

# Welcome to your CDP Water Security Questionnaire 2023

## **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 69 Countries around the world and employing more than 31,000 people.

The company mission clearly expresses Eni's commitment to play a decisive role in the Just Transition process to guarantee access to efficient and sustainable energy by achieving the goal of net zero emissions by 2050, with a view to sharing social and economic benefits with workers, the value chain, communities and customers in an inclusive, transparent and socially equitable manner, taking into consideration the different level of development of the Countries in which it operates, minimising existing inequalities. Along this path, Eni is committed to become a leading company in the production and sale of decarbonized energy products, increasingly customer-oriented. Decarbonization will be achieved through the implementation and strengthening existing technologies and activities such as:

- Efficiency and digitalization in operations and customer services;
- Renewables through increased capacity and integration with the retail business;
- Biorefineries with an increasing input of raw material from waste and from an integrated agribiofeedstock production chain not in competition with food production;
- Circular economy with increased production of biomethane, use of waste products and recycling of end products;
- Blue and green hydrogen to power highly energy-intensive industrial activities and sustainable mobility;

• Natural or artificial carbon capture to absorb residual emissions through Natural Climate Solutions, including REDD+ forest conservation initiatives and CCS projects.



Gas will be an important support to intermittent sources in the energy transition.

Eni's business model is focused on creating value for all its stakeholders through a strong presence along the entire energy value chain. Eni aims to contribute, directly or indirectly, to the achievement of the Sustainable Development Creating value for all stakeholders 2021 Sustainability Report Goals (SDGs) of the United Nations 2030 Agenda, supporting a just energy transition, which responds with concrete and economically sustainable solutions to the challenges of combating climate change and giving access to energy in an efficient and sustainable way, for all.

In June 2021 Eni published its position on water, identified it as a strategic resource for the protection of biodiversity and human health, for social and economic development, The company therefore undertakes to define objectives to minimize its freshwater withdrawals in waterstressed areas, seeking improvement solutions and leveraging innovative technologies.

Electric Utilities (EU) water data are referred to the activities of Enipower SpA, the Eni company that produces electricity and steam power. The company has six gas-fired combined cycle power plants.

Chemical activities refer to Eni Versalis SpA, Eni's chemical subsidiary, is also Italy biggest chemical company in terms of turnover, production volumes and number of employees. The company is also at the cutting edge and in continuous evolution, and is one of the leading players in the international chemicals sector.

Eni Rewind is the Eni's environmental company that operates according to the principles of the circular economy to enhance industrial land and waste through efficient reclamation and recovery projects, with attention to the specificity of the territories. Its operational model aims at regenerating soils, waters and resources that can be recovered thanks to the scientific research and the skills of over 1000 people. The company has launched a new business that will enable Eni Waste to Fuel technology to be applied on a large scale to transform organic waste into bio oil and water.

### W-OG0.1a

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

Upstream Midstream/Downstream Chemicals Other, please specify power plants



## 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, 2022	December 31, 2022

### W0.3

### (W0.3) Select the countries/areas in which you operate.

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



Gabon Germany Ghana Greece Hungary India Indonesia Iran (Islamic Republic of) Iraq Ireland Italy Japan Kazakhstan Kenya Lebanon Libya Mexico Morocco Mozambique Netherlands Nigeria Norway Oman Poland Portugal Qatar Romania **Russian Federation** Saudi Arabia Singapore



Slovakia Slovenia Spain Sweden Switzerland Timor-Leste Tunisia Turkey Turkey United Arab Emirates United Arab Emirates United Kingdom of Great Britain and Northern Ireland United States of America Venezuela (Bolivarian Republic of)

### 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



## **W0.7**

#### (W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	IT0003132476

# 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 is vital for all sectors as it is needed for cooling , steam production, reactions and for process activities. Direct use importance will remain vital for industrial operation in the near future. Indiretc operations, 70% of good quality freshwater is used in chemistry, 10% in upstream and 15% in downstream operations. Eni has already implemented projects to decrease its dependency on good quality freshwater by implementing in some assets efficiency programs, recycle and reuse initiatives and projects for replacing it with low quality sources. For example: desalinazation plant in Egypt, use of contaminated groundwater after treatment (TAF water) in Gela refinery, Thus, Eni foresees to reduce its dependency on good quality freshwater in the future. Eni is aware of the importance of water related risks existing along its supply chain (indirect use), as freshwater is used by its contractors during plant construction, plant maintenance (hydrodynamic whashing), process and safety operations (cooling and hydrodynamic



			pressure), To mitigate the water risks in indirect uses, Eni has launched OPEN-es an open digital platfom with the aim of gathering information and improving supply chain ESG performance, focusing on water and effluents. The importance of water in the supply chain is foreseen to increase and specific interventions will be implemented to address water intensive suppliers or materials.
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 and especially in arid areas where other water sources are difficult to access, mainly for pressure maintenance and for civil/industrial purposes. Produced water is an important resource as it is used to maintain the reservoir pressures and Eni intends to increase its use for reinjection in the future . Recycled water is important to reduce the freshwater withdrawals and Eni uses contaminated groundwater after treatment (TAF water) in Gela refinery. Eni intends to increase its use in the future. Eni is aware of the importance of water related risks existing along its supply chain (indirect use), as recycled freshwater is used by its contractors during plant construction, plant maintenance (hydrodynamic whashing), process and safety operations (cooling and hydrodynamic pressure), To mitigate the water risks in indirect uses, Eni has launched OPEN-es an open digital platfom with the aim of gathering information and improving supply chain ESG performance, focusing on water and effluents. By now, there is no specific dependence identified in the supply chain regarding brackish and/or produced water therefore, on overall, recycled and brackish and/or produced water would not affect the business overall nor is predictable a change in the future,. In order to mitigate the risks of an unsustainable future, Eni has launched a series of initiatives, some of which are specifically dedicated to the management of indirect water use, with the aim of gathering information and guiding supply chain behaviour. The importance of recycled freshwater in the supply chain is foreseen to increase and specific interventions will be implemented to address water intensive suppliers or materials



# W1.2

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Continuously	At site level by diretc measure by flowmeter or estimation. This methodology is used for freshwater source, saline, produced water, third parties waters (at inlet point). The total is the sum of all measured fluxes. Values are subsequently registered in HSE database (BDHSE) biannualy, or monthly for upstream.	Water witdrawals are monitored in all operations both onshore and offshore. Each site carries out the measures or estimates due to different processes or services carried out continuosly . For example Taranto Refinery measures total volumes of water witdrawals continuosly. Total water witdrawal is and HSE indicators which is registered by the HSEQ function in the integrated HSE Database (BDHSE). Water fluxes are measured and recorded according to the Management System Guideline (MSG) "Water management" and the professional operating instruction (OPI) "Criteria and methodologies for aquiring HSE indicators" and "Sustainable Water management". The MSG and OPI identify indicators, metrics, methods and frequency of water flows measuring and accounting. The reporting takes into account the "Sustainability reporting

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



				guidance for the oil and gas industry" issued by IPIECA/API/IOGP in 2020.
Water withdrawals – volumes by source	100%	Continuously	Direct measure by flowmeters: this methodology is used for freshwater source, saline, produced water, third parties waters (at inlet point). or estimation from pump capacity. (seawater). The total is the sum of all measured fluxes. Values are subsequently registered in HSE database (BDHSE) biannualy, or monthly for upstream.	Water witdrawals are monitored in all operations both onshore and offshore. Each site carries out the measures or estimates due to different processes or services . For example Taranto Refinery measures water volumes continuosly. Water witdrawal is and HSE indicators which is registered by the HSEQ function in the integrated HSE Database (BDHSE). Water fluxes are measured and recorded according to the Management System Guideline (MSG) "Water management" and the professional operating instruction (OPI) "Criteria and methodologies for aquiring HSE indicators" and "Sustainable Water management". The MSG and OPI identify indicators, metrics, methods and frequency of water flows measuring and accounting. The reporting takes into account the "Sustainability reporting guidance for the oil and gas industry" issued by IPIECA/API/IOGP in 2020.
Produced water associated with your oil & gas sector activities - total	100%	Continuously	Direct measure by level measurment devices, highly tecnological flow measurement systems, pump capacity, computation, estimation. The total volume	Produced water is monitored in all upstream operations both onshore and offshore. Each upstream site carries out the measures or estimates . Produced



volumes [only oil and			is calculated as the sum of discharged and	water is an HSE indicator which is
gas sector]			re-injected produced water. Injected	registered by the HSEQ function in the
			produced water is measured or estimated	integrated HSE Database (BDHSE).
			on the basis of the pump capacity. Values	Produced water is measured and
			are subsequently registered in HSE	recorded according to the Management
			database (BDHSE) monthly.	System Guideline (MSG) "Water
				management" and the professional
				operating instruction (OPI) "Criteria and
				methodologies for aquiring HSE
				indicators" and "Sustainable Water
				management". The MSG and OPI identify
				indicators, metrics, methods and
				frequency of water flows measuring and
				accounting. The reporting takes into
				account the "Sustainability reporting
				guidance for the oil and gas industry"
				issued by IPIECA/API/IOGP in 2020.
Water withdrawals	100%	Monthly	Quality of water withdrawals is generally	Quality of water withdrawal is monitored
quality			measured via physical, chemical and	in all operations both onshore and
			biological analysis. The analysis are	offshore at site level though specific
			carried out according to official analytical	measures . For example Taranto refinery
			methods, national (e.g. defined by the	monitors the quality of incoming sea
			Italian agency IRSA CNR) or international	water, on a monthly basis ; drinking
			(e.g. ASTM, ISO, US-EPA). Quality data	water; groundwater in accordance with
			are registered in HSE database (BDHSE)	the concessions and the reclamation
			biannually.	process . Quality of water withdrawal is a
				HSE indicator which is registered by the
				HSEQ function in the integrated HSE
				Database (BDHSE) biannually. Quality of



				water is measured and recorded
				according to the MSG "Water
				management" and the professional
				operating instruction (OPI) "Criteria and
				methodologies for aquiring HSE
				indicators". The OPI indicates which
				pollutants to be sampled and the number
				of sampling for industrial wastewater
				.These must be periodically detected by
				measure, estimate or calculation. The
				reporting takes into account what
				indicated in the "Sustainability reporting
				guidance for the oil and gas industry"
				issued by IPIECA/API/IOGP in 2020.
Water discharges -	100%	Continuously	Direct measure by flowmeters and	Total water discharge is monitored in all
total volumes			computation as the sum of discharges to	operations both onshore and offshore.
			all different destinations.	Each site carries out the measures and
				computation in function of the final
				destination. As an example Taranto
				refinery never sends its discharges via
				tank- truck. In Taranto refinery water
				discharges are measured continuosly, by
				flowmeters, liquid discharges are
				weighted before being accounted in HSE
				database BDHSE biannually. Water
				discharges are measured and recorded
				according to the Management System
				Guideline (MSG) "Water management"
				and the professional operating instruction



				(OPI) "Criteria and methodologies for aquiring HSE indicators" and "Sustainable Water management". The MSG and OPI identify indicators, metrics, methods and frequency of water flows measuring and accounting. The reporting takes into account the "Sustainability reporting guidance for the oil and gas industry" issued by IPIECA/API/IOGP in 2020.
Water discharges – volumes by destination	100%	Continuously	Directly measured by flowmeters. In rare cases: esitimated by computation from mass balance or estimation from pump capacity. Water discarges can be estimated even by "Water tankers counting". As an example in Taranto refinery water discharges are measured continuosly, by flowmeters.	Water discharges by final destination is monitored in all operations both onshore and offshore wherein final destinations are sea, surface basins, sewage. Water discharges are treated before being discharged. Each site measures and rarely computes discharge. Water discharge is a HSE indicator which is registered by the HSEQ function in the integrated HSE Database (BDHSE) biannually. Water discharge by destination are measured and recorded according to the Management System Guideline (MSG) "Water management" and the professional operating instruction (OPI) "Criteria and methodologies for aquiring HSE indicators" and "Sustainable Water management". The MSG and OPI identify indicators, metrics,



				methods and frequency of water flows measuring and accounting. The reporting takes into account the "Sustainability reporting guidance for the oil and gas industry" issued by IPIECA/API/IOGP in 2020.
Water discharges – volumes by treatment method	100%	Continuously	It is directly measured by flowmeters. In rare cases, it is registered by computation from mass balance or estimation from pump capacity. As an example in Taranto refinery water discharges by treatment method are measured continuosly, by flowmeters,	All water discharges are treated as to fulfil local or international limits or, in absence, in complinace with the best available internationally recognized. practices (IPIECA, IMO, IOGP, IFC). Eni does not register in BDHSE the discharge volumes by single treatment method, however all discharges are measured and monitored in terms of quality and volumes in order to comply with laws and permits at national/local level. At each treatment facility, the water discharged volumes are monitored at each single treatment unit prior to be discharged. If water is discharged to a third party treatment facility, it is monitored to fulfil the parameters dictated by the receiving facility and in respect of local regulations The Taranto Refinery treates all its waste water with a water treatment system called "TAE", operating a chemical- physical and biological treatment that complies with the national current



				legislation. The volumes of water are monitored and measured, up to end
				dscharge point
Water discharge quality – by standard effluent parameters	100%	Daily	Direct measure (chemical analysis or instrumental measurement depending on the parameter). Measured parameters are: hydrocarbons, BOD, COD, SST, Total Nitrogen, As, Cd, Cr, Cu, Ni, Hg, Pb, Zn, Dichloromethane, pentachlobenzene, halogenated organic compounds, dioxins and furans, pH, temperature, electrical conductivity. In Taranto refinery standard parameters monitored also include COD (daily), BOD and SST (weekly). Ph, conductivity, temperature and flow rate are continuously monitored.	Monitored and measured up to end dscharge point Water discharge quality is monitored in all operations both onshore and offshore. Specific measures are carried out depending on the business unit and site due to different processes or services carried out. In all operations, both onshore and offshore, water discharges are treated in compliance of local and/or international laws, in Italy also in line with permits, which set thresholds stated under permits issued by Competent authorities or, in absence, in compliance with the best available recognized international practices (e.g. IPIECA, IMO ). Standard effluent parameters are registered by the HSEQ Corporate into BDHSE system, annually or biannually. Local measures can occurr dayly or weekly, as in Taranto refinery. For the Taranto Refinery, the quality of the discharged water is monitored in accordance with the provisions of the Site AIA in force (Ministerial Decree 92 of 03 14 2018 - ref. prescriptions [70] and
				[71] of the PIC and par. 4 and 11.3 of the PMC).



Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	100%	Daily	Method of measurement: Direct measure (chemical analysis or instrumental measurement depending on the parameter). Priority substance are: hydrocarbons, BOD, COD, SST, Total Nitrogen, pH, temperature, electrical conductivity. In Taranto refinery among the parameters monitored, there are: Benzene, Cadmium, Lead, Mercury, Nickel, PAH and Phenols (weekly).	Priority substances in water discharge are monitored in onshore and offshore operations depending on the business unit and site due to different processes or services carried out. In all operations all water discharges are treated in compliance of local and/or international laws which set thresholds stated under permits issued by Competent authorities or, in absence, in compliance with the best available recognized international practices (e.g. IPIECA, IMO ). All quality indicators are monitored and registered by the HSEQ Corporate into the Integrated HSE Database (BDHSE) system annually or biannually. For the Taranto Refinery, the quality of the discharged water must comply with the provisions of the Site AIA in force (Ministerial Decree 92 of 03.14.2018 - ref. requirements [70] and [71] of the PIC and par. 4 and 11.3 of the PMC). At Taranto refinery frequency of measures is stated in the authorization PMC-AIA; and can be daily or weekly depending on the parameter.
Water discharge quality – temperature	100%	Continuously	Temperature is monitored in continuous (24h/day) using probes in situ.	Temperature of water discharges must fulfil local and/or international limits, such as thresholds stated under permits issued



				by Competent authorities (i.e. Environmnetal Integrated Authorization, AIA in Italy) or, in absence, in comliance of the best available internationally recognized practices (e.g. IPIECA, IMO). Temperature is monitored in the water discharge at discharge point and in the receiving water body at a distance from discharge ponit fixed by permit. For example a threashold limit for water discharge temperature in sea is 35°C and 32° within 1 km from the discharge point.
Water consumption – total volume	100%	Other, please specify Biannual, but in Taranto refinery monthly	Water consumption is computed as difference from water withdrawals and water discharges	Water consumption is monitored in all operations both onshore and offshore. Each site carries out the computation. As an example at Taranto refinery measuring of consumption is monthly. Water consumption is a HSE index which is registered by the HSEQ function in the integrated HSE Database (BDHSE) biannually. Water discharge by destination are measured and recorded according to the Management System Guideline (MSG) "Water management" and the professional operating instruction (OPI) "Criteria and methodologies for aquiring HSE indicators" and "Sustainable Water management". The MSG and OPI identify indicators, metrics,



				methods and frequency of water flows measuring and accounting. The reporting takes into account the "Sustainability reporting guidance for the oil and gas industry" issued by IPIECA/API/IOGP in 2020.
Water recycled/reused	100%	Continuously	Recycle/Reuse is directly measured by flowmeter or estimated by mass balance or project design data. Re-injected produced water is measured or estimated on the basis of the pump capacity.	All volumes of water reused or recycled are measured. As an example at Taranto refinery measuring is monthly. The water volumes recycled for cooling are not included except for the chemical sector, responsible for over 60 % of Eni's total freshwater withdrawals. In upstream operations, the recycled water is mainly referred to produced water reused for enhanced oil recovery, and is generally direct measured, computed or estimated. The total volume is calculated as the sum of discharged and re-injected produced water; that, in turn are measured or estimated on the basis of the pump capacity. Water recycle/reuse is a HSE indicator which is registered by HSEQ function in the integrated HSE Database (BDHSE) biannually. Water discharge by destination are measured and recorded according to the Management System Guideline (MSG) "Water management" and the professional operating instruction



				(OPI) "Criteria and methodologies for aquiring HSE indicators" and "Sustainable Water management".
The provision of fully- functioning, safely managed WASH services to all workers	100%	Yearly	Periodical medical examinations of health surveillance refer to annual medical surveillance plans.	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 Health Management System Guideline. The health management system is implemented in all Eni companies, in Italy and abroad. Medical examinations performed for Eni employees is part of medical surveillance plans, carried out by company health facilities and by private and public health systems.

## W1.2b

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

Volume	Comparison	Primary reason for	Five-	Primary reason for	Please explain
(megaliters/year)	with previous	comparison with	year	forecast	
	reporting year	previous reporting	forecast		
		year			



Total	1,467,743	Lower	Increase/decrease in	Lower	Increase/decrease	Total withdrawals decreased by 15% in 2022
withdrawals			business activity		in business activity	with respect to 2021, primarly for a decrease in
						sea water withdrawals (the 98%) which has
						been recorded in chemical and upstream
						sectors where seawater is primarly used for
						cooling and drilling.
						Seawater reduction is due to operative
						shutdown at Porto Marghera petrochemical
						plant and Taranto Refinery , and lower
						production at the Gela refinery, Angola SpA's
						exit from the domain and ILCV SpA's exit from
						the domain.
						Further, brackish water and freshwater
						withdrawals have decresaed in 2022 by 32%
						(together) vs 2021. Produced water has
						decresed by 27% in 2022 vs 2021 while re-
						injection of produced water amounts to 59% in
						2022, +1% vs 2021. Withdrawals reductions
						are due to improvement in efficiency,
						divestment of assets and maintenance cycle
						or temporary variations from the usual
						configuration (for example testing reasons).
						In the 5-year forecast Eni has planned to
						reduce its water withdrawal, and in particular
						to pursue initiatives that replace freshwater
						withdrawals by using seawter, low-quality
						water, such as treated water or desalinated
						water, but also to increase recycle of
						freshwater. Threshold: <10% is "about the



						same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total discharges	1,363,141	Lower	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	Discharged water volumes decreased by 16% in 2022 with respect to 2021, in line with lower total water withdrawals, primarly for a decrease in sea water discharges (the 98%) which has been recorded in chemical and upstream sectors. Water discharges variations are due to an increase in efficiency of processes, closure or divestment of facilities, normal oscillation due to maintenance cycle or temporary variations from the usual configuration (for example testing reasons). In the 5-year forecast Eni has planned to reduce the produced water of 19% by increasing the re-injected produced water by 10% and by divesting on water intensive technologies . Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total consumption	104,602	About the same	Increase/decrease in business activity	About the same	Increase/decrease in business activity	Total consumption is calculated company-wide as difference between water withdrawals and water discharges. Total water consumption decreased by 3% in 2022 vs 2021. This lower consumption has to be considered a normal oscillation related to maintenance cycle or temporary variations in production, in line with variations observed in water withdrawals and water discharges. The water volume



			consumed remained constantly under 10% of
			total water withdrawn in the last 6 years thus
			we can reasonably expect that this value will
			not change significantly. Threshold: <10% is
			"about the same"; 10-20% is higher or lower;
			>20% is "much higher or much lower"

# 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), how do they compare to the previous reporting year, and how are they forecasted to change?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five- year forecast	Primary reason for forecast	Please explain
Total withdrawals - upstream	233,160	Much Lower	Facility closure	Lower	Facility closure	Total withdrawals decreased by 25% in 2022 with respect to 2021, primarly for a decrease in sea water withdrawals (- 26%) and freshwater withdrawals (- 45%) where seawater is primarly used for cooling and drilling. Produced water has decresed by 25% in 2022 vs 2021 while re-injection of produced water amounts to 59% in 2022, +1% vs 2021. Withdrawals variations are primarly due to closure or divestment of facilities in Angola, and increase in efficiency of processes in Nigeria. In the 5-year forecast Eni has planned to



						reduce its water withdrawals through divestment in water-intensive technologies, and by replacing freshwater withdrawals by using seawater, low-quality water, such as treated water or desalinated water, but also to increase recycle of freshwater. In Egypt desalinated water has totally replaced freshwater withdrawals at the Zohr plant, thus contributing to reduce the total water withdrawals. A higher seawater withdrawal and re-injection of produced water are expected in future due to a likely increase of off-shore activities and to the intention of replacing freshwater use. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total discharges – upstream	168,805	Much Lower	Facility closure	Lower	Increase/decrease in business activity	Discharged water volumes decreased by 35% in 2022 with respect to 2021, in line with lower total water withdrawals, primarly for a decrease in sea water discharges (-26%) and produced water (-25%), while re-injection of produced water amounts to 59% in 2022, +1% vs 2021. Water discharges variations are due to variations are primarly due to closure or divestment of facilities in



						Angola, but also to increase in recycled water of 44%. In the 5-year forecast Eni has planned to reduce the produced water of 19% by increasing the re-injected produced water by 10% and by divesting on water intensive technologies , so Eni expects a decrease in water discharges in the next 5 years. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total consumption – upstream	64,355	Higher	Increase/decrease in business activity	About the same	Increase/decrease in business activity	Total water consumption in 2022 increased by 19% vs 2021 in line with variations observed in water withdrawals and water discharges as an effect of facility closure in Angola. Changes are expected in the near future, in part due to divesting on water-intensive technologies and in part due to effciency programs in the next 5 years. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total withdrawals - midstream/downstream	130,511	Lower	Increase/decrease in efficiency	About the same	Increase/decrease in business activity	Total withdrawals in 2022 decreased by 15% vs 2021 mainly in the refining sector as a consequence of a reduction of 16% in seawater



						withdrawal and of 15% in freshwater
						withdrawals.
						Reduction in seawater occurred in
						refinery of Taranto due to maintenance
						shutdown and lower production in
						refinery of Gela.
						Refineries of Sannazzaro, Livorno and
						Taranto have reduced their freshwater
						withdrawals in 2022 by at least 13% vs
						2021 thank to water reuse and
						desalinated water use.
						5-years forecast plans that traditional
						refineries will continue decreasing
						freshwater withdrawals by replacing it
						with low-quality water like seawater or
						treated water. Beside, bio-refinieries
						will increase their water withdrawals
						due to increase in refinery
						capacity.Changes are expected in the
						near future, in part due to divesting on
						water-intensive technologies and in
						part due to effciency programs in the
						next 5 years. Threshold: <10% is
						"about the same"; 10-20% is higher or
						lower; >20% is "much higher or much
						lower"
Total discharges –	124,121	Lower	Increase/decrease in	About	Increase/decrease	Discharged water volumes decreased
midstream/downstream			efficiency	the same	in business activity	by 16% in 2022 with respect to 2021,
						mainly in the refining sector in line with



						lower total water withdrawals. Primary source of discharge is sea water (89%) . Water discharges variations in refining derive from planned production variations, normal oscillation due to maintenance cycle or temporary variations from the usual configuration du to testing activities. In the 5-year forecast Eni has planned variations in the refinery assets with potential variations in production, water withdrawals, water consumption and water discharge. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total consumption –	6,370	About the	Facility expansion	About	Increase/decrease	Total water consumption in 2022 is
midstream/downstream		same		the same	in business activity	about the same with a slight increase
						by 6% vs 2021 in line with a reduction
						in water discharge and facility
						expansion. In the 5-year forecast Eni
						has planned variations in the refinery
						assets with potential variations in
						production, water withdrawals, water
						Throshold: <10% is "about the same":
						$10-20\%$ is higher or lower: $\sim 20\%$ is
						"much higher or much lower"



Total withdrawals – chemicals	712,325	Lower	Increase/decrease in efficiency	Much Iower	Increase/decrease in efficiency	Total withdrawals decreased by 17% in 2022 with respect to 2021, primarly for a decrease in sea water withdrawals (- 20%) where seawater is primarly used for cooling. This happened in the site of Porto Marghera. In the 5-year forecast Eni has planned to reduce its freshwater withdrawals in the chemical sector with two projects for the petrochemical plant of Mantova, the site which has the highest freshwater withdrawal, (-13Mmc by 2026) which increase water recycle/reuse and use of llow-quality water. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total discharges – chemicals	704,677	Lower	Increase/decrease in efficiency	Much Iower	Increase/decrease in efficiency	Discharged water volumes decreased by 17% in 2022 with respect to 2021 in line with lower total water withdrawals primarly for a decrease in sea water discharges (the 89%). Water discharges variations are due to an increase in efficiency of processes, normal oscillation due to maintenance cycle or temporary variations from the usual configuration (for example testing reasons). In the 5-year forecast Eni has planned



						to reduce water withdrawals in the chemical sector, thus potential variations in water discharges and water consumption are possible. Further future variations in the reported volumes have to be expected as a consequence of the planned maintenance cycle of the assets. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower"
Total consumption – chemicals	7,648	About the same	Increase/decrease in business activity	About the same	Increase/decrease in efficiency	Water consumption in 2021 has been revised during HSE revision of water accounting process. Total water consumtpion decreased by 5% in 2022 vs 2021, due to improvement in water efficiency in the factory of Mantova, which is the top- user of water in Eni. In the 5-year forecast Eni will likely improve water efficiency in several plants like Mantova, Brindis, Priolo, thus Eni expects water consumtpion variations in the chemical sector. Further future variations in the reported volumes have to be expected as a consequence of the planned maintenance cycle of the assets. Threshold: <10% is "about the same";



						10-20% is higher or lower; >20% is "much higher or much lower".
Total withdrawals –	369,320	About the	Increase/decrease in	About	Increase/decrease	Power plant sector.
other business division		same	business activity	the same	in business activity	Total water withdrawals decreased by
						2% in 2022 vs 2021 thank to seawater
						and freshwater which diminuished by
						9%. Reduction occurred also in
						stressed areas. Power plants were able
						to use low quality water such as
						desalted (Brindisi power plant) or
						treated water. In the 5 year forecast
						total water withdrawals in power sector
						of Eni will keep about the same, with
						slight decrease due to some planned
						projects. Ferrara and Ravenna power
						plants have planned projects that will
						reduce witdrawals of freshwater by
						2026. Threshold: <10% is "about the
						same"; 10-20% is higher or lower;
						>20% is "much higher or much lower".
Total discharges – other	357,581	About the	Increase/decrease in	About	Increase/decrease	Power plant sector.
business division		same	business activity	the same	in business activity	Total discharges were 1% lower in
						2022 vs 2021 due to normal
						fluctuations in operation of power
						plants. Discharges are mainly seawater
						and less than 0.7% is freshwater. In the
						5 year forecast water discharges will
						likely keep about the same excepto for
						variations in the as a consequence of



						the planned maintenance cycle of the assets. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower".
Total consumption –	11,739	Much Lower	Increase/decrease in	About	Increase/decrease	Power plant sector.
other business division			business activity	the same	in business activity	Total water consumtpion decreased by 20% in 2022 vs 2021, due to a reduction in productive cycles in Ravenna power plant and a larger use of desalted water in Brindisi. In the 5- year forecast Eni will likely improve water efficiency expecially in cooling cycle but by now Eni has not forecasted water consumption in the power sector.Some variations in the reported volumes have to be expected as a consequence of planned maintenance cycle of the assets. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is
						maon nghor or maon lowor .

## W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

Withdrawals	%	Comparison	Primary reason for	Five-	Primary reason	Identification	Please explain
are from	withdrawn	with previous	comparison with	year	for forecast	tool	
	from areas			forecast			



	areas with	with water	reporting	previous reporting				
	water stress	stress	year	year				
Row 1	Yes	1-10	About the same	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	WRI Aqueduct Other, please specify Gemi Water Local Tool	Only 8% of total Eni's water withdrawals is freshwater and about 20% is located in water stressed areas. In 2022 volumes withdrawn in stressed areas are below 2% of total only, the same as 2021, but Eni intends to keep on reducing freshwater withdrawals. In the 5-years plan Eni is expected to reduce freshwater withdrawals in water stress by 7%. Water stress areas are characterized by a baseline water stress greater than 40% or that are arid, according to Aqueduct water stress scores 3, 4 or 5). Water sources whose coordinates match a water stress area according to Aqueduct, are classified as water stress sources and water withdrawals are classified accordingly. In case of freshwater used by offshore facilities, the point of freshwater



stress condition. Seawater is not sourced from water basins mapped by aqueduct. Produced water in water-stressed areas was 23.1 Mm3 in 2022, however, it is not sourced from the water basins mapped in Aqueduct, as it is associated to oil and gas reservoirs, placed well below the aquifers. Low-salinity brackish water sourced in stressed areas is 5 Mm3. Summing freshwater and low-salinity brackish water in water stressed areas, the total proportion of withdrawals is 2%. Aqueduct is used as a first screening tool to identify and 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, like for example Egypt site in the upstream sector. Local water analysis carried out in Eni sites could investigate the actual freshwater availability, and Egyptian sites did not resulted in water stress state in 2022 . In



				some sites, the local analysis has	
				been conducted using the GEMI	
				Local Water Tool for Oil and Gas.	
				HSEQ reviews water	
				withdrawals, also in water stress	
				areas, on local base biannually,	
				while a full review of water	
				witdrawals, also in water stress	
				areas, in Eni and its sectors is	
				carried out annualy.	
				In June 2021 Eni published its	
				"Position on Water". The	
				company is therefore committed	
				to setting targets to minimize its	
				freshwater withdrawals in water-	
				stressed areas, seeking	
				improved solutions, for example	
				by using low-quality water to	
				carry out its operations, such as	
				wastewater, reclaimed water,	
				rainwater or produced water,	
				reducing consumption through	
				efficiency activities and	
				leveraging innovative	
				technologies to safeguard water	
				resources. The definition of the	
				targets will be based on the	
				assassment of the stress	
				conditions of the catchment	



				areas, the sites with the greatest
				potential impact (top consumer
				sites) and the opportunities to
				contribute to local management
				activities, in synergy with local
				authorities and stakeholders.
				Threshold: <10% is "about the
				same"; 10-20% is higher or
				lower; >20% is "much higher or
				much lower".

## W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	97,860	Higher	Mergers and acquisitions	Said withdrawals in 2022 increased by 20% vs 2021 due to incorporation of two water service companies in Porto Marghera and Ravenna areas. In the 5-year forecast Eni has planned to reduce fresh surface water withdrawals exepcially in the chemical sector, which is the top user sector in Eni. For example site of Mantova, a chemical factory responsible for 51% of said withdrawals, has planned to reduce fresh surface water withdrawals by 29% (-12 Mmc) by 2026 by increasing water efficiency and using treated contaminated groundwater (TAF water). Through the



					5-year Eni intends to increase the reuse of TAF water for civil or industrial purposes and, likewise, to launch initiatives for the use of low-quality water, the use of rainwater, polluted water, wastewater or desalinated water in the future. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower".
Brackish surface water/Seawater	Relevant	1,282,532	Lower	Increase/decrease in business activity	Saline water withdrawals decresed by 16% in 2022 vs 2021, primarly for a decrease in sea water withdrawals (98% of saline water) which has been recorded in chemical and upstream sectors where seawater is primarly used for cooling and drilling. Brackish water have decresed in 2022 by 30% vs 2021, brackish water decreased in the Lybia sites because of a forced shutdown, and due to the maintenance shutdown at the Brindisi petrochemical plant and the end of the functionality tests on the seawater network . In the 5-year forecats Eni intends to increase the use of saline water to replace freshwater where available, even if produced water is a preferred source with respect to seawater. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower".
Groundwater – renewable	Relevant	22,962	Much lower	Increase/decrease in efficiency	Withdrawals of renewable groundwater volume in 2022 were 22% lower than in 2021 mainly due to lower use of water from treatment process of contaminated sites (TAF) . Renewable groundwater is mainly freshwater and, wherever



					possible, saline water sources are preferred to freshwater, therefore a trend to decrease is planned by Eni. As the distinction between renewable and non renewable water is not always a simple task, a plan to better investigate the water balances at site level has been recently started and is ongoing. Whenever possible, groundwater from contaminated sites is used in order to preserve higher quality sources, and this specific source is foreseen to increase in the near future. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower".
Groundwater – non- renewable	Relevant	1,287,523	Lower	Increase/decrease in efficiency	Non renewable groundwater is currently assumed to be only brackish deep groundwater. It is on-going the mapping of the aquifers exploited by Eni to define their renewability. In specific cases, the withdrawal of this source could be an alternative to freshwater withdrawal. It is a relevant source where no alternatives are available such as in North Africa and Central Asia. A decrease of 16% has been observed in 2022 vs 2021, and a reduction is planned in the 5- year forecast plan for low-salinity brackish water withdrawal, as this is considered a high quality water as well as high quality freshwater. An increment of its use in North Africa is forecasted due to an increase of upstream activities and the subsequent need to maintain the reservoir pressure. Brackish water increase will be anyway restrained through dedicated produced water reuse projects, (some



					already started). Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower".
Produced/Entrained water	Relevant	43,860	Much lower	Increase/decrease in business activity	A decrease occurred in 2022 of 25% vs 2021 as re- injected produced water increased and some assets were sold (Congo) or deconsolidation of Var Energi, and a review of water accounting in Egypt. Relevant changes in productive asset perimeter are forecasted in the 5-year and long-term strategy. Threshold: <10% is "about the same"; 10-20% is higher or lower; >20% is "much higher or much lower".
Third party sources	Relevant	10,335	Much lower	Increase/decrease in business activity	Third parties sources were reduced by 22% in 2022 vs 2021. The reduction is due to temporary variations in the productive assets, such as for maintenance. Third parties water is used for civil purposes (drinkable water) or can be necessary for industrial purposes (demineralized water, industrial water or purchased vapour). It is mainly used in the chemical and downstream sector. As in the dowstream sector the 5-year plans changes in the productive asset, it is likely that its use will change, anyway Eni will continue finding ways to optimise third parties water with an increasing level of integration among its assets. Threshold: <10% is "about the same"; 10- 20% is higher or lower; >20% is "much higher or much lower"


# W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	64,840	Lower	Increase/decrease in efficiency	Most of discharge into fresh surface water relates to the multiple-through cooling system in the petrochemical plant of Mantova, which is the top user of fresh surfcae water and the top user of freshwater in Eni. After use Eni needs to discharge these volumes used for cooling purposes as industrial wastewater after adequate abd by law treatment. Volumes of freshwater discharged in fresh surface water decreased by 13% in 2022 vs 2021. Mantova has reduced its freshwater withdrawals thank to a careful control of use of water, and discharges are expected to drecrease in the 5-year plan thanks to a recyle project on cooling water, which will allow a reuction of around 12Mmc by 2026. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".
Brackish surface water/seawater	Relevant	1,192,788	Lower	Increase/decrease in business activity	Total discharges in sea and brackish water decreased by 17% in 2022 vs 2021. The discharge is 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. Water discharges variations are due to an increase in efficiency of



					processes, closure or divestment of facilities, normal oscillation due to maintenance cycle or temporary variations from the usual configuration (for example testing reasons). Changes for seawater discharged are foreseable due to changes in assets. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".
Groundwater	Relevant	68,712	Much lower	Increase/decrease in business activity	In this destination are included produced water volumes reinjected into deep formations. Produced water decreased by 25% in 2022 vs 2021, while re-injection of produced water amounts to 59% in 2022, +1% vs 2021. Water discharges variations are due to variations primarly due to closure or divestment of facilities in Angola, but also to increase in recycled water of 44%. In the 5-year forecast Eni expects a decrease in water discharges in deep groundwater. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".
Third-party destinations	Relevant	18,983	Higher	Increase/decrease in efficiency	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 vapour to third parties. These streams have increased by 12% in 2022 vs 2021. This destination is mainly used in the downstream and chemical sector: in the future changes in the productive asset are predicted, so discharges to third parties will vary but always in line with the principle of an increased recovery and rcycle as low quality water. Threshold: between 5 and 10% are "lower" or "higher",



		below 5% "about the same", more than 10% "much lower"
		or "much higher".

# W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant but volume unknown					Tertiary treatment is relevant in all industrial plants or civil facilities where the organic and/or inorganic pollutants that are present need a tertiary treatment in order to fulfil the regulatory limits or, if these are absent, to guarantee no harm to the receiving body or to the wider environment, according to international best practices. Water volumes are measured at the discharge point of each wastewater plant, however the data are recorded at corporate level as an aggregate of total volume discharge, not distinguished per treatment type. Directive 2000/60/EC of European parliament and Parts II, III and IV of



				Legislative Decree 152/06, Industrial
				Emissions Directive 2010/75/EU
				(Integrated Pollution Prevention and
				Control), IFC World Bank and regional
				conventions (e.g. Barcelona and
				OSPAR convention) are law of
				reference in Eni HSE MSG for
				controlling water pollutants, which are
				managed according to national/local
				IPPC permits According to Eni MSG
				HSE each asset must have a
				sampling plan and, for each discharge
				point, the parameters and pollutants
				are analyzed. Tertiary treatment is not
				as common as secondary treatment at
				Eni's sites Threshold: between 5 and
				10% are "lower" or "higher", below 5%
				"about the same", more than 10%
				"much lower" or "much higher".
Secondary	Relevant but			Secondary treatment is relevant in all
treatment	volume			industrial plants or civil facilities where
	unknown			the organic and/or inorganic pollutants
				that are present need a secondary
				treatment in order to fulfil the
				regulatory limits or, if these are
				absent, to guarantee no harm to the
				receiving body or to the wider
				environment, according to
				international best practices. Directive



				2000/60/EC of European parliament and Parts II, III and IV of Legislative Decree 152/06, Industrial Emissions Directive 2010/75/EU (Integrated Pollution Prevention and Control), IFC	
				(e.g. Barcelona and OSPAR convention) are law of reference in Eni HSE MSG for controlling water	
				pollutants, which are managed according to national/local IPPC permits. Water volumes are measured at the discharge point of each wastewater plant, however the data. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".	
Primary treatment	Relevant but volume unknown			Primary treatment is relevant in all industrial plants or civil facilities where the organic and/or inorganic pollutants that are present need a tertiary treatment in order to fulfil the regulatory limits or, in these are absent, to guarantee no harm to the receiving body or to the wider environment, according to international best practices. Directive 2000/60/EC of European parliament	



						and Parts II, III and IV of Legislative
						Directive 2010/75/ELL (Integrated
						Pollution Prevention and Control) IFC
						World Bank and regional conventions
						(e.g. Barcelona and OSPAR
						convention) are law of reference in
						Eni HSE MSG for controlling water
						pollutants which are managed
						according to national/local IPPC
						permits. Water volumes are measured
						at the discharge point of each
						wastewater plant, however the data
						are recorded at corporate level as an
						aggregate of total volume discharge,
						not distinguished per treatment type.
						Primary treatment is for example in
						place at the wastewater treatment
						plant of offshore oil extraction and
						production facilities. Threshold:
						between 5 and 10% are "lower" or
						"higher", below 5% "about the same",
						more than 10% "much lower" or "much
						higher".
Discharge to	Relevant	1,214,623	Lower	Increase/decrease	91-99	Discharge without treatment regards
the natural				in business activity		mainly sea water discharge to ocean
environment						when seawater is used in once
without						through cooling systems. In this case
treatment						temperature is the checked quality



				parameter. Discharge to sea
				decreased in 2022 by 17% vs 2021
				mainly because of a reduction in
				saline water withdrawals that occurred
				in chemical and upstream sectorfor
				the largets part. Another relevant
				case is rainwater discharge when it is
				not contaminated, Threshold: between
				5 and 10% are "lower" or "higher",
				below 5% "about the same", more
				than 10% "much lower" or "much
				higher".
Discharge to	Relevant but			Third party destinations are a relevant
a third party	volume			destination as these include the
without	unknown			discharge, via sewer, to a treatment
treatment				facility and industrial water. Discharge
				via sewer connected to the municipal
				net is due to water used for civil needs
				and it is not accounted. Other
				discharges to third parties can be sent
				to treatment facilities outside Eni's
				perimeter: this happens mainly in the
				downstream and chemical sector
				which anyway ensures the discharge
				will be treated according to
				natinal/internationl/local laws.Directive
				2000/60/EC of European parliament
				and Parts II, III and IV of Legislative
				Decree 152/06, Industrial Emissions



				Directive 2010/75/EU (Integrated Pollution Prevention and Control), IFC World Bank and regional conventions (e.g. Barcelona and OSPAR convention) are law of reference in Eni HSE MSG for controlling water pollutants, which are managed according to national/local IPPC permits. According to Eni MSG HSE each asset must have a sampling plan and, for each discharge point, the parameters and pollutants are analyzed. So all discharges to third party destination are analysed before living Eni's perimeter
Other	Not relevant			Other discharge water treatment such as, for example, rhizofiltration are not relevant for the Company.

# W1.2k

(W1.2k) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

	Emissions to water in the reporting year (metric tonnes)	Category(ies) of substances included	Please explain
Row 1	0	Nitrates Phosphates	In chemical and downsteam sector nitrates and phosphates are monitored at site level but these measures are not registered in the HSE database BDHSE. So total quantities are not available. In



	upstream sector nitrates and phosphates are not registerd at HSE database BDHSE, but Eni has
	indicated to all its sites to start accounting in view of the new EU standard whcih is entering in force at
	the end of 2023.

# W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	132,512,000,000	1,467,743	90,282.8356190423	Revenues are taken from the Eni fact book 2022, "sales from operations". Future trend of such an indicator will depend mostly on the financial development rather than from water withdrawals. It is anyway foreseable that some technologies in Eni's future development could change water withdrawals.

# W-OG1.3

(W-OG1.3) Do you calculate water intensity for your activities associated with the oil & gas sector?  $$\mathrm{Yes}$$ 

# 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/denominator)



0.01

Numerator: water aspect

Freshwater withdrawals

#### Denominator

Barrel of oil equivalent

#### Comparison with previous reporting year

About the same

#### **Please explain**

The upstream water intensity in 2022 was as in 2021. Eni intends to decrease future water intensity by decreasing freshwater withdrawals. Water intensity, calculated as freshwater withdrawn per product unit, is a relevant indicator of water efficiency and its value is an essential part of the annual Water Risk Report prepared annually in Eni in order to map and monitor water risks and drought in present and future scenarios (2030 and 2040 according to WRI/Aqueduct) as to define long-term actions, also to prevent and mitigate the effects of climate change, in line with environmental sustainability pursued by Eni in its strategic view. The Report represents an input for the 5Yplan of Eni and is used to prioritize actions to safeguard water, according to criteria taking into account, inter alia, the productive importance of the asserts, the freshwater top consumer assets and the water stress of the basins where we operate. Decreasing freshwater intensity entails decreasing the impact of the industrial activities on freshwater per unit of production. For example, in 2022 the upstream in Egypt completed actions to reduce freshwater withdrawals in most of its sites with a consequent decrease of water intensity of productive strategic assets located in a water stress basin such as the Nile Delta. As indicated in Eni internal operating instruction, the efforts made to reduce the impact on freshwater sources can be highlighted in 3 different ways: 1 decrease of withdrawals (and the relative water intensity index), 2 increase the percentage of low-quality water out of total freshwater withdrawals, 3 consumption decrease.

Such decrease could result from: a. greater process efficiency, b. the use of larger amounts of recycled water, c. the use of desalinated water. Eni is seeking to reduce its freshwater withdrawals and recently committed to minimize its freshwater withdrawals in water stressed areas (see the Eni position on water, https://www.eni.com/assets/documents/eng/just-transition/2021/eni-e-acqua-eng.pdf), so we expect a reduction in water intensity in the future; this is in line with the operational excellence lever of Eni business model towards a just transition.. To be noted that the calculation of water intensity is based on total freshwater withdrawals, included those for cooling purposes, even if in once-through systems. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".



#### **Business division**

Midstream/Downstream

#### Water intensity value (m3/denominator)

1

Numerator: water aspect

Freshwater withdrawals

#### Denominator

Other, please specify ton of refinery throughputs

#### Comparison with previous reporting year

About the same

#### **Please explain**

Water intensity remained stable in 2022 vs 2021. The Eni intends to reduce freshwater withdrawals are expected to decrease future water intensity. A higher decrease will be recorded in the bio-refineries from 2023 as biorefineries are less water intensive. For example in 2023 water intensity for bio-refining sector is expected to be 137 m3/kton. Water intensityin 2022 is calculated as freshwater withdrawn per product unit and is a relevant indicator of water efficiency and its analysis is an essential part of the annual Water Risk Report prepared annually in Eni in order to map and monitor water risks and drought in present and future scenarios (2030 and 2040 according to WRI/Aqueduct) as to define long-term actions, also to prevent and mitigate the effects of climate change, in line with environmental sustainability pursued by Eni in its strategic view. The Report represent an input for the 5Yplan of Eni and is used to prioritize actions to safeguard water, according to criteria taking into account, inter alia, the productive importance of the asserts, the freshwater top consumer assets and the water stress of the basins where we operate. Decreasing freshwater intensity entails decreasing the impact of the industrial activities on freshwater per unit of production. For example, at the Livorno refinery, top consumer in stress area, is ongoing a project to reduce freshwater withdrawals

As indicated in Eni internal operating instruction, the efforts made to reduce the impact on freshwater sources can be highlighted in 3 different ways:



□ decrease of withdrawals (and the relative water intensity index)

□ increase of percentage of low-quality water out of total freshwater withdrawals

□ consumption decrease. Such decrease could result from:

a. greater process efficiency

b. the use of larger amounts of recycled water

c. the use of desalinated water. Eni is seeking to reduce its freshwater withdrawals and recently committed to minimize its freshwater withdrawals in water stressed areas (see the Eni position on water, so we expect a reduction in water intensity in the future; this is in line with the operational excellence lever of Eni business model towards a just transition.

To be noted that the calculation of water intensity is based on total freshwater withdrawals, included those for cooling purposes, even if in oncethrough systems. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".

#### **Business division**

Chemicals

#### Water intensity value (m3/denominator)

12

#### Numerator: water aspect

Freshwater withdrawals

#### Denominator

Other, please specify tons of product

#### Comparison with previous reporting year

Much higher

#### Please explain



Chemical production has different processes and a cumulative index for intensity t could not be very useful to understand the efficiency in water use and management over time. In the calculation of 2022 water intensity is measured in m3/ton. In the site of Mantova, Eni's and Versalis' top consumer, water intensity increased in 2022 vs 2021 but two projects are planned by 2026 to decrease its water widrawals and therefore intensity. Versalis uses also an index that highlights the efficiency of freshwater use, dependent on the volume of recycled water, that is withdrawal/(withdrawal + recycle). In this way, the freshwater intensity can be lowered by a decrease of withdrawals as well as by an increase of recycled water. Water intensity is an essential part of the annual Water Risk Report prepared in Eni to map and monitor water risks and drought in present and future scenarios (2030 and 2040 according to WRI/Aqueduct) as to define long-term actions, also to prevent and mitigate the effects of climate change, The Report represents an input for the 4Yplan of Eni and is used to prioritize actions to safeguard water, according to criteria taking into account the productive importance of the assets, the freshwater top consumers and the water stress of the basins. Decreasing freshwater intensity entails decreasing the impact of the industrial activities on freshwater. For example, at the Brindisi productive site, top consumer in stress area, is ongoing a project to reduce freshwater withdrawals.

As indicated in Eni internal operating instruction, the efforts made to reduce the impact on freshwater sources can be highlighted in 3 different ways:

□ decrease of withdrawals (and the relative water intensity index)

□ increase percentage of low-quality water out of total freshwater withdrawals

□ consumption decrease

Such decrease could result from:

- greater process efficiency

- use of larger amounts of recycled water

- use of desalinated water

Eni is seeking to reduce its freshwater withdrawals and recently committed to minimize its freshwater withdrawals in water stressed areas (as per Eni position on water), so we expect a reduction in water intensity in the future; this is in line with the operational excellence lever of Eni business model towards a just transition. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".

#### **Business division**

Other, please specify power production

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Water intensity value (m3/denominator) 0.01

#### Numerator: water aspect

Freshwater withdrawals

#### Denominator

Other, please specify kWheq kilo watt hora equivalent

#### Comparison with previous reporting year

About the same

#### **Please explain**

Water intensity in power sector remained stable in 2022 vs 2021, further it is not planned a change by 2026. Eni intends to reduce freshwater withdrawals were and will be reflected in future water intensity. The data do not take into account the renewable production (presently accounting for less than 1% of total electricity production). Water intensity, calculated as freshwater withdrawn per product unit is a relevant indicator of water efficiency and its value is an essential part of the annual Water Risk Report issued for internal use in Eni. Decreasing freshwater intensity entails decreasing the impact of the industrial activities on freshwater per unit of production. As indicated in Eni internal operating instruction, the efforts made to reduce the impact on freshwater sources can be highlighted in 3 different ways:

- □ decrease of withdrawals (and the relative water intensity index)
- □ percentage of low-quality water out of total freshwater withdrawals
- □ consumption decrease. Such decrease could result from:
- a. greater process efficiency
- b. the use of larger amounts of recycled water
- c. the use of desalinated water

Eni is seeking to reduce its freshwater withdrawals and recently committed to minimize its freshwater withdrawals in water stressed areas (see the Eni position on water), so we expect a reduction in water intensity in the future; this is in line with the operational excellence lever of Eni business model towards a just transition.

To be noted that the calculation of water intensity is based on total freshwater withdrawals, included those for cooling purposes, even if in once-



through systems. Threshold: between 5 and 10% are "lower" or "higher", below 5% "about the same", more than 10% "much lower" or "much higher".

# W1.4

#### (W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
Row 1	Yes

# W1.4a

(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
Annex XVII of EU REACH Regulation	Don't know	Eni is a complex productive company which produces fossil fuels, chemical products (plastics and elastomers), refined products, lubricants or additives for lubricants. Further, Eni can use in all its processes and plants hazardous substances for many of its ordinary activities in the direct operations. All these products can be considered hazardous as such, but the company has built a complex structure HSEQ that has the aim of measuring, monitoring and controlling all the substances used in its direct operations. This structure has the aim to prevent incidents from the use of any hazardous substances through a well-structured system of management system guidelines (MSG), procedurese and operating instructions, local bases for each operative site, central bases for each business unit and a central body (the highest level) for developing strategies, monitoring and reporting on the use of hazardous substances. MSGs comply with the national and international environmental laws in force. Appropriate working group was activated to manage the



		substitution of hazardous substances of interest (only purchased chemicals) in line with the Chemical Strategy for Sustainability. According to the internal procedures the water resource management model adopted by Eni is based on the identification, assessment and minimization of impacts on water resources and the prevention of adverse events. Eni applies the ESHIA (Environmental, Social and Health Impact Assessment) process to all projects.
Candidate List of Substances of Very High Concern for Authorisation above 0.1% by weight (EU Regulation)	Don't know	Eni is a complex productive company which produces fossil fuels, chemical products (plastics and elastomers), refined products, lubricants or additives for lubricants. Further, Eni can use in all its processes and plants hazardous substances for many of its ordinary activities in the direct operations. All these products can be considered hazardous as such, but the company has built a complex structure HSEQ that has the aim of measuring, monitoring and controlling all the substances used in its direct operations. This structure has the aim to prevent incidents from the use of any hazardous substances through a well-structured system of management system guidelines (MSG), procedurese and operating instructions, local bases for each operative site, central bases for each business unit and a central body (the highest level) for developing strategies, monitoring and reporting on the use of hazardous substances. MSGs comply with the national and international environmental laws in force. Appropriate working group was activated to manage the substitution of hazardous substances of interest (only purchased chemicals) in line with the Chemical Strategy for Sustainability. According to the internal procedures the water resource management model adopted by Eni is based on the identification, assessment and minimization of impacts on water resources and the prevention of adverse events. Eni applies the ESHIA (Environmental, Social and Health Impact Assessment) process to all projects.
Annex XIV of UK REACH Regulation	Don't know	Eni is a complex productive company which produces fossil fuels, chemical products (plastics and elastomers), refined products, lubricants or additives for lubricants. Further, Eni can use in all its processes and plants hazardous substances for many of its ordinary activities in the direct operations. All these products can be considered hazardous as such, but the company has built a complex structure HSEQ that has the aim of measuring,



		monitoring and controlling all the substances used in its direct operations. This structure has the aim to prevent incidents from the use of any hazardous substances through a well- structured system of management system guidelines (MSG), procedurese and operating instructions, local bases for each operative site, central bases for each business unit and a central body (the highest level) for developing strategies, monitoring and reporting on the use of hazardous substances. MSGs comply with the national and international environmental laws in force. Appropriate working group was activated to manage the substitution of hazardous substances of interest (only purchased chemicals) in line with the Chemical Strategy for Sustainability. According to the internal procedures the water resource management model adopted by Eni is based on the identification, assessment and minimization of impacts on water resources and the prevention of adverse events. Eni applies the ESHIA (Environmental, Social and Health Impact Assessment) process to all projects.
Federal Water Pollution Control Act / Clean Water Act (United States Regulation)	Don't know	Eni is a complex productive company which produces fossil fuels, chemical products (plastics and elastomers), refined products, lubricants or additives for lubricants. Further, Eni can use in all its processes and plants hazardous substances for many of its ordinary activities in the direct operations. All these products can be considered hazardous as such, but the company has built a complex structure HSEQ that has the aim of measuring, monitoring and controlling all the substances used in its direct operations. This structure has the aim to prevent incidents from the use of any hazardous substances through a well-structured system of management system guidelines (MSG), procedurese and operating instructions, local bases for each operative site, central bases for each business unit and a central body (the highest level) for developing strategies, monitoring and reporting on the use of hazardous substances. MSGs comply with the national and international environmental laws in force. Appropriate working group was activated to manage the substitution of hazardous substances of interest (only purchased chemicals) in line with the Chemical Strategy for Sustainability. According to the internal procedures the water resource management model adopted by Eni is based on the identification, assessment and minimization of impacts on



	water resources and the prevention of adverse events. Eni applies the ESHIA
	(Environmental, Social and Health Impact Assessment) process to all projects.

# W1.5

## (W1.5) Do you engage with your value chain on water-related issues?

	Engagement
Suppliers	Yes
Other value chain partners (e.g., customers)	

# W1.5a

#### (W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

## Assessment of supplier impact

Yes, we assess the impact of our suppliers

#### **Considered in assessment**

Basin status (e.g., water stress or access to WASH services)

Supplier dependence on water

Supplier impacts on water availability

Supplier impacts on water quality

Procurement spend

Other, please specify

Implementation of Supplier programs on water management and their ability to manage the entire value chain impact

## Number of suppliers identified as having a substantive impact

31



## % of total suppliers identified as having a substantive impact

1-25

## **Please explain**

Eni monitors the management of water resources by its suppliers through Open-es, a innovative digital platform launched in 2021 whit a model based on the Stakeholder Capitalism Metrics released by the WEF. Suppliers are required to indicate: eg. the policy and the objectives on the consumption of water resources, the amount of the water withdrawn and of the water consumed, both in general and in geographical areas with high or very high levels of "water stress". Based on the answers provided by the suppliers, those who consume the greatest volumes of water and who have declared such data are identified as "substantive". Currently, 31 suppliers were classified as "substantive". Eni, through Open-es, promotes collaborations with third parties and development services to improve the ability of suppliers to measure and report data and to optimize water management performance with a view to improving water sustainability along the entire supply chain.

# W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements	
Row 1	Yes, water-related requirements are included in our supplier contracts	

# W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

## Water-related requirement

Conducting water-related risk assessments on a regular basis (at least once annually)

## % of suppliers with a substantive impact required to comply with this water-related requirement

100%



#### % of suppliers with a substantive impact in compliance with this water-related requirement

Unknown

## Mechanisms for monitoring compliance with this water-related requirement

Grievance mechanism/Whistleblowing hotline Supplier self-assessment Supplier scorecard or rating

## Response to supplier non-compliance with this water-related requirement

Retain and engage

## Comment

With reference to water management requirements and more generally on ESG objectives, Eni has decided to adopt an inclusive strategy that involves and supports all suppliers in this common path. For suppliers with non-aligned positions related to water management, Eni through Open-es, an innovative digital platform launched in 2021 with a model based on the Stakeholder Capitalism Metrics released by the WEF, defines a development plan and support services to cover these gaps. Furthermore, in the specific code of conduct, suppliers are required to:

- minimize environmental impacts and optimize the use of energy and natural resources such as water;
- carry out its activities through responsible use of resources;

-participate in the risk assessment and environmental protection process;

- integrate sustainable environmental principles into their supply chain management

# W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

## Type of engagement

Incentivization

## **Details of engagement**

Offer financial incentives to suppliers reducing your operational water impacts through the products they supply to you



Offer financial incentives to suppliers improving water management and stewardship across their own operations and supply chain Offer financial incentives to suppliers achieving water-related targets in their supply chain

#### % of suppliers by number

100%

#### % of suppliers with a substantive impact

Unknown

## Rationale for your engagement

The Basket Bond program launched in 2022 – Sustainable Energy", created in collaboration with ELITE, a company of the Borsa Italiana/Euronext Group and Banca illimity, is the first innovative financial instrument aimed at all companies in the integrated energy supply chain, with particular attention to SMEs; companies adhering to the program will have access to financial resources – at favorable conditions based on their current and expected sustainability profile – to be used in projects and investments to achieve the UN SDGs. To date emissions have been allocated for a value of EUR 23 million and therefore, companies committed to a correct energy transition path and aiming to improve their industrial processes and business models will be able to support concrete initiatives, also in terms of efficient management and responsible for water resourcestheir processes.

## Impact of the engagement and measures of success

The concrete impact of this commitment is the significant increase in the commitment of Eni's suppliers on issues of water resource management. Indeed, suppliers can:

- improve its positioning in terms of sustainability by gaining market competitiveness, with a consequent progressive reduction in the cost of financing.

- diversify and integrate funding sources by reducing exposure to the banking channel.

- finance medium-long term investment initiatives.

get in touch and get accredited with institutional investors. The concrete impact of this engagement is the significant increase in the quality of Eni's list of suppliers, contract holders or non-contract holders, engaged with a written and mandated commitment, also on water use related issues. The measure of success of this initiative is the certainty that Eni awards contracts and works only with suppliers formally engaged and committed on the efficient use and monitoring of water. In order to be qualified and participate in competitive procedures, all Eni suppliers must register on Open-es, an innovative digital platform launched in 2021 with a model based on the Stakeholder Capitalism Metrics released by the WEF. Eni engages all suppliers giving them equal opportunities and access to initiatives and providing them with the right tools to be



sustainable according to ESG criteria. Of the more than 4000 Eni's suppliers present on Open-es, 75% of them have made their answers regarding the 2022 data transparent, including those on water consumption. Another element that measures the success of the initiative is linked to the Open-es sharing experiences area: about 1.5 k (2022) shared their success stories, projects, experiences as best practices to follow (over 1.2 k in the Planet area and over 200 in the Circular Economy area)".

## Comment

#### Type of engagement

Innovation & collaboration

#### **Details of engagement**

Encourage/incentivize innovation to reduce water impacts in products and services

Encourage/incentivize suppliers to work collaboratively with other users in their river basins toward sustainable water management Educate suppliers about water stewardship and collaboration

## % of suppliers by number

100%

## % of suppliers with a substantive impact

Unknown

## Rationale for your engagement

There are numerous tools used by Eni to engage and promote the sustainable development of its supply chain with a view to innovation and collaboration. In particular:

- EniSpace, the supplier portal created as a common space to involve Eni's supplier base in the energy transition process and sustainable development initiatives, includes a channel called Innovation Match, entirely dedicated to the competition of innovative ideas and solutions. The most interesting and applicable ideas and solutions will be the starting point for collaborations, experiments and co-design activities. Until 2022 Eni has launched around 20 calls for innovation, 80% on ESG issues to promote innovation and collaboration along the entire supply chain. - Open-es, a system initiative open to all industrial sectors, in which all companies have the opportunity to measure their sustainability



performance according to standard metrics and share their ESG profile with their customers and/or financial institutions, discuss themselves with industry benchmarks, access customized development plans to identify the priority actions to implement and, taking advantage of the platform's collaborative mechanism, identify services and solutions to improve their ESG performance and support their innovation linked to the reduction of water impacts also in products and services. All Eni suppliers with existing contracts or those invited to tender are required to register for Open-es.

Workshops: from December 2020 to 2022, Eni conducted several workshops focused on sectors in which water consumption is a key factor involving more than 400 suppliers, defining shared KPIs such as: CO2 reduction for waste transport and in the area of reclamations and disposals; the amount of recycled material for packaging; and the consequent water saving obtained in the production of the goods.

#### Impact of the engagement and measures of success

The concrete impact of this commitment is the significant gualitative increase in the list of Eni suppliers, affiliated and not, committed with written and peremptory commitment, also on issues related to the use of water. The measure of the success of this initiative is the certainty that Eni only contracts and works with suppliers who are formally engaged and engaged in the efficient use and monitoring of water". Thanks to these innovative and collaborative tools, all Eni suppliers have the possibility to receive training and awareness on important issues in the field of sustainability. By making Eni's corporate strategy operational, the supply chain thus remains involved, becoming a fundamental and active part of the energy transition process. Thanks to the financial support, in fact, even SMEs have the possibility access financial instruments that allow them to fulfill their commitment in the sustainable sphere, with a view to the complete implementation of Sustainable Procurement, which provides for the verification of the ESG characteristics as well as the technical-operational, ethical and reputational reliability of the supplier in all phases of the procurement process (gualification, tender procedure, award and contract management) by providing rewarding mechanisms and action plans aimed at promoting a path of sustainable development. Thanks to Open-es and the other tools, all companies have the opportunity to measure their sustainability performance according to standard metrics and share their ESG profile with their customers and/or financial institutions, compare themselves with sector benchmarks, access plans customized development tools to identify the priority actions to implement and, taking advantage of the platform's collaborative mechanism, identify services and solutions to improve ESG performance and support its innovation linked to the reduction of water impacts also in products and services. Of the more than 4,000 Eni suppliers present on Open-es, 75% have made their answers on 2022 data transparent, including those on water consumption. Another element that measures the success of the initiative is linked to the Open-es experience sharing area: around 1.5k (2022) shared their success stories, projects, experiences as best practices to follow (over 1.2 k in the Planet area and over 200 in the Circular Economy area)".

#### Comment



## Type of engagement

Information collection

#### **Details of engagement**

Collect water management information at least annually from suppliers Collect water quantity information at least annually from suppliers (e.g., withdrawal and discharge volumes) Collect water quality information at least annually from suppliers (e.g., discharge quality, pollution incidents, hazardous substances) Collect WASH information at least annually from suppliers

## % of suppliers by number

100%

#### % of suppliers with a substantive impact

Unknown

## Rationale for your engagement

There are numerous tools used by Eni to engage and promote the sustainable development of its supply chain with a view of information collection. In particular: -Open-es, a system initiative open to all industrial sectors, in which all companies have the opportunity to measure their sustainability performance according to standard metrics and share their ESG profile with their customers and/or financial institutions, discuss themselves with industry benchmarks, access customized development plans to identify the priority actions to implement and, taking advantage of the platform's collaborative mechanism, identify services and solutions to improve their ESG performance and support their innovation linked to the reduction of water impacts also in products and services. All Eni suppliers with existing contracts or those invited to tender are required to register for Open-es.

Workshops: from December 2020 to 2022, Eni conducted several workshops focused on sectors in which water consumption is a key factor involving more than 400 suppliers, defining shared KPIs such as: CO2 reduction for waste transport and in the area of reclamations and disposals; the amount of recycled material for packaging; and the consequent water saving obtained in the production of the goods.

#### Impact of the engagement and measures of success



The concrete impact of this commitment is the significant qualitative increase in the list of Eni suppliers, affiliated and not, committed with written and mandatory commitment, also on issues related to the use of water. The measure of the success of this initiative is the certainty that Eni contracts and works only with suppliers formally engaged and committed to the efficient use and monitoring of water". Thanks to these innovative and collaborative tools, all Eni suppliers have the opportunity to receive training and awareness on important issues in the field of sustainability. By making Eni's corporate strategy operational, the supply chain thus remains engaged, becoming a fundamental and active part of the energy transition process. This occurs with a view to the complete implementation of Sustainable Procurement, which provides for the verification of the ESG characteristics as well as the technical-operational, ethical and reputational reliability of the supplier in all phases of the procurement process (qualification, tender procedure, assignment and management of the contract) providing reward mechanisms and action plans aimed at promoting a path of sustainable development; Of the more than 4000 Eni's suppliers present on Open-es, 75% of them have made their answers regarding the 2022 data transparent, including those on water consumption. Another element that measures the success of the initiative is linked to the Open-es sharing experiences area: about 1.5 k (2022) shared their success stories, projects, experiences as best practices to follow (over 1.2 k in the Planet area and over 200 in the Circular Economy area)".

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?



	Water-related regulatory violations	Comment
Row 1	No	All information regarding HSE criticalities are managed according to internal procedures, included water-related (Management System Guidelines, annex "Water Management") and regulatory violations are reported at the corporate level on a bi-annual basis. Main HSE criticalities, if present, are reported in the Company's Annual Report 2022

# **W3. Procedures**

# W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	Eni has adopted a New Regulatory System that applies to the whole company and its subsidiaries. The HSE implements the HSE MSG yearly and specifically the MSG and operating instructions for water resource management that guide identification of pollutants. Directive 2000/60/EC of European parliament (EU) and Parts II, III and IV of Legislative Decree 152/06 (Italy) are law of reference for Eni. Pollutants are identified and listed according to the specific industrial activity, as indicated e.g., by the Industrial Emissions Directive 2010/75/EU (Integrated Pollution Prevention and Control) and managed according to national/local IPPC permits. Other Eni references are IFC World Bank and regional conventions (e.g. Barcelona and OSPAR conv). According to MSG HSE each asset must have a sampling plan and, for each discharge point, the parameters and pollutants are analyzed. Eni implements the MSG "Acquisition Methodologies for HSE indicators" in combination with MSG "Planning, monitoring and reporting of HSE indicators" to periodically detect and quantify water pollutants in wastewater and produced water. Eni MSG complies with REACH, CLP, and Safety Data Sheet (SDS) that includes information on properties of each chemical; the



	physical, health, and environmental hazards; protective measures; safety precautions for handling, storing, and
	transporting it. For new products Eni evaluates the need to issue a new SDS or to revise an existing one. Eni O&G
	complies with ISO 45001:2018

# W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

#### Water pollutant category

Oil

#### Description of water pollutant and potential impacts

Crude oil and refined products can have potential impact on water if potential spills occur due to accident or sabotage. Potential spills can be detrimental for water ecosystem and can degrade freshwater quality, limiting its availability and increasing costs for water treatment and reclaim. Oil spills can also have detrimental impact on safety (potential flames and explosions), on health when water basins used for animal and human life are contaminated, and on ecosystems damaging or altering vegetable ecosystems and agriculture. Spills, 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 oil spilled and on the vulnerability of the area where it occurs.

#### Value chain stage

Direct operations Supply chain Product use phase

#### Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience Resource recovery Beyond compliance with regulatory requirements



Implementation of integrated solid waste management systems Industrial and chemical accidents prevention, preparedness, and response Provision of best practice instructions on product use Requirement for suppliers to comply with regulatory requirements Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

#### **Please explain**

Non exhaustive mitigating actions are listed in MSG, Procedure and Operating Instructions on Water Resource and Waste Management: measuring devices; leak control and maintenance; employee training and education; procedure for anomalous or emergency situations, data acquisition, audits; certification and transparency of reporting; BES action plan, containing site-specific indicators. Nearly 40 mn € were invested in 2022 in spill prevention interventions, improvement of containment, storage, transport systems. Some instruments that Eni adopts to minimise adverse impacts are innovative technologies: optical fibers; Eni Vibroacustic Pipeline Monitoring System (e-VPMS and eVPMS-TIP) to detect vibrations from excavation in the ground and anticipate intervention; ground-trotting; use of "Chopper Overflies" and short-range drones for asset surveillance and to discourage the activity of oil theft. Eni developed an innovative system of well barriers to decrease by one order of magnitude the probability of a blow-out event (10^-6). As a result, Eni refineries are EMAS registered; in upstream 56% of subsidiaries and 25% of joint ventures are ISO 14001, 59% of subsidiaries and 12% of ventures are ISO 45001. In the supply chain, Eni has adopted a specific sustainable procurement process, in order to evaluate the ESG performances on suppliers and verify the respect of requirements and support all the companies in an improvement path thanks to collaborative initiatives like Open-es.

Water pollutant category

Inorganic pollutants

#### Description of water pollutant and potential impacts

Inorganic pollutants have potential impact on water if potential spills or losses occur due to accident or if wastewater are not properly treated or disposed. Uncontrolled inorganic pollutants can be detrimental for water ecosystem and can degrade freshwater quality, limiting its availability and increasing costs for water treatment and reclaim. Uncontrolled inorganic pollutants can also have detrimental impact on health when water basins used for animal and human life are contaminated. Uncontrolled inorganic pollutants can compromise safety and health of people and ecosystems. All events, in terms of number of losses and quantities are recorded in Eni HSE database.



#### Value chain stage

Direct operations Supply chain Product use phase

#### Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response Provision of best practice instructions on product use Reduction or phase out of hazardous substances Requirement for suppliers to comply with regulatory requirements Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

#### **Please explain**

Non exhaustive mitigating actions are listed in MSG, Procedure and Operating Instructions on Water Resource Management: measuring devices; leak control and maintenance; employee training and education; procedure for anomalous or emergency situations, data acquisition, audits; certification and transparency of reporting; . To enhance internal skills, Eni is committed to spread knowledge across all the functions. Inorganic compounds are periodically detected with a sampling plan, monitored and recorded in HSE database. The magnitude of spill impact can be low, medium or high, depending on the quantity and quality of the emission and on the vulnerability of the interested area. Success depends on the number and magnitude of spills or losses. The number and quantity of chemical spills are disclosed in Eni annual DNF 2022 Environmental responsibility success is acknowledged and certified by international agencies and standards. The chemical sector, for example, acquired the environmental management system certification according to the ISO 14001, the certification of the health and safety management system according to the OHSAS 1800, the Responsible Care Certification, the quality certification according to the ISO 9001. In the Procurement process, Eni is committed to making its supply chain sustainable, limiting the use of polluting resources. For this reason, in order to be qualified, the supplier must register on Open-es and comply with the sustainability standards.

Water pollutant category

Nitrates

Description of water pollutant and potential impacts



Nitrates have potential impact on water if their concetration rises due to accident or if wastewater are not properly treated or disposed. Uncontrolled nitrates can cause eutrphication which is detrimental for water ecosystem. Marine organism and fishes can die; freshwater quality can degrade, limiting its availability and increasing costs for water treatment and reclaim. Uncontrolled nitrates can also cause over time accumulations of salts in the substrate and excessive accumulations of nitrates in plants as well as creating potential damage to human health in case of intake of drinking water that contain high concentrations of nitrates. All events, in terms of number of losses and quantities are recorded in Eni HSE database. The magnitude of losses can be low, medium or high, depending on the quantity and quality of the pollutant emitted and on the vulnerability of the area where it occurs.

#### Value chain stage

Direct operations Supply chain Product use phase

#### Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response Provision of best practice instructions on product use Reduction or phase out of hazardous substances Requirement for suppliers to comply with regulatory requirements Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

## **Please explain**

Non exhaustive mitigating actions are listed in MSG, Procedure and Operating Instructions on Water Resource Management: measuring devices; leak control and maintenance; employee training and education; procedure for anomalous or emergency situations, data acquisition, audits; certification and transparency of reporting; . To enhance internal skills, Eni is committed to spreading knowledge across all the functions. Nitrates are periodically detected in line with a sampling plan, monitored at site level but these measures are not registered in the HSE database BDHSE. So total quantities are not available. Environmental responsibility success is acknowledged and certified by international agencies and standards. The chemical sector, for example, acquired the environmental management system certification according to the ISO 14001, the certification of the health and safety management system according to the OHSAS 1800, the Responsible Care Certification, the quality certification according to the ISO 9001. In the Procurement process, Eni is committed to making its supply chain sustainable, limiting the use of polluting resources. For this reason, in order to be qualified, the supplier must register on Open-es and comply with the sustainability standards.



#### Water pollutant category

Other nutrients and oxygen demanding pollutants

#### Description of water pollutant and potential impacts

Nutrients and oxygen demanding pollutants have potential impact on water as high concentrations of organic substances can reduce the levels of dissolved oxygen in the water. This type of pollution can be due to unproperly treated wastewaters. Uncontrolled organic compounds can be detrimental for water ecosystem and can degrade freshwater quality, limiting its availability and increasing costs for water treatment and reclaim. Uncontrolled nitrates can also have detrimental impact on agriculture when water basins are used for irrigation. All events, in terms of number of losses and quantities are recorded in Eni HSE database. The magnitude of losses impact can be low, medium or high, depending on the quantity and quality of the pollutant emitted and on the vulnerability of the area where it occurs.

#### Value chain stage

Direct operations Supply chain Product use phase

#### Actions and procedures to minimize adverse impacts

Provision of best practice instructions on product use Reduction or phase out of hazardous substances Requirement for suppliers to comply with regulatory requirements Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

#### **Please explain**

Non exhaustive mitigating actions are listed in MSG, Procedure and Operating Instructions on Water Resource Management: measuring devices; leak control and maintenance; employee training and education; procedure for anomalous or emergency situations, data acquisition, audits; certification and transparency of reporting; . To enhance internal skills, Eni is committed to spreading knowledge across all the functions. Number of spills and quantities of nutrients and oxygen demanding pollutants are periodically detected with a sampling plan, monitored and recorded in the central HSE database. The magnitude of spills impact can be low, medium or high, depending on the quantity and quality of the emission and on the vulnerability of the impacted area. Success depends on the number and magnitude of spills. Environmental responsibility



success is acknowledged and certified by international agencies and standards. The chemical sector, for example, acquired the environmental management system certification according to the ISO 14001, the certification of the health and safety management system according to the OHSAS 1800, the Responsible Care Certification, the quality certification according to the ISO 9001. In the Procurement process, Eni is committed to making its supply chain sustainable, limiting the use of polluting resources. For this reason, in order to be qualified, the supplier must register on Open-es and comply with the sustainability standards.

#### Water pollutant category

Other physical pollutants

#### Description of water pollutant and potential impacts

Thermal pollution has impact on the biology of aquatic ecosystems, such as: proliferations of heat tolerant species, proliferation of bacteria and other pathogens, migration or death of heat-intolerant species, death of bacterial flora, alterations in community structure and ecosystem functioning. Further, an increase in temperature implies a decrease in oxygen solubility which can cause the loss of biodiversity. Eni retains that in its operations impact due to thermal pollution is low as it is easily and naturally recoverable.

#### Value chain stage

**Direct operations** 

#### Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

#### **Please explain**

Eni prevents and minimizes thermal pollution on water ecosystems and human health by implementing its New Regulatory System and D.lgs. 152/2006 part III Annex 5.

Temperature of water discharges must fulfil local and/or international limits, such as thresholds stated under permits issued by Competent authorities (i.e. AIA) or, in absence, in comliance of the best available internationally recognized practices (e.g. IPIECA, IMO). Temperature is monitored in the water discharge at discharge point and in the receiving water body at a distance from discharge point fixed by permit. For



example a threashold limit for water discharge temperature in sea is 35°C and 32° within 1 km from the discharge point. Eni power sector, which operates in Italy and uses thermoelectric plants, regularly implements D.Lgs. 152/2006 part III, Annex 5, that identifies the parameters and the limits depending on discharge and receptor body. According to D.Lgs each asset must activate an investigation on the causes if exceeding permitted values and implement corrective action. The disposal of wastewater must comply with D.Lgs. 152/2006 part IV. Eni power sector implements in addition: the procedure "Water Resource Management", the procedure "Acquisition Methodologies for HSE indicators" in combination with MSG "Planning, monitoring and reporting of HSE indicators". As a result, Eni power sector is EMAS registered since 2006 and UNI EN ISO 14001.

# 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.

Value chain stage 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?



More than 6 years

#### Type of tools and methods used

Tools on the market Enterprise risk management International methodologies and standards Databases

## Tools and methods used

GEMI Local Water Tool WRI Aqueduct Maplecroft Global Water Security Risk Index

#### **Contextual issues considered**

Water availability at a basin/catchment level Water quality at a basin/catchment level Stakeholder conflicts concerning water resources at a basin/catchment level Water regulatory frameworks Status of ecosystems and habitats Access to fully-functioning, safely managed WASH services for all employees

#### **Stakeholders considered**

Customers Employees Investors Local communities NGOs Regulators Suppliers Water utilities at a local level



#### 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". Eni yearly prepares a water risk report both at global and local level for each business unit (refining, power, upstream and chemicals), using international tools and databases (WRI Aqueduct, FAO/Aquastat, GEMI water local tool, internal methods, country level investigation) describing relevant water volumes, water source quality and water intensity. The risk analysis shows at high level (e.g. screening level) the top users also in stress areas, also projected to 2040; the trend of water volumes (withdrawn, consumed and discharged), volumes by source (fresh, desalinated, salt, produced, treated) and water intensities for each business unit. The analysis focus also on water availability at basin level adding value to internal reuse or recycle. The analysis considers Eni's exposure at site level as well as at basin and country level, and local/country regulatory frameworks as well as the awareness of contextual habitats and the needs of stakeholders (regulators, customers, employees, investors, local communities, NGOs, suppliers, water utilities and other water users) are an integral part of water-related project evaluation criteria. The report identifies priorities and improvement actions that will be considered as an input in Eni 4year plan. Where deemed necessary, local assessment using GEMI Local Water Tool or internal methodologies, or deep investigation at Country level are carried out. Eni ensures the provision of Clean drinking water, Sanitary facilities and Washing facilities to its employees in the areas of influence, as per the technical guidelines for "Industrial hygiene" and "Food & Water Hygiene". It is noteworthy to add that results of herein technical assessments contribute to Integrated Risk Management (IRM) process. IRM process makes reference to COSO ERM framework. Contextual issues includes quality and quantity evaluations as essential for industrial activities, as well regulatory analysis and evaluation of ecosystem and other users at the basin level as they all contribute to understand overall water related risks. Stakeholders are engaged at local level, as well as regulators, other users, local authorities, employees, suppliers and customers.

#### Value chain stage

Supply chain

#### Coverage

Full

#### **Risk assessment procedure**

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

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#### Frequency of assessment

More than once a year

# How far into the future are risks considered?

More than 6 years

## Type of tools and methods used

Tools on the market Enterprise risk management International methodologies and standards

## Tools and methods used

GEMI Local Water Tool WRI Aqueduct

## **Contextual issues considered**

Water availability at a basin/catchment level Water quality at a basin/catchment level Stakeholder conflicts concerning water resources at a basin/catchment level Implications of water on your key commodities/raw materials Water regulatory frameworks Status of ecosystems and habitats

## Stakeholders considered

- Customers
- Employees

Investors

Local communities

NGOs

Regulators

Suppliers


Water utilities at a local level Other water users at the basin/catchment level

#### Comment

In the Procurement process procedure, to qualify, suppliers must register with Open-es and in the competitive procedures they are obliged to present the sustainability report which also concerns their commitment to efficient management of the water resource. providing the industrial chain with concrete tools to improve its ESG performance, based on the Stakeholder Capitalism Metrics, the metrics defined by the World Economic Forum. Suppliers respond to a questionnaire based on GRI 303 "water and waste" standards. The references for the creation of the questionnaire refer to WRI Aqueduct, WWF water risk and the Alliance for Water Stewardship Standard. The procedures for identifying and assessing water-related risks have different levels of approach. Starting from the general guideline of the HSE management system up to the more detailed annexes "Risk management" and "Water resource management". Eni annually prepares a report on water risk both globally and locally for each business unit, using relevant international tools and databases describing water volumes, the quality of water sources and water intensity. Water-related problems and risks are assessed during the supplier qualification process, guided by the criticality level assigned to the goods by the Eni HSE code". In fact, during the qualification process and the tender process, Eni requires that the suppliers comply with the ISO 14001 and ISO 14046 standards, to obtain the best HSE score which will also be assessed in the vendor list phase during the tender phase Eni regularly carries out assessments of its suppliers, both new and expiring, but also monitors on supplier performance. The information and feedback collected are used to further detect when situations may require a more in-depth assessment, through an audit. The result can be used to initiate improvement plans and define actions on the supplier's qualification status, re-evaluating the supplier.

### W3.3b

(W3.3b) 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.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row	The annual water risk analysis (RA)	IRM and CCS apply Eni HSE	Contextual issues includes quality	Results thereof are shared with/
1	using Aqueduct (with projections to	Management System Guideline and	and quantity evaluations as	presented to all Eni business
	2030 and 2040) as well as specific	the annexes on Risk Management	essential for industrial activities, as	levels, including Eni Board of
	local investigations (GEMI), allows for	and Water Resource Management in	well regulatory analysis and	Directors. Eni CEO and Board of



site level recommendations if any	the risk assesment process. CCS	evaluation of ecosystem and other	Directors will take decisions on
water relate risks emerge, such as	analyses water risk for direct	users at the basin level as they all	water-related issues when
trends toward more restrictive	operations using WRI Aqueduct,	contribute to understand overall	relevant. Eni EVP of HSEQ
regulations, or decreased reliability of	FAO/Aquastat and internal	water related risks. Stakeholders	corporate ensures information on
water sources. The recommendations	databases, GEMI water local tool,	are engaged at local level, as well	water-related issues to Board of
identified in the annual RA represent	internal methods, and country level	as regulators, other users, local	Directors. Decision-making
an input of Eni 4YP. Possible identified	investigation. Yearly, Eni HSEQ	authorities, employees, suppliers	process on water-related issues is
actions include, e.g., the replacement	gathers data from all the business	and customers	therefore responsibility of CEO
of surface freshwater or groundwater	units regarding the presence of		and Board of Directors.
with remediation water or through	sensitive watersheds and connected		
water reuse.	habitats potentially influenced by the		
In 21-22 Eni developed a risk	industrial operations. Data are filled in		
management process to assess the	an internal database which is used to		
physical risk related to Climate	carry out the water-risk assessment.		
Change of its assets and of the 3rd	The physical risk (including the water		
party assets that can have a direct	risk) linked to climate change is		
impact on Eni business as well. The	evaluated by IRM with		
process assesses the inherent risk of	quali/quantitative metrics. Eni		
the assets, the mitigation actions in	regularly assesses water risk also in		
place and the corresponding residual	its existing and new supply chain,		
risk of each asset with respect to each	launching improvements plans and		
climate related risk (10 identified risks	actions and providing digital tools as		
both acute and chronic, including	Open-es to enhance ESG programs		
water related) with a time horizon of 3	of suppliers. CCS evaluates the		
decades (Maplecroft). The process	exposure of Eni operations to water		
foresees that the assets resulted	risk also as a projection to 2040 by		
exposed in terms of residual risk will	taking into account the volumes of		
be analyzed within the Asset Integrity	water used for its operations and new		
process through further quantitative	projects at global and site level. For		



and more detailed analysis and check	new projects water risk analysis can	
of the design basis for further	be a support to ESHIA. The outcome	
mitigation actions, if required. Based	provide a suggestions for	
on the learnings and results of 2022	improvements at local level and	
application, Eni will include	inputs for Eni 4 years planning, that	
quantitative "state of the art" data from	are monitored yearly. HSEQ in	
one of the best-in-science physical	response to water risk analysis	
climate risk analytics data provider	carries out local assessments at sites	
	characterized by high freshwater	
	withdrawals or located in water-	
	stressed as well as water-scarce	
	areas	
		(

# 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?

No

# W4.1a

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

To assess severity of risks identified according to the 4y strategic plan objectives and coherently with risk management practices applied at different business areas, Integrated Risk Management (IRM) framework, largely based on COSO ERM Framework, a risk scoring model has been adopted and is applied to direct operations, including impacts on Eni deriving from the supply chain

Risk impact is assessed based on a 5-level rating scale: negligible(1), significant(2), relevant(3), very relevant(4), extreme(5).



Such impact is measured based on the **following** quantitative and qualitative **metrics**, which are subject to yearly review and harmonized with the 4y strategic plan:

**Economic-financia**: the impact is measured based on reduction of net profit or cash flow. For such a metric, severity thresholds, from negligible to extreme, are set up based on the assumptions underlying the 4y plan

**Descriptive-qualitative**: the impact is measured based on the effort of the top management to manage the risk; it may involve a potential review of strategy when appropriate

Operational: the impact is measured based on reduction in daily production or delayed production

Image&reputation: the impact is measured based on the duration of the negative impact upon selected stakeholders

**Environmental**: the impact is measured based on the relevant fallouts on the environment, ecosystem and people. Indicators may include: size of the involved area, impact on the ecosystem, inconvenience from pollution to personnel or population, etc

Health&safety: the impact is measured based on the effects on health of both Eni and third parties' personnel, or any other individual concerned (accidents, illnesses, etc.)

**Social**: the impact is measured based on any social damage to local communities and population adjacent to industrial plants. Indicators may include: employment and workers' rights, access to basic resources, etc

Security: measures the impacts of criminal events on individuals/assets

Risks are evaluated at the inherent level as well as at the residual level taking into consideration how effective the mitigations in place are.

In order to assess the overall magnitude of risk, however, impact is combined with probability/frequency that is apportioned over a 5-level rating scale - in line with impact evaluation: (1)rare, (2)unlikely, (3)moderate, (4)possible, (5)likely.

The resulting risk score (probability x impact) is plotted in a probability/impact matrix.

Highly improbable major risk (probability = 1 and Impact =4 or 5) and all risks that have a risk score of 8 or higher, at residual level, are considered as "substantive" (i.e. top risk according to IRM methodology and definitions and, as such, treated differently and monitored/assessed on a quarterly basis. Top risks fall within the so called "tier 1" and "tier 2" area of the matrix).

Based on what above, a **substantive financial impact** occurs when a risk scores 8 or above (residual level, net of mitigations) with the higher impact registered on the economic-financial metric (that means, plotted the risk in the matrix, at least a "significant" economic-financial impact with reference to a risk event classified as "possible": the current threshold used for a "significant" financial impact in relation to an event with a likelihood of occurrence classified as "possible", determines a net profit or cash flow reduction that would lie above  $\in 100$  million).

A strategic impact occurs, in general terms, whenever an impact is registered such that the astrategy is modified.

Lastly, a substantive change occurs when the residualscore of a selected risk escalates up to 8 or higher in Eni probability/impact matrix, compared to the previous assessment or when a "top risk" escalates – from the so called "tier 2" area to "tier 1" area of the matrix, the latter being associated to the most severe risks.



Eni "strategic environmental risks" (which include, among others, water related risks) have scored 16 at inherent level in latest annual risk assessment, based on probability "possible" and impact "very relevant" based mostly on qualitative metrics.

By adopting the mitigation actions and practices elsewhere described in this report, residual score of Eni "strategic environmental risks" is lower than 8 and therefore the risk in question is not included in Eni's top risks, i.e. it is included in "tier 3" risks. However, great attention is given to water themes and water aspects are connected to Eni strategy. In such regard, please note that our recently adopted mission is largely based on SDG's targets, including those connected to water.

In the context of water-related risks, potential impact is connected, amongst others, to potential floods at site level and relevant damages/disputes, increase in the cost of water supply partly due to stricter regulation, etc.

### W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its 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	In the past years we indicated as at risk two refineries located in water stressed areas. However, also in a conservative hypothesis where shortages of water in the driest months of the year could determine an interruption of activities for several weeks or months, the consequent impact could be significant for the site and, in case of interruptions of several months, at the business level. At the corporate level, however, an interruption of activity of a single refinery as long as several weeks or months has a negligible impact (less than 1% of total company revenues). For example, in 2017 the Livorno Refinery had to shut down as a consequence of flooding, with a revenue loss estimated in less than 1% of total company revenues. In 21-22 Eni developed a risk management process to assess the physical risk related to CC of its assets and of the 3rd party assets that can have a direct impact on Eni business as well. The process assesses the "inherent risk" of the assets the mitigation actions in place and the corresponding "residual risk" of each asset with respect to each climate related risk (10 identified risks both acute and chronic, including water related), based on their position in climate related risk exposed areas, with a time horizon of 3 decades. Such analysis includes the detailed findings and results of the Water Resource Management assessment elaborated by CCS. The process foresees that the assets resulted exposed in terms of residual risk will be analyzed within the Asset Integrity process through further quantitative and more detailed analysis and check of the design basis for further mitigation actions, if required. The analysis has shown that a limited number of assets are exposed in the long period to water related risks, both acute and chronic, but none of them have a substantial impact on Eni



business. Based on the learnings and results of 2022 application, Eni will include quantitative "state of the art" data from one of the best-in-science physical climate risk analytics data provider.

### 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, driven by level of commodity code's ESG criticality. The importance of water in the supply chain is foreseen to increase and specific interventions will be implemented to address water intensive suppliers or materials. Suppliers are required to report information on their water management by means of a qualification questionnaire as part of a wider investigation of the vendor's ESG aspects. If critical issues or improvement areas emerge, Eni requires the implementation of an improvement plan to overcome the shortcomings identified. Beyond the qualification assessment, Eni performs a continuous monitoring on overall supplier's performances, including ESG. The information and the feedback collected are used to detect if a deeper evaluation, such as an audit, is required and can be used to launch improvement plans. Should critical issues emerge from this evaluation it would lead to the termination of the relations with Eni on an ongoing basis. In the qualification process Eni assesses suppliers' Water Management within the ESG evaluation. Furthermore, thanks to the innovative Open-es platform, suppliers are supported in a virtuous process for the measurement and improvement of water resources management performances. This enables the qualification evaluations to monitor suppliers and their commitment to water resource management and thus reduce the related risks

### 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

#### Company-specific description & strategy to realize opportunity

Improving access to water and sanitation is considered a priority for development and it is a priority for Eni as part of its local intervention strategy and its commitment to contribute to achieving the 2030 UN SDG 6 target. An example of the strategy in action is the PRORES Project in Mozambique, where Eni is committed to invest in local communities' socio-economic development in the Province of Cabo Delgado, as foreseen by the Plan of Development of O&G Coral South Project, which operations are mainly located offshore the coast of Pemba City. Eni has the responsibility to fulfil the obligations with the Government Of Mozambique, which include sustainable and local development activities in line with the SDG6, the Country's development plans and the National Determined Contributions.

This project has the objective to increasing the resilience to the effects of climate change of vulnerable communities living in the District of Mecufi, in Cabo Delgado Province, Mozambique, covering three sectors of intervention: biodiversity and environment conservation, economic diversification, access to water and sanitation. It started in December 2021 with the plan to build 6 new water supply facilities and rehabilitate two inefficient rural water supply systems. To enhance the sustainability of water point systems, specialized professionals will strengthen the 2 existing Water Management Committees - WMCs, and create 6 new ones. Secondly, the intervention will improve sanitation services in 5 rural schools building blocks of latrines. Finally, the intervention promotes awareness campaigns targeting the communities and the schools to enhance the adoption of good practices on sanitation and hygiene.

In 2022 the project rehabilitated 2 water sources in two communities, and 2,000 people benefited from access to safe drinking water. The communities have been also sensitized to safe water and sanitation.

Estimated RESULTS and BENEFICIARIES at the end of the project:



- 6 new water sources (wells) built and 2 water sources (wells) rehabilitated
- 37.453 people and 464 internally displaced people (IDPs) have access to safe drinking water
- 96 members of 8 WMCs and 3 technicians of the district authority receiving training on the O&M of the water points
- 5 Water Supply Systems and 5 blocks of latrines established in the 5 target schools
- 37,000 people and 2,500 students and teachers are sensitized to sanitation and hygiene practices

#### Estimated timeframe for realization

1 to 3 years

#### Magnitude of potential financial impact

Medium

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

793,000

Potential financial impact figure – minimum (currency)

#### Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

The figure is in USD and is the spending for facilities and equipment for the access to water and sanitation sector, while the Overall PRORES Project Budget amounts to 2.650.000 USD

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 budget indicated above is related with the investments of the project in the period 2021-2024 to improve access to water for local communities in area of Cabo Delgado.



#### Type of opportunity

Resilience

#### Primary water-related opportunity

Increased resilience to impacts of climate change

#### Company-specific description & strategy to realize opportunity

In Egypt, the issue of water scarcity is taken very seriously as a major challenge now and for the years to come. Egypt is facing an annual water deficit of around 7 billion m3 and the country could run out of water by 2025, when it is estimated that 1.8 billion people worldwide will live in absolute water scarcity and climate change is a key part of the problem (UNICEF, Water scarcity in Egypt).

Zohr represents one of the most important O&G development in the last years and for this reason it is considered a strategic asset for Eni; as the site is located in a water stress area, it is important both to secure a reliable water source for industrial activities and to relief the pressure to a scarce and precious resource for local needs. According to the Water Risk analysis that Eni carries out annually, Zohr was identified as one of the priority sites for the implementation actions to minimize water withdrawals, for its exposure to water stress according to Aqueduct and for the importance of the O&G production, as mentioned above.

The detailed analysis of all the water volumes streams and uses was an essential aspect to inform the project (Total Water Balance). The best solution identified, considering the area where the site is located, was the replacement of freshwater withdrawals with desalinated water. The desalination plant in the Zohr gas field (Egypt), operational from the half of 2021, and fully completed in 2022, zeroed fresh water withdrawals in 2022 for necessary uses of the site. Designed and installed in 2020 for a maximum production capacity of 1,200m3/day of desalinated water, the plant treats brackish water taken from coastal supply wells through a unit consisting of three filtration and reverse osmosis trains, meeting the Zohr plant's water needs previously guaranteed by tankers and the local aqueduct. In addition, the plant minimises the impact of natural waste management by injecting the saline concentrate resulting from the osmosis process into coastal wells. Finally, with the aim of reducing the waste produced, the new plant will be able to receive, treat and recirculate for internal use on the site the effluent from the demineralisation units (up to 200 m<sup>3</sup>/day), previously entirely transported by truck to external sites for disposal.

#### Estimated timeframe for realization

Current - up to 1 year

#### Magnitude of potential financial impact

High

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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**

The figure, expressed in US\$, refers to the total investment planned for the implementation of the opportunity as previously described. 89% of this investment costs are for the water desalination facilities while 11% for disposal and producer wells.

Furthermore, thanks to the reduction up to 1,200 m3/d of freshwater withdrawals and thanks to the elimination of water transportation by truck, we expect currently unquantifiable benefits in terms of improved water source resiliency, more freshwater available for local communities, Furthermore, we expect a reduction of transportation CO2 emissions from an estimated value of 120 tons/y to zero and improved reputation for the Company.

Type of opportunity Resilience

#### Primary water-related opportunity

Resilience to future regulatory changes

#### Company-specific description & strategy to realize opportunity

Eni's Refining & Marketing business is focused on refining of crude oil, production and storage of refined products in Italy, Germany and the Middle East. Livorno Refinery represents 15% of balanced refining capacity of the Company (Eni's share); as every Eni's refineries in Italy, it has operating and strategic features that aim at maximizing the value associated to the asset structure, the geographic location with respect to



end markets and the integration with Eni's other activities.

In the summer 2022 the Tusscany region decleared the emergency status due to drought. The Refinery of Livorno, Tuscany, is located not only in a water stress area but is also exposed to extreme events, such as the flood occurred in 2017 and documented by Eni in the questionnaire CDP water 2018. According to the Water Risk analysis that Eni carries out annually, Livorno's refinery was identified as one of the priority sites for the implementation of actions to minimize water withdrawals, as it represents the main freshwater user of the refining sector and one of Eni's top consumer in stress areas. The detailed analysis of all the water volumes streams and uses was an essential aspect to inform the project. The best opportunity identified, was the implementation of water reuse section in order to recycle the refinery wastewater. The installation and testing of the new demineralised water production plant serving the refinery was completed in December 2022. The plant is designed with a capacity of up to 200 m3/h to meet the site's demineralised water needs. The project involved the treatment and reuse of refinery wastewater for the benefit of a reduction in surface water withdrawals. When fully operational, a reduction in freshwater withdrawals of 0.4 Mm3 per year is envisaged, equivalent to a saving of approximately 10% of the site's fresh surface water withdrawals.

The projected interventions respond also to anticipated changes in the regulatory limits for water discharge thus increasing resilience to water regulatory risk. Water is the primary medium through which we will feel the effects of climate change, so it is important and beneficial for Eni to decrease its dependence from freshwater. The opportunity is in line with Eni endorsement of the CEO Water Mandate and to the commitment with respect to the core element #1 related to water use efficiency in the direct operations. It is also a way to decrease Eni's dependency from freshwater in stressed areas.

#### Estimated timeframe for realization

Current - up to 1 year

#### Magnitude of potential financial impact

Medium-high

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

1,900,000

#### Potential financial impact figure – minimum (currency)



#### Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

The economic impact indicated relates to the supply of the unit under a rental and service framework agreement with the supplier.

The breakdown of cost items over the 36 contractual months is defined as follows, expressed in  $\in$ 

- Supply of equipment = approx. 1,000,000
- Operation site preparation, approx. 80,000
- Operation & Maintenance service = approx. 300,000

• Variable quota proportional to the treated water volumes approx. 680,000 (estimated as maximum treatment capacity for 36 months)

• Final redemption approx. 500,000 for the acquisition of the unit by the refinery upon expiry of the lease

Furthermore, we expect benefits that are currently not quantifiable in terms of improved resilience of water sources and better reputation for the Company.

#### Type of opportunity

Resilience

#### Primary water-related opportunity

Increased resilience to impacts of climate change

#### Company-specific description & strategy to realize opportunity

Technological innovation and digital development are strategic areas for Eni's transformation into an integrated energy company for a low carbon future. The direct areas of interest for Eni, for the below listed research activities, are linked to agribusiness development, in particular for energy crops, and to the optimal management of coastal groundwater aquifers enhancing freshwater resources protection in water stressed regions where Eni operates.

In March 2019, Eni signed a Joint Research Agreement with the Italian National Research Council (CNR) to combine their technological research and development capabilities by establishing 4 joint research centres. The Metaponto center, in Southern Italy, is dedicated to the role of water, both as a vital resource and as an essential element for a balanced ecosystem. CNR and Eni, aim at accelerating new technologies development that can tackle global challenges, such as the relationship between energy, water, food and environment, with solutions that are



efficient, clean and with a low water footprint.

The main research areas under development in the centre are:

Advanced technologies water use in agriculture optimization, in particular analysis of plant water stress response and beneficial effects of natural endophytic bacterial inoculation. In the first place food crops were studied, while oil crops (biofeedstock for biofuels) are under study.
Innovative urban wastewater treatment: pilot study and installation of innovative treatment chains within a wastewater treatment plant nearby the research centre, and experimental reuse of treated water in agriculture. Detailed plant design finalized, procurement phase ongoing.

• Hydrogeological and geomechanical model setup applied to an area subjected to saline intrusion and subsidence to develop a tool for a sustainable groundwater use. Model has been implemented, optimization ongoing.

The opportunity is in line with:

• Eni positioning on water that states "identifying and developing innovative technologies will be a key lever to support its objectives of safeguarding water resources"

• the endorsement of the CEO Water Mandate commitment with respect to the core element #1 related to the use of new technologies The above illustrated research activities are linked to Eni interest regarding agro-feedstock for biofuels production both reducing required water for crops irrigation, exploiting marginal lands, and eventually using treated wastewater.

#### 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)

12,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)



#### Explanation of financial impact

Eni and the CNR established 4 joint research centres, 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, of which Eni's share part is 12 million euros. The Metaponto research centre has a whole budget of 7 million euros, of which Eni's share part is around 4 million euros.

With these activities Eni will benefit both from know-how acquisition and strengthening the existing relation with CNR, moreover the obtained results could lead to technological applications in countries where Eni is present, as well as to reputational impact.

#### Type of opportunity

Efficiency

#### Primary water-related opportunity

Cost savings

#### Company-specific description & strategy to realize opportunity

Eni's internal procedures, elaborated through IPIECA guidance such as the Water management framework and the fact sheet Reuse of produced water from the onshore oil and gas industry, state that produced water should be managed according to a list of criteria and priority, where the best option is:

"Minimization of extraction of produced water toward surface and maximization of use/reuse of extracted produced water, primarily re-injection for Improved Oil Recovery (IOR) processes". The Blue Water technology is conceived with an innovative approach, aimed at treating and reusing produced water in line with international management guidelines and Eni's circular economy strategy. The Blue Water project, carried out by Eni Rewind 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 fulfil 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 application for international patent for this specific water treatment was submitted in May 2017. The European Patent Office submitted Communication to EniRewind about intention to grant a European patent on march 31th 2021 (application nr. 17727563.3). The industrial plant, is currently in the permitting phase (obtained environmental compatibility, concluding the first step of the Regional Integrated Environmental Permit) and, if the necessary authorizations will be achieved, the construction of a 72 m3/h plant, is planned to start by 2024, while the start-up of the plant, operating 24/7, is foreseen by 2025. 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 currently sent to external suitable authorized plant with tankers as liquid wastes.

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, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency) 40,000,000

Potential financial impact figure – maximum (currency) 50,000,000

#### **Explanation of financial impact**

The cost indicated is the full life CAPEX. We expect a reevaluation of CAPEX with respect to the value indicated in CDP 2021, to take account of new raw material procurement price scenario. Less than 2 years payout time is expected. The economic evaluation are based on currently disposal cost (of un-reinjected produced water) and CAPEX and OPEX estimated for Blue Water plant at FEED accuracy. CAPEX 40-55 M€ IRR 52,7% considering @ 1700 m3/d

Type of opportunity Efficiency



#### Primary water-related opportunity

Water recovery from sewage management

#### Company-specific description & strategy to realize opportunity

According to the Water Risk analysis that Eni carries out annually, Brindisi petrochemical plant was identified as one of the priority sites for the implementation of actions to minimize water withdrawals, as it is one the main freshwater user of the chemical business line in stress areas. The detailed analysis of all the water volumes streams and uses was an essential aspect to inform the project. The best opportunity identified was the implementation of water reuse section in order to recycle the industrial site water discharge downstream the treatment plant . At the site several interventions in the past years have been carried out, as described in previous CDP questionnaire, so that most of its water needs are satisfied by desalinated water and water from site remediation activities. In order to continue along a water stewardship path, a study for wastewater reuse will bewas completed carried out in 2022, the project is expected to be completed by 2025. To the purpose of water discharge reuse, otherwise discharged to the sea, it will be installed a tertiary treatment in order to reuse about 500 Ml/year of water for industrial purposes, that is a significant reduction relative to the total water withdrawals of the site. Water is the primary medium through which we will feel the effects of climate change, so it is important and beneficial for Eni to decrease its dependence from freshwater. The intervention is an opportunity to pursue Eni's commitment to minimize its water withdrawals from water stress areas, according also to Eni's endorsement of the CEO Water Mandate.

#### Estimated timeframe for realization

1 to 3 years

#### Magnitude of potential financial impact

Medium-high

#### 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) 600,000



#### Potential financial impact figure – maximum (currency)

1,400,000

#### **Explanation of financial impact**

The figures refer to the total investment planned for the implementation of the tertiary unit, presently estimated with a ±40% accuracy. Furthermore, we expect unquantifiable benefits in terms of improved water source resiliency and improved reputation for the Company

Type of opportunity

Resilience

#### Primary water-related opportunity

Increased resilience to impacts of climate change

#### Company-specific description & strategy to realize opportunity

According to the Water Risk analysis that Eni carries out annually, the Sinai peninsula was identified as one of the priority sites for the implementation actions to minimize water withdrawals, for its exposure to water stress according to Aqueduct and for the importance of the O&G production, as mentioned above. The detailed analysis of all the water volumes streams and uses was an essential aspect to inform the project (Total Water Balance). The best solution identified, considering the area where the site is located, was the replacement of freshwater withdrawals with desalinated water. The area of the Sinai peninsula is a desert, so that freshwater as well as slightly brackish water (2-5 g/L of total dissolved solids) are highly valuable resources. In order to increase the water source reliability for its activity and to decrease the overall pressure to these precious resources, Eni decided to upgrade its seawater desalination units at two of its plants. With the upgrade of its plants, Eni is aiming to decrease its fresh and slightly brackish water withdrawals by about 650 ML/y (baseline year 2019), thus achieving a significant reduction relative to the total water withdrawals of the site to be realized in the current 4YP. Water is the primary medium through which we will feel the effects of climate change, so it is important and beneficial for Eni to decrease its dependence from freshwater. The intervention is an opportunity to pursue Eni's commitment to minimize its water withdrawals from water stress areas, according also to Eni's endorsement of the CEO Water Mandate.

#### Estimated timeframe for realization

1 to 3 years

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#### Magnitude of potential financial impact

Medium-high

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 1,800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

The figure, expressed in US\$, refers to the total investment planned for the implementation of the opportunity as previously described, furthermore we expect currently unquantifiable benefits in terms of improved water source resiliency and improved reputation for the Company.

#### Type of opportunity

Resilience

#### Primary water-related opportunity

Resilience to future regulatory changes

#### Company-specific description & strategy to realize opportunity

According to the Water Risk analysis that Eni carries out annually, the Brindisi power plant was identified as one of the priority sites for the implementation of actions to minimize water withdrawals, as it represent the one of the main freshwater user of the power sector and one of Eni's top consumer in stress areas. The detailed analysis of all the water volumes streams and uses was an essential aspect to inform the project. The Brindisi power plant is located in a water stressed area, where Eni already carried-out important investments for water preservation,



as described in the past years (see also https://www.eni.com/en-IT/operations/italy-brindisi-new-plant-membrane-technology-producedemineralised-water.html). A further opportunity identified was rainwater collection and reuse. The new intervention provides for the expansion of the rainwater management system of the power plant which will allow the collection, treatment and recovery of rainwater. The rainwater collected and treated will be reused to feed the demineralized water production plant and for cooling purposes, displacing a similar quantity of fresh water. Water is the primary medium through which we will feel the effects of climate change, so it is important and beneficial for Eni to decrease its dependence from freshwater. The intervention is an opportunity to pursue Eni's commitment to minimize its water withdrawals from water stress areas, according also to Eni's endorsement of the CEO Water Mandate.

#### 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?

Yes, a single figure estimate

# Potential financial impact figure (currency)

1,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

The costs of the project are mainly related to: 1) the development of the study and executive engineering of the works, approx. 20%; 2) the civil works necessary for the construction of the works and connection to existing systems, the supply of the required equipment and the electrical / instrumental connection activities, approx. 60%. Furthermore we expect currently unquantifiable benefits in terms of improved water source resiliency and improved reputation for the Company.



#### Type of opportunity Efficiency

#### Primary water-related opportunity

Water recovery from sewage management

#### Company-specific description & strategy to realize opportunity

Water is the primary medium through which we will feel the effects of climate change, so it is important and beneficial for Eni to decrease its dependence from freshwater. The intervention is an opportunity to pursue Eni's commitment to minimize its water withdrawals from water stress areas and to pursue collective actions according also to Eni's endorsement of the CEO Water Mandate. In 2022 the Emilia -Romagna Region delared an emergency status due to drought. The recent floods in 2023 demonstrate that the area is also prone to extreme events. According to the Water Risk analysis that Eni carries out annually, the area of Ravenna has been identified as a priority for the implementation of actions to minimize water withdrawals, as two of Eni's top consumers of freshwater in stressed areas, namely a chemical site and a power plant, are located in the industrial area of Ravenna.

The detailed analysis of all the water volumes, streams and uses among the site industrial facilities was an essential aspect to inform the project. The renewal of the demineralized water production plant, carried out in Ravenna site collectively with other industrial facilities of the same industrial cluster, will allow to recycle wastewater up to a 20% share of feed water for the new demineralized water production plant, thus achieving a substantial decrease of surface freshwater demand, i.e. about 0.7 million cubic meters per year with normal flow rates and up to 2 million cubic meters per year with design flow rates.

#### 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?

Yes, an estimated range

#### Potential financial impact figure (currency)

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# Potential financial impact figure – minimum (currency) 500,000

#### Potential financial impact figure – maximum (currency) 800,000

#### **Explanation of financial impact**

The figures above mentioned are referring only to the sustainability theme and, specifically, to the cost associated to the water recovery plant sections. Furthermore, renewing the demineralized water production plant, RSI will get a considerable reduction in terms of operational and HSE costs, associated to the use of hazardous substances. Namely, the HSE risk level will be reduced as RSI is going to eliminate the use of NaOH, H2SO4 and CaO, getting to a health and safety unquantifiable benefit.

# 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	Company-	Description of the scope (including	According to Sustainability Policy Eni is committed to realize actions that promote the respect of
1	wide	value chain stages) covered by the	environment and promotes a sustainable management of water with adaptation actions that are
		policy	oriented towards the adjustment of the consequences of climate change. Eni evaluates the
			interaction of its activities with ecosystem services, and promotes efficient water management,



Description of business dependency	especially in areas under water stress, and the reduction of emissions in water. Eni adopts a
on water	system that detects, analyses and manages risks connected to climate change, including water
Description of business impact on	risk, to carry out proper mitigation and adjustment measures concerning its operational activities.
water	Eni's biodiversity and ecosystem services (BES) policy covers Eni's relationships with
Commitment to align with international	stakeholders and local communities, its contribution to local development, the protection of
frameworks, standards, and widely-	human rights, climate strategy and ways to safeguard biodiversity and ecosystems. BES
recognized water initiatives	management model aligns with the strategic goals and targets of the Convention on Biological
Commitment to prevent minimize	Diversity, such as drinking water supply and water related disasters risk reduction. Eni is
and control pollution	committed to water stewardship, and evaluates the interaction of its activities with ecosystem
	services, it promotes efficient water management, especially in areas under water stress, and the
Commitment to reduce water	reduction of emissions in water. In Eni's Statement on Respect for Human Rights Eni
	acknowledges the human right to water: the rights of individuals and the local communities in
volumes in direct operations	which it operates to ownership and use of natural resources (water). Eni is committed to operate
Commitment to reduce water	beyond compliance throughout the project's lifecycle. Eni promotes a transparent and continuous
withdrawal and/or consumption	dialogue with relevant stakeholders and partnership with conservation NGOs, and with national
volumes in supply chain	and international scientific institutions. In 2019 we endorsed the CEO Water Mandate and
Commitment to water stewardship	committed to adopt and implement a comprehensive approach to water management that
and/or collective action	incorporates all six elements of the CEO water Mandate. In June 2021 Eni published its position
Commitment to the conservation of	on water, identified it as a strategic resource for the protection of biodiversity and human health,
freshwater ecosystems	for social and economic development, The company commits to define objectives to minimize its
Acknowledgement of the human right	freshwater withdrawals in water-stressed areas, seeking improvement solutions and leveraging
to water and sanitation	innovative technologies. Eni recognizes water as a strategic resource, the pivotal role of SDG6,
Recognition of environmental	the rational and efficient use of natural resources, such as water.
linkages, for example, due to climate	N 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11
change	

<sup>0</sup> <sup>1</sup>3\_Eni-Biodiversity-and-Ecosystem-Services-Policy.pdf

0<sup>2</sup>eni-e-acqua-eng.pdf

<sup>0</sup> <sup>3</sup>eni-for-2022-executive-summary-eng.pdf

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<sup>1</sup> <sup>4</sup>Dichiarazione-Eni-human-rights-ENG.pdf
 <sup>5</sup>4\_policy\_sustainability.pdf
 <sup>6</sup>Corporate-Governance-Report-2022.pdf
 <sup>7</sup>eni-for-2022-sustainability-performance-eng.pdf
 <sup>8</sup>eni-for-2022-just-transition-eng.pdf
 <sup>9</sup>eni-for-human-rights-2021.pdf
 <sup>10</sup>Annual-Report-2022.pdf
 <sup>11</sup>Slavery-and-Human-Trafficking-Statement-2022.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 or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	In accordance with the By-laws, on 11 May 2023 the Board of Directors appointed a Chief Executive Officer to manage the Company. Decisions on certain issues are reserved exclusively to CEO. The CEO is therefore the main person responsible for the management of the Company, apart from those tasks reserved to the Board of Directors. CEO is a member of BoD. As such, the CEO gave his agreement to the Eni's endorsement of the CEO Water Mandate in 2019, to the publication of the Eni's Position on Water in June 2021 and, since 2020, each year he decides to submit and signs the CDP Water questionnaire. Upon invitation of the Chairman of the



	Sustainability and Scenarios Committee (SSC) and Risk and Control Committee, the Chairman of the BoD and the CEO may attend		
	specific Committee meetings. At the end of 2022 the CEO decided to reinforce the importance of a water-related technology pathway		
	able to accelerate the sustainable valorization of water.		
Board-level	The Sustainability and Scenarios Committee (SSC) is established by the Board of Directors (BoD) and is charged with the task of		
committee	assisting the Board of Directors with preparatory, consultative and advisory functions on scenarios and sustainability issues. Upon		
	invitation of the Chairman of the Committee, the Chairman of the BoD and the CEO may attend specific Committee meetings.		
	The Committee focuses mainly on scenarios and sustainability, in particular the processes, projects and activities aimed at ensuring		
	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.		
	As stated in the Article 3 (duties) of the Rules of the SSC, it provides recommendations and advice to the BoD on scenarios and		
	sustainability issues, e.g.:		
	climate transition and technological innovation		
	<ul> <li>respect and protection of rights, particularly of the human rights</li> </ul>		
	local development, particularly economic diversification		
	<ul> <li>access to energy, energy sustainability</li> </ul>		
	environment and energy efficiency		
	<ul> <li>health, well-being and safety of people and communities</li> </ul>		
	<ul> <li>integrity and transparency; diversity and inclusion</li> </ul>		
	These responsibilities are directly linked to water security as:		
	- human rights are linked to water security (as stated in Eni's Statement on 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."		
	- local development is linked to water security, Access to Water is one of the 6 areas of intervention of Eni's Local Development		
	Projects		
Board-level	The BoD defines, upon proposal of the Chief Executive Officer, the strategic guidelines and objectives of the Company and of the		
committee	Group, pursuing its sustainable success and monitoring its implementation. It defines the nature and level of risk compatible with the		
	company's strategic objectives, based on an estimate of the probability and impact of the risks, as prepared (and, if necessary,		
	updated during the year) by the Integrated Risk Management function (IRM), including in its evaluations all the elements that can be		



relevant for the company's sustainable success.
Eni has adopted a Governance Model which includes Board-level committees (among the others):
• Sustainability and Scenarios Committee (SSC), which performs preparatory, consultative and advisory functions to the Board of
Directors on scenarios and sustainability issues, meaning the processes, initiatives and activities surrounding the Company's
commitment to sustainable development along the entire value chain, among which water access and security issues are
encompassed (for details refer to the previous line)
• Risk Control Committee (CCR) with the task, among other things, of supporting the board of directors' assessments and decisions
relating to the internal control and risk management system and to the top risk reported by the Chief Executive Officer at least once
every three months. Top risks are identified by Integrated IRM process. IRM function yearly assesses physical risks linked to the
climate change in the medium/long term, including water-related risks

# 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	Monitoring implementation and performance Monitoring progress towards corporate targets Overseeing and guiding scenario analysis Reviewing and guiding business plans	<ul> <li>During its term of office, the Board of Directors, with the support of SSC, is deeply involved in the sustainability topics, such as energy transition, decarbonization, human rights topics, environmental and social sustainability, climate change, also through the induction programme and on going training activities. For further details, please refer to the Corporate Governance Report 2022.</li> <li>Examples of water related issues reported to BoD on its periodical meetings, also through the outcomes of the SSC meetings:</li> <li>monitoring and review: 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; environment and energy efficiency, such as water; integrity and transparency; climate transition and technological innovation,</li> </ul>



	Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy	<ul> <li>diversity and inclusion.</li> <li>review and guidance of business plans and actions: the SSC analyses the context in which Eni operates, highlighting to the BoD the emerging issues of sustainability, the relevant issues and the progress compared to the targets set.</li> <li>review and guidance on strategy and risk management policies: SSC discussed issues related to climate change, such as water risk, and assessed the consistency of the results achieved with the climate objectives, including water risk and the company's goal for the safeguard of water resources.</li> <li>review and guiding risk management policy: Eni has assessed physical risk, including water- related risk assessed by the climate change strategy and positioning function; IRM periodically reports the outcome of risk assessment to the BoD.</li> <li>guiding strategy and risk management policies: in 2022 the Board received information by the SSC Committee on the results of the CDP Questionnaires (including Water Security Questionnaire).</li> <li>Each year the BoD approves the HSE Report, the Non-financial Statement (DNF), and the Eni For Report, which include water related issues.</li> </ul>
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# W6.2d

#### (W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water- related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	At top-management level, water issues are faced by BoD within the framework of sustainability and risk issues, with the support of SSC and CCR, in their preliminary, propositional and consultative functions on matters of competence. SSC and CCR members have adequate knowledge and experience on sustainability and on risks issues, respectively, as also required by Italian Code on Corporate Governance and reported on Eni website. The commitment of the entire Board on the issues of energy transition, climate change, risks, sustainability and ESG is unanimously recognized, and the centrality of the skills related to the above mentioned topics has been confirmed also



in the occasion of the last 2022 self assessment and renewal of the Board. Regarding the composition of the previous
BoD (mandate 2020-2023), based on the self-assessment conducted, about 90% of the Directors expressed their
positive opinion on the professionalism within the Board in terms of knowledge, experience and skills concerning
sustainability and energy transition, which encompasses also climate change. With reference to the new BoD, the
"Guidance to Shareholders on the Optimum Composition of the Future BoD". stresses the importance of ensuring
knowledge of issues related to sustainability and the control of climate and environmental risks gained in managerial or
entrepreneurial roles and acquired in industrial contexts comparable to those in which the company operates.
Moreover, the commitment of the entire Board to these aims is ensured by the induction and on-going training sessions
planned for the entire mandate of the previous BoD and immediately after the appointment of the new Directors, which
cover, among others, issues related to the decarbonization process and the environmental and social sustainability of
Eni's activities. Induction and ongoing training activities represent a well-established tool to ensure immediate and full
knowledge of Eni's strategic policies and objectives, as well as to delve into specific issues related to the company's
mission.

# 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)

Other C-Suite Officer, please specify DIRECTOR HUMAN CAPITAL & PROCUREMENT COORDINATION (DHCP)

#### Water-related responsibilities of this position

Assessing future trends in water demand Assessing water-related risks and opportunities Managing water-related risks and opportunities Setting water-related corporate targets



Monitoring progress against water-related corporate targets Managing value chain engagement on water-related issues Integrating water-related issues into business strategy Providing water-related employee incentives

#### Frequency of reporting to the board on water-related issues

Quarterly

#### **Please explain**

The DHCP supervises Eni's HSEQ processes, supporting business lines and transversal functions in achieving corporate objectives. The DHCP reports to BoD the main results of the HSE Committee (COHSE) and the Management Review (MR) which include water issues. The COHSE, is chaired by the Head of Eni's HSEQ function, is made up of its first reports and the HSE managers of the Business Units. Other corporate functions identified from time to time may also participate, according to the topics discussed. The committee is convened periodically to: address issues of cross interest in order to identify common solutions and approaches; evaluate areas for improvement of common interest, initiatives and projects; approve the outgoing elements of the MR, including water issues, before the transmission and representation of the most significant aspects and decisions taken to the top management, the CEO and the BoD.Frequency: at least yearly to BoD, biannually to CCR, quarterly to Direction Committee

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

Chief Risk Officer (CRO)

#### Water-related responsibilities of this position

Other, please specify Assessing and monitoring of Eni's main risks together with relevant risk owners

#### Frequency of reporting to the board on water-related issues

As important matters arise

Please explain



CRO is the Head of Integrated Risk Management (IRM). The Head of IRM ensures the conduct of IRM processes. The IRM process is designed to ensure that main Eni risks, Climate Change is included in Eni's "top risks", are identified, analysed and consolidated to support the BoD in making sure they are compatible with strategic goals and support the management in the decision making, reinforcing awareness of Eni risk profile and related mitigation activities. The Head of IRM presents the results at least quarterly to the Risk Committee of Eni, as well as to the Control and Risk Committee as well as, where requested, to other supervisory and control bodies. On at least a quarterly basis, the CEO submits the report on Eni's risks to the examination of the BoD. Within the process of strategic planning, the Head of IRM provides, on the basis of overall risk management activities, an expert contribution to the definition of the de-risking areas for the analysis of the corporate risk profile

# W6.4

#### (W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	Eni remuneration Report is publicly available at https://www.eni.com/en-IT/about-us/governance/remuneration- report.html The Report on remuneration policy and remuneration paid is prepared by the Remuneration Committee and is approved by the Board of Directors.

### W6.4a

(W6.4a) 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)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain
Monetary	Chief Operating	Reduction of	Eni is committed to reduction of freshwater	Eni Rewind CEO as well as Operation
reward	Officer (COO)	water	withdrawals expecially in water stress areas as	Management unit has a specific objective linked to
	Other, please	withdrawals -	reported in the Positioning on Water of 2021. To	the increase in the amount of re-use and re-
	specify	direct operations	respect its committment Eni promotes the use of	injection of water from groundwater and



	Head of TAF (groundwater treatment plant) mangement	low quality water, suche as water from TAF, and water re-use. Eni Rewind is the environmental company that owns and manages water from TAF. Water from TAF must respect quality standards before being re-used as low quality water or re- injected. IRM assesses the residual water risk each year, as physical risk for operational assets.	wastewater treatment plants compared to the total treated water (threshold: 9 million m3 for 2022; in the final balance 9.95 million m3). 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 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). Eni Rewind is Eni's environmental company.
Non- monetary reward	No one is entitled to these incentives		

# 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

Yes, trade associations

Yes, funding research organizations

Yes, other



# 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?

A detailed process guideline (i.e. "MSG for Government Affairs") regulates Eni's Public Affairs function to ensure consistency of the institutional relations and stakeholders' engagement with the Company's strategies and commitments. The MSG also highlights that all persons involved in the Government Affairs process must operate according to Eni's Code of Ethics in relating with counterparts. The Code of Ethics specifically mentions our commitment to fight climate change through the efficient use of natural resources, the protection of biodiversity and water resources, and the support of mitigation and adaptive actions in the contexts where we operate. Any violation to the Code is dealt with appropriate measures including contractual remedies provided under the applicable law. Institutional relations are managed at national, European, international and local levels also involving associative bodies, industry organizations and research centres to consolidate the Company's reputation and spread knowledge over topics of common interest, part of the global sustainability effort Eni has taken up. For example, in due institutional contexts, Eni proposes the adoption of a regulatory framework based on "suitability for use" capable of enhancing possible uses of treated water, according to Eni's circular and resources optimization principles. We also partner with several internationally recognized organizations focused on (water) sustainability (WBCSD, UN Global Compact, WEF, IPIECA).

# 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-2022.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	21-30	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 yearly, four-year and up to 2050 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 (2050), according to the three directives of Eni's business model: carbon neutrality in the long term; operational excellence; alliances for development. The protection of water sources are integral part of the operating model, as underlined by the commitment to the SDGs and to the CEO Water Mandate. The objective of Carbon Neutrality in the long term strategy is oriented towards the creation of long-term value, combining economic/financial and environmental sustainability. With the "dual flag" approach, Eni aims to cooperate with host countries to focus on the economic value of the resources of producer countries, and on support for sustainable development, such as access to clean water and sanitation as per SDGs commitment. In 2019, the Evaluation for Medium and Long Term Plans Committee was established, at the management level, chaired by the CEO to support the organic and sustainable development of Eni's business identifying strategic and operational guidelines and addressing the actions to ensure the achievement of the targets.
Strategy for achieving long- term objectives	Yes, water-related issues are integrated	21-30	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 protection is among the fundamental values within the Eni business model. In the new central organizational function established in 2020 and named "Scenarios, Strategic Options and Climate Change", a specific unit focuses its activities on water issues and performs an annual mapping and monitoring of water risks and drought in present and future scenarios (2030 and 2040 according to WRI/Aqueduct) in order to define long-term actions, also to prevent and mitigate the effects of climate change.



			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 productive sites and at water stress basins of strategic interest for Eni, 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 whereas Eni will drill the freshwater wells ,provide them with photovoltaic power systems, and will provide training for their use and maintenance for long term sustainability.
Financial planning	Yes, water-related issues are integrated	21-30	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. Community investment for projects of access to water and sanitary services, according to the commitment to the SDGs, as stressed in the new corporate mission, are integral part of Eni financial planning, as well as expenditures for withdrawals, monitoring and treatment and water injection. Eni integrates organically its industrial plan with the principles of environmental and social sustainability, extending its actions along three directives: operational excellence, carbon neutrality by 2050, alliances for development. Eni is in a new phase of evolution of its business model, strongly oriented towards creating value over the long-term that combines economic and financial sustainability with environmental sustainability. Eni's business model is aimed at creating long-term value for all stakeholders through a strong presence along the entire energy value chain. The core is represented by Eni's mission, inspired by the United Nations 2030 Agenda, whose foundations are embodied in Eni's distinctive approach, which permeates all activities. Eni is committed to fulfilling the essential pillars of the energy system trilemma, pursuing environmental sustainability together with energy security and affordability

# 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) 44

Anticipated forward trend for CAPEX (+/- % change) -7

Water-related OPEX (+/- % change)

8

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

0

#### Please explain

The investments in 2022 vs 2021 had a rebound as a consequence of the general recovery of activities and projects after the effects the pandemic, as anticipated in the 2022 CDP disclosure. The investments are anticipated to substantially stabilize in 2023. The OPEX expenditure, as anticipated in the 2022 CDP disclosure, did not change significantly in 2022, and no major changes are expected as no major changes in the operative assets are foreseen in the near future.

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 scenario analysis to inform its business strategy?

Use of	Comment
scenario	
analysis	



Row	Yes	In the context of Eni pathway to 2050 intermediate targets are in place to allow our stakeholders to track progress in the execution of
1		Eni decarbonization strategy. In 2030 we expect to be Net Zero Scope 1+2 in upstream and to cut by 35% Scope 1-2-3 emissions for
		the entire company. In 2022, our Net Zero emission KPIs (Scope 1+2+3) registered a reduction trend, both in absolute and intensity
		terms, in line with our decarbonization strategy and intermediate targets
		(https://www.eni.com/assets/documents/eng/governance/shareholders-meetings/2023/Say-on-Climate-ENG.pdf).
		The scenarios from IPCC are taken into account into the future water stress into Aqueduct water Atlas. Eni assesses its sites according
		to the 2030 and 2040 scenarios. An analysis of future water needs according to the evolution of the business has been considered.

# W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related Climate-related Socioeconomic Land-use change	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 visualizing 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, economic growth, land use change and declining supply in	The annual water risk analysis (RA) using Aqueduct (with projections to 2030-40) as well as specific local investigations, allows for site level recommendations if any water relate risks emerge,e.g. trends toward more restrictive regulations, low reliability of sources.Possible outcomes could be the restriction to use a specific water source.Recommendations identified in the RA represent an input of Eni 4YP. Possible identified actions include the replacement of freshwater with treated remediation water, wastewater, desal water.In 21-22 Eni developed a risk mng process to assess the physical risk related to CC of its	The annual water risk analysis carried out by Eni using Aqueduct as well as specific local investigations, allow for site level recommendations if any water relate risks emerge, such as trends toward more restrictive regulations, or decreased reliability of water sources both in terms of volumes and quality. In view of acknowledged water risks, in June 2021, Eni published its position on water. The company therefore undertakes to define objectives to minimize its freshwater withdrawals in water-stressed areas, seeking



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 to 2030 and 2040 of water stress, as provided by Aqueduct. In 2021 Eni published its own position on water resources, in which it undertakes to pursue the CEO Water Mandate and, in particular, to minimise its fresh water withdrawals in areas under water stress. The commitments undertaken lead Eni for optimal water management beyond the industrial boundary, integrated into

> the territory and to minimise the exposure of its activities to water risk, through an integrated approach at river basin level.

The risk and opportunity management process connected with climate change is part of the Integrated Risk Management (IRM) Model, developed by Eni with the aim of supporting the management in the decision-making process by strengthening awareness of

assets and of the 3rd party assets that can have a direct impact on Eni business as well. The process assesses the inherent risk of each asset, the mitigation actions in place and the corresponding residual risk with respect to each climate related risk (10 risks acute/chronic, including water related), based on their position in climate related risk exposed areas, with a time horizon of 30y. The process foresees that the assets resulted exposed in terms of residual risk will be analyzed within the Asset Integrity process through further quantitative and more detailed analysis and check of the design basis.Further mitigation actions, if required, can be identified and implemented. Based on the learnings and results of 2022 application, Eni will include quantitative "state of the art" data from one of the best-in-science physical climate risk analytics data provider

improvement solutions and leveraging innovative technologies. In 2021 a project was completed in collaboration with FEEM (Fondazione Eni Enrico Mattei) and the Pisa Institute of Management (IDM), for the assessment of the main risks/opportunities connected to Climate Change, which led to the development of guidelines and measures which provide methodological support for the identification and implementation of adaptation actions in Countries of interest. Moreover, as an active member of the IPIECA Water Working Group, Eni promotes guiding principles relevant for water management across the life cycle of oil and gas operations and water stewardship principles. It conveys the idea of going beyond simply managing risks and impacts from water use: it is the use of water that is socially equitable, environmentally sustainable and economically beneficial, achieved through a stakeholder-inclusive process.


the risk profile and related mitigations. As described in "Eni for 2022 - A Just Transition", risks related to climate change are analyzed, assessed and managed by considering the aspects identified in the TCFD recommendations. which refer both to the risks related to energy transition (market scenario, regulatory developments, legal risk, technological evolution and reputational issues) and to the physical risks (acute and chronic) associated with climate change. The analysis is carried out using an integrated and cross-cutting approach that involves specialist departments and business lines and considers the related risks and opportunities.

### W7.4

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

#### Row 1

Does your company use an internal price on water? Yes

#### Please explain

Presently water cost is identified with its price, or with the cost of licenses. Eni Rewind provides re-used water for industrial and environmental uses at the best cost, that is site specific based on quality requirements and related treatment processes. In such cases Eni Rewind gets fresh



water provided by local integrated water management authorities, at specific rates. According to Eni strategy, these figures are included in the Eni Rewind's business plan.

### W7.5

#### (W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Please explain
Row 1	Yes	According to the internal procedures (e.g. GRI 303 2018), the water resource management model adopted by Eni is based on the identification, assessment and minimization of impacts on water resources and the prevention of adverse events. Eni applies the ESHIA (Environmental, Social and Health Impact Assessment) process to all projects. As integral part of Eni's decarbonization strategy and energy transition, Eni will offer increasingly sustainable solutions to its customers, leveraging dedicated companies such as Plenitude, which will develop over 15GW of renewable capacity by 2030. In particular, photovoltaic and wind energy production is characterized by a two orders of magnitude lower water footprint with respect to fossil fuel (see Sustainability 2013, 5, 4674-4687).	Eni applies the ESHIA process to all projects. A monitoring system of water withdrawal and consumption that allows an adequate water balance at site level is established in order to reduce impacts and to guarantee the correct functioning of the production cycle, adopting the best practices of the sector and taking into account the sensitivity and vulnerability of the territorial context of reference and the bodies of water from which the withdrawals are made. Eni does not classify specific products as low water impact, however it is a matter of fact that wind and photovoltaic renewables production is characterized by very low water intensity (freshwater per produced energy) source if compared to conventional fossil fuel electric energy production.



# W8. Targets

### W8.1

(W8.1) Do you have any water-related targets?

Yes

### W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, but we plan to within the next two years	Presently, Eni is planning to set targets on water pollution. With regard to discharges (industrial, civil, meteoric,), according to its current internal procedures: "the employer is responsible for ensuring full compliance with the laws, regulations and national and local policies of the countries in which it operates, relating to the protection of water resources, according to policies and operating procedures specific to the business sector. Good management practices recommend that not only legal limits should be met, but that prevention programs should be undertaken, management procedures should be established, and Best Available Technologies (BAT) should be adopted where technically and economically feasible to minimize pollutant discharges, monitoring the quality and quantity discharged so that discharges occur in an environmentally and socially responsible manner and in compliance with applicable regulatory limits."
Water withdrawals	Yes	
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	Presently Eni has not set targets regarding WASH, however The Alliances for Development represent Eni's commitment to an equitable energy transition towards global human development models to achieve global and sustainable human development accessible to all. Where it operates, Eni launches long-term communitybased initiatives in collaboration with local Authorities and international development players to promote inclusive growth consistent with National Development Plans and the UN 2030 Agenda.



Other	No, and we do not	The Eni position on water clearly states the overall commitments of Eni to safeguard the water resources
	plan to within the	however, numeric targets other than those indicated in this section have not yet been set.
	next two years	

### W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

#### Target reference number

Target 1

Category of target

Water withdrawals

#### Target coverage

**Business activity** 

### Quantitative metric

Increase in water use met through recycling/reuse

#### Year target was set

2022

#### Base year

2021

#### Base year figure

9

Target year



2026

Target year figure

Reporting year figure

10

% of target achieved relative to base year 33.3333333333

#### Target status in reporting year

Underway

#### **Please explain**

Eni Rewind, 100% controlled by Eni, has a target to make available for industrial use consistent volumes of water (from 10 to 12 Mm3/year in the 2023-2026 plan) derived from its groundwater treatment plants (TAF). To facilitate the recovery and valorization of water resources, from a circular economy perspective, the Company promotes and supports a sustainable management, with the aim of maximizing reuse and reducing the withdrawal of water from the environment. 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. The target is consistent with the Eni's commitment to minimize water withdrawals in stress areas and is aligned to the first core element of the CEO Water Mandate. During 2022, approximately 10 Mm3 of treated water was recovered and reused mainly for industrial purposes, in line with planned volumes During 2022, through the 43 treatment plants managed, the company handled approximately 35 million of cubic meters of water, recovering about 10 million cubic meters for industrial use (within the sites) and environmental use, for example for reintroduction into the aquifer or for protection of surface water bodies. The remaining 25 million cubic meters was returned to the environment after treatment in line with current legislation. 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 built, in order to deliver treated water to companies for industrial use. The treated water is reused within the industrial sites or, in other cases, such as in Manfredonia site, the treated water is re-injected into the aquifer to restore its natural conditions.



### Target reference number

Target 2

### Category of target

Water withdrawals

### Target coverage

Business division

### Quantitative metric

Increase in water use met through recycling/reuse

### Year target was set

2021

### Base year

2021

### Base year figure

58

### Target year

2023

### Target year figure

59

### **Reporting year figure**

59

### % of target achieved relative to base year

100



#### Target status in reporting year

Achieved

### Please explain

Increase of the re-injection of produced water is a relevant target for the upstream business. 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 improve the oil recovery or to dispose them of. The reuse 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 higher quality sources.

The percentage of reinjected produced water in the Exploration & Production sector increased to 59% (58% in 2021), despite the deconsolidation of Vår Energi and the sale of some assets in Congo, which resulted in a reduction of both produced and reinjected water volumes. Planned maintenance of the share of re-injected produced water at no less than 59% by 2023.

# **W9. Verification**

### **W9.1**

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)? Yes

### W9.1a

(W9.1a) 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), as well as	ISAE 3000	Eni sustainability data have been certified by the auditing firm PWC. A limited audit was conducted in line with "International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Information"



	water withdrawals from water stress areas are		(hereinafter also "ISAE 3000 Revised") issued by the International
	reported in the Annual Report 2022		Auditing and Assurance Standards Board (IAASB) for limited assurance
			engagements. Quoting the auditor's report: "We are responsible for
			expressing a conclusion, on the basis of the work performed, regarding
			the compliance of the NFS with the Decree and the GRI Standards. We
			conducted our work in accordance with International Standard on
			Assurance Engagements 3000 (Revised) – Assurance Engagements
			Other than Audits or Reviews of Historical Financial Information ("ISAE
			3000 Revised"), issued by the International Auditing and Assurance
			Standards Board (IAASB) for limited assurance engagements. The
			standard requires that we plan and apply procedures in order to obtain
			limited assurance that the NFS is free of material misstatement. The
			procedures performed in a limited assurance engagement are less in
			scope than those performed in a reasonable assurance engagement in
			accordance with ISAE 3000 Revised, and, therefore, do not provide us
			with a sufficient level of assurance that we have become aware of all
			significant facts and circumstances that might be identified in a
			reasonable assurance engagement. [] Based on the work performed,
			nothing has come to our attention that causes us to believe that the NFS
			(non-financial statement) of Eni Group for the year ended 31 December
			2022 is not prepared, in all material respects, in accordance with articles
			3 and 4 of the Decree and with the GRI Standards"
W6	As described in EniFor 2022 - A just Transition	ISAE 3000	Eni sustainability data have been certified by the auditing firm PWC. A
Governance			limited audit was conducted in line with "International Standard on
			Assurance Engagements ISAE 3000 (Revised) – Assurance
			Engagements other than Audits or Reviews of Historical Information"
			(hereinafter also "ISAE 3000 Revised") issued by the International
			Auditing and Assurance Standards Board (IAASB) for limited assurance
			engagements. The level of assurance required by Eni is limited, which is



			the most common for sustainability reporting at the international level. Quoting the Independent auditor's report on the limited assurance engagement of the Sustainability Report – Eni For 2022 - A just Transition: << Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report – Eni for of Eni Group for the year ended 31 December 2022 is not prepared, in all material respects, in accordance with the requirements of the GRI Standards as illustrated in the "Reporting criteria" section of the Report."
W7 Strategy	Scenario and Strategy as described in the EniFor 2022 - A just Transition	ISAE 3000	Eni sustainability data have been certified by the auditing firm PWC. A limited audit was conducted in line with "International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Information" (hereinafter also "ISAE 3000 Revised") issued by the International Auditing and Assurance Standards Board (IAASB) for limited assurance engagements. The level of assurance required by Eni is limited, which is the most common for sustainability reporting at the international level. Quoting the Independent auditor's report on the limited assurance engagement of the Sustainability Report – Eni For 2022 - A just Transition: << Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report – Eni for of Eni Group for the year ended 31 December 2022 is not prepared, in all material respects, in accordance with the requirements of the GRI Standards as illustrated in the "Reporting criteria" section of the Report."
W8 Targets	Progresses and committments as described in EniFor 2022 - A just Transition	ISAE 3000	Eni sustainability data have been certified by the auditing firm PWC. A limited audit was conducted in line with "International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Information" (hereinafter also "ISAE 3000 Revised") issued by the International Auditing and Assurance Standards Board (IAASB) for limited assurance



			engagements. The level of assurance required by Eni is limited, which is the most common for sustainability reporting at the international level. Quoting the Independent auditor's report on the limited assurance engagement of the Sustainability Report – Eni For 2022 - A just Transition: << Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report – Eni for of Eni Group for the year ended 31 December 2022 is not prepared, in all material respects, in accordance with the requirements of the GRI Standards as illustrated in the "Reporting criteria" section of the Report."
W4 Risks and opportunities	Progresses and committments as described in EniFor 2022 - A just Transition	ISAE 3000	Eni sustainability data have been certified by the auditing firm PWC. A limited audit was conducted in line with "International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Information" (hereinafter also "ISAE 3000 Revised") issued by the International Auditing and Assurance Standards Board (IAASB) for limited assurance engagements. The level of assurance required by Eni is limited, which is the most common for sustainability reporting at the international level. Quoting the Independent auditor's report on the limited assurance engagement of the Sustainability Report – Eni For 2022 - A just Transition: << Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report – Eni for of Eni Group for the year ended 31 December 2022 is not prepared, in all material respects, in accordance with the requirements of the GRI Standards as illustrated in the "Reporting criteria" section of the Report."



# W10. Plastics

### W10.1

#### (W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics	Value chain	Please explain
	mapping	stage	
Row	Yes	Direct	Versalis is the Eni chemical company operating at an national and an international level in the basic chemicals and
1		operations	intermediates, plastics, rubbers, chemistry from renewable sources, in developing technologies for polymer recycling,
		Product use moulding and compounding. Across the value chain Versalis products are converted by third parties(customers) info	
	phase durable goods and placed on the marketplace. Products are in particular: polyethylene, styrenics and elastomers		durable goods and placed on the marketplace. Products are in particular: polyethylene, styrenics and elastomers are used
			by processing companies to produce a whole variety of products for everyday use

### W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact	Value chain	Please explain
	assessment	stage	
Row 1	Yes	Direct operations	Monomers for plastics or pellets are currently registered under REACH (where required) and sufficient information are available under such regulation to evaluate the impact on human health and the environment. In the next 2 years, in view of the possible restriction on microplastics and new provisions for synthetic polymer microparticles, Versalis will assess the potential impact of such upcoming changes. In addition, Versalis uses the Life Cycle Assessment (LCA) methodology, a structured and internationally standardised method to quantify the potential environmental and human health impacts associated with a product or service. To date, more than 72% of Versalis products placed on the market are assessed for their potential environmental impact



	according to the LCA method.
	Extent of the impact depends on the type of products.

### W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk	Value chain	Type of risk	Please explain
	exposure	stage		
Row 1	Yes	Direct operations Other, please specify	Regulatory Reputational	Versalis, Eni's chemical company, has assessed the exposure to plastics-related risks, considering in particular regulatory developments and society's perception of plastics. However the risks identified do not constitute a substantive impact on Eni's business because the impact fall under the threshold of loss of cashflow and the threshold of probability".
		management		

### W10.4

### (W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Please explain
Row 1	No – but we plan to within the next two years	

### W10.5

#### (W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	Yes	Versalis is the Eni chemical company operating at an national and an international level in the basic chemicals and intermediates, plastics, rubbers, chemistry from renewable sources, in developing



		technologies for polymer recycling, in the moulding and compounding industry In details, it manufactures intermediates, polyethylene, styrenics, elastomers and biobased products. Polyethylene, styrenics and elastomers are processed by third companies (customers) to produce a whole variety of products for everyday use
Production of durable plastic components	Yes	Through its subsidiary company Finproject, Versalis is active in the production of molded foam, compact and expanded compounds and in the manufacture and marketing of soles and ultralight components for top footwear brands and other industrial sectors, including the spa, automotive, furniture and safety industries
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	Yes	Versalis portfolio also contains BtoC products dedicated to the consumer market. it currently includes Invix®, the bioethanol-based hand and surface disinfectant, and Sunpower®, the pelargonic acid-based herbicide from renewable sources. These products are packaged in HDPE bottles
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

## W10.6

(W10.6) Provide the total weight of plastic polymers sold and indicate the raw material content.

### Row 1

**Total weight of plastic polymers sold during the reporting year (Metric tonnes)** 4,085,000



#### Raw material content percentages available to report

- % virgin fossil-based content
- % virgin renewable content
- % post-industrial recycled content

#### % virgin fossil-based content

97

% virgin renewable content

2.95

% post-industrial recycled content

0.15

#### **Please explain**

In order to disclose the percentage of renewable content and recycled content sold in our plastics products, we used a proxy. In particular, we used the weight of renewable content and recycled content on the total raw materials bought in the year 2022.

### W10.7

(W10.7) Provide the total weight of plastic durable goods/components sold and indicate the raw material content.

Row 1

Total weight of plastic durable goods/components sold during the reporting year (Metric tonnes) 76,000

#### Raw material content percentages available to report

% virgin fossil-based content

% virgin renewable content

% post-consumer recycled content



```
% virgin fossil-based content
```

% virgin renewable content

```
% post-consumer recycled content
```

```
0
```

#### Please explain

Details are not available yet. Estimated a 100% virgin-fossil based content.

### W10.8

(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.

	Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)	Raw material content percentages available to report	% virgin fossil- based content	% virgin renewable content	% post- industrial recycled content	% post- consumer recycled content	Please explain
Plastic packaging used	125.28	<ul> <li>% virgin fossil-based content</li> <li>% virgin renewable content</li> <li>% post-industrial recycled content</li> <li>% post-consumer recycled content</li> </ul>	100	0	0	0	Figures are referred to the sales of products packaged in plastic sold by Versalis in 2022. Figures are estimated as follows: number of items sold * weight of the packaged plastic per each product. They are packaged in 100% HDPE.



### W10.8a

### (W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.

	Percentages available to report for circularity potential	% of plastic packaging that is reusable	% of plastic packaging that is technically recyclable	% of plastic packaging that is recyclable in practice at scale	Please explain
Plastic packaging used	% reusable % technically recyclable % recyclable in practice and at scale	0	0	100	Packaging used is 100% HDPE approved by the Ministry of Health. 100% of plastic packaging is recyclable in practice and at scale because HDPE is sorted into a defined and existing stream for recycling with market value. Percentage have assessed by using the Ellen MacArthur Foundation's Recyclability Assessment Tool.

# 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	Eni CEO	Chief Executive Officer (CEO)

# SW. Supply chain module

### SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue		
Row 1			

### SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

### SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?		
Row 1			

### SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.



### SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

### SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

# Submit your response

#### In which language are you submitting your response?

English

### Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Yes, CDP may share our Main User contact details with the Pacific Institute

### Please confirm below

I have read and accept the applicable Terms

