

CDP Water Security Questionnaire 2021

Respondent: TotalEnergies

W0 Introduction

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

TotalEnergies is one of the largest international oil and gas companies and a major player in low carbon energies. It is present on five continents and in more than 130 countries, with consolidated sales of 140,685 M\$ in 2020. Committed to better energy, over 105,000 employees from nearly 160 nationalities help throughout the world to provide the Company's customers with products and services more affordable, more available and cleaner. As well as conducting its business according to the highest standards of professional behaviour, TotalEnergies maintains an ongoing commitment to transparency, dialogue and respect for others. The company is strategically dedicated to meeting the challenges faced by all its businesses when developing natural resources, protecting the environment, integrating our operations into host country cultures, and dialoguing with civil society.

Total's activities are divided into 4 main business segments:

- Exploration & Production of oil and natural gas (E&P).
- Integrated Gas, Renewables & Power (GRP) spearheads the Company's ambitions in low carbon energies. It comprises gas and electricity activities developed downstream of the gas chain all the way down to end-use consumers, including through LNG and power. Its activities include power generation, from gas and from renewables, solar, wind, and hydro, and power storage through batteries, and services for energy efficiency and energy access.
- Refining & Chemicals (RC) encompasses refining and petrochemical activities, renewable fuel and plastics from biomass and Hutchinson's operations. It also includes oil Trading & Shipping activities
- Marketing & Services (MS) includes worldwide supply and marketing activities mainly of oil products and services, but also of renewables incorporated in oil products, and of gas used for mobility.

Energy is inseparable from the major global challenges of sustainable development. Energy is a fundamental resource for economic, social and human development, which currently faces a twofold challenge: satisfying the energy needs of an ever-growing world population while reducing global warming. TotalEnergies' intention in becoming a broad energy company is to help meet that challenge in a responsible way.

On May 2020, TotalEnergies announced its climate ambition by 2050: to achieve carbon neutrality, from the production to the use of the energy products sold to its customers. The ambition is backed by an integrated strategy across the gas, electricity and liquid fuels value chains and the development of carbon sinks. To reach this goal, TotalEnergies leverages its integrated business model, which enables it to capture synergies between the different activities of the Company, its operational excellence, its technological expertise, and its capacity to manage complex projects. To reach the goals in the Paris Agreement, the ambition of its strategy is to reduce the carbon intensity of the energy mix that the Company offers to its customers and thus to contribute to the evolution of market demand and society's energy transition.

TotalEnergies faced two major crises in 2020: the COVID-19 pandemic that severely affected global energy demand, and the oil crisis that drove the Brent price below \$20 per barrel in the second quarter. In this particularly difficult context, the company implemented an immediate action plan and proved its resilience thanks to the quality of its portfolio.

Since 2016 TotalEnergies has committed to contributing to the UN SDGs and has structured its responsible development to make a more significant contribution, and regarding access to energy, decent work, human rights and climate change. TotalEnergies places the environment at the heart of its ambition to improve the environmental performance of its facilities and products. TotalEnergies' businesses operate in various regions, where the potential physical impacts of climate change, including changes in climate prediction models, are uncertain. Climate change potentially has multiple effects that could harm the company's operations.

The increasing scarcity of water resources may negatively affect the company's operations in some regions of the world, high sea levels may harm certain coastal activities, and the multiplication of extreme weather events may damage offshore and onshore facilities. TotalEnergies implements a policy of avoiding, reducing, managing, and monitoring the environmental footprint of its operations. As part of this policy, emissions are identified and quantified by environment (water, air and soil) so that appropriate measures can be taken to better control them.

TotalEnergies has adopted in 2020 a new biodiversity ambition to contribute to the protection of the nature on which humanity depends.

TotalEnergies takes a constructive approach on water resource management that is based on transparency and dialogue when communicating with its stakeholders and third parties.

(W-CH0.1a) Which activities in the chemical sector does your organization engage in?

- Bulk organic chemicals
- Bulk inorganic chemicals
- Specialty organic chemicals
- Specialty inorganic chemicals

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

- Upstream
- Midstream/Downstream
- Chemicals

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

Start date	End date
01/01/2020	31/12/2020

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

Country/area
Angola, Argentina, Belgium ,Bolivia, Brazil, Brunei, Canada, China, Congo, Czechia, Denmark, France, Gabon, Germany, India, , Israel, Italy, Kazakhstan, Lenanon, Malta, Mexico, Morocco, Mozambiue, Myanmar, Netherlands, Nigeria, Norway, Papua New Guinea, Poland, Portugal, Qatar, Romania, Senegal, Serbia, South Africa, South Korea, Spain, Sweden, Tunisia, Uganda, United Arab Emirates, United Kingdom, United States of America, Vietnam

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

Currency
Euros

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

- No

W1 Current state

Dependence

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

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Not very important	<p>Water is vital for the direct operations of Total. TotalEnergies' businesses operate in various regions, where the potential physical impacts of climate change are uncertain. The increasing scarcity of water resources may negatively affect the company's operations in some regions of the world, high sea levels may harm certain coastal activities, and the multiplication of extreme weather events may damage offshore and onshore facilities. The nature of TotalEnergies' business means that we need freshwater to run some of our sites. The company has committed to contributing to the SDGs since 2016 by taking steps to manage the volume of freshwater critical to our activities.</p> <p>In 2020, TotalEnergies' Refining & Chemicals (RC) activities represent 91% of our freshwater withdrawals (excluding open cooling). At RC sites, water is mainly used to produce steam and for cooling purposes. Water availability and quality are essential and remain so for business continuity. As mentioned by CDP, Freshwater corresponds to surface Freshwater, Groundwater-renewable and Third-party sources. All Freshwater sources are necessary for Exploration & Production (6%) and the Gas, Renewables & Power division (GRP) using 3% of fresh water for Cooling towers of cycle combined gas power plants and manufacture of batteries. Solar panels build-up will need more water and we strive to reduce reliance on freshwater sources.</p> <p>TotalEnergies' supply chain does not include water intensive products from mining commodity products and water is not particularly important for present needs. Regarding agricultural supply for biofuels, they are coming from areas without any water scarcity issues (controlled through our Geographic Information System). However, indirect water use's importance is expected to rise with the development of new environmental norms and TotalEnergies remains attentive to understand the dependence regarding future needs for freshwater of its direct operations and from its value chain.</p>

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Not very important	<p>The availability of recycled, brackish and/or produced water is important for TotalEnergies as the extraction of hydrocarbons produces large volumes of water (44% recycled, brackish and/or produced water is used by RC and 56% by E&P). The volumes of produced water and their discharge destination are accounted including the share that is immediately reinjected as part of the Enhanced Oil Recovery (EOR) process, and the share that is discharged to other water bodies. TotalEnergies' use of non-freshwater primarily occurs in once-through cooling processes and for maintaining reservoir pressure in E&P activities. As to E&P activities, brackish and saline water are mainly used for maintaining reservoir pressure in addition to produced water reinjection. It is therefore important for TotalEnergies to access enough recycled or brackish water to pursue its activities. As EOR and RC activities will remain core to TotalEnergies' activities, the company expects that, in the future, the availability of non-freshwater will remain very strategic to sustain all our activities. Smart, safe management of this produced water is both a business opportunity (treatment and recycling/reuse) and a regulatory necessity (compliance) to ensure a responsible approach towards local communities. We anticipate the deployment of new alternatives to recycle, or reuse produced water soon, for TotalEnergies to bring solutions linked to its activities for the potential situation of water scarcity. For example, the Tilenga project in the Lake Albert region in Uganda includes plans to develop six fields and 400 wells (including 200 water injection wells). All fluids (oil, water, gas) will be separated and treated to maintain pressure in the reservoir.</p> <p>There is no specific dependency to recycled, brackish or produced water identified in TotalEnergies' supply chain. Supplied liquids (chemicals, feedstocks, water) are limited in quantity and are commodities available from different places.</p>

Company-wide water accounting

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

Water aspect	% of sites / facilities / operations	Please explain
Water withdrawals – total volumes	100%	<p>100% of our activities use HARPE, the Company-wide environmental reporting system covers all the scope in which TotalEnergies is the operator. Created in 2010, HARPE, based on ENABLON technology, allows the sites to collect up to 20 water quantity primary indicators (+aggregated indicators) and 83 quality indicators. It is based on international norms like ISO14001, and constantly evolves in accordance with regulations and frameworks. HARPE data collection is planned annually at Company level and on a monthly/quarterly basis at Business Units. 100% of our sites with withdrawing of +500,000 m3 per year, report on their withdrawals measured through flowmeters (this threshold is the minimum volume required for a site, to have to report). For MS, this is sometimes much higher than their yearly withdrawals, but certain sites are recording to Harpe.</p> <p>Future withdrawal volumes are not expected to change significantly in the next 5 years due to an expected stable business energy product sector.</p>

Water aspect	% of sites / facilities / operations	Please explain
Water withdrawals – volumes by source	100%	<p>100% of our activities use HARPE, the Company-wide environmental reporting system covers all the operating scope. HARPE allows the sites to collect up to 20 water quantity primary indicators (+aggregated indicators) and 83 quality indicators. It is based on international norms like ISO14001, and constantly evolves in accordance with regulations and frameworks. HARPE data collection is planned annually at Company level and on a monthly/quarterly basis at Business Units. 100% of our sites with withdrawing of +500,000 m3/year, report on their withdrawals by source, directly measured through flowmeters or estimated for fresh or brackish water. Breakdown by source: Surface freshwater (10%), Brackish surface /seawater (60%), Groundwater-renewable (3%), Produced water (21%) and Third-party (7%).</p> <p>No significant change is expected soon. However, thanks to the strategy to get an operational excellence within an efficient water management, a reduction of the water consumption is expected by 2030.</p>
Produced water associated with your oil & gas sector activities - total volumes	100%	<p>100% of our activities use HARPE, the Company-wide environmental reporting system covers all the operating scope. HARPE allows the sites to collect up to 20 water quantity primary indicators (+aggregated indicators) and 83 quality indicators. Based on international norms, it evolves in accordance with new frameworks. TotalEnergies water associated with our O&G sector activities volumes are measured through flowmeters and continuously monitored by source at all our facilities for sites. The volumes of produced water and their discharge destination are accounted by the E&P branch, including the share reinjected as part of the Enhanced Oil Recovery (EOR) process, and the share discharged to other water bodies. It is reported in the E&P segment's environmental reporting system to continuous daily monitoring and consolidated in the HARPE annually.</p> <p>An increase in produced water total volumes is possible in the future according to announced portfolio changes (new projects under development).</p>
Water withdrawals quality	100%	<p>TotalEnergies' water withdrawals are measured through flowmeters and continuously monitored at 100% of our facilities for sites with withdrawing of +500,000 m3/year. At site level, TotalEnergies monitors the parameters of withdrawals to ensure that human health standards and process requirements are matched. Indicators are consistently monitored through site-measurements (sensors) and include standard suit biophysical parameters such as pH, water hardness, pollutant loading, salt content etc.</p> <ul style="list-style-type: none"> • E&P & RC: depending on the withdrawal sources (municipal, river...), the measurement frequency is aligned with the quality objectives, i.e., water used for boilers is daily assessed or water for cooling purposes is weekly assessed. • GRP: quality monitoring depends on the use (the quality is important to manage the process and the use of chemicals in CCGT). <p>According to the evolution of drought events throughout the world, it is anticipated that the quality of withdrawal water could decrease.</p>
Water discharges – total volumes	100%	<p>TotalEnergies' water discharges are measured through flowmeters and continuously monitored at 100% of our facilities for sites. HARPE, Company reporting system, allows the sites to collect up to 20 water quantity primary indicators (+ aggregated indicators) and 83 quality indicators. See more information above. TotalEnergies measures and monitors water discharges by volume through HARPE. Data is collected annually at Company level and daily/monthly/quarterly at some business units. Water discharges are monitored through HARPE for 100% of relevant sites and for 98% of discharges, mostly on a daily basis.</p> <p>The breakdown of discharges by source: Surface freshwater (7%), Brackish surface water/seawater (53%), Groundwater-renewable (38%), Third-party sources (2%). MS has been integrated in the scope of 2021 CDP to cover the full coverage of the Company activities.</p> <p>No significant change in the TotalEnergies volume of discharge water is now anticipated.</p>

Water aspect	% of sites / facilities / operations	Please explain
Water discharges – volumes by destination	100%	<p>TotalEnergies' water volumes are measured through flowmeters and continuously monitored at 100% of our facilities for sites with withdrawing of more than 500,000 m3 per year. All our activities use HARPE that allows sites to collect up to 20 water quantity primary indicators (+ aggregated indicators) and 83 quality indicators. TotalEnergies' business units report volumes of water discharges by destination for each operated facility (if material sites). Data is collected very frequently at site level (up to a continuous basis 24/7) and annually aggregated at HQ level. This indicator is monitored for 100% of relevant sites and for more than 98%, the water discharges are continuously measured through flowmeters. The HARPE destinations include: surface water, municipal or industrial wastewater treatment plans, groundwater.</p> <p>The breakdown of discharges: Freshwater (7%), Brackish surface water/seawater (53%), Groundwater- (38%) and Third-party (2%).</p>
Water discharges – volumes by treatment method	100%	<p>TotalEnergies' water volumes are measured through flowmeters and continuously monitored at 100% of our facilities for sites with withdrawing of more than 500,000 m3 per year. All our activities use HARPE that allows sites to collect up to 20 water quantity primary indicators (+ aggregated indicators) and 83 quality indicators. The water discharges are systematically treated as per the company requirements and daily measured and monitored. Data consolidation is annually done at Company level for more than 95% of indicators and is annually/monthly done for 100% at units' level. Treatment typology depends on branches, water flow types and activities thus the treatment methods are directly or indirectly monitored through classification of water flows by activities available in HARPE.</p> <p>According to investment forecast (LTP – Long Term Plan), no significant change in the use of treatment method is anticipated now.</p>
Water discharge quality – by standard effluent parameters	100%	<p>TotalEnergies' water volumes are measured through flowmeters and continuously monitored at 100% of our facilities for sites with withdrawing of more than 500,000 m3 per year. All our activities use HARPE that allows sites to collect up to 20 water quantity primary indicators (+ aggregated indicators) and 83 quality indicators. Through HARPE TotalEnergies consistently measures water discharge quality. A set of 2010-2020 environmental targets was defined in 2016 to maintaining hydrocarbon content of water discharges below 30 mg/l for offshore sites and below 15 mg/l for onshore sites. The following pollutants are monitored: Hydrocarbon content for E&P, macro-pollutants and micro-pollutants for RC, cadmium and nickel also COD and Suspended Solids for GRP. 100% of the significant sites monitor their discharges by sensors and aggregated at corporate level. A new strategic roadmap is to be published by 2021.</p> <p>No significant change in the quality of our effluents is expected so far.</p>
Water discharge quality – temperature	100%	<p>100% of our activities use HARPE that allows sites to collect up to 20 water quantity primary indicators (+ aggregated indicators) and 83 quality indicators. The temperature of discharged water is monitored through sensors and thermometers at operations. Due to the difficulty represented by the heterogeneity of the requirements in line with different regulations and the mixing zone definitions, this information is not consolidated at Company level and is monitored at local level. However, it is quite systematically required by local regulations and to comply to IFC monitoring programs at certain sites and is one of the most closely monitored parameters. In RC branch, temperature is continuously monitored (24/7) and exceedance of temperature limit in wastewater is integrated in monthly reporting. For MS, the temperature is controlled at the main sites. For E&P, temperature is monitored only for cooling water discharged.</p> <p>We are not expecting major non-conformities on this parameter soon.</p>

Water aspect	% of sites / facilities / operations	Please explain
Water consumption – total volume	100%	<p>100% of our activities use HARPE that allows sites to collect up to 20 water quantity primary indicators (+ aggregated indicators) and 83 quality indicators. TotalEnergies business units report their total volumes of water consumption for each operated facility in HARPE. These indicators are subject to continuous monitoring through flowmeters. Data collection and calculation is annual at Company level. Water Consumption is sometimes complex to monitor very precisely due to the difficulty to measure through flowmeters accurately Rainwater income. Consumption is thus measured for 100% as withdrawals and Discharges are monitored at 100% of the material reporting scope in HARPE.</p> <p>No significant change in the water consumption is expected so far.</p>
Water recycled/reused	100%	<p>100% of our activities use HARPE that allows sites to collect up to 20 water quantity primary indicators (+ aggregated indicators) and 83 quality indicators. The volumes of recycled/reused water are accounted at Company level through HARPE and are subject to continuous monitoring through flowmeters. Most of the recycled/reused water reported for CDP corresponds to E&P and RC. 51% of produced water is reinjected to the wells for reservoir pressure maintenance purposes (in top of more than the double of sea water also reinjected). Data collection is done annually at Company level and monthly/quarterly at some business. For GRP, in India, a rainwater harvesting collection pond & Sewage Treatment Plant has been implemented (GRP Direct operations), to improve water efficiency by reducing usage and consumption.</p> <p>Today, there is no announced major investment to increase the quantity of water recycled or reused at TotalEnergies.</p>
The provision of fully-functioning, safely managed WASH services to all workers	100%	<p>TotalEnergies is committed through its code of conduct to respect the ILO convention to provide employees with adequate work conditions, including access to potable water, toilet facilities. Audits are conducted yearly with Goodcorp since 2002. Each year, a steering Ethics committee chooses the audited affiliates according to the results of the former audits. The audits last about 10 days, during which the WASH services are audited for our employees but also for our subcontractor's employees.</p> <p>In RC branch, bacteriological analyses are done for showers and water distributors every 2 months and more if needed. This process enables to continuously measure progress across 100% of Total's operations. Results are compiled at site level and all non-conformities are systematically reported at Company level through SHARE platform, a Company-wide system.</p> <p>No change is expected for the future.</p>

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

Water aspect	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	575,700	About the same	<p>According to the CDP accounting principles (including produced water and non-freshwater as water withdrawals), TotalEnergies' water withdrawals are quite the same in 2020 compared to previous year, with an 1% decrease in absolute terms (584 in 2019) at the Company level. Breakdown by activity: E&P 46%, RC 52.6%, GRP 1%, and MS <1%. The decrease in the volume of freshwater withdrawals is largely related to a reduction in activity due to the COVID-19 pandemic for the RC branch which represents 53% of the total withdrawals. The temporary closing of some sites also explains the variation. Moreover the installation of a new flowmeters on one major refinery provided fairer and more consistent information for water volumes, than in previous years.</p> <ul style="list-style-type: none"> • According to the CDP principles, E&P withdrawals have increased in 2020 compared to previous year, with an 7% increase in absolute terms (250.7 in 2019). The evolution is mainly driven by the rise in non-freshwater used for Pressure Maintenance purposes, due to variation in assets' operations (change of portfolio). Of note, this data is different from the annual document, which only accounts for the freshwater withdrawals (115 million m³). Produced water is indeed fossil water and thus its cycle (either released or reinjected) is not linked to actual water resource. Rainwater collection is accounted in the 2020 figure thanks to an improved accounting procedure. • For MS and for some GRP sites, the coronavirus pandemic is responsible for the decrease of water withdrawals in 2020. • For GRP, there is a 57% decrease of withdrawals due to the operating exit from the Sunpower module manufacturing plant. <p>On the short to medium term, no significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. On the longer term, Total's commitment to a low-carbon business model should reduce its dependency to natural resources including freshwater.</p>

Water aspect	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total discharges	531,600	About the same	<p>The TotalEnergies water discharges have been quite stable in 2020 compared to previous year: with an 2% decrease in absolute terms (545.9 in 2019), even though it covers different realities among the different branches of TotalEnergies as described here-after.</p> <ul style="list-style-type: none"> • The slight decrease in the volume of discharges is largely related to a reduction (-9%) in activity due to the COVID-19 pandemic for the RC activities which represent 50% of the TotalEnergies withdrawals. To be noticed that until 2019, releases related to RKB activities (producer of steam and demineralized water for the LEUNA site) were integrated into the global releases from the site, it was decided to remove them. At certain sites, the volume of discharges from the cooling system could have decreased. • TotalEnergies' E&P water discharges (49% of the Company discharges) have increased in 2020 compared to previous year, with an 8% increase in absolute terms (244.3 in 2019). The evolution is mainly driven by unavailability of produced water injection and a full year of operations for assets added to the portfolio. Of note, this discharge data is different from the water discharged indicator followed in TotalEnergies' annual registration document, which only accounts for the total production water discharges. • Variations in the GRP operating perimeter with the exit of the solar panel production plants (Sunpower) between 2019 and 2020. Excepting this variation, GRP operations water discharges are about the same in 2020 compared to previous year. <p>On the short to medium term, no significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. On the longer term, Total's commitment to a low-carbon business model should reduce its dependency to natural resources including freshwater and subsequent discharges.</p>

Water aspect	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total consumption	44,100	Higher	<p>TotalEnergies' water consumption is higher in 2020 compared to the previous year: with an 16% increase (38.1 in 2019). It is calculated as the difference between total withdrawals and total discharges at the Company level. In absolute values, we notice a slight increase of our water consumption because of our progress initiatives regarding discharges, the effects of the covid pandemic at the RC and MS divisions and the exit of Sunpower plant for the GRP division. In conclusion the withdrawals have decreased less (-1%) than discharges (-2%).</p> <p>Progress initiatives correspond to an increased use of rainwater to supply the system fire and the installation of new flowmeters provided fairer and more consistent information with the water volumes at RC branch (82% of Company's water consumption). At certain sites, the volume of discharges from the cooling system have decreased, combined with a better effluent collection (including rainwater).</p> <p>E&P water consumption has decreased in 2020 compared to previous year, with a 6% decrease in absolute terms (6.41 in 2019). There is an improvement in the water used for Pressure Maintenance purposes. For MS, there is an increase in the recycled volumes of withdrawals.</p> <p>On the short to medium term, no significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. On the longer term, TotalEnergies' commitment to a low-carbon business model should reduce its dependency to natural resources including freshwater.</p>

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

Water aspect by business division	Volume (megaliters/year)	Comparison with previous reporting year %	Please explain
Total withdrawals - Upstream	268,700	About the same	<p>The E&P segment encompasses 100% of upstream activities. According to the CDP questionnaire's accounting principles (including produced water and non-freshwater as water withdrawals), E&P water withdrawals, which represents 46% of TotalEnergies withdrawals, have increased in 2020 compared to previous year, with an 7% increase in absolute terms (250.7 in 2019). The evolution is mainly driven by the rise in non-freshwater used for Pressure Maintenance purposes, due to variation in assets' operations (change of portfolio). Of note, this withdrawal data is different from the water withdrawal indicator followed in TotalEnergies' annual registration document, which only accounts for the total freshwater withdrawals (Freshwater withdrawals excluding once-through cooling water and rainwater = 115 million m³). Produced water is indeed fossil water and thus its cycle (either released in the environment or reinjected) is not linked to actual water resource. Rainwater collection is accounted in the 2020 figure (as it was in 2019) thanks to an improved accounting procedure. On the short to medium term, no significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. An increase in produced water total volumes is possible in the future according to announced portfolio changes (new projects under development).</p>
Total discharges – Upstream	262,600	About the same	<p>The E&P segment encompasses 100% of upstream activities. E&P water discharges (49% of the Company discharges) have increased in 2020 compared to previous year, with an 8% increase in absolute terms (244.3 in 2019). The evolution is mainly driven by unavailability of produced water injection and a full year of operations for assets added to the portfolio. Of note, this discharge data is different from the water discharged indicator followed in TotalEnergies' annual registration document, which only accounts for the total production water discharges. Moreover, TotalEnergies considers that the definition of reinjected water as a discharge is not appropriate for its E&P activities, since this water is reinjected in a fossil reservoir, replacing oil, and thus not causing any harm of any nature to the environment. For these reasons, total discharges indicator should not include water reinjected in oil reservoirs. On the short to medium term, no significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. An increase in water reinjected in oil reservoirs is possible in the future according to announced portfolio changes (new projects under development).</p>

Water aspect by business division	Volume (megaliters/year)	Comparison with previous reporting year %	Please explain
Total consumption – Upstream	6,000	About the same	<p>The E&P segment encompasses 100% of upstream activities. Its water consumption has been stable compared to previous year (6,41 in 2019). It is calculated as the difference between total withdrawals and total discharges for E&P segment. In conclusion the withdrawals have increased less (7%) than discharges (8%) and in absolute values, we notice an improvement of our water consumption because of an increased efficiency on water reinjected to the wells.</p> <p>On the short to medium term, no significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. On the longer term, TotalEnergies' commitment to a low-carbon business model should reduce its dependency to natural resources including freshwater.</p>
Total withdrawals – Midstream / Downstream	307,010	About the same	<p>The figures provided relate to the RC including both Refining and Chemical activities, GRP and MS segments. The total of water withdrawals for these activities have been stable compared to previous year with a 4% decrease (333.27 in 2019).</p> <ul style="list-style-type: none"> • The slight decrease in the volume of freshwater withdrawals is largely related to a reduction in activity due to the COVID-19 pandemic for the RC activities which represent 53% of the total Company withdrawals and 98,6% of downstream withdrawals. However, with an increase in open cooling water volumes, which are withdrawn and discharged (no significant water consumption). • For the other divisions (MS and for some GRP sites) the coronavirus pandemic is responsible for the decrease of water withdrawals in 2020. • In addition, for the GRP division, there is a 57% decrease of withdrawals due to the exit from the operating perimeter of the Sunpower module manufacturing plant between 2019 and 2020. They accounted for a significant proportion of the total quantity of water withdrawals in 2019. The amount of water withdrawals for activities operated on the same perimeter has changed slightly (<10%), on the combined cycle gas plants which is due to the evolution of the production. <p>On the short to medium term, no further significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. On the longer term, Total's commitment to a low-carbon business model should reduce its dependency to natural resources including freshwater.</p>

Water aspect by business division	Volume (megaliters/year)	Comparison with previous reporting year %	Please explain
Total discharges – Midstream / Downstream	268,940	About the same	<p>The figures provided relate to the RC including both Refining and Chemical activities, GRP and MS segments. The total of water discharges for these activities have been stable compared to previous year with a 6% decrease (301.59 in 2019).</p> <ul style="list-style-type: none"> The slight decrease in the volume of discharges is largely related to a reduction in activity due to the COVID-19 pandemic for the RC activities which represent 50% of the total discharges and 99.5% of the downstream discharges. Variations in the GRP operating perimeter with the exit of the solar panel production plants (Sunpower) between 2019 and 2020. Excepting this variation, GRP gas operations water discharges are about the same in 2020 compared to previous year. <p>On the short to medium term, no further significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. On the longer term, TotalEnergies' commitment to a low-carbon business model should reduce its dependency to natural resources including freshwater and subsequent discharges.</p>
Total consumption – Midstream/ Downstream	38,070	Higher	<p>The figures provided relate to the RC including both Refining and Chemical activities, GRP and MS segments. The total water consumption from midstream/downstream activities has increased in 2020 compared to the previous year: 17% (31.7 in 2019). It is calculated as the difference between total withdrawals and total discharges. In conclusion the discharges have decreased more (-6%) than withdrawals (-4%).</p> <p>In absolute values, we notice our water consumption has increased as a result of our progress initiatives, the effects of the covid pandemic at the RC, GRP and MS divisions and the exit of Sunpower plants for the GRP division between 2019 and 2020. For example, there was a slight increase in water consumption on the combined cycle gas plants (<5%) which is due to the evolution of the production.</p> <p>On the short to medium term, no significant change is anticipated for this indicator, apart from yearly variations in assets' perimeter and activity. On the longer term, Total's commitment to a low-carbon business model should reduce its dependency to natural resources including freshwater.</p>

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Yes	1-10%	About the same	WRI Aqueduct	<p>In order to identify its facilities exposed to the risk of water stress, TotalEnergies records the withdrawals and discharges of water on all of its operated sites that are significant for this indicator and assesses these volumes on the basis of the current and future water stress indicators of the WRI Aqueduct tool. In 2020, the Company's sites withdrew 105 million m3 of freshwater, with net consumption of 75 million m3. Half this volume was withdrawn in areas of high or extremely high water stress according to the WRI definition, i.e. areas where human demand for water exceeds 40% of resources available. These are mainly highly populated urban areas, such as urban areas in Northern Europe. According to the CDP Water definition, these withdrawals represent 9.6% of the overall Company's water withdrawals (including brackish water and seawater). For priority sites defined as those located in water stress areas and withdrawing more than 500,000 m3 per year, TotalEnergies assesses water resources risk levels using, in particular, the Local Water Tool (LWT) for Oil & Gas from the Global Environmental Management Initiative (GEMI). This tool also helps guide the actions taken to mitigate the risks and to make optimal use of water resources on the sites when necessary. The risk assessment establishes that the activities of the sites operated by the Company expose the other users of the water to a relatively low risk of water shortage. The risk mainly concerns the sites for which the water supply could be cut to maintain access to water for priority users.</p> <p>Globally, most of the sites operated by the company are not particularly exposed to water risk. By the end of 2020, the level of water risk was assessed with the LWT tool, on 20 priority operated sites (15 Refining & Chemicals, 3 Exploration & Production and 2 Gas, Renewables & Power). Meanwhile 12 significant sites are assessed at the "High (40-80%)" or "Extremely high (>80%)" level. We anticipate that by 2030, 3 of those sites will be downgraded to less stressed level while 3 others will become in high or extremely high stressed areas. Our analysis of the trend shows that the freshwater withdrawals in 2030 will remain quite stable in the water stress areas.</p>

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

Source	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	55,200	About the same	<p>The total water surface freshwater withdrawals from TotalEnergies' activities have been quite stable in 2020 compared to previous year: -2% (56,6 megaliters in 2019). Fresh water withdrawals are important to meet domestic needs of employees and for industrial uses. Rainwater is accounted since 2019 thanks to an improved accounting method.</p> <ul style="list-style-type: none"> The slight decrease (-3%) of freshwater withdrawals is largely related to a reduction in activity due to the COVID-19 pandemic for the RC activities (91% of the Total's freshwater withdrawals). At refineries and petrochemicals sites, water is mainly used to produce steam and for cooling. GRP (3% of the freshwater withdrawals) has decreased in 2020 compared to previous year (8.15 in 2019). <p>Wat-R-Use is our tool to collect data and calculate water footprint, within and beyond TotalEnergies boundaries.</p> <p>The situation should remain stable until 2030 in Europe mainly for GRP due to alternative sources of water supply and to the energy transition.</p>
Brackish surface water/seawater	Relevant	344,900	About the same	<p>Total's brackish surface water/seawater withdrawals are about the same in 2020 compared to previous year, with a 1% decrease in absolute terms (346.8 in 2019). This has been consistently calculated through the Company-wide reporting system HARPE.</p> <ul style="list-style-type: none"> For the E&P division (56% of brackish/seawater), withdrawals maintain reservoirs pressure over time. Non-freshwater withdrawals consist almost entirely of open ocean seawater, which is by essence an infinite resource, not conflicting with any other usage and thus not causing any water security issue. It is a vital use for the continuity of E&P's operations. Total's brackish surface water/seawater withdrawals for E&P have increased in 2020 compared to previous year, with an 8% increase in absolute terms. In the RC segment (44 % of brackish/seawater), brackish water/seawater is only used for once-through cooling purposes. Our withdrawals are lower in 2020, with an 8% decrease. <p>Future trend: Brackish water use may not increase in the future.</p>

Source	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Groundwater – renewable	Relevant	15,200	About the same	<p>Some sites are fully depending on groundwater renewable due to specific and remote location and to technical production aspects, and despite of the low volume of 15.2 megaliters, this source is relevant for TotalEnergies.</p> <p>Groundwater withdrawals have been stable in 2020 compared to previous year, +1% (15.1 in 2019). This is mainly due to lower withdrawals for the refining activities.</p> <ul style="list-style-type: none"> • EP groundwater renewable withdrawals (28%) have slightly decreased in 2020 compared to previous year (-8%) mainly due to optimization of well pumping operations. • RC groundwater renewable withdrawals (62%) are stable in 2020 (-3%). • GRP groundwater renewable withdrawals (10%) have increased in 2020, +21% (1,3 in 2019), due to evolution of production in combined cycle gas plants and battery manufacturing plants. • MS accounts for a non-significant share of the withdrawals and its withdrawals by source are not monitored. <p>In the next 5 years, no significant change is expected for this source of water.</p>
Groundwater – non-renewable	Nor relevant			TotalEnergies does not consider Produced Water as ground water and does not use non-renewable ground water, considering that this practice is not sustainable.
Produced / Entrained water	Relevant	121,500	About the same	<p>Our produced water withdrawals are stable in 2020, +2% (118.8 in 2019) due to comparable portfolio in the E&P (=100% of produced water withdrawals). Produced water is brought to the surface during the production of hydrocarbons. Volumes include the share reinjected in the EOR process, and the share discharged to other water bodies. The volumes of produced water depend on the age of wells: the oldest ones give more produced water.</p> <p>This indicator is linked to portfolio evolution. Smart, safe management of this produced water is both a business opportunity (treatment and recycling/reuse) and a regulatory necessity (compliance) to ensure a responsible approach towards local communities.</p> <p>In Uganda, the Tilenga project includes plan to develop six fields with 400 drilling wells (including 200 water injection wells). Production will be carried to a treatment plant, where the fluids (oil, water, gas) will be treated and all water produced to be reinjected into the fields.</p>

Source	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Third party sources	Relevant	38,900	Lower	<p>Some sites are fully depending on third party sources, and despite of the low volume, this source is relevant for TotalEnergies. Water from third-party sources (mainly municipal networks) have been lower in 2020, -15% (46.8 megaliters in 2019).</p> <ul style="list-style-type: none"> At RC (94% of third-party withdrawals), a few major industrial refineries in Europe are quite fully depending on third-party sources and withdrawals remain stable (-6%), due to an equal level of activity. E&P third-party withdrawals are very limited (3%). For the MS (2%), only by the largest retail networks (France) is reporting with a decrease due to the COVID pandemic. <p>GRP third-party withdrawals (1%) have decreased in 2020, -92% due to variations in the operating perimeter (exit of the SUNPOWER solar panel production plant, accounting for a significant volume of water withdrawn in 2019). The trend should remain stable in the future, mainly due to an equal level of activity and portfolio for the sites that depend to this water source.</p>

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

Destination	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	34,800	Much lower	<p>Water discharges to fresh surface water have been much lower in 2020, with an 40% decrease (57.6 megaliters in 2019).</p> <ul style="list-style-type: none"> E&P Fresh surface water discharges are stable in 2020, (+3%) due to comparable activity and portfolio. At the RC branch, total water discharges to fresh surface water have decreased in 2020 (- 44%), mainly due to a lower amount of water “used” (withdrawn and discharged) for cooling and due to the Covid pandemic. GRP total fresh surface water discharges have decreased in 2020 (-83%), due to variations in the branch's operating perimeter (exit from the operating scope of the SUNPOWER solar panel production plants). The amount of discharged water in fresh surface water for activities operated on the same perimeter has changed slightly (<10%). <p>On the short-medium term, there is no significant variation to expect. The trend should remain stable in the future, mainly due to an equal level of activity and portfolio for the sites that discharge into this water body.</p>

Destination	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Brackish surface water/seawater	Relevant	282,000	About the same	<p>Water discharges to Brackish surface water/seawater water are quite stable in 2020 compared to previous year, with a 2% decrease (287,1 megaliters in 2019). It is relevant to TotalEnergies' activities in two branches:</p> <ul style="list-style-type: none"> • To E&P operations due to its offshore operations (17% of Total's brackish/seawater discharges). Stable with a slight decrease of 2% for EP. • For RC (83% of total's discharges to brackish surface water/seawater). The stable figure with a slight decrease is mainly due to a lower amount of water "used" (withdrawn and discharged) for cooling and due to the Covid pandemic. <p>There is no foreseeable change expected in the future. The trend should remain stable in the future, mainly due to an equal level of activity and portfolio for the sites that discharge into this water body.</p>
Groundwater	Relevant	203,400	Higher	<p>Water discharges of Groundwater renewable water are higher in 2020, +10% (188,4 megaliters in 2019) due to higher volumes of non-freshwater used for reservoir pressure maintenance. Relevant to E&P operations due to high reservoirs pressure maintenance activities and Enhanced Oil Recovery. Reinjection is perceived as the best way to handle produced water and neutralize their possible impact to environment. TotalEnergies does not consider Produced Water Reinjection as discharge to groundwater (not discharged to a water body) and does not discharge water to phreatic groundwater resources aside from this activity. Thus, the use of the term discharge to groundwater corresponds to discharge to Hydrocarbon reservoir and includes non-freshwater used (withdrawn + discharged) for Pressure Maintenance.</p> <p>There is no foreseeable change expected soon. An increase in water reinjected in oil reservoirs is possible in the future according to announced portfolio changes (new projects under development).</p>

Destination	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Third-party destinations	Relevant	11,400	Much lower	<p>Water discharges to third-party destinations are much lower in 2020, -28% (14,7 megaliters in 2019)</p> <ul style="list-style-type: none"> • For RC (89% of Company discharges to third parties), mainly relevant for its chemical specialties activities (Hutchintson) which use external wastewater treatments (municipal or industrial). • For GRP (4%), an increase (0,42 megaliters gap), mainly due to an improvement of discharges monitoring. • For MS (7%), in the cities, the water used in stations and rainwater from roads go to municipality networks with current development of water recycling systems, to optimize water efficiency and business continuity in case of droughts (66 regions in France with water restrictions). The carwash are now fitted with recycling/reuse units that allow to recycle 25% of the water withdrawals. <p>There is no foreseeable change expected in the future. The trend should remain stable in the future, mainly due to an equal level of activity and portfolio for the sites that discharge to third parties.</p>

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

Highest level of treatment within direct operations	Relevance	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	44,560	Much lower	11-20%	<p>This treatment is only relevant for the RC division.</p> <p>For TotalEnergies, the tertiary treatment is applicable at a refinery or petrochemicals plants, where 3 different stages are applied and the last one consists of a biological treatment with aerobic/anaerobic steps.</p> <p>The volume of effluents to be treated has decreased due to Covid-19 pandemic.</p>

Highest level of treatment within direct operations	Relevance	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Secondary treatment	Relevant	266,440	About the same	51-60%	This treatment is relevant for the GRP and the RC divisions. For TotalEnergies, the secondary treatment is equivalent to a physical-chemical treatment, with flocculation. For RC: it corresponds to some petrochemicals sites. For EP: it corresponds to water discharged into environment (sea most of the time, rivers for onshore sites) or to water injected into the reservoirs. It's mainly produced water that is reinjected after primary separation and secondary treatment. For GRP: A physical-chemical treatment is carried out before the water is discharged into the natural environment in certain gas power plants. The sites ensure compliance with the emission limits set by their local regulations.
Primary treatment only	Relevant	5,240	About the same	1-10%	This treatment is relevant for RC et MS divisions. For TotalEnergies, the primary treatment is a treatment with decantation. RC (84% of this treatment): it is applied at some petrochemicals sites. MS (16% of this treatment): it corresponds to highway stations and storage units.
Discharge to the natural environment without treatment	Not relevant				
Discharge to a third party without treatment	Relevant	10,610	Lower	21-30%	This treatment is relevant for the RC and GRP divisions. RC (95% of this discharge): for most of the RC sites, water effluents are pre-treated before sending them to a third-party network. GRP (5% of this discharge): we currently consider that the water discharged by battery manufacturing plants is sent to the public network for external treatment. Sanitary water from the cycle combined gas power plants is also discharged to the network for external treatment.

Highest level of treatment within direct operations	Relevance	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Other	Relevant	204,730	About the same	11-20%	This category is relevant RC and GRP divisions. RC: it corresponds to water discharged toward some industrial users and corresponds to the water for open cooling systems. This flow of water does not need any treatment as the water quality is not modified, and as consequence there is no impact on environment. GRP: the treatment method analysis is still in progress for the other GRP sites.

Water intensity

(W-CH1.3) Do you calculate water intensity for your activities in the chemical sector?

No, and we have no plans to do so in the next two years

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

Yes

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

Business division	Water intensity value (m3)	Numerator: water aspect	Denominator	Comparison with previous reporting year	Please explain
Midstream / Downstream	0.17	Freshwater withdrawals	Barrel of Petrochemical products	About the same	<p>This metric is expressed in m3 of total freshwater withdrawal for the downstream activities (excluding once-through cooling water and rainwater), per Barrel of Petrochemical products (BBL). The intensity metric is 0,17 in 2020 (0.133 in 2019), corresponding to Water withdrawals of 60 005 291 of m3 for 2020/ Barrel of Petrochemical products throughput of 348 287 230 BBL in 2020. Both metrics are KPIs for TotalEnergies and consistently measured and monitored. The ratio is slightly increased due to lower levels of activity (-20%) and less used water (-4%). This metric is observed and is subject to a very detailed benchmark, which helps review our strategy to reduce water intensity. And identifying possible margin for improvement or possible needs for innovative technology implementation. TotalEnergies remains at the top of the best performers in the O&G sector. The benchmark is updated yearly to the management as appropriate.</p> <p>Best practice: Wat-R-Use tool is the company tool to validate the cost models and calculate Water footprint. TotalEnergies developed this tool with a multi criteria approach for direct and indirect Water footprint, evaluate ecotoxicity and take actions limiting water risk. It helps reduce our water use wherever possible, and without harm to the environment at site locations. Wat-R-Use tool is now for use within TotalEnergies and outside (under the name of GreenFlex), contributing to water efficiency within and beyond TotalEnergies boundaries. The implementation of the R-use tool has saved significant amounts of intake water from solar panel manufacturing plants.</p> <p>No major evolution is expected for this parameter There is no foreseeable change expected in the future as petrochemical products will be progressively replaced by biofuels which require the same water volume than petrochemical products.</p>
Midstream / Downstream	0.47	Freshwater withdrawals	MW produced	About the same	<p>This metric corresponds to GRP division, and more precisely to the activity of 4 combined cycle gas turbine (CCGT) power plants. It is calculated as the total water withdrawals of the plants (3×10^6 m3) divided by the electricity produced ($6,39 \times 10^6$ MWh).</p> <p>We record the same level as last year (0,48 m3/MWh). According to a benchmark among power producers, this performance is among the bests in class.</p> <p>This metric is expected to decrease in the future as electricity will be mostly produced by solar and wind plants, and by power stations with limited needs of water (air cooling rather than water cooling).</p>

W2 Business impacts

Recent impacts on your business

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

No

Compliance impacts

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

No

W3 Procedures

Potential water pollutants management procedures

(W-CH3.1) How does your organization identify and classify potential water pollutants associated with its activities in the chemical sector that may have a detrimental impact on water ecosystems or human health?

See our response to question W-OG3.1.

W-CH3.1a) Describe how your organization minimizes adverse impacts of potential water pollutants on water ecosystems or human health. Report up to ten potential pollutants associated with your activities in the chemical sector.

Potential water pollutant	Value chain stage	Description of water pollutant and potential impacts	Management procedures	Please explain
Total's potential pollutants are Hydrocarbon (HC), COD, COT, heavy metals, phenols, BTEX and Polycyclic aromatic hydrocarbons (PAHs)	<ul style="list-style-type: none"> • Direct operations • Distribution network • Product use 	Total places strong focus on water pollution risk management, especially potential contamination by hydrocarbons, chemicals and cuttings. Total's potential pollutants are Hydrocarbon (HC), COD, COT, heavy metals, phenols, BTEX and Polycyclic aromatic hydrocarbons (PAHs). Impacts of pollutants mismanagement could include the alteration of local ecosystems and health impacts on local communities like toxicity (high HC content) or eutrophication induced by high nutrient content (chemicals) in discharge water. Produced water can contain high concentrations of salts, organic and inorganic chemicals, and naturally occurring radioactive material. All contaminants could possibly accumulate in the trophic levels of the food chain and ultimately threaten human health.	<ul style="list-style-type: none"> • Compliance with effluent quality standards • Measures to prevent spillage, leaching, and leakages • Providing best practices instructions on product use • Providing best practice guidance to suppliers • Auditing supplier compliance to industry standards • R&D into less harmful alternative products 	See our response to question W-OG3.1

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

The Company's operations generate discharges of wastewater and the risks of soil pollution related to its operations come mainly from accidental spills and waste storage. In addition to complying with applicable legislation, TotalEnergies has drawn up rules and guidelines that the Company's Subsidiaries can use to limit the quantities discharged. TotalEnergies has set targets for limiting its hydrocarbon discharges into water.

POLICIES: In keeping with its Safety Health Environment Quality charter, TotalEnergies considers respect for the environment to be a priority. All employees, at every level, must do their utmost to protect the environment as they go about their work. To manage the operational risks, the Company adopted a preventive and remedial approach putting in place centralized HSE and security management systems. TotalEnergies relies on the HSE division, part of the PSR division, whose President is a member of the EXCOM. The HSE division coordinates the implementation of the Company's HSEQ charter.

The One MAESTRO framework and includes the requirements of the international standards ISO 14001:2015 (environmental management) and ISO 45001:2018 (occupational health and safety). The One MAESTRO reference framework states that the environmental management systems of the sites operated by the Company that are important for the environment must be ISO 14001 certified within two years of start-up of operations or acquisition: 97% of these 79 sites were compliant in 2020. In the Refining & Chemicals segment, refineries and petrochemical sites put consultation with stakeholders at the heart of their ongoing improvement strategy and are all ISO 14001 certified. The sites not yet certified within this two-year period are the Lapa site in Brazil which should be certified in 2021, and the Kaombo Norte site in Angola, whose certification audit has been postponed until 2021 because of the COVID-19 pandemic. In addition to this requirement, at the end of 2020, a total of 266 sites operated by the Company were ISO 14001 certified. In 2020, 12 sites received ISO 14001 certification.

FRAMEWORKS: TotalEnergies refers in its water pollutants management both to regulatory and industry best practices. Regulatory frameworks can be national/supranational (REACH or SEVESO) or international conventions (Barcelona Convention or OSPAR). TotalEnergies refers to industry best practices, from organizations including the IOGP, IPIECA, CONCAWE. ConcaWE intends to play an important role in developing sound science to address these issues for RC. TotalEnergies participates in industrial working groups, to identify and anticipate potential dangerous substances contained in effluents, through studies, through extensive analysis campaigns, by asking the sites to respond to Surveys, to establish benchmarks and cross information from sites. TotalEnergies has its own research centre with pilot rivers and is testing various methods to highlight the ecotoxicity of effluents.

VALUE CHAIN: As to its value chain, water pollution risks are part of the parameters integrated in Total's suppliers' assessment, especially through the identification of those with production sites in Ramsar (wetland) protected areas, which are paramount importance areas for water natural reclaim and resource. TotalEnergies procedures also require that purchased chemicals be selected to minimize toxicity, bioaccumulation and persistence in the environment to protect both environment and human health. TotalEnergies engages with its clients on water pollution risks through labelling information on its products, by providing regulatory end-of-life information. The Company is approaching industrial recognized experts to capitalize on the momentum of expertise and the partnerships forged with the major water treatment companies make it possible to create an integrated water management system, both upstream and downstream. With all partners, a technical brief is defined on water treatment parameters. The objectives apply both to water withdrawals, the treatment of produced waters and to the water discharges. TotalEnergies' water treatment suppliers must commit to controlling chemical products injection, to monitoring the levels of legionellosis but also to following and avoiding all potential pollutions in rejected waters. A reflection is carried out on the optimization of the recirculation of water and the conformity of WWTP on the levels of BTX pollutants. A roadmap will be defined to make standard certain virtuous practices.

TotalEnergies' success at building and expanding partnerships worldwide can also be attributed to its strategy of generating value at the local level as part of its growth model. That commitment – carried out systematically and professionally – is a major competitive asset. Whether they target continued growth in LNG or renewable power generation, the Company's partnerships with governments and local communities serve a critical function.

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

Potential water pollutant	Business division	Description of water pollutant and potential impacts	Management procedures	Please explain
Hydrocarbons	<ul style="list-style-type: none"> • Upstream • Midstream / Downstream 	<p>Hydrocarbons are organic compounds that naturally occur in crude oil. If massively released to the environment (during production, transport or refining) through water discharge or accidental spills, hydrocarbons can significantly impact natural environments (both fauna and flora). The scale of impacts generated can vary depending on the volume of hydrocarbons discharged and can go from very localized impacts for minor spills to major environmental impacts for large oil spills. Chronic potential impacts related to hydrocarbon releases in effluents are possibly reaching an Environmental Impact Factor (EIF) above 10,000 according to Norwegian Continental shelf (NCS) standards. Among potential impacts it can noted: fishes, benthic fauna, plankton, invertebrates mortality, reproduction adverse effects, physical contamination of sediments including river banks, shoreline and soil, long term chronic effects on endocrine systems or reproduction.</p>	<ul style="list-style-type: none"> • Compliance with effluent quality standards • Measures to prevent spillage, leaching, and leakages • Community / stakeholder engagement • Emergency preparedness • No formal management procedure in place 	<p>The risk of having a significant detrimental impact over the natural environments is monitored through a yearly target of maintaining the hydrocarbon content of the water discharge below thresholds (15 mg/l for onshore/coastal sites and 30 mg/l offshore). 100% of the Company's oil sites have met the target for the quality of onshore discharges since 2016 and 100% of the Company's oil sites for the quality of offshore discharges in 2019. This worldwide Company objective is complemented by risk analysis based on the DREAM model to implement extra treatment measures. The performance is actually much better than the objective for coastal downstream sites: 1 mg/l. Total's approach combines thresholds and risk analysis and treatment systems are adapted to pollution risk reduction. Sites from RC monitor their water effluents in a regular basis (daily for some pollutants), and monthly performance is screened by headquarters.</p> <p>The risks of soil and water pollution to TotalEnergies' operations come mainly from accidental spills and waste storage. In terms of preventing the risk of accidental pollution, in 2020, TotalEnergies has assessed the preparedness of 119 operated sites for oil spills (sites whose risk analysis identified at least one risk of major accidental pollution to surface water). The target measure is that 100% of those 119 sites have an operational oil spill contingency plan and 88% have performed an oil spill response exercise (85% in 2019).</p> <p>The Company has drawn up a guide to prevent and contain this pollution based on 4 pillars:</p> <ul style="list-style-type: none"> • preventing leaks, by implementing, industry best practices in engineering, operations and transport; • carrying out maintenance at appropriate frequency to minimize the risk of leaks; • overall monitoring to identify any soil and groundwater pollution; and • managing any pollution by means of containment and reduction or elimination operations. <p>This system is supplemented by requirements of the One MAESTRO framework. In accordance with industry best practices, TotalEnergies also monitors accidental liquid hydrocarbon spills of more than one barrel. As a success measure, zero fine has been recorded.</p> <p>VALUE CHAIN: Position papers are established jointly between the HSE teams and the Division's strategy department. Documents are exposed to the Management Committee of the Branch or even to the EXCOM, to verify if they are in line with the Company's stated objectives.</p>

Potential water pollutant	Business division	Description of water pollutant and potential impacts	Management procedures	Please explain
Chemicals	<ul style="list-style-type: none"> Upstream 	<p>Total's activities may potentially be located in sensitive natural environments. The Company is fully aware of this challenge and takes biodiversity and ecosystems into account in its reference frameworks, the founding element of which is its Safety Health Environment Quality charter, as well as in projects and operations. Chemical products are mostly used by Exploration and Production activities. However, the Company's management norms are applicable for all of its activities. This includes sludges, drilling fluids, etc. Mismanagement of chemicals can lead to harmful products being released into the environment. This can affect local ecosystems, both in terms of fauna (e.g. toxic products' impact on biodiversity) or flora (e.g. lower soil fertility). The scale of impacts generated can vary depending on the volume of chemicals discharged and can go from very localized impacts for minor chemical discharges to significant environmental impacts for large chemical mismanagement events (pollution of water resources for instance). Chronic potential impacts related to hydrocarbon releases in effluents are possibly reaching an Environmental Impact Factor (EIF) above 10.000 according to Norwegian Continental shelf (NCS) standards.</p>	<ul style="list-style-type: none"> Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community / stakeholder engagement Emergency preparedness 	<p>Company's internal rules require that impact assessment taking into account biodiversity and ecosystems to be carried out and action be taken if necessary. Within the framework of the Act4Nature initiative, the Company made 16 biodiversity commitments. A review of the actions already been performed on the first three priority commitments was made in 2019. For the management of chemical products, TotalEnergies refers to both relevant regulatory standards (such as the CLP and REACH at European level) and industry best practices. The ISO 14001 principles are implemented at Company level in company rules (for toxic products storage and confinement for instance) and cascaded at site level as well. TotalEnergies implements Environment Management Systems taking chemicals into account from the selection/supply step until the disposal step. For the latter return to the supplier is even considered as priority. These principles are set in the environmental management system MAESTRO, which details the HSE management principles (ISO 14001 standards). This is completed by specific documents for the management of the different categories of potential pollutants (sludge, drilling fluids, chemicals storage, guide on polluted sites and soils, accident management, guide to prevent local population water pollution etc.). DREAM modelling is also applied to maintain an ALARP risk assessment (As Low As Reasonably Practicable) related to the discharge of certain chemicals through produced water as low as possible and anyway at an acceptable level. TotalEnergies is also applying a policy for the drilling fluids, to avoid detrimental chemical usage and discharge. Chemicals are also present in hydrotest water (water used to test pipelines). TotalEnergies has put in place specific procedures to limit as much as possible the use of chemicals during those tests and based on a risk approach, to minimize any harmful impact related to the discharge of those fluids.</p> <p>As a success measure, no major pollution or fine has been reported.</p> <p>For its chemical supply, TotalEnergies applies environmental criterion pertaining to ecotoxicity, bioaccumulation and biodegradation to select the most environmentally friendly chemicals and at the end of the value chain, ensures a proper disposal of chemicals with the lowest environment impact.</p>

Potential water pollutant	Business division	Description of water pollutant and potential impacts	Management procedures	Please explain
Cuttings	<ul style="list-style-type: none"> Upstream 	<p>Drill cuttings are the broken bits of solid materials removed as part of O&G wells drillings. Improper disposal of the resulting waste can lead to water pollution, especially at offshore sites. The scale of impacts generated varies depending on the volume and nature of mismanaged cuttings, and the sensitivity of the sediment community (benthos). Shannon-Winner indexes (an indicator of local biodiversity) could be significantly affected and get much lower than 2 by improper release of high hydrocarbon content drilling wastes or if the chemical content of released cuttings is inappropriate.</p>	<ul style="list-style-type: none"> Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community / stakeholder engagement Emergency preparedness 	<p>Cuttings are subject to the same risk assessment approach as chemicals and Hydrocarbons. In certain countries TotalEnergies applies a “zero discharge” policy, particularly for drilling waste (drill cuttings) which are brought back to shore and treated appropriately to avoid any discharge to the sea. When a part of drilling waste is released to the water column (mostly water-based mud cuttings) TotalEnergies implements a water column and sediments monitoring program every 3-5 years (depending of the division) in order to monitor possible impacts during the whole life of the field. TotalEnergies uses the MEMW (Marine Environmental Modeling Workbench) model to assess the impact of the cutting's particles on the water column and this is used to design properly the drilling sequences and reduce the impacts on water column as much as possible. As a success measure, no major pollution or fine has been recorded. For nearly 20 years (even before 2001) TotalEnergies has engaged in different programs assessing and reducing drilling waste impacts on water column and has now a strong set of tools and practices that are shared in the 130 countries where TotalEnergies has operations.</p>
Chemicals	<ul style="list-style-type: none"> Midstream / Downstream 	<p>For the GRP division, combined cycle gas power plants generate chloride, nitrogen and sulfate chemicals. The analyses carried out on the discharges ensure that the sites comply with the limit values for pollutant emissions.</p>	<ul style="list-style-type: none"> Compliance with effluent quality standards 	<p>TotalEnergies has established procedures that help to manage Chemicals risks: GRP: In the event of process modifications, the impact on effluent quality is studied through measurement by sensors. RC: Implementation of self-monitoring programs in accordance with permits. Monthly monitoring of emission limit overruns. Systematic investigation of the causes and implementation of action plans in case of water treatment dysfunctions. Three action plans have been put in place for the period 2020. As a success measure, no formal notice on the quality of discharges over the 2020 period and zero fine has been recorded.</p>

Risk identification and assessment procedures

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

Yes, water-related risks are assessed

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

Value chain stage	Coverage	Risk assessment procedure	Frequency of assessment	How far into the future are risks considered?	Type of tools and methods used	Tools and methods used	Comment
Direct operations	Full	Water risks are assessed as part of an enterprise risk management framework	More than once a year	More than 6 years	<ul style="list-style-type: none"> • Tools on the market • Enterprise Risk Management • International methodologies • Databases 	<ul style="list-style-type: none"> • GEMI Local Water Tool • WRI Aqueduct • ISO 31000 Risk Management Standard • Environmental Impact Assessment • Life Cycle Assessment • IPCC Climate Change Projections • Regional government databases • Internal company methods • External consultants • Other: PROTEUS, ISO 14046, GRMC, SRM+, ERASM (Internal risk assessment tool), CORISK 	<p>The Company implements a global risk management system that relies on a continuous process of identifying and analyzing risks to determine those that could limit the achievement of TotalEnergies' goals. The specificities of the Company's activities incur environmental risks, for which TotalEnergies has developed a structured management policy. Our main environmental challenges:</p> <ul style="list-style-type: none"> • preventing risks of accidental pollution • limiting environmental footprint by managing energy consumption, emissions in natural environments (water, air, soil) and use of natural resources • managing impacts to biodiversity and ecosystems during projects and operations especially in sensitive natural environments • limiting production of residual waste by supporting the circular economy. <p>The ExCom, along with the Company Risk Management Committee, is responsible for identifying and analysing risks that could impact the achievement of the Company's objectives. Risk mapping, carried out since the 2000s, is a dynamic process. Water resources management is evaluated and monitored during Risk Committee (CORISK) meetings. Water-related risks are systematically evaluated as part of projects' Environmental Impact Assessment (EIA) in their prospect and design phases Life Cycle Assessment (LCA) as a decision-making Tool.</p> <p>EIAs are systematically used for projects and enable to give information to ExCom through the CORISK. WRI Aqueduct and the Local Water Tool are systematically used according to the strategy.</p>

Value chain stage	Coverage	Risk assessment procedure	Frequency of assessment	How far into the future are risks considered?	Type of tools and methods used	Tools and methods used	Comment
Supply chain	Full	Water risks are assessed in an environmental risk assessment	More than once a year	More than 6 years	<ul style="list-style-type: none"> • Tools on the market • Enterprise Risk Management • International methodologies 	<ul style="list-style-type: none"> • GEMI Local Water Tool • IPIECA Global Water Tool • WRI Aqueduct • Life Cycle Assessment • Other: PROTEUS, ISO 31000, ISO 14046, GRMC, SRM+ 	<p>Regarding risks linked to partnerships management, the procedures for selecting the Company's commercial partners (joint-ventures and suppliers) and managing the different stages in the life cycle of each partnership are governed by structured internal frameworks, applied by all TotalEnergies entities.</p> <p>To select future partners for the creation of a joint company, the Company's framework includes a due diligence process relating to the partner's HSE, technical, legal and financial activities and operating methods. Agreements signed with suppliers are managed under the Company's dedicated procurement system. This system includes now a systematically supplier evaluation and qualification process, and the monitoring and coordination of contract performance. Finally, regular audits specified in the agreements complete the system. One of the criteria used for the assessment specifically deals with possible suppliers' impact on water resource areas. TotalEnergies' purchases do not include water intensive products such as mining commodities, but supply chain water risks are assessed where relevant. The raw materials (oil) from TotalEnergies' E&Pbranch are assessed for water risks using the Local Water Tool and Aqueduct (BWS) tools. For other suppliers, production locations are subject to investigations (indirect and possibly direct) to identify those production areas that may cause a risk. If such risk is deemed significant, further investigation is done to properly characterize it.</p>

Value chain stage	Coverage	Risk assessment procedure	Frequency of assessment	How far into the future are risks considered?	Type of tools and methods used	Tools and methods used	Comment
Other stages of the value chain	Full	Water risks are assessed as part of an enterprise risk management framework	More than once a year	More than 6 years	International methodologies	<ul style="list-style-type: none"> • Environmental Impact Assessment • Life Cycle Assessment • IPCC Climate Change Projections • Internal company methods • External consultants 	<p>The Company complies with regulatory requirements to minimize risks associated with petroleum or chemical products marketed by TotalEnergies throughout their life cycle. The Company has defined minimum requirements that apply to the marketing approach of its products sold worldwide to reduce potential risks to consumer health and to the environment. They include the identification and assessment of risks inherent to a product and its usage, as well as the provision of information to consumers. The material safety data sheets (MSDS) that come with products marketed by the Company and product labels are two key sources of information. The RC and MS teams draft the material safety data sheets, compliance certificates and manage REACH registration where necessary. Governance of the process is completed within Subsidiaries by the designation of a product officer to monitor compliance of the market release of entity's products. The conformity of the marketing process is ensured by the Subsidiary. TotalEnergies' products impact on water generally speaking is assessed in accordance with different standard practices: i.e. all chemicals sold by TotalEnergies including crude oil, lubricants, Bitumen, etc. are supplied with a regulatory MSDS notably dealing with water related environment risks like toxicity to aquatic organisms, persistence in water, bioaccumulation factors, in compliance with REACH and CLP regulations.</p>

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

Contextual issue	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	<p>TotalEnergies' businesses operate in various regions, where the potential physical impacts of climate change are uncertain. The increasing scarcity of water resources may negatively affect the operations in some regions of the world, high sea levels may harm certain coastal activities, and the multiplication of extreme weather events may damage offshore and onshore facilities. TotalEnergies has implemented water risk management principles:</p> <ol style="list-style-type: none"> 1. monitor water withdrawals to identify priority sensitive sites and then carry out a risk assessment; 2. improve the water resources management by adapting the priority sites' environmental management system. <p>This risk assessment establishes that the activities of the sites operated by the Company expose the other users of the water to a relatively low risk of water shortage. The risk mainly concerns sites for which the water supply could be cut to maintain access to water for priority users. To identify its facilities exposed to the risk of water stress, TotalEnergies records the withdrawal and discharge with the WRI Aqueduct tool. In 2020, the Company's sites withdrew 105 million m3 of fresh water, with net consumption of 75 million m3. Half this volume was withdrawn in areas of high or extremely high-water stress according to WRI. According to CDP, these withdrawals represent 9.6% of the Company's water withdrawals (including brackish water and seawater). For priority sites in water stress areas and withdrawing more than 500,000 m3 per year, TotalEnergies assesses water resources risk levels using. In 2020, 20 priority sites were assessed with the Local Water Tool (LWT) for O&G from GEMI. This risk assessment concludes that the risk of usage conflict with other water users is limited. The regular update of LWT assessments is essential to ensure that water management is aligned with any changes in water resources availability. This is seen as a potential key risk for TotalEnergies' future activities relating to water (mainly for RC). We have been able to develop a range of different future risk profiles and identify that stakeholder conflict creates a bigger risk than water availability under certain conditions. Current water availability is annually reported through HARPE to fulfil Company's requirements. TotalEnergies' strategy for estimating future changes in water availability on a local level relies on site monitoring and water risk management strategy (sites screening, Local Water Tool, valuation).</p>
Water quality at a basin / catchment level	Relevant, always included	<p>TotalEnergies' activities may potentially be located in sensitive natural environments. The Company takes biodiversity and ecosystems into account in its internal standards, in its Safety Health Environment Quality Charter. TotalEnergies doesn't require high quality water for most of their operations. However, TotalEnergies continuously monitors their effluents quality, over which TotalEnergies has set public targets. This is done to ensure a lower level of risks and as a precautionary measure in order to face any legal compliance issue. TotalEnergies' target is to maintain hydrocarbon content of water discharges below 30 mg/l for offshore sites (100% achieved since 2016) and 15 mg/l for onshore and coastal sites (100% achieved since 2019). In 2020, the hydrocarbon content of offshore water discharges (in mg/l) was 12.8 (13.0 in 2019) and of onshore water discharges (in mg/l) was 1.9 (1.7 in 2019). TotalEnergies has set itself targets for reducing sulfur dioxide (SO2) emissions and is committed to limiting its hydrocarbon discharges into water. In 2010, SOx emissions reached 99kt. TotalEnergies has set itself the target of not exceeding 49.5kt by 2020; it has met this target since 2017. In 2020, air emissions of Sox are 34kt. For NOx, 2020 air emissions are 64kt.</p> <p>Six biodiversity action plans deployed or in preparation in 2020. No oil and gas exploration or production activity in natural sites listed on the UNESCO World Heritage List and no exploration activity in oil fields under sea ice in the Arctic.</p> <p>We use information gathered by operational and EHS managers using HARPE. All the activities use this Company-wide reporting system and environmental reporting covers all operated activities. HARPE allows the sites to collect and report up to 32 water quantity and 80 quality indicators. Both water withdrawals and discharges are subject to quality monitoring at local (site) level, and therefore part of the Company-wide water risks assessment. The results of the LWT risk assessment enable to identify the sites where action plans are needed to decrease impacts on water. For new facilities, internal standards require to conduct an impact assessment considering biodiversity and ecosystems and the implementation of actions. For existing facilities, the Company recommended avoid-reduce-restore-compensate steps be taken. To make this policy more tangible, in 2018, and within the framework of the Act4Nature initiative, the Company made 16 biodiversity commitments.</p>

Contextual issue	Relevance & inclusion	Please explain
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	<p>TotalEnergies operates in many countries with disparate and complex economic, social, and cultural environments. Dialogue with its stakeholders is essential to conduct our business responsibly and integrate long-term challenges of sustainable development into our strategy and policies. That dialogue informs the Company's decision-making, by helping it identify the risks and impacts of its operations and, more generally, by providing greater insight into changing societal patterns and expectations.</p> <p>TotalEnergies has dialogue procedures based on consultation of stakeholders to develop constructive and transparent relationship. The One MAESTRO framework requires subsidiaries to establish a structured dialogue process with their stakeholders to treat expectations, to report on mitigation actions or compensation, to measure satisfaction and to identify means of improving their societal policy.</p> <p>Since 2006, TotalEnergies has deployed its internal Stakeholder Relationship Management Tool (SRM+), which helps identify key site stakeholders, schedule consultation meetings to better understand their expectations, and consider local development needs to build a long-term relationship. The system is supplemented by a network of mediators with local communities to maintain a constructive dialogue with neighbouring communities.</p> <p>TotalEnergies considers as being key water stakeholders, those with whom we share the water resources or who may be affected by potential pollution events. For the priority sites, located in water stress areas, a risk assessment is performed through the Local Water Tool, which includes local reputation and social activism parameters. SRM+ enables to identify potential future stakeholders' conflicts at local level. Grievance mechanisms have also been set to anticipate potential conflicts. TotalEnergies closely monitors its media and NGO coverage; success at building and expanding partnerships worldwide can also be attributed to its strategy of generating value at the local level as part of its growth model. Whether the target is continued growth in LNG or renewable power generation, the Company's partnerships with governments and local communities serve a critical function. TotalEnergies develops its contribution to economic development in its host regions and helps fight inequality. Within this context, the Company strives to act as an agent for positive change in society by helping to promote ethical principles in every region where it operates.</p>
Implications of water on your key commodities / raw materials	Relevant, always included	<p>Consumption of raw materials is to nearly double by 2060 and will mean a steep increase in emissions of the GHG. At its meeting on May 2020, the Board of Directors approved the Company's new Climate ambition to get to net zero carbon emissions by 2050 together with society and determined the relevant steps and targets for reducing the Company's GHG. These targets were supplemented in September 2020 with TotalEnergies' announcement of absolute targets for cutting Scope 3 emissions, with the aim of reducing Scope 3 emissions in Europe by 30% by 2030 compared to 2015, in absolute terms, and a commitment to reduce the level of Scope 3 emissions worldwide by 2030 relative to 2015, despite growth in energy demand from its customers during the decade to come. Present in +130 countries, the Company currently works with a network of +100,000 suppliers of goods and services. In 2020, the Company's purchases of goods and services (excluding petroleum products and vessel chartering by Trading & Shipping) represented approximately \$23 billion worldwide. TotalEnergies' main commodities are oil and gas, essentially supplied internally by its E&P segment. The application of risk management processes such as the LWT and the use of internal company knowledge directly assesses the link with water on raw materials</p>

Contextual issue	Relevance & inclusion	Please explain
Water-related regulatory frameworks	Relevant, always included	<p>To ensure water security and a zero-carbon future, regulators are acting worldwide to drive a transition away from pollutions. The existing and potential regulatory frameworks for water withdrawals, discharges, tariff changes, water costs, licensing of operations and drought management plans are key for TotalEnergies' activities. Our activities are subject to laws and regulations pertaining to the environment, health and safety. In countries where the Company operates, particularly in Europe and the United States, sites and products are subject to stringent laws governing the protection of the environment (including water) and health (occupational safety and chemical product risk, etc.). Product quality and consumer protection are also subject to increasingly strict regulations. TotalEnergies' entities ensure that their products meet applicable specifications and all applicable consumer protection laws. Failure to do so could lead to personal injury, property damage, environmental harm and loss of customers, which could negatively impact TotalEnergies' financial condition and reputation. Local regulations and water tariffs are likely to affect the continuity of the Company operations and are tracked and monitored by affiliates (for the refining and chemical segments, generally located in developed countries with water pricing). For the sites identified as priorities, the risk assessment performed through the Local Water Tool includes current water regulatory frameworks and water tariffs parameters. TotalEnergies monitors potential regulatory changes at corporate, affiliates and sites levels. It is expected that local legislation will be reviewed to reflect the growing need for strong water management in these areas. As part of the company annual Long Term Plan exercise, the potential impact of future regulatory changes on CAPEX is yearly assessed. The future potential regulatory changes upon water are embedded in TotalEnergies' risk assessment process. The European Water Framework Directive (2000/60/EC) aims to achieve good ecological status in water bodies of member states. TotalEnergies produces and markets biofuels partly produced from agricultural raw materials and the production in Europe is certified as sustainable ISCC EU certification required by the European Union. This certification imposes criteria of sustainability and traceability of the oils (carbon footprint, non-deforestation, proper soil and water use, respect for Human Rights).</p>

Contextual issue	Relevance & inclusion	Please explain
Status of ecosystems and habitats	Relevant, always included	<p>TotalEnergies' activities can both have an impact on the environment and ecosystems and help preserve the most sensitive areas. In 2020, TotalEnergies extended its ambitions on the occasion of preparing for the UN global biodiversity plan, which aims to protect global biodiversity and updates its public commitments concerning biodiversity that includes:</p> <ul style="list-style-type: none"> • a commitment not to conduct any exploration activities in oil fields under sea ice in the Arctic; • a commitment to recognize the universal value of UNESCO's world natural heritage sites, with no oil and gas exploration or production activity in these areas; • for each new project located in an IUCN Protected areas I or II area or Ramsar areas, the Company undertakes to implement measures to produce a net positive impact on biodiversity. <p>The results are:</p> <ul style="list-style-type: none"> • No oil and gas exploration or production activity in the area of natural sites listed on the UNESCO World Heritage List. • No exploration activity in oil fields under sea ice in the Arctic. • 6 biodiversity action plans deployed or in preparation in 2020. • 14 biodiversity diagnostics exercises expected in 2022 with pilot diagnostics done in 2021. • TotalEnergies Foundation supports the IUCN's public interest initiative Blue Natural Capital Financing Facility BNCFF. • Share of biodiversity data on 2 projects on the international platform Global Biodiversity Information Facility (GBIF). Data downloaded by researchers more than 400 times in 2020, with a TotalEnergies of 84,000. • single data views, and in mid-2020 this data was already cited in three scientific publications. <p>TotalEnergies identifies risks levels for sites withdrawing more than 500,000 m³/year which are located in areas exposed to water resource risks using the LWT with local ecosystems and watershed ecosystems parameters with focus on protected wetlands (Ramsar). TotalEnergies' Geographical Information System (HSEQ maps) provides monthly updates on ecosystems and habitats status and some future protected areas, through a MOU with UN-Environment -WCMC program PROTEUS.</p> <p>In line with its Biodiversity Policy published in 2020, TotalEnergies decided to voluntarily limit the Tilenga project's footprint within Uganda's Murchison Falls park. While the current permits cover nearly 10% of the park, the development will be restricted to an area representing less than 1% of its surface. The Company confirms its commitment to produce a net positive impact on biodiversity in the development of these projects.</p>
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	<p>TotalEnergies has developed regular safety, health and environment risk assessment procedures and tools applicable to operate its Activities at various levels (Company level, activities and/or industrial sites): prior to investment decisions in industrial projects of the Company, acquisition and divestment decisions; during operations and prior to releasing new substances on the market. TotalEnergies ensures the Health and Safety of all our employees, and also as part of our corporate responsibility to respect and ensure implementation of the human rights to water and sanitation. The Company ensures that it complies with strict safety, security, health and environment standards in the performance of its Activities. The Safety Health Environment Quality Charter sets out the principles that apply to the conduct of its operations in all of the countries where it operates. As such, the Company's Subsidiaries implement a framework incorporating occupational health and safety, security, societal commitment and environment as well as associated management systems (MAESTRO). TotalEnergies' global activities make the provision of services aligned with WASH guiding principles extremely relevant for its workforce, and therefore these aspects are closely monitored and part of the Company's regular audit processes. TotalEnergies is committed through its code of conduct and the 2015 Industrial agreement signed by the CEO to respect the ILO convention which requests employers to provide employees with adequate work conditions, including access to potable water, toilet facilities.</p> <p>Some audits are conducted every year on these aspects with Goodcorp since 2002. Each year, a steering Ethics committee chooses the affiliates to be audited according to the results of the former audits and their experiences and knowledge of these affiliates. The audits last an average of 10 days, during wich the WASH services are audited for our employees but also for our subcontractor's employees. A non-conformity to our ethics rules would imply an action to resolve it. This process enables TotalEnergies to continuously progress on this topic.</p>

Contextual issue	Relevance & inclusion	Please explain
Other contextual issues, please specify	Not relevant, explanation provided	No further contextual issue has been identified as relevant for TotalEnergies' operations.

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

Stakeholder	Relevance & inclusion	Please explain
Customers	Relevant, always included	<p>Due to emerging customers behaviors and increased sustainability awareness, TotalEnergies is attentive to customers' expectations, and particularly to the fact that customers are sensitive to the production process related to the products sold by TotalEnergies. Water consumption and intensity metrics associated to those products are under the scrutiny of our customers. In order to secure and sustain the products sales, TotalEnergies engages with its customers upon its responsible management of water resources through internal and external certifications, such as TotalEnergies Eco Solutions products, Ecovadis certification, site ISO14001 certifications, "cradle to cradle" certification for renewables. This is particularly relevant for our Lubricant products lines and also for the B2B fuel sales. The Company is also pursuing its growth in the car wash market through its TotalEnergies WASH brand. With a network of 15,500+ service stations, the Company is present in the key Western European markets and continues to grow in Africa, where it is present in 40 countries, as well as in major growth markets. M&S is developing partnerships with leading brands in quick-service restaurants and convenience stores as well as new services that use digital innovations to capture and retain customers. The Company is also pursuing its growth in the car wash market through its TotalEnergies WASH brand. These offers support customers in their mobility by providing "One Stop Shop" service stations. M&S pursues its solarization program, with nearly 2,000 service stations equipped with solar panels at year-end 2020. Created to impact positively on water resources and to create shift in consumer preferences, the car dry washing solutions are also impactful to adapt to local water stress conditions. TotalEnergies Carwash systems in France are indeed partly fitted with water recycling/reuse units. To work on filter media selector for viscosified production water treatment, we have developed collaboration with industrial partners (Veolia OMV...). For membrane tests for water treatment, we have implemented an application in Brazil and involved several industrial partners: Nitto Denko; Polymem, Veolia, Suez, JIP Springs: Veolia, Saipem. We conducted testing of metal and hydrocarbon analyzers in effluents with startups for the installation on offshore platform laboratory and improvement of the measurement of the elements, particularly a collaboration with Axens.</p>

Stakeholder	Relevance & inclusion	Please explain
Employees	Relevant, always included	<p>Employee dialogue in Europe has remained quite active despite the COVID-19 pandemic. Meetings of the European Works Council have regularly been held virtually since March 2020. Every two years, TotalEnergies carries out an internal survey among its employees to gather their views and expectations about their work situation and their perceptions, both at the local level and Company-wide. The most recent survey, conducted in 2019 among 83,000 employees in 126 countries, found a 79% commitment rate. HSE have long been the topic of specific attention at Company level, as its activities give rise to health and safety risks for the employees, the external contractors, and residents in the vicinity of industrial sites. As primary stakeholders and key to TotalEnergies' interests, employees are considered regarding potential risks linked to water. Main employee-related risk would be discontinuity of operations (lack of freshwater availability). Through the ISO14001 EMS, employees can report on water-related risks.</p> <p>In 2020, 97% of employees with specific occupational risks benefited from regular medical monitoring and 87.4% of the Company's entities included HSE criteria in the variable compensation. The Company's employees have also a merit-based salary based on targets set during an annual individual review, including at least one HSE target.</p> <p>Employees' health (SDG3): TotalEnergies' goal is to be recognized as a reference in safety within its industry and to achieve a zero fatal accident rate. Water risks are specifically taken into consideration in light of climate change consequences for employees regarding access to water for domestic purposes and access to work sites in case of water level rises. A time-bound agreement on the ability to donate COVID-19 rest days from accrued time off and other measures in response to the pandemic was signed on May 2020.</p> <p>Employee training (SDG4): the strength of TotalEnergies lies in the diversity and talents of more than its 92,000 employees around the world. Accompanying our employees in skills adaptation process is a guarantee of responsibility.</p> <p>Equal remuneration (SDG5): TotalEnergies is committed to applying the principles of the fundamental conventions of the International Labor Organization (ILO) regarding human rights in the workplace.</p>

Stakeholder	Relevance & inclusion	Please explain
Investors	Relevant, always included	<p>Members of the Company's General Management and Investor Relations regularly meet with institutional investors and financial analysts throughout the world. In 2020, the Company kept up a sustained rate of meetings, mainly held by videoconference owing to the health crisis. More than 1,200 meetings have been organized. With a dedicated team, the Company maintains an active dialogue with shareholders in the field of Environment, Social, and Governance (ESG). In this context, the Lead Independent Director also participated in two road shows held in London and Paris and, together with the Chairman and CEO, took part in a meeting with the investor coalition Climate Action 100+ as part of the development of the Company's new Climate Ambition presented in May 2020. 200+ ESG meetings were organized in France and abroad in 2020. The Company has an ISO 9001 certified team dedicated to relationships with individual shareholders. In the context of the COVID-19 pandemic, the fight against its spread and to protect everyone's health, the Board of Directors has decided to hold online the Annual Shareholders' Meeting on May 2020,.</p> <p>The growing concern of certain stakeholders with regards to environmental issues could also have an impact on certain external financing of the Company's projects or influence certain investors involved in the oil and gas sector. TotalEnergies' investors are involved in the company's strategic decisions, especially through AGM voting, and are thus key to the business continuity. In addition to CDP disclosure, Total's Registration Document contains a specific chapter on water management that provides transparent information on the Company's most material subjects including water. TotalEnergies also discloses its environmental information, including water-related KPIs, to the Global Compact initiative, the CDP and numerous rating agencies, such as but not limited to S&P-SAM (DJSI), Sustainalytics and GRI. More broadly, TotalEnergies' transparency towards financial markets means that investors' appreciation of the potential water risks affecting TotalEnergies, and therefore their perception of TotalEnergies' resilience, is constantly considered. TotalEnergies also proactively participates in the elaboration of environmental norms for the financial sector (IFC EHS guidelines for Oil & Gas for instance).</p>
Local communities	Relevant, always included	<p>The main challenges associated with the effects of the Company's activities in terms of respect for human rights for local communities are linked to the access to land and the right to health and an adequate standard of living. Water security is an essential component of the respect of human rights for our local communities. TotalEnergies fosters for communities social and economic development in host countries with contributions amounting to \$2,450 million in income tax, \$3,768 million in production taxes paid by EP activities, \$2,178 million in employer social charges and \$20,981 million in excise taxes + 3.8 million solar kits and lamps sold since 2011, benefiting 17 million people through our access-to-energy program. The Stakeholder Relationship Management (SRM+) methodology allows to explain our activities to communities and other stakeholders, and to single out potentially vulnerable local populations. A few Subsidiaries within the Exploration & Production segment have also in place a network of mediators with local communities, with a view to maintaining a constructive dialogue with neighboring communities.</p> <p>In Mozambique, the TotalEnergies LNG Project is the first onshore development of a liquefied natural gas (LNG) plant in the country. This project is part of a global plan for economic development and transformation of the region of Cabo Delgado and of Mozambique. A human rights due diligence assessment was initiated in 2019 and finalized in late 2020. The aim of this assessment was to identify and prioritize the risk of potential risks of impacts to the human rights of people affected by the project and to support the project team in developing a framework for ongoing human rights due diligence. In 2020, an innovative new mobile app (SIMBA – Societal Impact Management and Baseline Assessment) for the ongoing recording and tracking of the opinions, concerns and expectations of stakeholders was developed, to identify and understand the local context and facilitates ongoing analysis of this context.</p>

Stakeholder	Relevance & inclusion	Please explain
NGOs	Relevant, always included	<p>Centrally, relevant divisions of the Holding ensure a continuous dialogue with the Company stakeholders. The Civil Society Engagement division manages relations between the Company and civil society, represented notably by nongovernmental organizations (NGOs), as well as large institutions and multilateral agencies (e.g. Global Compact). Built on constructive dialog, the involvement of stakeholders bears witness to the Company's will to build trusting, long-term relations. The long-term future of societal projects is guaranteed by partnerships with local institutions and organizations. TotalEnergies cooperates directly with the local authorities in all its actions and collaborates with NGOs that have experience in the water field. First and foremost, the projects address the issues of local development and solidarity and favor cooperation and skills development. The Civil Society Engagement division manages relations between the Company and civil society, represented notably by non-governmental organizations (NGOs), as well as large institutions and multilateral agencies (e.g. Global Compact). NGOs are consulted through the SRM+ stakeholder relationship management system, and hence potential risks linked to water are factored in TotalEnergies' water risks assessment (such as brand reputation damage or litigation for instance).</p> <p>The Tilenga project in Uganda. In 2013 the Tilenga and EACOP projects appointed an independent Biodiversity and Livelihood Advisory Committee, whose members are independent experts from various national and international organizations (WCS, Wetlands International, CIRAD...). The committee aims to ensure that project activities are conducted in accordance with social and environmental best practices. In addition, in 2020 a dialogue was initiated with representatives from the International Union for Conservation of Nature (IUCN), and included the project's impact on primate habitats and corresponding mitigation measures.</p>
Other water users at a basin / catchment level	Relevant, always included	<p>The local societal team is made up of more than 100 persons, engaged in the different neighboring communities, including a CLO network which has an excellent local relationship with neighbors at the basins. A grievance mechanism has been put in place. Given the important volumes of water required for TotalEnergies' activities (especially in the RC segment), maintaining a constructive a constructive dialogue with other water users at a local level is essential. The use of the SRM+ stakeholder management system, and the implementation local grievance mechanisms allow TotalEnergies to engage with other local water users and anticipate conflict of use risks (which could result in brand reputation damage or litigation for instance). Specific engagement points with this stakeholder category also include potential water reuse opportunities for third parties. In terms of risk assessment, the Local Water Tool allows the identification of other water users and any potential water use conflicts (different water categories: surface water, groundwater, municipal and network supplied water, brackish water, seawater and salty groundwater). In OECD countries, sites use their statutory relationship with authorities to participate to local agencies or bodies dealing with local water users' dialog. As an example, in France, sites do engage with Region Water Agencies that maintain a platform for exchanges among water users.</p>

Stakeholder	Relevance & inclusion	Please explain
Regulators	Relevant, always included	<p>Our activities are subject to laws and regulations pertaining to the environment, health and safety. In most countries where the Company operates, particularly in Europe and the United States, sites and products are subject to stringent laws governing the protection of the environment (incl. water) and health (occupational safety and chemical product risk, etc.). Product quality and consumer protection are also subject to increasingly strict regulations. TotalEnergies' entities ensure that their products meet applicable specifications and all applicable consumer protection laws. Failure to do so could lead to personal injury, property damage, environmental harm and loss of customers, which could negatively impact the Company's financial condition, including operating income, cash flow, and reputation. Local regulations and water tariffs are likely to affect the continuity of TotalEnergies' operations and are tracked and monitored by affiliates (in particular for the refining and chemical segments, which are generally located in developed countries with water pricing).</p> <p>TotalEnergies conceptualizes and develops its projects in partnership with regulators in order to meet all relevant regulations, and therefore manage regulatory risks. As part of its annual Long Term Plan exercise, TotalEnergies anticipates future regulatory changes that are likely to affect its CAPEX. As a consequence, regulators are systematically factored in its water-related risk assessments. Moreover, TotalEnergies proactively participates in public consultations over regulatory changes. Example: consultation on the transposition of European regulation into French Law regarding water discharge. This participation is made either directly or through the relevant professional organizations (CONCAWE, UIC, UFIP, and IOGP).</p> <p>In 2020, we engaged with the IFTS (Institut Français sur les Techniques de Separation), to research on treatment of water treatment residues, and particularly on Polymem which is a membrane development for water treatment.</p>
River basin management authorities	Relevant, always included	<p>Beyond the societal initiatives that are directly related to the Company's industrial and commercial activities, TotalEnergies is committed to general interest measures in the countries where it operates. In the face of growing inequality and environmental challenges, the Company intends to strengthen its public interest initiatives and has implemented a new civic commitment policy in line with its history, its values and its businesses. It wishes to act in a way that ensures the vitality and sustainability of the territories in which the Company is present by favoring actions that benefit young people first.</p> <p>As coordinators of local water resources, river basin management authorities are relevant stakeholders to TotalEnergies' projects. The associated risk would be that TotalEnergies loses its license to operate. Where relevant, TotalEnergies engages with river basin management authorities through direct dialogue, in order to ensure the compliance of its operations with local water management rules, and thus adequately manage water-related risks (water quotas or environmental permits).</p>
Statutory special interest groups at a local level	Relevant, always included	<p>On a general basis, TotalEnergies engages proactively with local interest groups at local level to optimize its "social license to operate" and manage the associated operational risks. Where relevant, TotalEnergies engages and maintains a constant dialogue for instance with local fishery associations through the selection of Community Liaison Officers, living in the communities as applicable. TotalEnergies engaged in this in French Guyana. As another instance of relations with special interest groups. TotalEnergies also has, for more than 10 years, a partnership with a veterinary center specialized in managing oiled aquatic fauna. This expertise is quite unique since it allows to alleviate the risk for marine birds in case of spills, there is no such example in our benchmark. These groups are identified in the SRM+ internal system, and hence potential risks linked to water are factored in TotalEnergies' water risks assessment.</p>

Stakeholder	Relevance & inclusion	Please explain
Suppliers	Relevant, always included	<p>In 2020, as part of a continuous improvement process, TotalEnergies Global Procurement continued with its work on updating the CSR risk mapping for each category of goods and services. This risk mapping examined CSR risks relating to human rights and fundamental freedom as well as risks relating to the environment (depletion of natural resources; loss of biodiversity; climate change and GHG; waste and end-of-life management; air, water and soil pollution). A Responsible Procurement roadmap defines TotalEnergies' guidelines for upholding respect for human rights in the supply chain, the environment and economic development.</p> <p>TotalEnergies has set up a few actions to educate and raise awareness among its buyers of risks and concerns related to its supply chain. Training modules explaining the Company's ethical commitments and the Fundamental Principles of Purchasing have been developed for and made available to company procurement officers. In 2020, 40 buyers attended training and/or awareness-raising sessions on respect for human rights and working conditions at supplier sites. Workshops were held in 2020 to raise awareness of buyers on the risks associated to human rights and environment in the supply chain.</p> <p>Each year (except in 2020 due to the COVID-19 pandemic), the International Procurement Office holds a compliance day. Special attention was given to the issue of respect for human rights, which was also on the agenda of the Suppliers Day event organized in Shanghai in 2019.</p> <p>TotalEnergies belongs to the IPIECA's Supply Chain Working Group. Building on the workshops held since 2015, TotalEnergies continued to participate in the Operationalization of the UN Guiding Principles work organized by the IPIECA, aimed at both oil and gas companies and engineering, procurement and construction (EPC) contractors. Suppliers are part of the SRM+ stakeholder relationship management system and hence potential risks linked to water are factored in TotalEnergies' water risks assessment. TotalEnergies' suppliers are not deemed to include significant users of water. This position will evolve depending on the development of biofuels activities as agricultural products are more exposed to water risks.</p>
Water utilities at a local level	Relevant, always included	<p>As part of its project feasibility studies, TotalEnergies engages with local water utilities through dialogue and contractual agreements, to ensure the continuity of its access to local water resources. Water costs from water utilities are factored into risk assessments through the Long-Term Plan annual assessment, which anticipates OPEX rise due to higher water costs. The Local Water Tool assessment also incorporates this parameter, which helps managing the risk of discontinuity in water supply from local water utilities.</p>
Other stakeholder, please specify	Not relevant, explanation provided	<p>The categories listed above encompass TotalEnergies' stakeholders categories according to the stakeholders mapping performed through SRM+. TotalEnergies is cooperating with the International Office for water on a variety of topics including water re-use guidance tools, Horizon Scanning and Water GIS data provisioning for integration to its GIS HSEQ Company tool use for monitoring and assessments. TotalEnergies relates to the IPIECA guidance for environmental and societal issues. Detailed information on reporting guidelines is available on the Company's website (sustainableperformance.total.com). Building on the workshops held since 2015, TotalEnergies continued to participate in the Operationalization of the UN Guiding Principles work organized by the IPIECA, aimed at both oil and gas companies and engineering, procurement and construction (EPC) contractors. TotalEnergies has partnered with IPIECA for the editing of a public guide to monitor and assess water risks on August 2020 and a white paper "Freshwater management adaptation" was released on September 2020. Since this date, an on-going initiative to assess drought and flood risks is in progress.</p>

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

TotalEnergies has adopted a water stewardship approach. Water risks are caused not only by our own water use and discharges, but also by the catchment context in which TotalEnergies operates. We have identified water challenges: quality, quantity, governance, ecosystems and biodiversity, Access to safe water, sanitation, and hygiene and Extreme weather events. SDGs are associated to water SDG targets: targets 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6 + 11.5 and 13.1.

TotalEnergies implements the following water risk management actions:

- **Develop water risk management strategy:** TotalEnergies' activities are carried out in adherence to laws and Company's Code of Conduct within the framework of compliance and risk management procedures. Increasing scarcity of water resources may negatively affect TotalEnergies' operations, high sea levels may harm coastal activities, and the multiplication of extreme weather events may damage facilities. Risk factors are continually assessed in the risk management and prevention plans. The Company's risk management system draws on main international standards (COSO, ISO 31000:2018) and on French standards. In addition, we use WRI AQUEDUCT, SRM+ and ERASM tools to assess our risks along the value chain.

Internal Risk Management, Internal Control and Audit Charter form the framework to ensure control of the activities. These rules task the Board of Directors' Audit Committee with monitoring the efficiency of the control and risk management systems, and of the internal audit performed at all levels of the organization and to make recommendations for their improvement. The EXCOM is responsible for analysing internal and external risks that could impact the company's objectives. To prevent the occurrence of a major industrial accident, TotalEnergies implements suitable risk management policies and measures which apply to all the Company's operated activities that are exposed to such risks. The evaluation of water-related risks is core to the environmental impact assessment along all project assessment phases. Each assessment is followed by a stage-gate review and a decision process regarding the go/no-go of the project; so water risks are fully integrated into project assessments. Detailed studies relating to water management are established according to projects' scope and nature. This exercise is presented at the highest management level of the company and is thus embedded into the Company's strategy. It includes an evaluation of the costs associated with water-related CAPEX / OPEX, which allows an alignment of TotalEnergies' strategy with the evolution of water-related risks. For operating sites, further to the assessment process, sites potentially exposed to water risk or with a significant impact on water resources conduct a LWT, which includes other relevant risks. Continuous monitoring of water risks is ensured through the company-wide reporting systems.

- **Set water targets across business units:** TotalEnergies has defined a target to improve water performance: Maintain the hydrocarbon content of water discharges below 30 mg/l for offshore sites and below 15 mg/l for onshore and coastal sites. TotalEnergies continuously monitors water resources use at site level through its reporting system (HARPE).
- **Develop site water stewardship plan and obtain third-party certification:** we improve the water resources management depending on identified needs adapting the priority sites' environmental management system. 100% of the Company's sites have met the target for the quality of onshore discharges since 2016 and 100% of the Company's sites have met the target for the quality of offshore discharges in 2019. TotalEnergies has deployed since 2006 its Stakeholder Relationship Management (SRM+) methodology for the value chain.
- **Manage water-related performance:** In order to identify its facilities exposed to the risk of water stress, TotalEnergies records the withdrawals and discharges of water on every operated site and assesses these volumes on the basis of the current and future water stress indicators of the WRI Aqueduct tool. Globally, the sites operated by the Company are not particularly exposed to water risk. TotalEnergies also uses the Water

and Biodiversity working groups of IPIECA to perform benchmarks of the Best Available Practices in the industry and ensure internal practices are up to speed. LCA is a key methodology used to assess on a global manner all the aspects of the Water strategy that is defined at a company level down to local level. The internal Geographic Information System (GIS) is used to assess Water risks in general (risk to surface water like lakes, rivers, ponds, etc.... and Wetland particularly Ramsar Area). TotalEnergies uses an internal screening and detailed environment risk assessment system called ERASM covering water risks (risks for surface and underground waters).

W4 Risks and opportunities

Risk exposure

(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) How does your organization define substantive financial or strategic impact on your business?

In 2020, TotalEnergies Global Procurement finalized an update to the CSR risk mapping for goods and services. This risk mapping examined CSR social risks as well as risks relating to the environment. The risk assessment establishes that the activities of the sites operated by the Company only expose the other users of the water to a relatively low risk of water shortage. The risk mainly concerns TotalEnergies sites for which the water supply could be cut in order to maintain access to water for priority users. This risk analysis is carried out on an annual and perimeter-wide basis to analyse and prioritise sites exposed to water stress. Site assessment is provided by recognized measurement tools such as Aqueduct LWT and WRI. TotalEnergies has committed to assess 100% of the 23 sites at risk of water stress by the end of 2021. In 2020, the Company's sites withdrew 105 million m³ of freshwater, with net consumption of 75 million m³. 50% of fresh water withdrawn in regions with High or Extremely High Baseline, according to the WRI definition, i.e., areas where human demand for water exceeds 40% of resources available. These are mainly highly populated urban areas, such as urban areas in Northern Europe. According to the CDP Water definition, these withdrawals represent 9.6% of the overall Company's water withdrawals (including brackish water and seawater). For priority sites defined as those located in water stress areas and withdrawing more than 500,000 m³ per year, TotalEnergies assesses water resources risk levels using the LWT for O&G from the GEMI. The results of the LWT risk assessment enable to identify the sites where action plans are needed to decrease impacts on water. This tool also helps guide the actions taken to mitigate the risks and to make optimal use of water resources on the sites when necessary.

In 2020, investments planned on aqueous matters represented 34 million euros across the Division, including work and studies aimed at optimizing the treatment of effluents.

To define if there was substantive financial impact on our business, a calculation through LWT analysis has been made for the largest priority site to assess the financial impact of a potential closure. The direct operations are possibly affected by water scarcity and the permit granted by local authority could ask the refinery to reduce its water withdrawal in case of droughts. If a severe drought occurred, a European refinery that represents the highest revenue share, taken as an example for the estimation should stop its operation during several weeks or months. In the event of a very maximal drought of 3 months, the lack of income would be much less than 1% of the Company income. Moreover, the likelihood (no materialization of risks in the past years) and low magnitude (less than 1% of the Company revenues would be affected in total, even with very conservative hypothesis) of the water-related risks for this site are not considered as having a « substantive impact ». Therefore, there is no site considered as exposed to substantial water risk in this year's response.

Any investment, sale or financial commitment is subject to different levels of decision-making based on financial thresholds.

Substantive financial impacts are defined as the amount of CAPEX involved in the particular project under analysis. Based on “financial significance” thresholds, the environmental risks will be assessed through different processes and undergo different levels of validation. These thresholds are segment-specific, but the general rule is that decisions on water-related risks with minor CAPEX implications are taken at site level. Then, decisions with significant CAPEX implications are taken at branch level, while decisions with significant CAPEX implications will be discussed and approved by the Company's executive committee.

Different levels of water risk exposure have been defined for the projects reviewed by the Company's executive committee (and branch committees), ranging from low risk (no competition for the resource, water not usable for anything else by future generations or available in unlimited quantities) to very high risk (very large volumes of freshwater with usage conflicts in a watershed under severe water stress, in a country with low per capita income and very weak water supply infrastructures). Hence substantive change is defined based on activity-specific CAPEX thresholds, and water-related CAPEX are discussed through this particular process. Due to the nature of TotalEnergies' activities, this approach to water risks related changes is applied to TotalEnergies' direct operations, where the vast majority of water risks are concentrated. It is also applied to TotalEnergies' assets operated by third parties.

Each year, the Refining & Chemical branch carries out a long-term plan exercise, integrating the 5-year investment plan (2020-2025) for HSE aspects.

(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
Risks exist, but no substantive impact anticipated	<p>Conducting its activities in more than 130 countries throughout the world, TotalEnergies is subject to increasingly numerous, complex and restrictive laws and regulations. In Europe and the United States, the Company's sites and products are subject to increasingly stringent laws governing the protection of the environment (water, air, soil, noise, protection of nature, waste management and impact assessments, etc.), health (occupational safety and chemical product risk, etc.), the safety of personnel and residents, product quality and consumer protection. TotalEnergies is conducting an annual risk assessment that establishes that the activities of the sites operated by the Company only expose the other users of the water to a relatively low risk of water shortage. The risk mainly concerns TOTALENERGIES sites for which the water supply could be cut to maintain access to water for priority users. Globally, most of the sites operated by the Company are not particularly exposed to water risk. By the end of 2020, the level of water risk was assessed with the WRI Aqueduct tool and the GEMI LWT tool, on 20 priority sites (15 Refining & Chemicals, 3 Exploration & Production and 2 Gas, Renewables & Power). These assessments enable the company to retain 5 priority sites the most exposed to water risks, which only represent 5% of the total Company withdrawals</p> <p>To define if there was substantive financial impact on our business, a calculation after LWT analysis has been made for the largest priority site to assess the financial impact of a potential closure. The direct operations are possibly affected by water scarcity and the permit granted by local authority could ask the refinery to reduce its water withdrawal in case of droughts. If a severe drought occurred, a European large refinery, the highest revenue share, taken as an example for the estimation should stop its operation during several weeks or months. In the event of a very maximal drought of 3 months, the lack of income would be much less than 1% of Company income. Moreover, the likelihood (no materialization of risks in the past years) and low magnitude (less than 1% of the company revenues would be affected in total, even with very conservative hypothesis) of the water-related risks for those sites are not considered as having a « substantive impact ». Therefore, there is no site considered as exposed to substantial water risk in this year's response.</p>

(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
Risks exist, but no substantive impact anticipated	<p>TotalEnergies operates along the entire oil and gas value chain, and therefore has integrated its raw material supply within its perimeter: water-risks mainly occur in its direct operations and not in its value chain. At present, very few supplies are linked to water issues while TotalEnergies operations are possibly directly causing risks to water masses like through possible oil spills or improper water discharges.</p> <p>The Company's Vigilance Plan covers the risks for the activities of suppliers of goods and services under Article L. 225-102-4 of the French Commercial Code. It sets out the rules and measures which, as part of risk management systems, enable TotalEnergies to identify and prevent actual or potential severe impacts related to its Activities and to mitigate their effects, as the case may be. It reflects the responsible purchasing principles applicable to relationships with Suppliers. The mapping work was carried out using TotalEnergies' existing risk management tools. The Fundamental Principles of Purchasing specify the commitments that TotalEnergies expects from its suppliers: respect for human rights at work, health protection, safety and security, preservation of the environment, prevention of corruption and conflicts of interest and fraud, respect for competition law, as well as the promotion of economic and social development. Depending on the results of a risk analysis, a detailed assessment is performed once every five years.</p> <p>The company activities' diversification has generated ties with new value chains (solar power, biofuels, batteries...) with inherent water issues. These are integrated in the company's risk strategy through value chain specific analysis. For instance, lifecycle analysis has been performed on polymers (leading to the development of polymers integrating recycled materials up to 50%). However, the related water risks (e.g. water</p>

	<p>footprint of solar panels) are currently not anticipated to have a substantive impact over the Company. For the GRP branch, the main water-related risks concern the withdrawals required for the combined cycle power plants that use cooling towers as a cooling system. However, in the short and medium term, the necessary quantities of water will be available. In addition, the branch also has power plants that use air-cooled condensers. The company is building a new plant that will operate with an air cooling system (opportunity).</p>
--	---

Water-related opportunities

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

Type of opportunity	Primary water-related opportunity	Company-specific description & strategy to realize opportunity	Estimated timeframe for realization	Magnitude of potential financial impact	Potential financial impact	Explanation of financial impact
Efficiency	Improved water efficiency in operations	<p>TotalEnergies relies on a robust and dynamic R&D policy to conduct and develop its activities. As part of the Company's ambition to become the responsible energy major, TotalEnergies updated, in 2020, its R&D strategic plan to determine its positioning for the five coming years, together with its portfolio of research programs. The portfolio of programs is divided into five focus areas: safety and environment, low-carbon mix, operational efficiency, new products and, finally, digital. TotalEnergies has made strong commitments around the world that benefit sustainable growth. In 2020, R&D equals to: \$895 million invested / 4,339 employees dedicated to R&D / 12 R&D centers / 6 technology development centers / 1,000 agreements with partners and 200 R&D patent applications filed. The initiative One R&D Plan Vision federates pioneers committed to providing impactful solutions to our customers for a cleaner, safer, and more affordable energy. Regarding R&D on Water, the focus is on our industrial performance and innovative processes. As a major Oil & Gas company, TotalEnergies has an opportunity to lead water research and set industry best practices in this field. R&D offers the opportunity of economic and environmental</p>	More than 6 years	Medium	5 M€	<p>Wat-R-Use tool is TotalEnergies' tool to collect accurate data, validate the cost models and calculate Water footprint. It helps reduce our water footprint wherever possible, using every available approach, and without harm to the environment at site locations. Wat-R-Use has been developed as a decision support tool to compare water consumption optimization scenarios. All cases of adaptation or development of technologies aim to improve the water footprint, the carbon footprint and to reduce the impact on ecosystems of the applications. TotalEnergies developed a tool through a multi criteria approach that pushes users to collect data, validate the cost models, calculate direct and indirect Water footprint and Carbon footprint (LCA approach), evaluate ecotoxicity and get aware and take actions limiting water risk. Wat-R-Use tool helps reduce our water footprint wherever possible, using every</p>

Type of opportunity	Primary water-related opportunity	Company-specific description & strategy to realize opportunity	Estimated timeframe for realization	Magnitude of potential financial impact	Potential financial impact	Explanation of financial impact
		<p>performance improvements, via reducing water risks, decreasing water costs and thus improving business resilience. The primary purpose of this research program is to improve industry's best practices on water management. TotalEnergies' Refinery and Chemicals activities are the most water intensive (approximately 86% of the Company's total freshwater withdrawals in 2020) and therefore concentrate most of the effort to improve water efficiency. This is achieved through several water optimization actions, such as the Total company-wide water optimization guide and the development of the water reuse tool. The improvement of water efficiency represents a significant opportunity of economic and environmental performance improvements for TotalEnergies, via reducing water risks, decreasing water costs and thus improving business resilience. TotalEnergies has implemented several tools like Wat-R-Use and WaterFlex to generate water cost savings, especially in its GRP - Solar Panels production activities and CGGT and to adapt new water management approaches. A budget of 6M€ budget has been allocated and 24 pilots are in progress with worldwide collaborations with selected universities and business partners facilitating progresses to both parties.</p>				<p>available approach, and without harm to the environment at site locations. The tool has been transferred to Greenflex. TotalEnergies is investing in low-carbon companies and since 2017, GreenFlex is part of its 'Carbon Neutrality Businesses' operations. TotalEnergies has developed also viscosified water reinjection, produced water reinjection and new technologies, among them salt removal. In addition, we rely on our environmental performance (effluent characterization and monitoring, water usage analysis, water treatment, water management and Life cycle analysis). The improvement of water efficiency represents a significant opportunity of economic and environmental performance improvements for TotalEnergies, via reducing water risks, decreasing water costs and thus improving business resilience. Based on the measures we have already installed at our O&G facilities in the past months with a resulting company-wide water consumption saving of 10% and reduced water charges that could correspond to 31,000 megaliters, we have been able to estimate the full impact of water efficiency measures in savings of up to 5 millions € on a period of time of 6 years. On a long-term perspective, the return on the R&D CAPEX is obtained after 12 years. That means that the impact will be double in term of water efficiency. The lifetime of our sites is generally over 25 years. The improvement performed through the R&D actions are also a factor of local acceptability. Improved local acceptability is priceless.</p>

Efficiency	Reduced impact of product use on water resources	<p>The study of water reuse opportunities in TotalEnergies' most consuming sites is done across all relevant business segments.</p> <p>OneTech: In 2020 a new organisation by technical function has been designed and is deployed by 2021. The principles are to share technical specialists among the Company, to optimize the resources and increase the Company's expertise. 22 Water specialists (16 for E&P), on a full-time basis, have been already identified and will be at the service of the divisions to bring their expertise on water management and toxicity assessment. These 22 water specialists are focused on water management and treatment technologies, monitoring and impact assessment of the activities' impacts on the natural environment or the quality of the different waters under consideration.</p> <p>The company-wide budget for water R&D actions in 2020 amounts to €8.6M. It includes pilot programmes, partnerships and research carried out externally or in-house. In addition, we have initiated a project to involve our 22 water specialists in the development of a water management solution. The objective is to increase the TRL to 6 and to transfer the solution to the activities to standardize as an industrial practice. The sum of €8.6M is linked to several pilot projects that were successful in 2020. In 2021, the R&D budget will slightly decrease because of this successful programme.</p> <p>In 2020, we conducted an E&P deep offshore pilot to test the nanofiltration installed at the bottom of the sea (with an objective to test the duration without intervention in the operating conditions in large background). We did a mapping of water quality (reduction of the margin of approximation for the calculation of installations).</p> <p>Regarding R&D on Water, we focus on our industrial performance and innovative processes and through 2020, Total has pursued the development of some pilot projects concerning innovative water treatment technologies:</p> <ul style="list-style-type: none"> • Desalinisation and reuse of water • Reduction of water toxicity by biological means: increasing the compactness of the installations aiming at their offshore installation • Phase separation, dewatering, water clarification and viscosified water treatment • Modeling of separations and processing processes. <p>While using more efficient treatments, TotalEnergies has adopted an advanced position to reduce impact of product use. In addition we strive to prevent any new more stringent regulations linked to water resources.</p>	More than 6 years	Medium	1 M€	Based on the average price of water in the concerned 66 french regions and the associated expected consumption savings, the order of magnitude of potential savings due to lower water-related OPEX is 1 million € / year.
------------	--	---	-------------------	--------	------	--

Markets	Stronger competitive advantage	<p>As TotalEnergies evolves in extremely competitive markets, differentiating its products with an optimized environmental performance is a clear business opportunity for TotalEnergies. Therefore, TotalEnergies regularly performs new products' lifecycle assessments over several environmental indicators including water, which ensures these products and their supply chain resilience. The optimized water footprint of TotalEnergies' products and services provides with a competitive advantage in a competitive market. Part of the research activity on water management is used to develop intellectual property and build a capability for differentiation. Best practices:</p> <ul style="list-style-type: none"> • At E&P, we have developed SUMOW, a physico-chemical water treatment pilot in a single unit to increase compactness for use on a platform. For the reuse of water, we have a pilot for centrifuge in production water treatment for reinjection into the reservoir (reuse) in collaboration with OMV/AlfaLaval, • We have implemented a bivalve stress warning tool (HC presence, other chemical, physical modification of environment-noise) in collaboration with the University of Bordeaux. • Improving the compacity of water treatment units leads to significant savings on CAPEX for the offshore installations while reducing our resource consumption. • In the MS segment, TotalEnergies has developed its offering of environmentally optimized products. Indeed, the "TotalEnergies Ecosolutions" internal label only features on products for which a life-cycle analysis has demonstrated a reduced environmental impact (including water use reduction) compared to market standards. TotalEnergies explores the development of water recycling from car wash at petrol stations, to optimize its water efficiency, and ensure business continuity in case of droughts (66 departments in France with water restrictions). TotalEnergies Carwash systems in France are fitted as much as possible with water recycling/reuse units. • GRP: In line with its strategy, TOTALENERGIES is expected to sustain its growth in renewables through projects to build solar and wind power plants, in electricity with the start-up of its gas-fired power plant in Landivisiau, France, along with industrial activities at Saft Company. Treatment of the water withdrawn thanks to the installation of inverse osmosis enables Saft Germany to be more efficient. They need less water for cleaning and can save 1200 liters of water/year (withdrawal of 2000 m3 in 2020). 	More than 6 years	Medium-high	7 M€	<p>In the GRP division, the water opportunities bring direct financial benefits and water efficiency parameters should allow an increase of the GRP segment profit by a maximum of 1%. Thus the magnitude of the impact would be 7M€. However, 1% is considered as a maximum since a lot of efforts in water reductions have already been made, reaching one of the best performance of the market. The margin for further improvement remains thus limited. Based on the average price of water in the concerned 66 french departments and the associated expected consumption savings, the order of magnitude of potential savings due to lower water-related OPEX is 1 million € / year. concerned 66 French departments.</p>
---------	--------------------------------	--	-------------------	-------------	------	--

Resilience	Resilience to future regulatory changes	<p>The water opportunities bring direct financial benefits and other kinds of benefits such policy influence, strengthening of reputation, and reduced environmental impact. We have an opportunity to lead water research and set industry best practices in this field. R&D offers the opportunity of performance improvements, via reducing water risks, decreasing water costs and thus improving business resilience.</p> <p>Each year, RC branch does an LTP (Long Term Planning) exercise, including investments for HSE subjects in the next 5 years. In 2020, investments foreseen on water subjects represented 34 million euros for RC branch, including studies for resilience to future regulatory changes.</p> <p>In 2020, a 6 M€ budget has been allocated on water issues and 24 water initiatives are still in progress with worldwide collaborations with selected universities and business partners facilitating progresses to both parties.</p> <p>The risks associated with water management are anticipated through the Long-Term Plan (LTP), which is a prospective exercise undertaken annually. It includes water production/injection/discharge analysis over the next 10 years. It analyses the CAPEX risks associated with water management, notably considering potential changes in the regulatory contexts to which the Company is exposed. We need to be resilient to adapt our responsiveness to government priorities and to anticipate the regulatory uncertainty for the industry. The measures improve the information TotalEnergies receives from regulators and update the process for serving under water industry legislation. From an investor's point of view, this prospective approach provides a competitive advantage in terms of risk management. Being able to maintain an A- level at CDP Water Risk Questionnaire is considered as a proper answer to investor's questions pertaining to water risks for TotalEnergies.</p> <p>We support the development of the aquatic impact measurement methodology as part of the BREF CWW published by the French Ministry of ecologic transition. As several chemical industrial actors, we have shared our water cases to make evolve a regulation framework for the local authorities' decrees related to water measurement.</p> <p>We developed a tool for the management of refinery effluents, in relation with changing regulatory demand to address the complexity of effluent components. In addition, we focus on a comparison impact tool for the assessment of aqueous effluents, part of the Water Framework Directive.</p>	More than 6 years	High	1 M€	<p>Thanks to a robust water-related risk management, we have identified that the Long-Term Plan (LTP) help anticipate the water-related risks and quantify the financials impacts of these risks (costs of water supply and their evolution, costs related to regulation evolution and CAPEX needed to meet compliance). We have assessed that the reduction of these expenses (CAPEX, fines, cost of water supply) could result in a financial positive impact avoided of approximately 15 million euros.</p> <p>The investments allow the refineries to improve continuously their performances, and to be compliant to new regulations. If not, the impact could be to stop the operations for these refineries. We estimate that the financial impact could be 1 M€ based on our experience.</p> <p>(the components for the calculation of 1 M€ are essentially the taxes due to an overage thresholds and the limitation of production to be able to control the effluents).</p>
------------	---	--	-------------------	------	------	---

W6 Governance

Water policy

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

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

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

Scope	Content	Please explain
Company-wide	<ul style="list-style-type: none"> • Description of business dependency on water • Description of business impact on water • Description of water-related performance standards for direct operations • Description of water-related standards for procurement • Reference to international standards and widely-recognized water initiatives • Company water targets and goals • Commitment to align with public policy initiatives, such as the SDGs • Commitments beyond regulatory compliance • Commitment to water-related innovation • Commitment to stakeholder awareness and education • Commitment to water stewardship and/or collective action 	<p>TotalEnergies' corporate water policy is publicly available on its 2020 Universal Registration Document. TotalEnergies Water Policy is company-wide and does apply worldwide.</p> <p>In addition to align water policy to the recent CEO WATER MANDATE framework, the Company commits to:</p> <ol style="list-style-type: none"> 1. Providing WASH services in the workplace 2. Measuring and monitoring water management practices 3. Driving operational efficiency and reduce pollution 4. Identifying and understanding water-stressed and high-risk basins 5. Integrating water management into business strategy 6. Leveraging improved practices throughout the value chain. <p>To reduce risk exposure, TotalEnergies has adopted a water stewardship approach. We have identified water challenges such as quality, quantity, governance, water-related ecosystems and biodiversity, access to safe water, sanitation, and hygiene, and extreme weather events. To respond to priority water challenges, TotalEnergies has defined SDGs targets.</p> <p>TotalEnergies implements the following water actions:</p> <ol style="list-style-type: none"> 1. Develop water risk management strategy: TotalEnergies' activities are carried out in adherence to laws and Company's Code of Conduct within the framework of compliance and risk management procedures. 2. Set water targets across business units: TotalEnergies has maintained the hydrocarbon content of water discharges below 30 mg/l for offshore sites and below 15 mg/l for onshore and coastal sites. 3. Develop site water stewardship plan and obtain third-party certification: 100% of the Company's sites met the target for the quality of onshore discharges since 2016 and 100% of the Company's sites met the target for the quality of offshore discharges in 2019.

Scope	Content	Please explain
	<ul style="list-style-type: none"> • Commitment to safely manager Water, Sanitation and Hygiene (WASH) in the workplace • Acknowledgement of the human right to water and sanitation • Recognition of environmental linkages, for example, due to climate change 	<ol style="list-style-type: none"> 4. Manage water-related performance: To identify its facilities exposed to the risk of water stress, TotalEnergies records the water withdrawal and discharge on its operated sites for this indicator and assesses these volumes based on the current and future water stress indicators of the WRI Aqueduct tool. 5. The Company already practices and encourages the internal reuse of water. A guide has been developed to systematically conduct a pre-study to assess risks and opportunities such as costs and benefits. This policy is more generally based on the 5R rule, promoted by the WBCSD. 6. Encourage respect and mobilization of employees and suppliers, because with over 100,000 employees and a network of more than 100,000 suppliers, TOTALENERGIES can play an influential role across its value chain.

Board oversight

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

Yes

(W6.2a) Identify the position(s) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board Chair	<p>The Chairman of the Board and CEO of TotalEnergies is responsible for water inclusion in the strategy on the long-term. The chairman of the board is the highest level of the organization. The Charmain ensures that the board is informed of the market developments, the competitive environment and the main challenges, including water issues. The Chairman also chairs the Company Performance Committee and has a direct look at the “One R&D program”, in which the water management is included, with projects to improve water quality, to desalinate, or to decrease the volume of resource water used.</p> <p>In 2015 the Board set objectives on HC content in discharge water for the period 2015-2020 and decided more recently to use the CDP Water security questionnaire as a metric for the TotalEnergies water risk assessment policy.</p> <p>A new environmental roadmap for 2021-2030 is still ongoing. Water resources is one of the 4 pillars of this roadmap. Some objectives will be available in early 2022.</p>
Director on Board	<p>The Board of Directors is a collegial body that determines the strategic orientation of the Company and supervises the implementation of its vision. With the exception of the powers and authority expressly reserved for shareholders and within the limits of the Company’s legal purpose, the Board may address any issue related to the Company’s operation and make any decision concerning the matters falling within its purview. TotalEnergies’ Board of Directors ensures that water-related issues are incorporated into the Company’s strategy. The Lead Independent Director who ensures efficient governance of the company in accordance with current practice, is the Chairwoman of the Governance and Ethics Committee, member of the Strategic & CSR Committee and member of the Compensation Committee. The latter implies that she monitors the definition of sustainability criteria of the compensation schemes including water-related aspects.</p>

(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
Scheduled - some meetings	<ul style="list-style-type: none"> • Monitoring implementation and performance • Overseeing acquisitions and divestiture • Overseeing major capital expenditures • Providing employee incentives • Reviewing and guiding annual budgets • Reviewing and guiding business plans • Reviewing and guiding major plans of action • Reviewing and guiding risk management policies • Reviewing and guiding strategy • Reviewing and guiding corporate responsibility strategy • Reviewing innovation/R&D priorities • Setting performance objectives 	<p>Every year, the Board of Directors reviews the main issues related to climate change and environmental issues (including water issues) in the strategic outlook review of the Company's business segments, which are presented by the respective branch Directors. Also, the Audit Committee, a subset of the board, does more specific work on the climatic and environmental reporting processes in the review of the performance indicators published by TotalEnergies in its annual report and audited by an independent third-party organization. The Board of Directors is fully mobilized by the Climate issue in order to support the development of TotalEnergies, and it approved the publication of the first Climate Report in March 2016. This report is updated yearly. All these points of information and decisions were made during programmed Board's meetings along the year. The Board yearly approves the release of water-related information.</p> <p>Since 2016, the Compensation Committee also decided to introduce changes to the variable compensation of the Chairman and Chief Executive Officer to take better account of the achievement of Corporate Societal Responsibility (CSR) and HSE targets. The importance given to these aspects in the remuneration keeps growing, and the Compensation Committee of the Board reviews these criteria every year.</p> <p>Significant CAPEX decisions related to water are for instance part of board's discussion (Water major investments at RC sector, R&D programs etc.). The integration of water related issues also relies on the CORISK approach, whereby any significant modification to TotalEnergies' operational perimeter is presented and analyzed by the Company Risk Management Committee, including all HSE risks. This analysis is then presented to the Executive Committee (ExCom).</p> <p>Through 2020, the Chief Sustainability Officer has submitted full information and documentation related to the compliance with the Grenelle II environmental law in France to the Board. This process ensures the Board's information and ability to take decision, based on the actions defined during CSR reviews.</p> <p>ExCom members meet, as a minimum, on a quarterly basis at HSE Business Reviews to discuss about HSE issues (including water). Further these meetings, a feedback is done through ExCom to implement the decisions taken into the branches.</p> <p>In conclusion, the governance related to water issues is shared throughout the TotalEnergies management scheme (from Board to sites).</p>

Management responsibility

(W6.3) Below board level, provide the highest-level management position(s) or committee(s) with responsibility for water-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on water-related issues	Please explain
Chief Executive Officer (CEO)	Both assessing and managing water-related risks and opportunities	More frequently than quarterly	<p>The CEO is Chairman and Chief Executive Officer of + TotalEnergies. The Chairman represents the Board of Directors and organizes and oversees the work of the Board of Directors and ensures that the Company's corporate bodies operate effectively and in compliance with good governance principles</p> <p>The CEO chairs the monthly Company Performance Committee that deals with HSE including water-related issues like major spills. The CEO personally approves the Universal Registration Document submitted in France and the Form 20F to the US SEC. During the URD review, the CEO analyses the response to CDP Water Security questionnaire and orientates the water strategy for a better performance.</p> <p>A new strategic roadmap for environment was initiated in 2020 and discussed at the COMEX meeting in April 2021. A decision is made to bring more transparency and comparability to respond to assessment framework such as CDP, S&PSAM, considering the reporting frameworks such as GRI and SASB.</p>

Employee incentives

The questions in this section are presented to high-impact sectors only and will not be displayed here unless you opted to view sector-specific questions.

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
Yes	<p>At TotalEnergies, there is a Human Resources rule regarding the incentives of water-related issues: For all managers, a remuneration package is defined at a certain level of management responsibility. The individual performance compensation is linked to achievement of quantitative and qualitative objectives and also might include appropriate managerial practices and the contribution to the collective performance. Some HSE objectives including the Company water target are set, representing up to 10% of the variable share. In 2020, 87.4% of Company entities incorporate HSE criteria in variable remuneration.</p>

W-6.4a What incentives are provided to C-suite employees or board members for the management of water-related issues?

Type of incentive	Roles entitled to incentive	Performance indicator	Please explain
Monetary reward	Chief Executive Officer (CEO)	Improvements in waste water quality – direct operations	<p>For 2019, the variable part of the compensation paid to the Chairman and the Chief Executive Officer amounts to 180% of the fixed compensation. The formula for calculating the variable portion uses economic parameters that refer to targets reflecting the Group's performance. These targets include 15% related to CSR objectives. For water, these objectives are to maintain the Group in the DJSI (Dow Jones Sustainability Index) list, which takes into account water performances of the company. Due to positive trends on CSR performance gained in the recent years and particularly in 2019, the 15% have been obtained by Chairman and CEO. However, the variable part of the Chairman and the CEO compensation could be reduced in the future if the water performance of the company would degrade the DJSI scoring. This decision would be taken by the compensation committee of the Board of Directors.</p>
Non-monetary reward	Other, please specify: Employees	<ul style="list-style-type: none"> ● Reduction of water withdrawals ● Reduction in consumption volumes ● Improvements in efficiency – direct operations ● Improvements in efficiency – product-use ● Improvements in waste water quality – direct operations ● Improvements in waste water quality – product-use ● Implementation of employee awareness campaign or training program ● Implementation of water-related community project 	<p>Employees have a HSE annual objective to be achieved that could be linked to concrete water projects. Water performance is evaluated each year and the individual monetary reward will depend if applicable on direct performance. Moreover, a collective monetary reward exists and relies on multiple HSE criteria which represents up to 10% of the variable portion. In 2020, 87.4% of the Company's entities (WHRS scope) included HSE criteria in the variable compensation. Volunteering program. In 2018, the Company introduced a worldwide employee community volunteering program called Action!, designed to give its employees the time and opportunity to do more to foster development in its host regions. Action! lets volunteer employees devote up to three workdays a year to community projects that fall within the scope of the TotalEnergies Foundation program. As of December 31, 2020, the program had been introduced in 63 countries, and more than 9,300 projects had been carried out since the program's launch.</p> <p>Employees' water performance is share on newsletters and available on the R&D water database. To contribute directly to societal initiatives, TotalEnergies allows each employee to spend 3 free days serving associations in accordance with strategic issues such as water.</p>

Public policy engagement

(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
- Other

(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?

TotalEnergies has adopted a lobbying ethics charter widely distributed within the Company and available online.

It applies to all entities and subsidiaries held by the Company, in accordance with respective decision-making rules. TotalEnergies applies a zero-tolerance policy to any infringement to the Lobbying Ethics charter which implies possible sanctions up to dismissal in accordance with applicable law. TotalEnergies complies with all national and international laws and standards in all of its host countries. Beyond rules, TotalEnergies has made values: Safety, Respect for Each Other, a Pioneer Spirit, the need to Stand Together and a Performance-Minded attitude – the beacons that guide actions day after day. The 2 core values, Safety and Respect for Each Other, form the basis of our Code of Conduct. The Respect of Each Other covers 4 aspects: respect of laws, respect of human rights, respect of all resources, and respect in the interactions towards stakeholders. The respect of human rights includes access to clean water, implying the sustainable use of water into our operations (minimize the use of water, do not pollute...)

TotalEnergies plays an active role within partnerships established with recognized organizations (WBCSD, IPIECA, DREAL, Water Agencies in France, Office International de l'Eau (Water International Office),...). Other partnership can be noted in R&D: UPPA and Rio Tinto.

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

- Yes

W7 Business strategy

Strategic plan

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

Please complete the following table:

Aspect of strategic business plan	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	21-30	TotalEnergies anticipates risks and opportunities in its Long-Term Plan exercise (LTP), including water-related over 10 years and the next LTP will start in 2021 until 2030. On a longer-term perspective (25-30 years), installation designs integrate stress resilience to water issues, whether stress elements pertain to CAPEX or OPEX: long term evolution of the Hydrocarbon content of discharged water and retrofit on projects, water regulation evolution and retrofit on water CAPEX on projects, Water withdrawals in water stress area and prioritization of water technical solutions for use and discharge. The Management ensures that objectives are defined at all levels for operations, reporting and compliance. To provide assistance to its direct operations, created in 2010, TotalEnergies monitors a Water Database with all expertises gained for more efficient production and distribution processes. This database is available at 100% of production sites and offers existing and innovative water treatment technologies. This tool is strategic, as it facilitates the building of water treatment lines, allows to establish contact with a water treatment engineer, provides of expertise and methodology to verify a process. Water experts are mobilised among the Company through sharing of good practices, support functions, water networks, PERL laboratory and technical assistance from TRTG (Laboratory) and ATCO (assistance center). They all regularly follow-up the R&D water management program.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	21-30	TotalEnergies anticipates risks and opportunities in its Long-Term Plan exercise (LTP), including water-related over a horizon of 10 years and the next LTP will start in 2021 until 2030. On a longer-term perspective (25-30 years), installation designs integrate stress resilience to water issues, whether stress elements pertain to CAPEX or OPEX. An example is the the Djeno project in Congo onshore with a significant CAPEX, for a new flotation unit installed in 2016 to enhance the existing waste water treatment plant. In addition, the Company has made some assets investment or divesture etc. and therefore they are integrated into long-term business objectives.

Aspect of strategic business plan	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Financial planning	Yes, water-related issues are integrated	21-30	TotalEnergies anticipates risks and opportunities in its Long-Term Plan exercise (LTP), including water-related over a horizon of 10 years and the next LTP will start in 2021 until 2030. On a longer-term perspective (25-30 years), installation designs integrate stress resilience to water issues, whether stress elements pertain to CAPEX or OPEX. An example is the Djeno project in Congo onshore with a significant CAPEX for a new flotation unit installed in 2016 to enhance the existing waste water treatment plant. In addition, the Company has made some assets investment or divesture etc. and therefore they are integrated into long-term business objectives.

Capex/Opex

(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?

Water-related CAPEX (+/- % change)	Anticipated forward trend for CAPEX (+/- % change)	Water-related OPEX (+/- % change)	Anticipated forward trend for OPEX (+/- % change)	Please explain
0	0	0	0	2020 was marked by a small decrease in research carried out due to the health crisis. It is also a marker for a set of studies completed and results transferred to the activities. Overall, there was a few actions in 2020, apart from the increase in the use of renewable energy, the standardization of the risk-based approach, the research for net gain on ecosystems and the consideration of the worsening availability of fresh water on the Company's activities. The companywide budget for water R&D OPEX in 2020 amounts to 8.6 M€. TotalEnergies' water withdrawal from third party sources is about the same in 2020 and therefore the water-related OPEX is considered stable. The reason is that water-related operational expenditures are linked to the volumes of water sourced from freshwater providers. No significant increase is forecast for the coming years. Water R&D CAPEX will remain stable on the current trend. However future OPEX could be materialized due to emerging water tax regulations.

W7.3 Scenario analysis

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

Use of climate-related scenario analysis	Comment
Yes	Climate change is of paramount for TotalEnergies' strategic vision. TotalEnergies' Chairman of the Board and Chief Executive Officer, in accordance with the long-term strategic directions set by the Board, implements the Company's approach to climate, to reduce GHG emission for the Company's operated oil & gas facilities; to reduce the carbon intensity of the energy products used by the Company's customers; to monitor existing or emerging CO ₂ markets and to drive new-technology initiatives to reduce CO ₂ . TotalEnergies aims to both reduce the environmental footprint and the CO ₂ emissions of its operations, and to actively contribute to finding solutions to limit the impact of climate change by providing its customers with a mix of energy products whose carbon intensity is expected to decrease with a reduced pressure on water resources.

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

Yes

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

Climate-related scenario(s) and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
IEA Sustainable Development Scenario	<p>In 2020, TotalEnergies announced its climate ambition by 2050: to achieve carbon neutrality, from the production to the use of the energy products sold to its customers. Thus the markets for low-carbon electricity and gases will see robust growth. TotalEnergies is also pursuing its integrated expansion along the renewables value chain. TotalEnergies aims to become a major force in the biofuels market. TotalEnergies confirms its objective to invest to have a gross power generation capacity from renewables of 35 GW in 2025 to become a major international player in renewable energies with the ambition to have developed a gross capacity of 100 GW by 2030. To address the issue of end-of-life plastics, TotalEnergies is investing in recycling and biopolymers with the ambition of producing 30% recycled plastics by 2030 and it aims to become the world's top producer of biobased polylactic acid (PLA), biodegradable and recyclable.</p> <p>Fuels or technologies used for the clean energy transition could be water intensive. Water scarcity is having an impact on energy reliability. Diminished freshwater resources can lead to energy-</p>	<p>TotalEnergies conducted natural capital valuation studies, which involve pricing of water resources based on local scarcity. All water projects are based on a local water approach (prices+taxes). This is used to calculate OPEX & CAPEX for development and maintenance operations: objective of 10%+ of Capex to low carbon electricity and 20% by 2030.</p> <p>The initiative One R&D Plan provides impactful solutions to customers for a cleaner, safer, and more affordable energy. For WATER R&D, there is a focus on industrial performance (viscosified treatment, produced water reinjection and new technologies) and on environmental performance (effluent monitoring, water usage analysis, treatment, management and Life cycle analysis). We support open innovation projects: start-up Adionics that uses solvents to desalinate and regenerates the solvent for another cycle, meaning that the water can be recycled and reused. Low energy desalination technics have delivered few</p>

Climate-related scenario(s) and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
	intensive sources of water supply (desalination). Water scarcity has an impact on energy needs. There is significant potential for energy savings in the water sector if all the economically available energy efficiency and recovery potentials in the water sector are mobilised: a major opportunity to reduce water losses along the supply chain - leaks, shrapnel and theft.	satisfactions, but oil water separation gave positive results in 5 years. Water neutrality is under consideration in the field of electricity production. The R&D is exploring water & climate management technologies through a water treatment and renewable energy mix solution. The coupling of water treatment and electricity production by photovoltaic panel has generated patents. A circular economy project was launched to generate lithium resources from production water in our oil production waters and throughout the value chain.

Water pricing

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

Does your company use an internal price on water?	Please explain
Yes	As part of its ongoing work on natural risks identification, TotalEnergies has studied natural capital valuation, which involves pricing water resources based on local scarcity parameters. Water Neutrality concept is also under investigation particularly in electricity production sector. All water projects under development are based on a local water approach (local prices + fees + taxes linked to the context and project). This information is used when calculating OPEX & CAPEX for commercial development and maintenance operations.

W8 Targets

Targets and goals

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

Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
<ul style="list-style-type: none"> ● Company-wide targets and goals ● Activity level specific targets and/or goals ● Site/facility specific targets and/or goals 	<ul style="list-style-type: none"> ● Targets are monitored at the corporate level ● Goals are monitored at the corporate level 	<p>The Company places the environment at the heart of its ambition of being a responsible company with a goal to improve the environmental performance of the facilities and products. In relation with its Safety Health Environment Quality charter, TotalEnergies considers respect for the environment to be a priority. TotalEnergies strives to control its energy consumption, its emissions in natural environments (water, air, soil), its residual waste production, its use of natural resources and its impact on biodiversity. Targets are validated by the Executive Committee, to ensure alignment with the industry's best practices. To this end, the HSE division and the HSE departments within the Company's entities seek to ensure both applicable local regulations and internal requirements resulting from the Safety Health Environment Quality Charter and the Company's additional commitments are respected. The Company was one of the first in the industry to publish measurable improvement targets in these areas.</p> <p>The One MAESTRO reference framework states that the environmental management systems of the sites operated by the Company that are important for the environment must be ISO 14001 certified within two years of start-up of operations or acquisition: 97% of 79 sites were compliant in 2020. The sites not yet certified within this two-year period are the Lapa site in Brazil to be certified in 2021, and the Kaombo Norte site in Angola, whose certification audit has been postponed because of the COVID-19 pandemic. In addition to this requirement, at the end of 2020, a TotalEnergies of 266 sites operated by the Company were ISO 14001 certified. In 2020, 12 sites received ISO 14001 certification.</p> <p>To sustain a circular economy including water issues, TotalEnergies is a founding member of the Alliance to End Plastic Waste, launched in 2019, which now brings together 80 companies and partners in the plastics and consumer goods value chain who are committed to ending plastic waste in the environment. Over five years, the Alliance's objective is to finance 14 projects, for the development of solutions for the reduction and treatment (reuse, recycling and recovery) of used plastics, particularly in the oceans. In 18 months, the Alliance has made great strides: 14 projects across cities in Ghana, India, Indonesia, the Philippines, Thailand and Vietnam.</p> <p>A project aiming to generate lithium resources from production water using the concepts developed by the circular economy at our petroleum production waters and all along the value chain has been launched. The project will be extended to saline aquifer waters eventually extracted to manage pressure under CO₂ injection, and to other metals of interest. A mapping of the resource has been initiated. A sufficient lithium concentration in deposits could provide an economic return and in co-construction with partners who distribute innovative technologies. The validation is in progress and results will be analyzed soon.</p>

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

Please complete the following table.

Target reference number	Category of target	Level	Primary motivation	Description of target	Quantitative metric
Target 1	Water pollution reduction	Company-wide	Risk mitigation	TotalEnergies aims at maintaining the average hydrocarbon content of its water discharges below 30 mg/l for 100% of its offshore sites. This target is thus company-wide and ensure a significant reduction of water-related risks exposure (water pollution risks). This objective will remain in the next year, with adaptation according to the change of regulations.	% reduction in concentration of pollutants
Baseline year	Start year	Target year	%of target achieved	Please explain	
2010	2010	2030	100%	In 2020, 100% of the Group's sites have met the target for the quality of offshore discharges.	

Target reference number	Category of target	Level	Primary motivation	Description of target	Quantitative metric
Target 2	Water pollution reduction	Company-wide	Risk mitigation	TotalEnergies aims at maintaining the average hydrocarbon content of its water discharges below 15 mg/l for 100% of its onshore sites. This target is thus company-wide, and ensure a significant reduction of water-related risks exposure (water pollution risks). This objective will remain in the next year, with adaptation according to the change of regulations.	% reduction in concentration of pollutants
Baseline year	Start year	Target year	% of target achieved	Please explain	
2010	2010	2030	100%	100% of the Company's sites have met the target for the quality of onshore discharges since 2016.	

Target reference number	Category of target	Level	Primary motivation	Description of target	Quantitative metric
Target 3	Watershed remediation and habitat restoration, ecosystem preservation	Company-wide	Risk mitigation	<p>In 2020, the Company has performed a new ambition for biodiversity protection. There are several commitments:</p> <ul style="list-style-type: none"> Not to conduct any exploration activity in oil fields under sea ice in the Arctic For new projects, a BAP (Biodiversity Action Plan) is developed for any new site located in an area of interest for biodiversity For existing sites, A biodiversity action plan will be defined by 2025 at the latest and deployed by 2030 at the latest on every existing environmentally significant site. 	<p>Other:</p> <p>The different metrics are:</p> <ul style="list-style-type: none"> Number of projects of exploration activity in oil fields under sea ice in the Arctic Number of BAPs done for new projects. <p>Number of BAPs done for existing sites.</p>

Baseline year	Start year	Target year	% of target achieved	Please explain
2010	2010	2030	100%	<p>The Company publishes a list of its licenses in the Arctic on its website sustainableperformance.total.com. In 2020, the Company did not conduct any exploration activity in oil fields under sea ice in the Arctic</p> <p>For new projects: A biodiversity action plan has been put in place for all operated production sites located in the most sensitive protected areas, corresponding to the IUCN I to IV and Ramsar areas, some of which have a target of a net gain. In 2020, this concerned six projects, two of which are aligned with the performance standards of the World Bank's IFC.</p> <p>For existing sites: Planning of the program is under way, with the preparation of the 14 biodiversity diagnostics exercises expected in 2022. Concerning the creation of biodiversity-rich zones for restoring sites that have ceased to operate, an initial zone has been created with a reptile habitat on the banks of the river Garonne. Around ten other sites have been identified and will be subject to a similar process.</p>

Target reference number	Category of target	Level	Primary motivation	Description of target	Quantitative metric
Target 4	Water pollution reduction	Company-wide	Risk mitigation	<p>An oil spill scenario is deemed "important" when its consequences are at a minimum on a small scale and have a limited impact on the environment (approximately several hundred meters of shores impacted or several tons of hydrocarbons involved).</p> <p>An oil spill preparedness plan is deemed operational if it describes the alert mechanisms, if it is based on pollution scenarios that stem from risk analyses and if it describes mitigation strategies that are adapted to each scenario; if it defines the technical and organizational resources, internal and external, to be deployed; and lastly if it indicates the items to be addressed in order to begin monitoring the environmental impact of the pollution.</p>	<p>Other:</p> <p>% of sites that have an oil spill response plan</p>

Target reference number	Category of target	Level	Primary motivation	Description of target	Quantitative metric
Baseline year	Start year	Target year	% of target achieved	Please explain	
2019	2020	2030	100%	All the sites where the risks analysis identified at least one major accidental pollution risk until 2019 have an oil spill response plan in place.	

Target reference number	Category of target	Level	Primary motivation	Description of target	Quantitative metric
Baseline year	Start year	Target year	% of target achieved	Please explain	
Target 5	Water pollution reduction	Company-wide	Risk mitigation	<p>An oil spill scenario is deemed "important" when its consequences are at a minimum on a small scale and have a limited impact on the environment (approximately several hundred meters of shores impacted or several tons of hydrocarbons involved).</p> <p>An oil spill preparedness plan is deemed operational if it describes the alert mechanisms, if it is based on pollution scenarios that stem from risk analyses and if it describes mitigation strategies that are adapted to each scenario; if it defines the technical and organizational resources, internal and external, to be deployed; and lastly if it indicates the items to be addressed in order to begin monitoring the environmental impact of the pollution.</p> <p>For this indicator, are included sites that have performed an exercise during the year since one of the scenarios identified in the oil spill preparedness plan up to the equipment deployment stage as well as sites that have been prevented from carrying out an exercise by a competent authority.</p>	<p>Other:</p> <p>100% of sites have performed an oil spill response exercise or whose exercise was prevented following a decision by the authorities</p>
2019	2020	2030	88%	In accordance with industry best practices, TotalEnergies monitors accidental liquid hydrocarbon spills of more than one barrel. Spills that exceed a predetermined severity threshold are reviewed on a monthly basis and annual statistics are sent to the Company Performance Management Committee. All spills are followed by corrective actions aimed at returning the environment to an acceptable state as quickly as possible.	

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

Goal	Level	Motivation	Description of goal	Baseline year	Start year	End year	Progress
Engagement with public policy makers to advance sustainable water policies and management	Company-wide	Water stewardship	<p>TotalEnergies adopted this goal part of its commitment to be proactive on its management of natural resources, in line with its aim to become the most responsible energy major. This goal is monitored at company-level as it is a commitment for all TotalEnergies' activities. Success is measured through the participation and completion of collaborative initiatives on this topic. TotalEnergies engages with public policy makers in order to ensure the alignment of its activities with current and future expectations from them.</p> <p>These objectives were set in 2012 at corporate as part of the HSE chart and are part of a continuous effort (no end year), and therefore apply to the entire company. The Company participations in initiatives are defined at Company level, hence the level of implementation.</p>	2012	2012	2020	<p>The progress towards this goal is measured through the initiatives in which TotalEnergies participates. For example, 7 pilot research projects were conducted at TotalEnergies' petrochemicals plant at the Normandy platform in the frame of the European Commission Initiative E4Water. The Environment Department of the RC Sector at TotalEnergies is also deeply engaged in the process of European Water Framework Directive fitness check and participates until march 2019 directly and indirectly through CONCAWE to the Public Consultation issued by the EU Commission. TotalEnergies also participates to the UN Global Compact Sustainable Ocean Business Action Platform to define Oil&Gas standard practices for Ocean protection. Finally, through its leadership in the Environment Group at IPIECA, TotalEnergies has an access to the UN Environment Assembly since IPIECA is granted an observer role there.</p> <p>We are measuring the progress of the different working groups working on engagement with policy makers. To assess the engagement performance, our objective to measure the goal of is to collect all the initiatives on our database SRM+. Thus, we follow the number and the quality of initiatives that have been continuously reported on the database. As a measure of success, we recorded that 100% of our countries are actively engaged with their public stakeholders (2020 reporting on SRM+)</p>

Goal	Level	Motivation	Description of goal	Baseline year	Start year	End year	Progress
Other: Constant monitoring of sites' exposure	Company-wide	Risk mitigation	<p>TotalEnergies has an internal goal to constantly monitor its exposure to water risk and to assess its water performance, through the screening of its global activities, and within a particular focus on sites identified as water risk priorities. This goal ensures the resilience of TotalEnergies' business model. These assessments are made on an annual basis, through the collaboration of members of the environmental department. This goal is therefore implemented at corporate level, which is the most appropriate level to analyse and prioritize sites exposed to water stress.</p> <p>These objectives were set in 2012 at corporate level as part of the HSE chart and are part of a continuous effort (no deadline) and therefore apply to the entire Company. The Company reporting and indicators are managed at Company level, hence the level of implementation.</p>	2012	2012	2030	<p>The progress towards this goal is measured through the number of sites assessed using measurement tools: LWT and WRI Aqueduct software. In 2020, TotalEnergies assessed 100% of this sites with 20 of them assessed with a full detailed local assessment through LWT. The results were disclosed in TotalEnergies' 2020 Universal Registration Document (as indicated in the present CDP Water Security questionnaire).</p> <p>In 2021, three other sites have been identified and will be assessed before the end of 2021.</p> <p>Thus, the number of at-risk sites will amount to 23.</p> <p>Our goal is to assess 100% of the priority sites, and to assess new sites whenever they are into our portfolio and as a measure of success, this measure is achieved.</p>

W9 Verification

Verification of water information

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

Yes

(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
W8 Targets	<p>Environmental information linked to water issues is verified. Scope of verification linked to water-related issues is:</p> <ul style="list-style-type: none"> • Number of operated sites important for the environment ISO 14001 certified • Number of sites whose risk analysis identified at least one risk of major accidental pollution to surface water • Proportion of those sites with an operational oil spill contingency plan • Accidental liquid hydrocarbon spills of a volume of more than one barrel that affected the environment, excluding sabotage • SO₂ emissions • NO_x emissions • Hydrocarbon content of offshore water discharges • Percentage of sites that meet the target for the quality of offshore discharges • Hydrocarbon content of onshore water discharges • Percentage of sites that meet the target for the quality of onshore discharges • Fresh water withdrawals excluding cooling water • The results of the environmental policy • Measures undertaken not to harm biodiversity • Pollution prevention measures • Water management. 	ISAE 3000	<p>Verification has been performed by EY, a third party, accredited by the COFRAC. The report of March 2020 is presented in chapter 5 of Total's 2019 Universal Registration Document (5.12 p. 252-255). The work was performed in accordance with the articles A. 225-1 of the French Commercial Code, as well as with the professional guidance of the French Institute of Statutory Auditors (CNCC) and with ISAE 3000. The verification was carried out from corporate down to site level including a sample of contributing sites which cover between 4% and 13% of the consolidated data selected for these tests (6% of freshwater withdrawals). The verification work mobilized 9 people and took place between September 2019 and March 2020 on thirty weeks. EY conducted interviews with around 20 persons responsible for the preparation of the Statement including in particular the divisions HSE, Strategy & Climate, Legal Affairs, Finance, Human Resources, Civil Society Engagement, Support & Purchasing Performance, Strategy Research & Development on biofuels (of the Refining & Chemicals segment).</p> <p>Based on the procedures performed, nothing has come to their attention that causes to believe that the consolidated non-financial performance statement is not presented in accordance with the applicable regulatory requirements</p>

			<p>and that the Information, taken as a whole, is not presented fairly in accordance with the Guidelines, in all material respects.</p> <p>The Group's HSE audit protocol is based on the One MAESTRO framework and includes the requirements of the international standards ISO 14001:2015 and ISO 45001:2018. The Group's internal requirements state that the EMS of its operated sites that are important for the environment must be ISO 14001 certified within two years of start-up of operations or acquisition: At the end of 2019, a total of 281 of the sites operated by the Group were ISO 14001 certified. In 2019, 7 sites were newly ISO 14001 certified.</p>
--	--	--	---

W10 Signoff

Signoff

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

Job title	Corresponding job category
Head of the People & Social Responsibility division (ExCom member of Total)	Chief Sustainability Officer (CSO)

Water Action Hub

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

Yes