with Amnesty International on activities in Nigeria: since 2009 Eni and the NGO have been talking about the protection of the human rights of the populations living near the extraction sites in Nigeria. The meeting allowed the parties to deepen various areas of discussion and in particular the potential impacts of oil spills on local communities. Eni is committed to completing remediation in areas of operational presence affected by spills, often caused by sabotage. Eni believes that the problems of the Niger Delta require a Nigerian-led multi-partner strategy. Companies, Institutions and NGOs, each in line with their respective missions, views and perspectives, must find common answers. As suggested by Amnesty International, a dedicated website (NAOC Sustainability) has been set up to present information on the technologies used to limit any oil spills, as well as data on the causes and magnitudes of oil spills in recent years. In 2016, Eni organized an internal awareness-raising workshop on security and human rights issues, involving a representative of the international secretariat of Amnesty International as a speaker. In 2018 Amnesty International published a report on the presumed impacts caused by Eni related to the management of oil spills in Nigeria. Eni has provided Amnesty International with a structured response, publishing it on its website.</p> <p>Other pertinent active partnerships: FFI, WCS. NGOs are considered when valuating water related reputational risk</p>
Other water users at a basin/catchment level	Relevant, always included	<p>Eni is aware of the opportunity represented by circular economy and, accordingly, water resources are deemed as a fundamental element toward this path. In the downstream section, consistent volumes of water are made available for industrial use (from 4.8 to 6.8 Mm3/year for the next 4 years), thanks to the groundwater treatment plants (TAF). Other water users at the basin/catchment level is fundamental to understand present and future water related risk due to competition for the water resources.</p>
Regulators	Relevant, always included	<p>The regulators are Eni's stakeholders in water related risk assessment issues, under multiple points of view: In ordinary business operations, for both new projects and existing facilities, during any step of water related risk assessment and permitting, regulators, as stakeholders, are:</p> <ul style="list-style-type: none"> • informed through objective information to demonstrate water risk assessment is mitigated and controlled through BAT or emerging techniques' application; • consulted to obtain feedback on very singular circumstances of ongoing projects' phases: Eni collaborate with regulators to decide and share the proposed solutions and alternatives. <p>Moreover, Eni participates in public consultations over regulatory changes, directly or through international associative bodies (Concawe, IOGP, Fuels Europe, ...) or national associations.</p>

River basin management authorities	Relevant, always included	The river basin management authorities are Eni's stakeholders in water related risk assessment issues, in ordinary business operations, for both new projects and existing facilities, during any step of water related risk assessment and permitting. Timely renewal of appropriate water permits is essential for our operations, thus regular engagement with river basin authorities, as regulated by local laws, is key to mitigate the risk in all our operating locations.
Statutory special interest groups at a local level	Relevant, always included	Timely renewal of appropriate water permits is essential for our operations, therefore engagement with statutory special interest groups at a local level is evaluated in order to anticipate the needs and to mitigate local risks in all our operating areas.
Suppliers	Relevant, always included	Eni has always been committed to selecting suppliers and external collaborators with appropriate professionalism and who share the company's values. The selection of reliable partners is an indispensable activity in the creation of value for shareholders, for ensuring innovation, continuous improvement, and the safeguarding of Eni's integrity and reputation in the market. To this end, the following documents have been produced: Code of Ethics, Model 231, Guidelines for the Promotion and Protection of Human Rights, and the Eni Anti-Corruption Management System (MGS.). In FY 2018, more than 8,500 suppliers were awarded contracts globally. The supplier qualification phase aims to assess, verify and monitor the technical and managerial skills, and the ethical, economic and financial reliability of a supplier on the basis of objective elements. In particular, selection is carried out by evaluating the degree of implementation of, among others, environmental protection. The Green sourcing project will aim at the identification of the levers in the supply chain for the reduction of environmental impacts and risks
Water utilities at a local level	Relevant, always included	Only a small amount of water needs in Eni are fulfilled by freshwater (less than 7%) and, of these, about 5% by municipal water. With regard to the risk associated to availability and capacity of water treatment plants, this is considered according to annex E-D to HSE Management System Guidelines, "Water resource management". Even if water utilities at local level represent a small volume for Eni, they are nevertheless important and factored in water risk assessment.
Other stakeholder, please specify	Not considered	

W3.3d

(W3.3d) Describe your organization’s process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

The procedures for identifying and assessing water-related risks have different level of approach. Starting from the general HSE Management System Guideline to the more detailed annexes "Risk Management" and " Water Resource Management". Annually, a report dedicated to evaluate the water risk is carried out for each business unit (refining, power, upstream and chemicals), applying international tools and databases. Local assessment are carried out at sites characterized by high freshwater withdrawals, that are located in water-stressed as well as water-scarce areas.

The central HSE function, in collaboration with the business unit, carries out annually an analysis of water risk exposure taking into account the absolute quantity and the trend of water needs for the industrial operations and the availability at basin/catchment level. For this purpose Eni uses its internal data and international tools, such as WRI Aqueduct. The analysis is furthermore integrated with data from Aqueduct and from FAO/Aquastat. The timeframe projections provided by these tools and databases go as far as 2050, allowing for a long term perspective analysis. The analysis is used to provide suggestions for improvements and for defining targets, that are monitored year by year. The outcome of the above activities represent an input for Eni Integrated Risk Management (IRM) process which maps and monitors Eni global risk profile as well as contributes to regularly updating the mitigation actions adopted at different levels of the organization. Specifically, within the IRM process, water related risks fall within the “emerging environmental risks” which are analysed at a global, i.e. aggregated, level, at business lines level as well as at country (of Eni presence) level. Results thereof, comprehensive of the input coming from the above technical risk management carried out by HSE, are quarterly shared with/ presented to all Eni business levels, including Eni Board of Directors.

The study is applied to operated sites and, in new projects, can be a support to ESHIA (Environmental Social Health Impact Assessment).

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, only within our direct operations

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Impacts evaluation in Eni Integrated Risk Management (IRM) process is carried out by adopting metrics that take into account the potential quantitative impacts (i.e. economic, financial or operational) as well as the potential qualitative impacts (i.e. on the environment, health and safety, social, reputation).

Impacts severity is assessed on the basis of five levels, from negligible (1) to extreme (5). However, according to Eni IRM framework, risk prioritization is more generally based on the use of multidimensional matrices so that each risk is positioned at the intersection of set values of impacts and likelihood, ranging from rare (1) to probable (5). By applying such methodology, any assessed risk is given a tier of risk ranging from 1 to 3 - where risks falling either in tier 1 or 2 are Eni top risks and definable as “substantive” within the scope of this questionnaire - and therefore monitored and treated differently (i.e. more frequently and more thoroughly).

Specifically, as to the “nature” of impacts:

- Economic-financial impact is quantified using as indicators the reduction of the net profit or cash flow. Severity thresholds (from negligible to extreme) are referred to the assumptions underlying the four-year strategic plan (then reviewed each year) and vary when applied to a project or a subsidiary or the entire group.
- Descriptive-qualitative impact is evaluated based on the effort of the top management to manage the risk (including a potential review of strategies if appropriate).
- Image & reputation impact is evaluated using as an indicator the relevant duration on selected stakeholders.
- Environmental impact is evaluated based on the effects on the environment, ecosystem and people affected, e.g. using as indicators the size of the involved area, impact on the ecosystem, inconvenience from pollution to personnel or population, etc.

- Health & safety impact is evaluated considering the effects in terms of health of both Eni and third parties' personnel, or any other individual concerned (accidents, illnesses, etc.).
- Social impacts are evaluated using as indicators any social damage on local communities and population adjacent to industrial plants, e.g. employment and workers' rights, access to basic resources, etc.

As for water related risks, as previously pointed out (under W3.3b), they are dealt within IRM process as a part of the “emerging environmental risks”. By applying IRM methodology and metrics – whereby and in general risks de-escalate when moving from project/ site/ country/ line of business level to corporate level in which the “aggregated” view is assessed - the “emerging environmental risks” have so far ranked tier 3. Therefore, although regularly mapped, updated, monitored and reported, they do not generate an “aggregated” substantive financial impact according to the Integrated Risk Management process and mapping. Nevertheless, at project/ site/ country/ line of business level, water related risks are substantive, when mapped in relative matrices, and are therefore and necessarily accompanied with mitigations such that their impacts at corporate level de-escalate accordingly. As an example of monitored risks: decreased availability, reliability and quality of water supplies as a result of climate change; extreme weather events (floods). The monitoring is limited to direct operations, as the water risks of the value chain is considered not to pose a substantial risk to our business as the majority of its key inputs are not extremely water intensive.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	3	1-25	This value has been calculated considering all Eni's productive sites. The selection of sites has been done taking into account sites located in areas characterized by a BWS higher than 40% and by a freshwater withdrawal higher than 500,000 m3 in the year 2018. Among these, local evaluations have been carried out according to the procedures described in the dedicated parts of this questionnaire. Considering all Eni productive sites, the exposed facilities represent roughly 1.5 % of total number.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive impact on your business, and what is the potential business impact associated with those facilities?

Country/Region

Italy

River basin

Other, please specify

Arco Ionico

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's annual electricity generation that could be affected by these facilities

% company's global oil & gas production volume that could be affected by these facilities

1-25

% company's total global revenue that could be affected

Less than 1%

Comment

The refinery of Taranto is located in an area that is part of the "Bacino idrografico Taranto, macroarea ARCO IONICO (rif. Piano Tutela Acque Regione Puglia tab. 3.1)".

As well as being the sole refining centre in south-east Italy and the most important hub for distributing petroleum products in this vast area, the refinery has links to the Upstream sector thanks to its direct pipeline connection with the Val d'Agri oil field in Basilicata (60.77 per cent Eni-owned). The Taranto refinery throughput represents roughly 1/5 of total Eni's refinery capacity.

Country/Region

Italy

River basin

Other, please specify

Bacino Toscana Costa

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's annual electricity generation that could be affected by these facilities

% company's global oil & gas production volume that could be affected by these facilities

1-25

% company's total global revenue that could be affected

Less than 1%

Comment

The refinery of Livorno is located in an area that is part of the "Livorno, Bacino Toscana Costa (rif. Piano Tutela acque Reg. Toscana § 2.3.4)". The refinery of Livorno produces lubricants and other specialties and is connected via a pipeline to the Calenzano (Florence) deposit. The Livorno refinery throughput represents roughly 1/5 of total Eni's refinery capacity.

Country/Region

Italy

River basin

Other, please specify

Bacino del Brenta

Number of facilities exposed to water risk

2

% company-wide facilities this represents

Less than 1%

% company's annual electricity generation that could be affected by these facilities

% company's global oil & gas production volume that could be affected by these facilities

• Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

The petrochemical plant of Porto Marghera was identified as exposed to water stress according to Aqueduct and selected as it is the facility characterized by the second highest freshwater withdrawal in Eni and the first among the facilities exposed to water stress according to Aqueduct. The total Versalis revenues represents about 6% of total Eni's revenues, while intermediates represent less than 3 %. Porto Marghera is one of the 6 plants where intermediates are produced in Versalis, therefore the total impact with respect to Eni revenues can be estimated in less than 1%.

In the Porto Marghera Plant are produced olefins and aromatics. Versalis is also planning a major investment to create a biochemistry complex at Porto Marghera.

In the same river basin is also located the bio-refinery of Venice, opened in June 2014. However, due to its low freshwater withdrawals (3% of total water withdrawals) and its current low financial impact, it is not considered for disclosure in 2019.

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Region

Italy

River basin

Other, please specify

Arco Ionico

Type of risk

Physical

Primary risk driver

Increased water stress

Primary potential impact

Fines, penalties or enforcement orders

Company-specific description

The refinery of Taranto water withdrawals are represented, for about 99%, by seawater. As a consequence of an increase of water stress, an interruption of the license for freshwater supply could be hypothesized, limited to one month during the driest period of the year.

Timeframe

4 - 6 years

Magnitude of potential impact

Low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

16,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

The financial impact was calculated making the assumption that a shortage of freshwater could impose the complete shutdown of the refinery for one month and a consequent complete loss of revenues. However, an alternative for freshwater is already present, so the actual (residual) risk is zeroed.

Primary response to risk

Secure alternative water supply

Description of response

At the refinery of Taranto is in exercise a desalination plant having the capability to produce an extra desalinated water volume if needed, therefore the freshwater volumes currently withdrawn can be promptly replaced; furthermore, the increase of desalination throughput does not need further authorizations.

Cost of response

9,420

Explanation of cost of response

The cost indicated is calculated hypothesizing the replacement of the freshwater volumes for one month (7247 cubic meter as a monthly average) with desalinated water (at a cost of 1.3 €/m³) produced by the existing plant.

Country/Region

Italy

River basin

Other, please specify

Bacino Toscana Costa

Type of risk

Physical

Primary risk driver

Increased water stress

Primary potential impact

Fines, penalties or enforcement orders

Company-specific description

Even if not identified as at risk according to the BWS criteria (BWS higher than 40%), the refinery of Livorno is totally dependent on freshwater and is located in an area where are present other water users, industrial, civil and agricultural and is characterized by a high seasonal rainfall variability. As a consequence of an increase of water stress, an interruption of the license for freshwater supply could be hypothesized, limited to one month during the driest period of the year.

Timeframe

4 - 6 years

Magnitude of potential impact

Low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

18,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

As a consequence of an increase of water stress, an interruption of the license for freshwater supply could be hypothesized, limited to one month during the driest period of the year. The indicated value is an estimate considering one month of total shutdown of the refinery and a consequent complete loss of revenues. However, a shutdown due to a water shortage has never been recorded.

Primary response to risk

Secure alternative water supply

Description of response

In case of impossibility to withdraw freshwater, it would be necessary to replace the water needs with desalinated water. This could be done through engaging with service companies present on the market. The refinery of Livorno is evaluating a water reuse project in order to decrease its dependency on freshwater. The feasibility study is currently ongoing and further details will be available by the end of 2018.

Cost of response

1,000,000

Explanation of cost of response

The feasibility study is currently ongoing and further details will be available by the end of 2018. The value indicated is an estimate of the installation and rental costs, for one month, of desalination plants needed to completely replace the freshwater needs for the refinery. However, the cost of the project of water desalination is currently being evaluated and not yet available.

Country/Region

Italy

River basin

Other, please specify
Bacino del Brenta

Type of risk

Physical

Primary risk driver

Increased water stress

Primary potential impact

Fines, penalties or enforcement orders

Company-specific description

The facility is characterized by the highest freshwater withdrawal in Eni among the facilities exposed to water stress according to Aqueduct. Versalis, the Eni chemical company, is also planning a major investment to create a biochemistry complex at Porto Marghera. A supply of water of good quality in sufficient quantity is fundamental for industrial activities, and a risk to the operations must be taken into account as the area, according to Aqueduct, is at water stress and is subject to flood and quality risk.

Timeframe

4 - 6 years

Magnitude of potential impact

Medium-high

Likelihood

Very unlikely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

0

Potential financial impact figure - maximum (currency)

30,000,000

Explanation of financial impact

Water is fundamental for the production thus, in case of lack of water, the production should be interrupted. In the unlikely hypothesis of an interruption of the production for one month due to absence of water, the impact on Eni revenues would be less than 1%. However, historical records do not report any events of water shortages, furthermore, analysing the projected change in “water demand” and in “water stress” to 2030 in a pessimistic scenario, according to Aqueduct, the scenario is not predicted to change, therefore water shortages are unlikely also in the future.

Primary response to risk

Adopt water efficiency, water re-use, recycling and conservation practices
Purchasing of new vapor generators

Description of response

Installation of new vapor generators with closed loop cooling system, in replacement of the current thermoelectric central. This response, among other benefits, could decrease the water needs by 80%.

Cost of response

50,000,000

Explanation of cost of response

The cost is an estimate of the CAPEX for replacing the thermoelectric central with new vapor generators.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Eni operates along its supply chain and knows that water risks exist along its supply chain (e.g. water scarcity or water contamination). Eni is aware of water related issues and risks through an environmental risk monitoring along the supplier qualification process, drive by level of commodity code's HSE criticality. Moreover these elements are going to be integrated in the group's risk strategy, through value chain specific analysis (e.g. products' lifecycle analysis) and through the implementation of the Green Sourcing Project.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Markets

Primary water-related opportunity

Improved community relations

Local development - access to water

Company-specific description & strategy to realize opportunity

Access to water and basic sanitation is considered a priority for development and therefore promoting safe and reliable access to water is a priority for Eni, as part of its local intervention strategy. Initiatives promoting access to water resources and improve hygiene and sanitation conditions include the building of wells, water purifying plants, water distribution networks and sewers, as well as training activities. This effort is part of Eni's commitment to contributing to achieving the 2030 UN SDG targets, by improving community water efficiency, protect watersheds and increase access to water services as a way of promoting sustainable water management and reducing risks (as expected by the 5th core element of CEO Water Mandate). An example of the strategy in action is the Collaboration Agreement signed in February 2018 between Eni and FAO (Food and Agriculture Organization of the United Nations), for the implementation of sustainability activities in favour of communities affected by the humanitarian crisis in the North East of Nigeria. The Access to Water project is the first initiative identified by the agreement, to ensure access to clean and safe water thanks to the construction of wells powered by photovoltaic systems.

RESULTS AND BENEFICIARIES

- ⌋ First well in Waru (Abuja) with a 25,000 litre tank
- ⌋ 3 water collection points with 6 taps each, to ensure maximum ease of access
- ⌋ About 4,000 people reached
- ⌋ 4 wells in the Borno State

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

28,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The improvement of community relations doesn't have a defined direct financial impact in terms of revenues (therefore financial impact it's not the scope of these activities). The figure provided (€28 million) is related with the investments expected in the period 2019-2022 to improve access to water in the countries where we operate.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

The Company's objective was to highlight improvement margins in the fresh water management in a water stressed area and to implement an action plan. The project was carried out at the Bhit and Badhra fields in PAKISTAN, in the period 2015-2017. The first step was the analysis of freshwater consumption in gas fields, by civil and industrial usage and by local communities from 7 wells, some of which suffering from water stress. The investigation highlighted areas for improvement in managing water both in infrastructures and in management practices, as well as the need to increase awareness on the importance of water resources. The main improvement actions implemented were:

- Works on the water distribution network for civil and industrial usage.
- Reuse of water from the water treatment plants for irrigation.
- Plant optimization.

- Awareness raising actions on the importance of water management in the daily tasks, among employees and local communities

The implemented actions allowed for a 40% decrease of freshwater withdrawals in 2016-2017 with respect to the previous two year period.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The total expenses of the project and its financial impact are negligible if compared to Eni' revenues, however, it represents an important result in terms of culture and good practice, that can be replicated in other sites.

Type of opportunity

Other

Primary water-related opportunity

Other, please specify

Reuse of wastewater

Company-specific description & strategy to realize opportunity

Water is essential for electric power and vapor generation for the Enipower power plants. The Enipower power plant of Ferrera Erbognone has completed in the first half of 2019 the project for the recovery of condensed water that, otherwise, were delivered to the wastewater treatment plant before the discharge to the superficial water body according to regulatory limits. The new plant allows for a saving of 10 t/h of demineralized water.

The downstream sector in Eni is characterized by a high level of efficiency and is generally well integrated in the industrial context, so the efficiency margins for improvement are limited. However, whenever possible, also relatively small projects such as that above described, are realized, in a view of continuous improvement and of water stewardship.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

335,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The financial impact indicated is the total cost to realize the project. The estimated financial data are:

IRR: 24,98 %

NPV: € 129,902

Type of opportunity

Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

The Eni multi-company site in Brindisi, where an EniPower thermoelectric power plant, a Versalis petrochemical plant and a Syndial remediation plant are located, lies in a water stressed area. During 2018, a project was implemented at this site to reduce both seawater and freshwater withdrawals. At the EniPower site, through the project, which received approval by the Italian Ministry of the Environment, a new plant has been built. It has been in operation since September 2018 and replaces both the old thermal desalination system supplied with seawater and the existing desalination modules that used freshwater from wells and the Cillarese basin. Thanks to the project, freshwater consumption can be reduced by 52%, equal to about 990,000 m³/year. The demineralised water produced is used both for thermoelectric production and in the production processes of the co-located companies. The plant continues to use seawater as the main raw material but, while ensuring the same production, it makes it possible to reduce both withdrawals by about 6 million m³ a year and the amount of chemicals needed for conditioning seawater. A further improvement provides that, as an alternative discharging into the sea, part of the contaminated groundwater, after treatment (TAF water), can be sent to the new plant and reused in the production processes of the companies co-located at the petrochemical site. It is estimated that from the second half of 2019 about 125 m³/h of treated water will be used.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The financial impact is related to the full-life Capex for the ongoing project to connect the TAF water to the new reverse osmosis plant. This allows for a reduced seawater withdrawal and an energy saving.

Type of opportunity

Other

Primary water-related opportunity

Other, please specify

Water - energy - food nexus

Company-specific description & strategy to realize opportunity

In March 2019, Eni signed a Joint Research Agreement with the Italian National Research Council (CNR) to conduct joint research in four areas of high scientific and strategic interest: nuclear fusion, water, agriculture and the Arctic ecosystem. Eni and the CNR are combining their strong technological research and development capabilities by establishing 4 joint research centres, with a total economic commitment of over 20 million euros for a duration of 5 years. One of the research centres, located at Metaponto, in Southern Italy, is dedicated to the important role of water, both as a vital resource and as an essential element for a balanced ecosystem. The President of CNR said: "The National Research Council, together with Eni, aims at accelerating the development of new technologies that can tackle global challenges, such as the relationship between energy, water, food and the environment, with solutions that are efficient, clean and with a low water footprint. The agreement, with regard to water and agriculture, aims to achieve purification and reuse of the water resources and the sustainable food production, particularly in those areas of the world where population is growing at a fast pace such as Africa".

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

20,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Eni and the CNR will establish 4 joint research centers, with a total economic commitment of over 20 million euros for a duration of 5 years. The financial figure indicated is for the whole agreement.

Type of opportunity

Efficiency

Primary water-related opportunity

Cost savings

Company-specific description & strategy to realize opportunity

The project Blue Water, carried out by Syndial and Eni upstream, aims at the treatment of produced water in order to decrease the volumes of water disposed of while reusing it for local industrial, civil or agricultural purposes. The process, patent pending, is currently authorized the

engineering design (FEED, Front End Engineering Design) for the construction of a 200 m³/h plant, operating 24/7, expected to be completed in the first half 2020.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

176,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The value indicated is the Eni investment:

NPV: 176 M€ Eni share (61%)

IRR: 24,9%

Type of opportunity

Efficiency

Primary water-related opportunity

Cost savings

Company-specific description & strategy to realize opportunity

The project Mini Blue Water, carried out by Syndial and Eni upstream, aims at the treatment of produced water of the "Centro Olio Val D'Agri - COVA" in order to recycle it and to fulfill the site industrial needs. The treated water will be connected to the industrial site by two feed lines, one for industrial water uses and the other one for demineralized water uses. The process, patent pending, is currently in the permitting step and, if the necessary authorizations will be achieved, the construction of a 72 m³/h plant, operating 24/7, is planned in 2020. The initiative is strategically based on increasing sustainability for the management of Eni Upstream produced water: the plant will meet the water needs of COVA reducing its water footprint and will at the same time reduce the impacts (economical and environmental) for the water treatment of water that cannot be re-injected and that are sent to external plant with tankers.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

44,800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The cost indicated is the full life Capex. Less than 2 years payout time is expected. The economic evaluation are based on currently disposal cost (of un-rejected produced water) and capex and opex estimated for Mini blue water plant at FEED accuracy.

CAPEX 44,8 M€

IRR 55%

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, total water accounting data and comparisons with the previous reporting year.

Facility reference number

Facility 1

Facility name (optional)

Refinery of Taranto

Country/Region

Italy

River basin

Other, please specify

Arco Ionico

Latitude

40.48

Longitude

17.19

Primary power generation source for your electricity generation at this facility

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

78,376

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

77,600

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

776

Comparison of consumption with previous reporting year

About the same

Please explain

During 2018 there were not significant changes in the refinery exercise, so the water balance remained about the same (lower than 10% changes) with respect to the previous year. It is noteworthy to mention that the refinery of Taranto, which is located in a water stress area, uses almost exclusively low quality freshwater, namely harvested rainwater and contaminated groundwater to satisfy its freshwater needs.

Facility reference number

Facility 2

Facility name (optional)

Refinery of Livorno

Country/Region

Italy

River basin

Other, please specify

Bacino Toscana Costa

Latitude

43.59

Longitude

10.34

Primary power generation source for your electricity generation at this facility

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

4,591

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

4,000

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

591

Comparison of consumption with previous reporting year

Higher

Please explain

The consumption is a little higher as the water discharge in 2018 were "normal", if compared to 2017, when a flooding occurred.

Facility reference number

Facility 3

Facility name (optional)

Porto Marghera Plant

Country/Region

Italy

River basin

Other, please specify
Bacino del Brenta

Latitude

45.44

Longitude

12.24

Primary power generation source for your electricity generation at this facility

Oil & gas sector business division

Chemicals

Total water withdrawals at this facility (megaliters/year)

332,778

Comparison of withdrawals with previous reporting year

Higher

Total water discharges at this facility (megaliters/year)

332,066

Comparison of discharges with previous reporting year

Higher

Total water consumption at this facility (megaliters/year)

712

Comparison of consumption with previous reporting year

Lower

Please explain

The water consumption is almost exclusively limited to freshwater, as the seawater is used for once-through cooling

W5.1a

(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

Facility reference number

Facility 1

Facility name

Refinery of Taranto

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

250

Brackish surface water/seawater

77,600

Groundwater - renewable

461

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

65

Comment

The groundwater withdrawal refers almost exclusively to contaminated water (458 ML) treated in a dedicated plant (TAF) and reused into the refinery productive cycle. Third party refers to municipal water for civil uses, superficial water is only rainwater.

Facility reference number

Facility 2

Facility name

Refinery of Livorno

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

4,417

Brackish surface water/seawater

0

Groundwater - renewable

53

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

121

Comment

Third party refers to municipal water for civil uses, while groundwater is from a polluted groundwater treatment plant (TAF water)

Facility reference number

Facility 3

Facility name

Porto Marghera Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

3,115

Brackish surface water/seawater

326,435

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

3,228

Comment

Third party sources include municipal water, demineralized water and steam.

W5.1b

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

Facility reference number

Facility 1

Facility name

Refinery of Taranto

Fresh surface water

0

Brackish surface water/Seawater

77,600

Groundwater

0

Third party destinations

0

Comment

The refinery is near the sea and water discharges are mainly represented by seawater

Facility reference number

Facility 2

Facility name

Refinery of Livorno

Fresh surface water

4,000

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

The refinery discharges the water into the near creek "Fosso Acque Chiare" (rif. Emas Decl. 2017-2019 §3.4)

Facility reference number

Facility 3

Facility name

Porto Marghera plant

Fresh surface water

0

Brackish surface water/Seawater

331,834

Groundwater

0

Third party destinations

232

Comment

Third party destination includes steam and demineralized water delivered to third parties

W5.1c

(W5.1c) For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name

Refinery of Taranto

% recycled or reused

51-75%

Comparison with previous reporting year

About the same

Please explain

The refinery of Taranto treats to a level suitable for industrial re-use both process water and contaminated groundwater. CDP's definition and calculation method were used

Facility reference number

Facility 2

Facility name

Refinery of Livorno

% recycled or reused

26-50%

Comparison with previous reporting year

Higher

Please explain

CDP's definition and calculation method were used. An increment was observed as a consequence of an improvement of the water discharge plant, that allowed for a higher volume of water reuse. A further increment is foreseeable as R&M is planning to enhance the reuse wastewater

in order to reduce freshwater withdrawals at the Refinery of Livorno.

Facility reference number

Facility 3

Facility name

Porto Marghera Plant

% recycled or reused

11-25%

Comparison with previous reporting year

About the same

Please explain

CDP's definition and calculation method were used. A slight decrease has been observed in the last reporting period and is anticipated in the future as a consequence of a new productive asset, that allows for lower freshwater withdrawals and consumption.

W5.1d

(W5.1d) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?

Water withdrawals – total volumes

% verified

76-100

What standard and methodology was used?

As part of the reporting external verification process, every year Eni reporting data of the sustainability and DNF are audited every year. A sample of representative sites is verified as well. The verification was planned as follows: facility #1 in 2018, #2 in 2015 and #3 in 2017. The audits are conducted by EY.

Water withdrawals – volume by source

% verified

51-75

What standard and methodology was used?

Facilities #1 and #2 are EMAS certified and the data reported are externally verified by SGS Italia.

Water withdrawals – quality

% verified

76-100

What standard and methodology was used?

As part of the reporting external verification process, every year Eni reporting data of the sustainability and DNF are audited every year. A sample of representative sites is verified as well. The verification was planned as follows: facility #1 in 2018, #2 in 2015 and #3 in 2017. The audits are conducted by EY.

Water discharges – total volumes

% verified

76-100

What standard and methodology was used?

As part of the reporting external verification process, every year Eni reporting data of the sustainability and DNF are audited every year. A sample of representative sites is verified as well. The verification was planned as follows: facility #1 in 2018, #2 in 2015 and #3 in 2017. The audits are conducted by EY.

Water discharges – volume by destination

% verified

51-75

What standard and methodology was used?

Facilities #1 and #2 are EMAS certified and the data reported are externally verified by SGS Italia.

Water discharges – volume by treatment method

% verified

Not verified

What standard and methodology was used?

Water discharge quality – quality by standard effluent parameters

% verified

51-75

What standard and methodology was used?

Facilities #1 and #2 are EMAS certified and the data reported are externally verified by SGS Italia.

Water discharge quality – temperature

% verified

Not verified

What standard and methodology was used?

Water consumption – total volume

% verified

51-75

What standard and methodology was used?

Facilities #1 and #2 are EMAS certified and the data reported are externally verified by SGS Italia.

Water recycled/reused

% verified

51-75

What standard and methodology was used?

Facilities #1 and #2 are EMAS certified and the data reported are externally verified by SGS Italia.

W6. Governance

W6.1


(W6.1) Does your organization have a water policy?










Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.


	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals	Eni's biodiversity and ecosystem services (BES) policy covers the company's relationships with stakeholders and local communities, its contribution to local development, the protection of human rights, climate strategy and ways to safeguard biodiversity and ecosystems. Eni's BES management model aligns with the strategic goals and targets of the Convention on Biological Diversity, such as drinking water supply and water related disasters risk reduction. In Eni's Sustainability Policy there is a clear link between water and climate change (Eni promotes the sustainable management of water resources in actions that are oriented towards the adjustment of the consequences of climate change); a wide description of business impact on water; a commitment to water stewardship (Eni evaluates the interaction of its activities with ecosystem services, and promotes, in particular, efficient water management, especially in areas under water stress, and the reduction of emissions in air, water and soil). In Eni's Statement on Respect for Human Rights there is an acknowledgement of the human right to water: Eni respects the rights of individuals and the local communities in which it operates, with particular reference to biodiversity, the rights to ownership and use of land and natural resources, the right to water Eni commits to operating beyond compliance throughout the projects lifecycle. Eni promotes investment projects and initiatives that combine the conservation BES with the

	<p>Commitment to align with public policy initiatives, such as the SDGs</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to water-related innovation</p> <p>Commitment to stakeholder awareness and education</p> <p>Commitment to water stewardship and/or collective action</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>sustainable development of local communities, and raises awareness on these topics through dedicated initiatives.</p> <p>Eni promotes a transparent and continuous dialogue with relevant stakeholders and partnership with conservation NGOs, and with national and international scientific institutions. In 2019 we endorsed the CEO Water Mandate and committed to adopting and implementing a comprehensive approach to water management that incorporates, over time, all six elements of the CEO water Mandate.</p> <p> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12</p>
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-  ¹Human rights statement Eni.pdf
-  ²useful links.pdf
-  ³policy_sustainability.pdf
-  ⁴rules-of-the-sustainability-and-scenarios-committee.pdf
-  ⁵Eni water screenshot.pdf
-  ⁶Mandate_Brochure.pdf
-  ⁷eni-code-of-ethics.pdf
-  ⁸Corporate-Governance-Report-2018.pdf
-  ⁹EniFor-2018-Performance-eng.pdf

 ¹⁰EniFor-2018-Decarbonization.pdf

 ¹¹Eni-Biodiversity-and-Ecosystem-Services-Policy.pdf

 ¹²EniFor-2018-eng.pdf

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board-level committee	<p>The Sustainability and Scenarios Committee (SSC) is established by the Board of Directors and is charged with the task of supporting the Board of Directors with consultative and advisory functions on matters of competence. The Chairman of the Board of Directors and the CEO may participate in Committee’s meetings. The Chairman of the Board of Statutory Auditors, or a Statutory Auditor designated by her, may also attend the meetings. Other persons, including other members of the Board of Directors or of the Company structure, may be invited by the Chairman of Committee on behalf of the Committee itself to attend the meetings in relation to individual items on the agenda.</p> <p>The Committee focuses mainly on scenarios and sustainability, with particular focus on processes, initiatives and activities to preserve the Company's commitment to sustainable development along the value chain.</p> <p>The SSC addresses the integration among strategy, evolution scenarios and business sustainability over the medium to long term and examines the scenario for the strategic plan preparation over the medium to long term. Set up in 2014, the SSC was the first example, in the Oil and Gas sector, of an integrated approach in the evaluation of sustainability and energy scenarios.</p> <p>The SSC focuses mainly on processes, initiatives and activities to preserve the Company's commitment to sustainable development along the value chain. Particular attention is paid to the respect and protection of human rights, to the environment and to the efficient use of resources.</p>

	It examines how the sustainability policy is implemented in business initiatives and it monitors the Company's position in terms of sustainability with regard to financial markets and international sustainability initiatives.
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W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	<ul style="list-style-type: none"> Monitoring implementation and performance Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy 	<p>The SSC focuses mainly on scenarios and sustainability, with particular focus on processes, initiatives and activities implemented to preserve the Company's commitment to sustainable development along the value chain. In particular is monitored the respect and protection of rights, in particular human rights, which is the foundation for the inclusive development of companies, territories and, consequently, of companies operating there.</p> <p>Among other issues monitored, reviewed and guided by the SSC with regard to sustainability: health, well-being and safety of people and communities; respect and protection of rights, particularly of the human rights, such as access to water; local development; access to energy, energy sustainability and climate change; environment and efficient use of resources, such as water; integrity and transparency; and innovation.</p> <p>The SSC analyzes the context in which Eni operates, highlighting the emerging issues of sustainability, the relevant issues and the progress compared to the targets set. This scenario analysis is approved by Eni's Board of Directors.</p> <p>In each of the twelve meetings held in 2018, the SSC discussed issues related to climate change, such as water risk, and assessed the consistency of the results achieved with the climate objectives. Specifically, Eni exposure to water risk was reviewed in some of the meetings.</p>

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Safety, Health, Environment and Quality committee

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

The Executive Vice President (EVP) of the Health, Safety, Environment & Quality (HSE&Q) Department guarantee the coordination of the Committee and holds the responsibility to supervise policy making, coordination, control and definition of standards for environment. He supervises the analysis of performance with regard to environment. He supervises regulatory developments and the preparation, updating and monitoring of the implementation of Management System Guidelines, procedures and best practices for pertinent issues. Water related issues are presented and discussed, when needed, at the Health Safety Environment and Quality Committee meeting that is held four times in a year. The HSE&Q EVP ensures the flow of information to the Top Management and the Watch Structure and ensures representation to control bodies for relevant HSE issues.

W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4

(W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

Yes

W-FB6.4a/W-CH6.4a/W-EU6.4a/W-OG6.4a/W-MM6.4a

(W-FB6.4a/W-CH6.4a/W-EU6.4a/W-OG6.4a/W-MM6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Who is entitled to benefit from these incentives?	Indicator for incentivized performance	Please explain
Monetary reward	Chief Operating Officer (COO)	Reduction of water withdrawals Water-related community project	<p>The CO Upstream has a specific objective linked to access to water, namely for the construction of water wells in Nigeria, as for the Eni-FAO agreement</p> <p>The CEO/Syndial has a specific objective linked to the increase in the amount of re-use and re-injection of water from TAF (groundwater treatment plant) compared to the total water treated by TAF (threshold: 4.6 million m³ for 2019). The treatment of water using integrated systems for intercepting the aquifer and directing the water to treatment plants for purification and reuse is fundamental to protect and preserve freshwater resources and TAF water can represent a reliable source for industrial use and an alternative to withdrawals from other water sources, thus reducing withdrawals from primary sources (e.g. surface or subsurface water). Syndial is Eni's environmental company.</p>
Recognition (non-monetary)			
Other non-monetary reward			

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Environmental policies are under HSEQ department coordination, whose role is to give company wide directions and strategy on environmental issues and to control their correct implementation.

At Eni, we believe that an open and fair exchange with institutions is the best way to legitimately contribute to creating the social, cultural and regulatory conditions that can help us to achieve our aim of creating long-term value for all our stakeholders. We present our point of view to our institutional interlocutors and talk with them - in the belief that they can make a useful contribution based on extensive experience - both on energy issues and more general policy issues - such as climate change, protecting the environment, human rights, safety - convinced that open and direct exchange enhances public understanding to the benefit of both the company and the community. In order to ensure transparency in the representation of our interests, Eni has structures in place that are permanently dedicated to Institutional Relations, so that the people delegated to manage institutional dialogue can be easily identified, while at the same time ensuring the consistency and coherence of our relational strategies. In line with legal provisions, all of our meetings with institutional representatives are recorded.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

 Annual-Report-2018.pdf

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	<p>The topics arisen from the analysis and evaluations of sustainability scenario are the basis to define Eni's strategic sustainability Guidelines, issued by the Chief Executive Officer for all business segments. These Guidelines are deployed in the four-year strategic plan and the managerial targets are defined. These also identify key and material sustainability issues, which enable the company to create value in the short, medium and long-term. These topics are represented below according to the three levers of Eni's business model (Path to Decarbonization, Operating Model, Cooperation Model). The protection of water sources are integral part of the operating model.</p> <p>In our strategic approach, we aim to reduce fresh and brackish water withdrawals increasing the use of produced water and implementing of projects of water reuse for industrial or civil uses.</p> <p>According to sustainable remediation principles, Syndial is committed to reuse treated groundwater (TAF water) for industrial or civil uses. For example, EniPower and Syndial are planning the reuse of TAF water to reduce the total withdrawals of the industrial site of Brindisi, located in a water stress area in southern Italy</p> <p>With the "dual flag" approach, Eni aims to cooperate with host countries and to focus not only on the economic value of the resources of producer countries, but also on concrete support for sustainable development, such as the initiatives for access to drinkable water and sanitary services.</p>
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	<p>Eni has adopted an integrated strategy to pursue its operating objectives, combining financial robustness with social and environmental sustainability, based on: a) a path to decarbonization; b) an operating model that reduces business risks as well as social and environmental impacts; c) a host country cooperation model based on long-lasting partnerships. Accordingly, environmental</p>

			<p>protection is among the fundamental values within the Eni business model. Eni pursues the efficient management of water, especially in water stressed areas and performs an annual mapping and monitoring of water risks and drought scenarios to define long-term actions, also to prevent and mitigate the effects of climate change.</p> <p>Projects for produced water reinjection and valorisation and the dual flag model are integral part of Eni strategic plan, as well as studies of water resiliency carried out at refining sites, projects for TAF water reuse and for withdrawals reduction. An example of cooperation model is the Eni – FAO agreement, where FAO will provide support in identifying the areas of intervention for the freshwater wells as well as technical expertise and know-how in the targeted areas, whereas Eni will drill the boreholes and provide them with photovoltaic power systems, including training for their use and maintenance for long term sustainability</p>
Financial planning	Yes, water-related issues are integrated	5-10	<p>At business unit level, several studies include the financial planning of projects related to water, aimed at reducing freshwater withdrawals, increase produced water reinjection (upstream), treatment and reuse of contaminated groundwater.</p> <p>Community investment for projects of access to water and sanitary services are integral part of Eni financial planning, as well as expenditures for withdrawals, monitoring and treatment and water injection.</p>

W7.2

(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

34

Anticipated forward trend for CAPEX (+/- % change)

52

Water-related OPEX (+/- % change)

20

Anticipated forward trend for OPEX (+/- % change)

8

Please explain

28% increase of total expenditure is anticipated for 2019. The water-related expenditures include:

- water supply, desalination and cooling systems
- wastewater monitoring and treatment
- water injection and re-injection plants.

W7.3

(W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?

	Use of climate-related scenario analysis	Comment
Row 1	Yes	The review performed at the end of 2018 indicated that the internal rates of return of Eni’s ongoing projects in aggregate should not be substantially affected by a carbon pricing mechanism. The sensitivity test performed at Eni’s oil&gas CGUs (Cash Generating Units) under the IEA SDS (International Energy Agency Sustainable Development Scenario) assumptions indicated the resiliency of Eni’s asset portfolio in terms of carrying amounts and fair value. The management has subjected to a sensitivity analysis the book value of all CGUs in the upstream sector, adopting the IEA SDS scenario; this stress test highlighted the substantial retention of the asset book values and no impact on fair value.

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

W7.3b

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

	Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	Other, please specify IPIECA Water Visioning / Aqueduct	As an active member of the IPIECA water working group, Eni participated to the development of a members only report: "Water Visioning: from now to 2030", a work aimed at visualising the future constraints, opportunities and possible responses in water management, as it applies to the oil and gas industry. The key threat to water security is posed by increasing water demands and changing supply availability. Water demands will increase through population and economic growth and declining supply in some areas due to over-exploitation of aquifers, pollution and the impacts of climate change. In the definition of the 2030 scenarios, the impacts from climate change are acknowledged to be influential. The water risk analysis carried out by Eni uses also decadal climate projections of water stress, as provided by Aqueduct.	The benefits provided by ecosystems, such as food, fresh water, climate regulation and nutrient recycling, are vital for the livelihood communities and for the equilibrium of the whole planet. Eni evaluates the interaction of its activities with ecosystem services, and promotes, in particular, efficient water management, especially in areas under water stress, and the reduction of emissions in water.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

Please explain

Presently water cost is identified with its price, or with the cost of licenses. A broader and comprehensive method to value water is recognized as important but not yet considered. Eni participated to the development of a study on water management with Politecnico di Milano, where a first attempt to evaluate the economic benefits associated to water efficiency is reported; in its second report, issued in 2019, it was better investigated the potential water market in Italy, that gives a better understanding of water value in Italy, where most of Eni’s freshwater withdrawals occur.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	The process to set targets and goals starts every year in October with the issue of the Chief Executive Officer (CEO) guidelines. The objectives (either qualitative or quantitative) are included in the long term plan of each business unit, defined and quantified in their 4 year strategy. The qualitative and quantitative objectives are collected at the corporate level. The business unit 4 years plans are used to define the MBO for the management. The numerical results are monitored quarterly, through the HSE data reporting, and biannually through a more descriptive and comprehensive review process, at the corporate level. Eni strategic plan is publicly communicated in March, every year. Water issues are included, in the described process, as a part of HSE performance flow that, in turn, is included in the sustainability CEO guidelines. The General principles and process flows for HSE planning, monitoring and reporting are described in the Annex J "Planning, monitoring and reporting of HSE indicators" of the HSE Management System Guidelines. This annex includes all the HSE indicators and indexes considered to be indispensable for correct measuring and evaluation of HSE performance.

			<p>The HSE indicators: are defined in terms of absolute values; provide information on performance and achieving planned objectives; can be expressed in currency or physical units. The indexes allow for a comparison of the performances and risks trends over time.</p>
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W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water recycling/reuse

Level

Other, please specify

Controlled society (Syndial)

Primary motivation

Increase freshwater availability for users/natural environment within the basin

Description of target

Syndial, 100% controlled by Eni, has a target to make available for industrial use consistent volumes of water (from 4.8 to 6.8 Mm3/year in the 2019-2022 plan) derived from its groundwater treatment plants (TAF). Low quality water can represent a reliable alternative for industrial purposes as it is not in competition with local needs (e.g. civil or agricultural) and decrease Eni's impact on the quantity/availability of primary sources such as freshwater from superficial or underground sources.

Quantitative metric

% increase in water recycling/reuse

Baseline year

2017

Start year

2016

Target year

2018

% achieved

100

Please explain

During the past plan, the objective to reach the target reuse percent of treated groundwater was completely fulfilled. In the Priolo, Porto Torres, Assemini and Brindisi plants special demineralized water production sections have been created, to be distributed to companies for industrial use. During 2018, approximately 5 Mm³ of treated water was recovered.

Target reference number

Target 2

Category of target

Other, please specify
produced water reinjection

Level

Business

Primary motivation

Reduced environmental impact

Description of target

Increase of the re-injection of produced water. Produced water typically contains high quantity of salt, in addition to other minerals, metals and organic compounds (in both aqueous and non-aqueous phases). According to best international practices (IOGP, IPIECA), produced water are re-injected to enhance the oil recovery or to dispose them of. The use of produced water allows to reduce the use of other kind of water, e.g. sea water, brackish water, thus decreasing the Eni's impact on the quantity/availability of primary sources such as brackish water or seawater.

Quantitative metric

Other, please specify

% in produced water re-injection

Baseline year

2017

Start year

2016

Target year

2018

% achieved

90

Please explain

In 2018 the produced water re-injected increased to 60%, one percent point higher with respect to the previous year, but a little less than the planned 67% (90% of target achieved). Water reinjection was 60% in 2018, leveraging on the ongoing programs in certain operational plants, in particular in Egypt (in particular, the water reinjection project was completed in the Sinai area, achieving the zero water discharge) and Ecuador

Target reference number

Target 3

Category of target

Water withdrawals

Level

Business

Primary motivation

Water stewardship

Description of target

At corporate level freshwater withdrawals are monitored and is given a indication to decrease them. Freshwater availability can be affected by physical risks (availability of sufficient quantity of water of suitable quality) regulatory, economic and reputational risks. Reduction to freshwater dependence is therefore a way to reduce these risks. This target can be achieved through a better efficiency, water reuse initiatives or the replacement of freshwater with low quality water.

Quantitative metric

Absolute reduction in total water withdrawals

Baseline year

2017

Start year

2016

Target year

2018

% achieved

100

Please explain

In line with the trend recorded in recent years, in 2018 Eni also reduced its total freshwater withdrawals by 2% compared to 2017. This result was made possible by new steam generators installed in the Porto Marghera petrochemical plant, which made it possible to reduce the amount of freshwater used in the cooling cycles. The target is set and monitored for each business unit.

Target reference number

Target 4

Category of target

Water recycling/reuse

Level

Business

Primary motivation

Water stewardship

Description of target

The target includes also the increase of water recycled for cooling purposes, but is limited to freshwater. Recycle and reuse initiatives are fundamental to increase water security as they allow for a freshwater withdrawals decrease, thus reducing the related risks (physical, economic and reputational risks)

Quantitative metric

% increase in water recycling/reuse

Baseline year

2017

Start year

2016

Target year

2018

% achieved

100

Please explain

This result was made possible by new steam generators installed in the Porto Marghera petrochemical plant, which made it possible to reduce the amount of freshwater used in the cooling cycles.

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Providing access to safely managed Water, Sanitation and Hygiene (WASH) in local communities

Level

Country level

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Improve the quality of life of local communities through the improvement of water supply and sanitation facilities. These efforts represent an essential part of Eni commitment to participate in collective efforts with civil society, intergovernmental organizations, affected communities and other business to advance water sustainability and to reduce its water related reputational risk. This is also a commitment expected by the 3th core element of CEO Water Mandate, endorsed by Eni in 2019. In North East Nigeria is present a humanitarian emergency caused by the violent Boko Haram movement and the shrinking of the Chad Lake basin, the main source of water for local communities. The crisis has triggered important migration flows in the Country and the development of informal settlements both in Abuja and in the North East where many fleeing people are pouring in. In this context, the Federal Government of Nigeria has requested support from energy companies and Eni has signed a three-year Collaboration Agreement with Food and Agriculture Organization (FAO) to foster access to safe and clean water in Nigeria by drilling boreholes powered with photovoltaic systems, both for domestic use and irrigation purposes. The project aims to contribute to the humanitarian interventions for internally displaced persons and host communities which have led to unprecedented levels of population displacements and prolonged disruption of agricultural, livestock and fishing activities

Baseline year

2018

Start year

2018

End year

2021

Progress

The collaboration addresses Nigeria's Federal Government request to Oil and Gas Companies to provide support in alleviating the sufferings of the victims of insurgency in the North East region, by launching sustainable intervention programmes that will have a positive impact on the lives of affected communities. The Access to Water project is the first initiative promoted in the FAO - Eni collaboration. Within this project, FAO will provide support in identifying the areas of intervention for the wells as well as technical expertise and know-how in the targeted areas, whereas Eni will drill the boreholes and provide them with photovoltaic power systems, including training for their use and maintenance for long term sustainability.

Eni has developed a method for evaluating the social, economic and environmental impacts of its activities locally in order to quantify the benefits generated and better direct future initiatives. The Eni Impact Tool, validated by the Politecnico di Milano, uses different methodologies to measure the change generated by a project on living conditions and resources of local communities and to assess their economic and environmental performance.

https://www.eni.com/en_IT/media/2018/02/eni-and-fao-define-initiatives-to-foster-access-to-water-in-nigeria

Goal

Engaging with local community

Level

Country level

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Access to water for local communities in the Countries where Eni operates. These efforts are part of Eni commitment to improve community water efficiency, protect watersheds and increase access to water services as a way of promoting sustainable water management and reducing risks (as expected by the 5th core element of CEO Water Mandate). In Kenya the project is carried out in collaboration with the local government and the Kenyan Ministry of Energy and Petroleum. Before embarking on any activity, Eni Pakistan and its sub-contractors contact stakeholders in the area to provide information about the project and identify potential impact on local communities. They consider opportunities for social development projects and look into services that can be provided by local suppliers.

Baseline year

2016

Start year

2016

End year

2021

Progress

Eni Kenya B.V. carried out a baseline study along the coastline of northern Kenya and nearby regions, that have historically been marginalised, affected by high morbidity and mortality rates, as well as acute shortage of access to clean water, particularly in island communities. The Lamu County, one of six coastal counties in Kenya, was identified as the one with most pressing needs.

Eni Kenya built then a desalination plant. In-house expertise helped in the design of a fully-sustainable, solar-powered reverse-osmosis unit capable of producing around 20,000 litres per day. The direct beneficiaries of the project are members of the Siyu community – an estimated 2,000 people. In periods of drought, however, the plant may help more than 6,500 per day.

Eni Pakistan is present in the Jamshoro, Dadu, Shaeed Benzirabad and the Khairpur Mirs districts and in coastal areas for exploration activities. All of these areas have severe shortages of health facilities, schools and water supplies.

Eni has developed a method for evaluating the social, economic and environmental impacts of its activities locally in order to quantify the benefits generated and better direct future initiatives. The Eni Impact Tool, validated by the Politecnico di Milano, uses different methodologies

to measure the change generated by a project on living conditions and resources of local communities and to assess their economic and environmental performance.

Goal

Providing access to safely managed Water, Sanitation and Hygiene (WASH) in local communities

Level

Country level

Motivation

Increase freshwater availability for users/natural environment within the basin

Description of goal

Eni Pakistan is located in the districts of Jamshoro and Dadu, in the district of Khairpur Mirs and in coastal areas for exploration activities. All are lacking in sanitation infrastructure, schools and adequate water supply. In the Nara Desert, in Khairpur Mirs district, the population occupies a hostile environment. Here the dunes are made of shifting sand and move rapidly – changing direction depending on where the wind is coming from – making it hard for people and animals to find their bearings. Another part of the desert has only sparse vegetation, due to lack of rain. There are only traces of irrigation and agriculture and people must travel 2-5km a day to fetch water. This is carried on foot or with animals and small carts. In order to reach the precious, mainly brackish underground water, wells are dug that are 30-150m deep and covered in mud or brick, cement and concrete. Since the water from these wells is salty, it is mainly used for animals and other domestic uses. Eni will continue its commitment to raise awareness among employees and local communities on the importance of adequately managing water resources in daily activities and furthermore, to extend access to the primary needs of local communities. This efforts are part of Eni commitment to improve community water efficiency, protect watersheds and increase access to water services as a way of promoting sustainable water management and reducing risks as expected by the 5th core element of CEO Water Mandate

Baseline year

2013

Start year

2013

End year

2021

Progress

In 2013-16, Eni Pakistan built 11 pumping systems powered by solar energy, 11 hand-pumps and two reverse-osmosis plants in the Kadanwari area, meeting the needs of 500-600 people. In addition, drinking water is provided by means of cisterns to between 2,000 and 2,500 people in the wider area. In Bhit and Badhra, Kadanwari and in the coastal areas, Eni Pakistan has set up water infrastructure such as hand-pumps, wells, cisterns for harvesting rainwater and water-storage tanks supplying 2,000 people. Eni has developed a method for evaluating the social, economic and environmental impacts of its activities locally in order to quantify the benefits generated and better direct future initiatives. The Eni Impact Tool, validated by the Politecnico di Milano, uses different methodologies to measure the change generated by a project on living conditions and resources of local communities and to assess their economic and environmental performance.

https://www.eni.com/enipedia/en_IT/international-presence/asia-oceania/enis-sustainability-projects-in-pakistan.page

Goal

Providing access to safely managed Water, Sanitation and Hygiene (WASH) in local communities

Level

Country level

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Improve the quality of life of local communities through the improvement of water supply and sanitation facilities. These efforts are part of Eni commitment to participate in collective efforts with civil society, intergovernmental organizations, affected communities and other business to advance water sustainability (as expected by the 3th core element of CEO Water Mandate)

https://www.eni.com/enipedia/en_IT/international-presence/africa/enis-sustainability-projects-in-mozambique.page?Inkfrm=asknow

Baseline year

2014

Start year

2014

End year

2022

Progress

Mozambique is characterized by very low levels of access to drinking water (13 million people, just over half of the total population) and sanitation (21.5 million people): 4.000 children die each year from diarrhoea as a result of unsafe water and poor sanitation.

In 2014, Eni East Africa conducted a needs assessment in the Province of Cabo Delgado, paying particular attention to the village of Palma: the old colonial-era water distribution system was found to be obsolete and unable to supply water to the growing population of the village (about 25,000 people).

EEA decided to launch a water access project, in coordination with local authorities and representatives of the communities involved, with a view to building a water system in two areas of Palma:

- the Quilaua district, the central location of administrative and public buildings
- the Muha district, a rapidly-growing residential area.

The starting point of the project was the completion of a geo-water survey to better understand the potential of the two sites in terms of water availability, quality and reliability.

The water system built by EEA, and delivered to local authorities in 2015, currently serves more than 4,000 people, providing 20 litres of water per person per day. The system is made up of the following elements:

- two water wells with submerged electric pumps
- two water tanks (with a capacity of 60 cubic metres)
- three public viewpoints
- a small water distribution network (around 1.2 km long)

Goal

Providing access to safely managed Water, Sanitation and Hygiene (WASH) in local communities

Level

Country level

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Improve the quality of life of local communities through the improvement of water supply and sanitation facilities. This efforts are part of Eni commitment to participate in collective efforts with civil society, intergovernmental organizations, affected communities and othe business to advance water sustainability (as expected by the 3th core element of CEO Water Mandate)

Baseline year

2014

Start year

2017

End year

2021

Progress

In 2014, Eni Angola carried out a Feasibility Study on Access to Energy and Access to Water in the provinces of Huíla and Namibe, as part of a commitment established by Eni Angola with the Ministry of Energy and Water. As a result of the study, Eni Angola designed an integrated social project of access to energy and water, health and capacity building, for two communities of the provinces of Huíla and Namibe, aiming at contributing to the improvement of their quality of life with a sustainable approach.

https://www.eni.com/enipedia/en_IT/article.page?path=/international-presence/africa&article=enis-sustainability-projects-in-angola

W9. Linkages and trade-offs

W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Decreased GHG emissions

Description of linkage/tradeoff

The replacement of seawater thermal desalination and of a membrane process with a new and efficient reverse osmosis plant, coupled with the reuse of TAF water (water from the contaminated groundwater treatment plant) will reduce the consumption of water resources (- 6 million m3 of sea water and -1 million freshwater per year) and to reduce the GHG emissions (-11500 ton CO2 per year) at the Enipower plant of Brindisi. Brindisi is located in a water stress area, and the project represent a substantial achievement in order to secure a sufficient and reliable quantity of good quality water.

Policy or action

In order to ensure long-term growth in the future, the Company must be economically, technically and environmentally efficient. Efficiency is a broad concept that includes continuous evolution, with a view to growth, the regeneration of what was built in the past, according to the new

prospects that the future is shaping and also the ability to sustain itself while eliminating waste and losses. This broad concept of efficiency is at the heart of Eni's strategy and runs throughout the Company.

Eni promotes an efficient use of water resources, especially in water stress areas, is on the path to decarbonization and of circular economy. The case of Brindisi is emblematic of how this policy comes into action: all these goals are addressed and measured in terms of reduction of water resources use, reduction of GHG emission, reuse of a low quality freshwater resource otherwise discharged to sea. Furthermore, the action is focused to a site exposed to water risk

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Environmental restoration

Description of linkage/tradeoff

Syndial, 100% controlled by Eni, has a target to make available for industrial use consistent volumes of water (from 4.8 to 6.8 Mm³/year in the 2019-2022 plan) derived from its groundwater treatment plants (TAF). This objective will produce a double benefit as it couples the treatment of groundwater with its reuse, thus decreasing the need to withdraw freshwater from other sources. Sometimes water should be treated to quality standards higher than requested by law for remediation purposes, in order to be suitable for industrial use (e.g. demineralized water).

Policy or action

Circular economy is one pillar of Eni's operating model. The path towards a circular economy represents a necessary challenge and an opportunity for Eni, in terms of both profitability and improvement in environmental performances and it involves the fundamental contribution of research and technological innovation. The Company goal to reuse TAF water contributes to the strategy goal to decrease the withdrawal from good quality sources and to an efficient management of water resources, especially in water stressed areas. The target is monitored at corporate level and in the last reporting year TAF water reuse increased by about half million cubic meters with respect to the previous year.

Linkage or tradeoff

Tradeoff

Type of linkage/tradeoff

Increased wastewater treatment

Description of linkage/tradeoff

The use of air cooling systems rather than water cooling systems has the advantage to significantly decrease the need for freshwater, however it is penalizing from an energy efficiency point of view. This solution is anyway adopted where a local water stress, present or future, is identified. In Enipower, the Ferrera Erbognone power plant adopts an air cooling systems .

Policy or action

According to its sustainability policy, Eni evaluates the interaction of its activities with ecosystem services, and promotes, in particular, efficient water management, especially in areas under water stress. The Company strategy goal to decrease the freshwater withdrawals is monitored at corporate level and, in the last reporting year, Eni reduced its total freshwater withdrawals by 2% compared to 2017.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

Yes



useful links.pdf



Annual-Report-2018.pdf



Reporting certification process.pdf



EY_EniFor-2018-eng.pdf



EY_Annual-Report-2018.pdf



EY_Annual-Report-2018 DNF.pdf

W10.1a

(W10.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1. Current state	Water withdrawals by source, produced water re-injected and groundwater treated or used in production or reinjected (TAF water) are reported in the Annual Report 2018	ISAE3000	<p>Eni sustainability data have been certified by the auditing firm EY. A limited audit was conducted in line with the criteria indicated by the International Standard on Assurance Engagements 3000 - Assurance Engagements other than Audits or Reviews of Historical Information (ISAE 3000) published in 2004 by the International Auditing and Assurance Standard Board (I.A.A.S.B.), the same body that oversees accounting standards.</p> <p>The level of assurance required by Eni is limited, which is the most common for sustainability reporting at the international level. The verification process conducted in 2018 consisted mainly in:</p> <ul style="list-style-type: none"> •a compliance analysis of the information reported in “Eni for 2018” in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) with an “in accordance-core” level of compliance and also taking into consideration the “Oil & Gas industry guidance on voluntary sustainability reporting” produced by IPIECA/API/OGP; •an analysis of the functioning of the processes underlying data management and data collection mechanisms and sustainability information; •meetings and interviews with employees of the divisions of Eni SpA; <p>According to the "Auditor's Report", included in the Annual Report, “based on the procedures performed, nothing has come to our attention that causes us to believe that the DNF of the Eni Group for the year ended on December 31, 2018 has not been prepared, in all material aspects, in accordance with the requirements of articles 3 and 4 of the Decree and the GRI standards”</p>

<p>W3. Procedures</p>	<p>Stakeholder relation as described in Enifor 2018</p>	<p>ISAE3000</p>	<p>Eni sustainability data have been certified by the auditing firm EY. A limited audit was conducted in line with the criteria indicated by the International Standard on Assurance Engagements 3000 - Assurance Engagements other than Audits or Reviews of Historical Information (ISAE 3000) published in 2004 by the International Auditing and Assurance Standard Board (I.A.A.S.B.), the same body that oversees accounting standards.</p> <p>The level of assurance required by Eni is limited, which is the most common for sustainability reporting at the international level. The verification process conducted in 2018 consisted mainly in:</p> <ul style="list-style-type: none"> •a compliance analysis of the information reported in “Eni for 2018” in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) with an “in accordance-core” level of compliance and also taking into consideration the “Oil & Gas industry guidance on voluntary sustainability reporting” produced by IPIECA/API/OGP; •an analysis of the functioning of the processes underlying data management and data collection mechanisms and sustainability information; •meetings and interviews with employees of the divisions of Eni SpA; <p>According to the "Auditor's Report", included in the Annual Report, “based on the procedures performed, nothing has come to our attention that causes us to believe that the DNF of the Eni Group for the year ended on December 31, 2018 has not been prepared, in all material aspects, in accordance with the requirements of articles 3 and 4 of the Decree and the GRI standards”</p>
<p>W6. Governance</p>	<p>As described in the Annual Report 2018</p>	<p>ISAE3000</p>	<p>According to the "Auditor's Report", included in the Integrated Annual Report, the extent of work performed was lower than that required for a full examination according to ISAE 3000 Revised and, hence, it does not provide assurance that "we have become aware of all significant matters and events that would be identified during a reasonable assurance engagement". The procedures performed on the DNF were based on EY professional judgment and included</p>

			inquiries, primarily with company personnel responsible for the preparation of the information included in the DNF, document analysis, recalculations and other procedures in order to obtain evidences considered appropriate.
W0. Introduction	As described in the Annual Report 2018	ISAE3000	According to the "Auditor's Report", included in the Integrated Annual Report, the extent of work performed was lower than that required for a full examination according to ISAE 3000 Revised and, hence, it does not provide assurance that "we have become aware of all significant matters and events that would be identified during a reasonable assurance engagement". The procedures performed on the DNF were based on EY professional judgment and included inquiries, primarily with company personnel responsible for the preparation of the information included in the DNF, document analysis, recalculations and other procedures in order to obtain evidences considered appropriate.
W7. Strategy	Scenario and Strategy as described in the Annual Report 2018	ISAE3000	According to the "Auditor's Report", included in the Integrated Annual Report, the extent of work performed was lower than that required for a full examination according to ISAE 3000 Revised and, hence, it does not provide assurance that "we have become aware of all significant matters and events that would be identified during a reasonable assurance engagement". The procedures performed on the DNF were based on EY professional judgment and included inquiries, primarily with company personnel responsible for the preparation of the information included in the DNF, document analysis, recalculations and other procedures in order to obtain evidences considered appropriate.
W8. Targets	Goals and targets as described in the Annual Report 2018	ISAE3000	According to the "Auditor's Report", included in the Integrated Annual Report, the extent of work performed was lower than that required for a full examination according to ISAE 3000 Revised and, hence, it does not provide assurance that "we have become aware of all significant matters and events that would be identified during a reasonable assurance engagement". The procedures performed on the DNF were based on EY professional judgment and included inquiries, primarily with company personnel responsible for the preparation of the

		information included in the DNF, document analysis, recalculations and other procedures in order to obtain evidences considered appropriate.
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W11. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Chief Services & Stakeholder Relations Officer	Chief Operating Officer (COO)

W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No