Welcome to your CDP Water Security Questionnaire 2023

W0. Introduction

W0.1

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

TotalEnergies is a global multi-energy company that produces and markets energies: oil and biofuels, natural gas and green gases, renewables and electricity. Our more than 100,000 employees are committed to energy that is more affordable, cleaner, more reliable and accessible to as many people as possible. Active in close to 130 countries, the Company, with consolidated sales of 264 B€ in 2022, puts sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people.

Its model of value creation is based on integration across the energy value chain, from exploration and production of oil, gas and electricity to energy distribution to the end customer, and including refining, liquefaction, petrochemicals, trading, and energy transportation and storage.

The Company can leverage those integrated businesses with the know-how and resources inherent in its business model, including a global brand and presence, technical expertise and partnerships with governments and local communities.

TotalEnergies is committed to transforming its production and sales while continuing to meet the needs of a growing population. The Company is developing a wide range of energies in an integrated approach in order to decarbonize its energy offering and generate a competitive advantage that will create long-term value for its shareholders and secure its future.

The world's energy mix needs to change if the objectives of the Paris Agreement are to be achieved. As a multi-energy company, TotalEnergies has factored this development into its strategy and set itself the ambition of achieving carbon neutrality (net zero emissions) by 2050, together with society.

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

UPSTREAM ACTIVITIES
• **Integrated Gas, Renewables & Power (IGRP):** TotalEnergies’ strategy aims to transform itself into a multi-energy company by profitably growing its portfolio of liquefied natural gas and its production of electricity, as well as in decarbonized gas (biogas and hydrogen). The execution of a profitable growth strategy in these promising businesses is helping to achieve TotalEnergies’ ambition to reach carbon neutrality (net zero emissions) by 2050 together with society.

• **Oil & Gas Exploration & Production activities (EP):** encompasses the oil and natural gas exploration and production activities (excluding LNG) in about 50 countries.

**DOWNSTREAM ACTIVITIES**

• **Refining & Chemicals segment (RC):** include refining, base petrochemicals (olefins and aromatics); polymer derivatives (polyethylene, polypropylene, polystyrene and hydrocarbon resins), including biopolymers and recycled polymers obtained from chemical or mechanical recycling, and biofuels from the transformation of biomass and, since January 1, 2022, specialty fluids, which were previously part of the Marketing & Services segment. The Refining & Chemicals activities also include the processing of elastomers by Hutchinson.

• **Marketing & Services (MS):** is proactively supporting its customers in their transition to more sustainable energy and mobility. Includes the worldwide supply and marketing of oil products and services, low-carbon fuels and new energies for mobility.

TotalEnergies’ commitment to the Sustainable Development Goals has four dimensions: Climate and sustainable energy, People’s well-being, Care for the environment and creating shared value. TotalEnergies creates and drives positive change for communities in its host territories and, more broadly, for its employees, suppliers, customers, partners, states and civil society.

Respect for the environment is key to the way TotalEnergies conducts its operations. Our ambition is to place environmental performance at the heart of our projects and operations and pay particular attention to the use of the planet's natural resources. TotalEnergies takes care to manage the environmental impacts of all its operations according to the Mitigation Hierarchy (Avoid, Reduce, Compensate). The first step is to avoid any impacts wherever possible. If an impact cannot be avoided, the Company uses best available technology to reduce it and, as a last resort, compensates residual impacts. In light of the environmental challenges facing the planet, the Company has set three priorities to take care of the planet's resources: preserving biodiversity, protecting water resources and practicing circular resource management. **With a focus on continuous improvement, the Company decided in 2022 to renew the environmental objectives set for the previous decade, which had already been met. These objectives have been strengthened and expanded. New targets for water were set to reduce the freshwater withdrawal of the sites located in water stress area and limit the hydrocarbon content of continuous aqueous discharges. Moreover, TotalEnergies joined the UN Global Compact’s CEO Water Mandate.**
W-OG0.1a

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

W0.2

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

<table>
<thead>
<tr>
<th>Reporting year</th>
<th>Start date</th>
<th>End date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January 1, 2022</td>
<td>December 31, 2022</td>
</tr>
</tbody>
</table>

W0.3

(W0.3) Select the countries/areas in which you operate.
   - Algeria
   - Angola
   - Argentina
   - Belgium
   - Bolivia (Plurinational State of)
   - Botswana
   - Brazil
   - Brunei Darussalam
   - Cambodia
   - Cameroon
   - Canada
   - Chile
   - China
   - Congo
Czechia
Democratic People's Republic of Korea
Denmark
Dominican Republic
Egypt
Estonia
Ethiopia
France
Gabon
Germany
India
Israel
Italy
Jamaica
Kazakhstan
Luxembourg
Madagascar
Malawi
Malta
Mayotte
Mexico
Morocco
Myanmar
Netherlands
New Caledonia
Nigeria
Norway
Papua New Guinea
Poland
Portugal
W0.4

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

EUR

W0.5

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

Companies, entities or groups over which operational control is exercised
W0.6

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

No

W0.7

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

<table>
<thead>
<tr>
<th>Indicate whether you are able to provide a unique identifier for your organization.</th>
<th>Provide your unique identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, an ISIN code</td>
<td>FR0000120271</td>
</tr>
<tr>
<td>Yes, a Ticker symbol</td>
<td>TTE</td>
</tr>
</tbody>
</table>

W1. Current state

W1.1

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

<table>
<thead>
<tr>
<th>Direct use importance rating</th>
<th>Indirect use importance rating</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient amounts of good quality freshwater available for use</td>
<td>Vital</td>
<td>Freshwater corresponds to surface Freshwater, Groundwater-renewable and Third-party sources. In 2022, Freshwater withdrawals were 125,083 Megaliters/year distributed as follows: RC 84%, IGRP 10%, EP 4%, and MS 2%. Freshwater availability and quality are vital for TotalEnergies' direct operations due to the reasons explained below: UPSTREAM 1. O&amp;G Exploration &amp; Production (EP): Oil and natural gas exploration and production activities (excluding LNG) use water for Pressure Maintenance purposes, but also for cooling and</td>
</tr>
<tr>
<td></td>
<td>Not very important</td>
<td></td>
</tr>
</tbody>
</table>

UPSTREAM 1. O&G Exploration & Production (EP): Oil and natural gas exploration and production activities (excluding LNG) use water for Pressure Maintenance purposes, but also for cooling and
<table>
<thead>
<tr>
<th>Sufficient amounts of recycled, brackish and/or produced water available for use</th>
<th>Vital</th>
<th>Not very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2022, recycled, brackish and/or produced Water withdrawals were 1,192,835 Megal/year split as follows: 82% EP and 18% RC. The availability of recycled, brackish and produced water is vital for TotalEnergies as the extraction of hydrocarbons produces large volumes of water and open cooling demands large volumes of water. Without brackish water Oil and Gas extraction must stop. The revenue associated to this activity represents the major part of the revenue of the Company. 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 that...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
is discharged to other water bodies. For EP activities: saline water and brackish water are used for cooling purposes as well as maintaining reservoir pressure as well as produced water reinjection. For RC activities: the use of non-freshwater occurs in once-through cooling processes. It is therefore vital for TotalEnergies to access enough recycled or brackish water to pursue its activities. EOR and RC activities will remain core to TotalEnergies’ activities for the coming years and the availability of non-freshwater will remain very strategic to sustain all our activities. The company expects that, the recycled/brackish/produced water dependency will increase in the future to reduce the freshwater dependency. We anticipate the deployment of new alternatives to bring solutions for the potential situation of water scarcity. Recycled/brackish water is not very important for our supply chain as their activities do not include water intensive products. TotalEnergies signed major multi-energy agreements in Iraq for the construction of a new gas network and treatment units, the construction of a large-scale seawater treatment unit and the construction of a 1 GW photovoltaic power plant.

W1.2

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

<table>
<thead>
<tr>
<th>% of sites/facilities/operations</th>
<th>Frequency of measurement</th>
<th>Method of measurement</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water withdrawals – total volumes</td>
<td>100%</td>
<td>Continuously</td>
<td>Flowmeters - direct monitoring</td>
</tr>
</tbody>
</table>

Water is vital to most of the operations of the Company thus 100% of our sites monitor and report their withdrawals through continuous recording flowmeters. ‘sites’ refer to where our O&G extraction, processing, administrative works and R&D operations take place. All TotalEnergies sites use HARPE, the Company-wide environmental reporting system that covers
HARPE allows to collect up to 20 water quantity primary indicators and 83 quality indicators including water withdrawal volumes. Based on international norms like ISO14001, it constantly evolves in accordance with regulations and reporting frameworks.

HARPE data collection is done on a monthly/quarterly basis at Business Units and annually at Company level. Disclosure occurs on an annual basis.

**Water withdrawals – volumes by source**

<table>
<thead>
<tr>
<th>Source</th>
<th>Reporting</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface freshwater</td>
<td>100%</td>
<td>Continuously</td>
</tr>
<tr>
<td>Brackish surface/seawater</td>
<td>100%</td>
<td>Flowmeters - direct monitoring</td>
</tr>
<tr>
<td>Groundwater – renewable</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Produced water</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Third-party</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

In 2022, withdrawals breakdown by source: Surface freshwater (5%), Brackish surface/seawater (82%), Groundwater – renewable (1%), Produced water (9%) and Third-party (3%).

No significant change is expected soon. However,
thanks to the strategy to get an operational excellence within an efficient water management and some specific projects for sites located into scarce areas (according to the WRI aqueduct tool), the freshwater withdrawal into scarce areas is expected to decrease within 2030.

<table>
<thead>
<tr>
<th>Produced water associated with your oil &amp; gas sector activities - total volumes [only oil and gas sector]</th>
<th>100%</th>
<th>Continuously</th>
<th>Flowmeters - direct monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% of TotalEnergies sites use HARPE. Further information above. TotalEnergies water associated with our O&amp;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&amp;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&amp;P segment's environmental reporting system to continuous daily monitoring, consolidated on a monthly basis for piloting purposes at Branch level and consolidated in the HARPE annually for external disclosure.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water withdrawals quality</th>
<th>100%</th>
<th>Continuously</th>
<th>Continuous Sensors - direct monitoring (temperature, TDS, pH, ...)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% of TotalEnergies activities use HARPE. Further information above. At site level, TotalEnergies monitors the parameters of withdrawals to ensure that human</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Indicators are consistently monitored through site-measurements (sensors) and include standard suit biophysical parameters such as pH, water hardness, pollutant loading, salt content etc.

- EP & RC: depending on the sources (municipal, river...), the measurement frequency is aligned with the quality objectives, i.e., water used for boilers may be assessed daily or water for cooling purposes weekly assessed.

- IGRP: quality monitoring depends on the use (quality is important to manage the process and the use of chemicals in thermal power plants).

<table>
<thead>
<tr>
<th>Water discharges – total volumes</th>
<th>100%</th>
<th>Continuously</th>
<th>Flowmeters - direct monitoring</th>
<th>TotalEnergies’ sites water discharges volumes are continuously monitored through flowmeters, or in rare cases estimated, and reported through HARPE. See more information above. This is essential to comply to regulatory requirements. HARPE data collection is planned on a monthly/quarterly basis at Business Units and annually at Company level for external disclosure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water discharges – volumes by destination</td>
<td>100%</td>
<td>Continuously</td>
<td>Flowmeters - direct monitoring</td>
<td>TotalEnergies’ sites water discharges volumes are continuously monitored through flowmeters, or in rare cases estimated, and reported through HARPE. See more information above. This is essential to comply to regulatory requirements. HARPE data collection is planned on a monthly/quarterly basis at Business Units and annually at Company level for external disclosure.</td>
</tr>
</tbody>
</table>
essential to comply to regulatory requirements. TotalEnergies measures and monitors water discharges volumes by destinations through HARPE. HARPE data collection is planned on a monthly/quarterly basis at Business Units and annually at Company level.

<table>
<thead>
<tr>
<th>Water discharges – volumes by treatment method</th>
<th>100%</th>
<th>Continuously</th>
<th>Flowmeters - direct monitoring</th>
</tr>
</thead>
</table>

100% of TotalEnergies activities use HARPE. Further information above.

Company data consolidation is annually done for 100% of the sites.

The water discharges are systematically treated as per the company requirements and daily measured and monitored. Treatment typology depends on branches, water flow types and activities thus, the treatment methods are directly or indirectly monitored through classification of water flows available in HARPE.

According to investment forecast, no significant change in the use of treatment method is anticipated, but we forecast adaptation to the current treatment for the onshore plants which are not yet compliant to our commitment of 1 mg/l of HC, or for new businesses (i.e. biofuels).
| Water discharge quality – by standard effluent parameters | 100% | Continuously | Sensors - direct monitoring and analysis using automatic water samplers and lab testing. Lab testing include metals, COD, hydro carbons, etc.... |
| Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances) | 100% | Continuously | Sensors - direct monitoring and lab analysis after sampling |

100% of TotalEnergies activities use HARPE. Further information above. Through HARPE TotalEnergies consistently measures water discharge quality. The following main potential 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 sites monitor their discharges by sensors, sampling and lab testing and data are aggregated at corporate level.

New internal environmental targets have been defined to limit the hydrocarbon content of water discharges to below 30 mg/l for offshore sites and to below 1 mg/l for onshore and coastal sites by 2030.

No significant change in the quality of our effluents is expected so far, except for the onshore plants that are not yet compliant with the TotalEnergies target of less than 1 mg/l.
<table>
<thead>
<tr>
<th>Water discharge quality – temperature</th>
<th>100%</th>
<th>Continuously</th>
<th>Sensors and thermometers - direct monitoring</th>
</tr>
</thead>
</table>

100% of the sites monitor their discharges by sensors and sampling/lab testing and data are aggregated at corporate level at least on a yearly basis. This monitoring is essential to comply to regulatory requirements and to optimize the piloting of the sites. A list of priority substances exists for each type of site.

New environmental targets have been defined to limit the hydrocarbon content of water discharges to below 30 mg/l for offshore sites and to below 1 mg/l for onshore and coastal sites by 2030. No significant change in the quality of our effluents is expected so far, except for the onshore plants that are not yet compliant with TotalEnergies target of less than 1 mg/l.
<table>
<thead>
<tr>
<th>Water consumption – total volume</th>
<th>100%</th>
<th>Continuously</th>
<th>Flowmeters - indirect monitoring</th>
</tr>
</thead>
</table>

Comply with local legal requirements and also as a key metrics to pilot our sites.

100% of TotalEnergies activities use HARPE. Further information above. 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 and daily mass balance calculations at site level. Aggregated data collection and calculations are performed annually at the Company level. Water consumption can be complex to monitor due to the difficulty to measure rainwater income. Consumption is thus measured at 100% as withdrawals and discharges are monitored at 100% of the material reporting scope in HARPE. Water consumption is more a legal/disclosure metrics than a piloting metrics. No significant change in the water consumption is expected so far.

<table>
<thead>
<tr>
<th>Water recycled/reused</th>
<th>100%</th>
<th>Continuously</th>
<th>Flowmeters - indirect monitoring through mass balance</th>
</tr>
</thead>
</table>

100% of TotalEnergies activities use HARPE. Further information above. 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 corresponds to E&P and RC.
| The provision of fully-functioning, safely managed WASH services to all workers | 100% | Quarterly | Internal and external Audits and measurements on WASH water quality, the frequency of the audits and measurements varies depending on Branches, sites and parameters (access, quality). |

51% of produced water is reinjected to the wells for reservoir pressure maintenance purposes. Aggregated data collection is done annually at Company level and monthly/quarterly at some business. We expect to increase the use of recycled water in the future. Some projects are being studied, especially when the use of freshwater can be in competition with other usages.

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 (WASH). 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. 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 our operations. Results are compiled at site level and all non-conformities are systematically reported at Company level through SHARE platform, a Company-wide system.
### (W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

<table>
<thead>
<tr>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Primary reason for comparison with previous reporting year</th>
<th>Five-year forecast</th>
<th>Primary reason for forecast</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total withdrawals</td>
<td>About the same</td>
<td>Increase/decrease in business activity</td>
<td>About the same</td>
<td>Increase/decrease in efficiency</td>
<td>In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation up to +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation &gt; +/- 50% = much higher / lower. The 2022 reported total water withdrawals (1,446,181 Mgl) are stable compared to the 2021 reported volume (1,389,922 Mgl), with a 4% change. Breakdown by activity: EP 77%, RC 22%, IGRP 1%, and MS &lt;1%. •EP: withdrawals have changed by 6% (1,116,799 // 1,057,639 in 2021). The freshwater withdrawals have been stable but there was an increase in brackish water linked to production fluctuations.</td>
</tr>
</tbody>
</table>
•RC: withdrawals have been stable, with a slight decrease of 3% (314,507 // 323,622 in 2021). The variations are linked to production fluctuations.
•IGRP: withdrawals have increased by 67% (12,126 // 7,264 in 2021). There has been important withdrawal increase at St Avold, PSS and Marchienne (linked to the functioning of the CCGT in 2022 due to a high demand of electricity)
•MS: withdrawals have increased by 97% (2,749 // 1,397 in 2021). This increase is linked to change in reporting: from 2022 onwards, all the MS sites are reporting through HARPE.

Short / medium term horizon: no significant change is anticipated for the overall water withdrawals, apart from yearly variations in assets' perimeter and activity.
Longer term: our commitment to a low-carbon business model should reduce our dependency to water.

| Total discharges | 1,387,906 | About the same | Increase/decrease in business activity | About the same | Increase/decrease in efficiency | In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation up to +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower. The 2022 reported total water discharges |

The 2022 reported total water discharges
(1,387,906 Mgl) are stable compared to the 2021 reported volume (1,342,553 Mgl), with a 3% change.

Breakdown by activity: EP 80%, RC 19%, IGRP 1%, and MS <1%.
• EP: discharge have increased by 6% (1,111,608 // 1,051,751 in 2021), due to more produced water (the mature wells give more water).
• RC: discharge have decreased by 6% (270,191 // 286,983 in 2021), in coherence with decrease in withdrawals (same efficiency of TAR).
• IGRP: discharge have increased by 34% (3,358 // 2,422 in 2021), due to higher activity implying higher evaporation within cooling.
• MS: withdrawals have increased by 97% (2,749 // 1,397 in 2021). This increase is linked to an improvement in reporting: from 2022 onwards, all the MS sites are reporting through HARPE.

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, our commitment to a low-carbon business model should reduce
our dependency to natural resources including water and subsequent discharges.

<table>
<thead>
<tr>
<th>Total consumption</th>
<th>58,275</th>
<th>About the same</th>
<th>Increase/decrease in business activity</th>
<th>About the same</th>
<th>Increase/decrease in efficiency</th>
</tr>
</thead>
</table>

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation up to +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower.

TotalEnergies’ water consumption is quite stable in 2022 (58 275 in 2022 // 47 367 in 2021) taking into account the very specific context of energy demand all over Europe during winter 2022 that should have lead to more dramatic changes.

Water consumption is calculated as the difference between the total of withdrawals and the total of discharges at the Company level, this is a Company-wide calculation. The figures are about the same with a similar water efficiency. The main contributors for this consumption are: Volume evaporated through vapour use and cooling towers.

Power plants in St Avold, PSS and Marchienne have increased the hours of functioning hours in 2022 due to higher demand of electricity in 2022 in a specific context requiring higher
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 and the actions to optimize the processes should reduce its dependency to natural resources including water.

### W-OG1.2c

(W-OG1.2c) In your oil & gas sector operations, what are the total volumes of water withdrawn, discharged, and consumed (by business division), how do they compare to the previous reporting year, and how are they forecasted to change?

<table>
<thead>
<tr>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Primary reason for comparison with previous reporting year</th>
<th>Five-year forecast</th>
<th>Primary reason for forecast</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total withdrawals - upstream</td>
<td>1,116,800</td>
<td>About the same</td>
<td>Increase/decrease in efficiency</td>
<td>About the same</td>
<td>Increase/decrease in business activity</td>
</tr>
</tbody>
</table>
operations of the EP activities like: cooling, oil desalting, pressure maintenance, EOR, etc.... The stable withdrawals are linked to no major change in our EP activities and a stable water efficiency.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends:

- deviation up to +/- 25% = about the same;
- deviation between +/- 25-50% = higher / lower;
- deviation > +/- 50% = much higher / lower.

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).

<table>
<thead>
<tr>
<th>Total discharges – upstream</th>
<th>1,111,608</th>
<th>About the same</th>
<th>Increase/decrease in efficiency</th>
<th>About the same</th>
<th>Increase/decrease in business activity</th>
</tr>
</thead>
</table>
| The EP segment encompasses 100% of upstream activities. The 2022 reported total water discharge (1,111,608 Mgl) for EP are about the same compared to the 2021 reported volume (1,051,751 Mgl) with a 6% change. It corresponds to water discharge to the environment,
used for EOR by reinjection in the reservoirs and to any other significant flow leaving our EP installations. The absence of significant variation is due to a constant efficiency and no significant production variation.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends:

- deviation +/- 25% = about the same;
- deviation between +/- 25-50% = higher / lower;
- deviation > +/- 50% = much higher / lower.

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).

| Total consumption – upstream | 5,192 | About the same | Increase/decrease in efficiency | About the same | Increase/decrease in efficiency | The EP segment encompasses 100% of upstream activities. EP water consumption is about the same in 2022 (5,192) compared to 2021 (5,888), with a 12% change. It is calculated as the difference between the |

EP segment encompasses 100% of upstream activities. EP water consumption is about the same in 2022 (5,192) compared to 2021 (5,888), with a 12% change. It is calculated as the difference between the
Due to the absence of significant variation for these two components, it is normal that the consumption is not varying much either. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends:

- deviation $\pm$ 25% = about the same;
- deviation between $\pm$ 25-50% = higher / lower;
- deviation $>\pm$ 50% = much higher / lower.

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.

| Total withdrawals - midstream/downstream | 329,381 | About the same | Increase/decrease in business activity | About the same | Increase/decrease in efficiency | The figures provided relate to RC activities, IGRP and MS segments. RC activities represent around 90% of these freshwater withdrawals. They correspond mostly to water used for cooling, Vapour production and at some extent to the water used for car washing. The total of water withdrawals for these... |
activities are about the same in 2022 (329,381) compared to previous year (332,283 in 2021), with a 1% change. An increase in MS segment was recorded due to the incorporation of all MS sites into the reporting, but a large decrease was observed for the IGRP segment due to changes in activities. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower.

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’s commitment to a low-carbon business model and to reduce by 20% freshwater withdrawals in water stress areas by 2030 should reduce its dependency to freshwater.

| Total discharges – midstream/downstream | 276,298 | About the same | Increase/decrease in business activity | About the same | Increase/decrease in efficiency | The figures provided relate to RC activities, IGRP and MS segments. The total water discharges for these activities are about the same in 2022 (276,298) |
Compared to previous year (290,802 in 2021), with a 5% change. They correspond to water discharged from our downstream sites mostly industrial and domestic wastewater. There has been an increase for IGRP and MS but we observe a large decrease in RC due to lower activity.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation up to +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower.

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.

<table>
<thead>
<tr>
<th>Total consumption – midstream/downstream</th>
<th>53,086</th>
<th>Higher</th>
<th>Increase/decrease in business activity</th>
<th>About the same</th>
<th>Increase/decrease in business activity</th>
<th>The figures provided relate to RC activities, IGRP and MS segments. It is calculated as the difference between the total of midstream/downstream withdrawals and discharges. The total of</th>
</tr>
</thead>
</table>
water consumption has increased of 28% in 2022 (53,086) compared to 2021 (41,479). The increase is due to a higher withdrawal of IGRP and MS segments compared to their discharges even though the consumption remains low compared to the withdrawals. Some sites have been operating at a conjunctural higher rate in 2022. This is particularly the case for sites of St Avold, Pont Sur Sambre and Marchienne Sites, linked to the high demand of supplemental electricity in 2022 (lack of nuclear electricity in France). An increase in the power plants means higher losses by evaporation to increase the cooling capacity.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends:

- deviation up to +/- 25% = about the same;
- deviation between +/- 25-50% = higher / lower;
- deviation > +/- 50% = much higher / lower.

On the short to medium term apart from yearly variations in assets' perimeter and activity, a return to previous situation could be expected. On the longer term, our commitment to a low-carbon...
(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

<table>
<thead>
<tr>
<th>Withdrawals are from areas with water stress</th>
<th>% withdrawn from areas with water stress</th>
<th>Comparison with previous reporting year</th>
<th>Primary reason for comparison with previous reporting year</th>
<th>Five-year forecast</th>
<th>Primary reason for forecast</th>
<th>Identification tool</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11-25</td>
<td>Lower</td>
<td>Increase/decrease in business activity</td>
<td>Lower</td>
<td>Investment in water-smart technology/process</td>
<td>WRI Aqueduct</td>
<td>To identify all its operated facilities (any Branch and any type of activity) exposed to the risk of water stress, TotalEnergies records the withdrawals of water on all of its operated sites and assesses these volumes on the basis of the current and future (2030) water stress indicators of the Baseline Water Stress of the WRI Aqueduct tool. The Baseline Water Stress 2030 data set of the WRI is downloaded from the Aqueduct, uploaded into the Geographical...</td>
</tr>
</tbody>
</table>

business model should reduce our dependency to natural resources including freshwater.
Information System of TotalEnergies and compared to the locations of all the sites of the Company in order to perform a water stress assessment of each site one by one. The register of the Company’s sites in Water Stress Area is updated annually.

In 2022, the Company’s sites withdrew water for their operational needs. Part of this volume was withdrawn from high or extremely high-water stress areas according to the WRI Baseline water stress definition, i.e. areas where human demand for water exceeds 40% of resources available. For us, these are mainly highly populated urban areas, such as urban areas in Northern Europe. This assessment is done for every existing site, every new site entering our portfolio and every time WRI modifies its Baseline Water Stress indicators. Thus we plan to review the level of water-
stressed in September 2023, once new version of Aqueduct will be released. According to the CDP Water definition, these withdrawals represent 18% of the overall Company’s water withdrawals (including brackish water and seawater) in 2022 versus 24% in 2021 so a 25% decrease. This indicator should continue decreasing in the next years, because 73% of water withdrawals in water-stressed areas are brackish water, which are quite stable and the 27% rest is freshwater withdrawals and should decrease by 20% by 2030 (as per Company target). For 2025 a significant reduction project is already planned to produce its benefits on fresh water withdrawals in water stress area. Globally, most of the sites operated by the company are not particularly exposed to water risk.
### W1.2h

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

<table>
<thead>
<tr>
<th>Source Description</th>
<th>Relevance</th>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Primary reason for comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh surface water, including rainwater, water from wetlands, rivers, and lakes</td>
<td>Relevant</td>
<td>68,452</td>
<td>About the same</td>
<td>Increase/decrease in business activity</td>
<td>Some of our sites depend on freshwater sources (rivers and at least extent rainwater). The fresh surface water withdrawals in 2022 are about the same (68,452) compared to 2021 (61,587), with a 11% change. This figure is an aggregate of all the sites volumes, which come from direct measurements with flowmeters source by source. In 2022, due to the context of the energy demand, we use the following thresholds: up to +/- 25% = about the same; between +/- 25-50% = higher/lower; &gt; +/- 50% = much higher/lower. Breakdown: RC 91%, IGRP 8% and EP &lt;1%. RC faced operational fluctuations mostly linked to Leuna site that went back to operation (stopped in 2021 back in 2022). Water is mainly used to produce steam and for cooling. IGRP: withdrawal increase at 3 power plants, linked to high demand of electricity in 2022. These sites have launched actions to optimize water management. This water volume should decrease thanks to our...</td>
</tr>
<tr>
<td>Source</td>
<td>Relevance</td>
<td>Volume</td>
<td>Increase/Decrease</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------</td>
<td>---------</td>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| Brackish surface water/Seawater | Relevant  | 1,192,835 | About the same   | The 2022 reported total Brackish/Seawater withdrawals (1,192,835 Mgl) are stable (3% change) compared to the 2021 reported volume (1,163,039 Mgl). They are monitored with flowmeters for each source. In 2022, due to the specific context of the energy demand, we use the following thresholds: +/- 25% = about the same; between +/- 25-50% = higher/lower; > +/- 50% = much higher/lower. Breakdown: RC 82% and EP 18%.  
- At RC, brackish water is only used for once-through cooling purposes in 2 platforms. Withdrawals are about the same in 2022 (209,499) compared with 2021 (223,774) with a 6% change.  
- For EP, withdrawals are about the same in 2022 (983,336 vs 939,265 in 2021), with a 5% change. These withdrawals maintain reservoirs pressure over time and are used for once-through cooling. It is a vital use for the continuity of EP’s operations, but without causing any water security issue (seawater considered as an infinite resource). This indicator should remain stable with the current assets. |
| Groundwater – renewable       | Relevant  | 13,010  | About the same   | Some sites are fully depending on renewable groundwater due to specific and remote locations and to technical production aspects: despite of the low volume, this source is relevant mainly for the refining activities (RC:58%, 26 EP% and IGRP 16%). Volume |
In 2022, due to the specific context of the energy demand, we use the following thresholds: +/- 25% = about the same; between +/- 25-50% = higher/lower; > +/- 50% = much higher/lower.

Renewable groundwater withdrawals from our activities are about the same in 2022 (13,010) compared to 2021 (15,070), with a 14% change.

- **RC**: 7,502 in 2022 // 9,301 in 2021. To be noticed that half of these withdrawals are under a mandatory treatment by regulation to ensure the quality of groundwater.
- **IGRP**: 2,141 in 2022 // 1,300 in 2021, due to high demand of electricity in 2022 (PSS concerned)

In the next 5 years, no significant change is expected for this source of water.

TotalEnergies forbids the use of non-renewable groundwater, considering that this use would not be sustainable and could cause damages to nature or other users. A specific Company Rule is in place to prevent such use and audits are performed on sites.

<table>
<thead>
<tr>
<th>Groundwater – non-renewable</th>
<th>Not relevant</th>
<th>TotalEnergies forbids the use of non-renewable groundwater, considering that this use would not be sustainable and could cause damages to nature or other users. A specific Company Rule is in place to prevent such use and audits are performed on sites.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produced/Entrained water</td>
<td>Relevant</td>
<td>128,263</td>
</tr>
</tbody>
</table>

Increase/decrease in business activity
### Produced/entrained withdrawals from our activities

<table>
<thead>
<tr>
<th>Third party sources</th>
<th>Relevant</th>
<th>43,621</th>
<th>About the same</th>
<th>Increase/decrease in business activity</th>
</tr>
</thead>
</table>

Produced/entrained withdrawals from our activities are about the same in 2022 (128,263 // 112,437 in 2021), with a 14% change.

In the next 10 years, we expect an increase of this source of water due to projects under development.

### Third party sources

Third party sources withdrawals from our activities are overall about the same in 2022 (43,621 // 37,789 in 2021), with an overall 15% change. They are either monitored with flowmeters on site or given by the external providers (invoices), which are mostly municipal suppliers. In 2022, due to the specific context of the energy demand, we use the following thresholds: +/- 25% = about the same; between +/- 25-50% = higher/lower; > +/- 50% = much higher/lower.

Breakdown: RC 80%, EP 3%, IGRP 11%, MS 6%

- **RC withdrawals** are stable (34,987//33,880 in 2021) with 3% change.
- **EP withdrawals** are 25% higher (1,128// 901 in 2021) due to specific projects
- **IGRP withdrawals** are 195% higher (4,756//1,611 in 2021) due to the high activity of power plants.
- **MS withdrawals** are 97% higher (2,750//1,397 in 2021), because of the rising number of MS sites reporting through HARPE. Although their water use is...
In the next 5 years, no significant change is expected for this source of water.

W1.2i

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

<table>
<thead>
<tr>
<th>Fresh surface water</th>
<th>Relevance</th>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Primary reason for comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant</td>
<td>22,151</td>
<td>About the same</td>
<td>Increase/decrease in business activity</td>
<td>Our discharges to fresh surface water are about the same in 2022 (22,151Mgl) vs 2021 (21,887Mgl) with 1% change. For our onshore assets discharge points must be close to the sites, so this destination is relevant for our sites. Volumes are measured by flowmeters direct measurements. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher/lower; deviation &gt; +/- 50% = much higher/lower. Breakdown: RC 90%, EP &lt;1%, IGRP 10% • RC disch. to fresh surface water are stable (20,032 vs 20,078 in 2021). • EP disch. to fresh surface water are significantly lower (82%) (9 vs 49 in 2021). For 2022, the disch. of Djeno site has been requalified in brackish water destination (coastal area). • IGRP discharges to fresh surface water are about the same</td>
<td></td>
</tr>
</tbody>
</table>
The discharges to brackish surface water/seawater from our activities are about the same in 2022 (1,174,115 Mgl) vs 2021 (1,151,819 Mgl), with 2% change, and a stable activity of the sites concerned. The discharges measured by flowmeters by direct measurements.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends:
- deviation +/- 25% = about the same;
- deviation between +/- 25-50% = higher/lower;
- deviation > +/- 50% = much higher/lower.

Breakdown:
- RC 20% (234,984 in 2022/253,626 in 2021, 7% change).
- EP 80% (939,131 in 2022/898,193 in 2021, 5% change)

More than 75% of the volume is used for cooling systems: the water withdrawn is directly discharged into the same catchment with the same quality. It is relevant since without cooling the site must shut down and the associated revenue is lost.

We expect these discharges to be stable in the near future and decreasing in the long term as we will decrease our activities offshore.

<table>
<thead>
<tr>
<th>Source of Water</th>
<th>Relevance</th>
<th>Discharges (Mgl)</th>
<th>Increase/Decrease in Business Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brackish surface water/seawater</td>
<td>Relevant</td>
<td>1,174,115</td>
<td>Increase/decrease in business activity</td>
<td>The discharges to brackish surface water/seawater from our activities are about the same in 2022 (1,174,115 Mgl) vs 2021 (1,151,819 Mgl), with 2% change, and a stable activity of the sites concerned. The discharges measured by flowmeters by direct measurements. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher/lower; deviation &gt; +/- 50% = much higher/lower. Breakdown: - RC 20% (234,984 in 2022/253,626 in 2021, 7% change). - EP 80% (939,131 in 2022/898,193 in 2021, 5% change) More than 75% of the volume is used for cooling systems: the water withdrawn is directly discharged into the same catchment with the same quality. It is relevant since without cooling the site must shut down and the associated revenue is lost. We expect these discharges to be stable in the near future and decreasing in the long term as we will decrease our activities offshore.</td>
</tr>
<tr>
<td>Groundwater</td>
<td>Relevant</td>
<td>172,468</td>
<td>Increase/decrease in business activity</td>
<td>Discharges to groundwater from our activities are about the same in 2022 (172,468/153,509 in 2021), with 12% change. The discharges are sourced by flowmeters based on direct measurements. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends:</td>
</tr>
<tr>
<td>Third-party destinations</td>
<td>Relevant</td>
<td>Higher</td>
<td>Increase/decrease in business activity</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td>-------</td>
<td>----------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
|                         | 19,172  |       | Discharges to third-party destinations from our activities have increased by 25% in 2022 (19,172 // 15,338 in 2021). The discharges are measured by flowmeters direct measurements, and they are sent to third-parties to be treated before release into the environment. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower. Breakdown: RC 79 %, IGRP 7 %, MS 14%.  
• RC discharges are about the same (15,174 // 13,278 in 2021), with a 14% change.  
• IGRP discharges are much higher (89%) (1,248// 662 in 2021). This increase is due to the rise of the IGRP activity in our power plants (high demand of electricity)  
• MS discharges are much higher (97%) (2,750// 1,398 in 2021). The increase is due to the rise of the reporting sites. |
We expect these discharges to be stable in the future.

**W1.2j**

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

<table>
<thead>
<tr>
<th>Relevance of treatment level to discharge</th>
<th>Volume (megaliters/year)</th>
<th>Comparison of treated volume with previous reporting year</th>
<th>Primary reason for comparison with previous reporting year</th>
<th>% of your sites/facilities/operations this volume applies to</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary treatment</td>
<td>Relevant</td>
<td>53,683</td>
<td>Higher</td>
<td>Change in accounting methodology</td>
<td>1-10</td>
</tr>
</tbody>
</table>

The discharges by tertiary treatment are higher by 29% in 2022 (53,683/41,600 in 2021). This is due to a change in the accounting methodology to better capture the treatment level to discharge. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower. 5% of the sites are concerned by this treatment. This treatment is mainly relevant for the RC division (99%) whereas 1% of this treatment level is used in the GRP division.
The RC division requires tertiary treatment to ensure organic substances (hydrocarbons mainly) are not discharged into the wastewater, and to comply with the emission limits of national regulatory standards and local permitting. In addition, TotalEnergies applies its company standard for RC that consists of biological treatment with aerobic/anaerobic steps. Discharge volumes treated to tertiary level are expected to remain the same in the upcoming years as no significant changes are being planned for the process of the sites concerned. In 5-10 years, the treatment should increase to reuse some sites’ wastewaters.

<table>
<thead>
<tr>
<th>Secondary treatment</th>
<th>Relevant</th>
<th>240,380</th>
<th>About the same</th>
<th>Increase/decrease in business activity</th>
<th>11-20</th>
</tr>
</thead>
</table>

17% of the sites are concerned by this treatment, which is relevant for the activities EP (98%), RC (1%), and IGRP (<1%). At TotalEnergies, the secondary treatment consists in physical and chemical treatments with flocculation and without any biological treatment. The discharges by secondary
Treatment are about the same (240,380 // 224,000 in 2021), with a 7% change. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower. There is in 2022 more produced water than in 2021, with the same volume needed to maintain pressure in reservoirs: the surplus is discharged into environment after treatment.

To comply with regulation and to avoid to harm the environment, EP division and some RC sites requires secondary treatment. TotalEnergies complies with all local and national regulatory standards. The sites ensure compliance with the emission limits set by their local regulations.

- For RC: it corresponds to some petrochemical sites.
- For EP: Fully aligned with the need of pressure maintenance and re-
injection of produced water.

- For IGRP: A physical-chemical treatment is carried out before the water is discharged into the natural environment in certain gas power plants.

Discharge volumes treated to secondary level are expected to remain the same in the upcoming years as no significant changes are being planned for the process of the sites concerned. In a 5-10 years time, the volume could increase as produced waters entrained from wells increase with time.

| Primary treatment only | Relevant | 9,245 | Much higher | Change in accounting methodology | 31-40 | 38% of the sites are concerned by this treatment. This treatment is relevant for the four activities, but mainly for EP (22 %), RC (48%) and MS (30%), IGRP represents 0.5 %. For TotalEnergies, the primary treatment is a treatment with decantation.

The discharges by primary treatment are much higher by 62 % (9,245 // 5,797 in 2021). This is due to a change in the accounting
methodology. The reporting for each site has been refined.
In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower.
TotalEnergies complies with all local and national regulatory standards. The sites ensure compliance with the emission limits set by their local regulations.
• EP: it is applied to one sector
• RC: it is applied at 3 petrochemicals sites, and this treatment is sufficient to comply with their permitting and the emission limit values not to be exceeded.
• GRP: it corresponds to 1 power plant with air cooling; volumes are very low, mainly rainwater.
• MS: it corresponds to highway stations and storage units.
The level of treatment for these sites has been chosen due to limited environment sensitivity which leads to reduced regulatory contraints.
Discharge to the natural environment without treatment | Relevant | 1,080,183 | Higher | Change in accounting methodology | 1-10 |

**GRP**, no further treatment is required due to the absence of significant polluted water flow.

Discharge volumes treated to primary level are expected to remain the same in the upcoming years as no significant changes are being planned for the process of the sites concerned.

9% of the sites are concerned by this treatment. This treatment is relevant mainly for the EP (99.7%) as RC division represents 0.3% of the volumes discharged.

The 2022 reported total discharges to the natural environment without treatment (1,080,183) are higher to 30% compared to the 2021 reported volume (833,756). This due to the reclassification of certain flows in this category.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher /lower; deviation > +/- 50% = much higher / lower.
<table>
<thead>
<tr>
<th>EP</th>
<th>RC</th>
<th>Discharge volumes to the natural environment without treatment are expected to remain the same in the upcoming years as no changes are being planned for the water used to cool systems of the sites concerned.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The volume represents seawater used for once-through cooling, which is not altered by the process and can be thus discharged safely into the sea without treatment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The volume corresponds also to the water for open cooling systems, which does not need any treatment as the water quality has not been modified and as such cannot cause environmental damage.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TotalEnergies complies with all local and national regulatory standards. The sites ensure compliance with the emission limits set by their local regulations. This level of treatment has been selected according to legal requirements.

• EP: the volume represents seawater used for once-through cooling, which is not altered by the process and can be thus discharged safely into the sea without treatment.
• RC: the volume corresponds also to the water for open cooling systems, which does not need any treatment as the water quality has not been modified and as such cannot cause environmental damage.
| Discharge to a third party without treatment | Relevant | 4,402 | Much lower | Change in accounting methodology | 31-40 | 31% of the sites are concerned by this treatment. This treatment is relevant for the RC (72%) and IGRP (28%) divisions. The sites concerned discharge their wastewaters to third parties to be treated correctly (secondary or tertiary treatments according to the location) before being discharged into environment. The discharges to a third party without treatment are much lower by 66 % (4,402 // 13,000 in 2021). It's chiefly due to Leuna refinery, which was affected in this category last year as the treatment is externalized but as the external partner only manage the refinery's wastewaters with a tertiary treatment, we reallocate this volume to "tertiary treatment" category. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower. TotalEnergies complies with all local
and national regulatory standards. The sites ensure compliance with the emission limits set by their local regulations. This level of treatment has been selected according to legal requirements.

• RC: for most of the RC sites, water effluents are pre-treated before sending them to a third-party network, which has secondary or tertiary treatments.

• IGRP: 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. The third party takes care of the effluents, and discharges through an appropriate treatment compliant with local regulations.

Discharge volumes to third parties are expected to remain the same in the upcoming years as treatments are done correctly with third parties.
In a 5-10 years, these discharges might increase according to our portfolio changes.

<table>
<thead>
<tr>
<th>Other</th>
<th>Relevant</th>
<th>13</th>
<th>Much lower</th>
<th>Change in accounting methodology</th>
<th>Less than 1%</th>
</tr>
</thead>
</table>

<1% of the sites are concerned by this treatment. This category is relevant for RC division only (100%). The discharges (any other method) are much lower by 1000 % (13 // 224,400 in 2021). The open cooling water for RC branch was affected to "other" the years before. They have been reaffected to discharge to environment without treatment even if they don't need any treatment as their qualities are not changed through the process.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower.

TotalEnergies complies with all local and national regulatory standards. The sites ensure compliance with the emission limits set by their local regulations. This choice of treatment has mainly been done to comply to
% of the 299 metric tons are reported by RC division, whose sites are

 regulary obligations.
• RC: it corresponds to one site only, which sends water towards some industrial users after being treated by our site to be used to the clients’ processes (water circularity). These discharge volumes to external users are expected to decrease in the future as the external users have been asked to optimize their water usages by the administration to reduce their water consumption (taken into account droughts periods).

**W1.2k**

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

<table>
<thead>
<tr>
<th>Emissions to water in the reporting year (metric tonnes)</th>
<th>Category(ies) of substances included</th>
<th>List the specific substances included</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>299</td>
<td>Nitrates</td>
<td>The list of substance presents the priority substances monitored by TotalEnergies and that is reported through HARPE. Tons are also available per substance. The sites comply with their permits, and do a lot more of analysis, but they are not consolidated at a company level. Pesticides are not included in the priority list as not relevant to TotalEnergies activity. 100% of these 299 metric tons are reported by RC division, whose sites are...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phosphates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Priority substances listed under the EU Water Framework Directive</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total nitrogen (oxidized and reduced, as total N)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total phosphorus (as mass of total P)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Benzene Phenols</td>
<td></td>
</tr>
</tbody>
</table>
Total polycyclic aromatic hydrocarbons (PAHs) 
Cadmium 
Mercury 
Lead 
Nickel 
Benzene

mainly in Europe or USA. Out of the 299 metric tons of emissions to water, 93% are consisting in Global Nitrogen. They are not released in water sensitive area nor possibly causing hazard to people. The level of these pollutants are comlying to regulatory limits and Health Chronic risks analysis are duly performed.

W1.3

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

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Total water withdrawal volume (megaliters)</th>
<th>Total water withdrawal efficiency</th>
<th>Anticipated forward trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1&lt;br&gt;264,140,000,000&lt;br&gt;1,446,181</td>
<td>182,646.570519181</td>
<td>Revenue in €. We anticipate increasing the efficiency rate through an optimised use of water at direct operations and from the value chain. We have committed to reduce freshwater withdrawals to 20% between 2021 and 2030 for sites located in high or extremely high scarce areas (as defined by te WRI aqueduct). The management of produced water is a business opportunity (recycling/reuse) and a regulatory necessity (compliance) for a responsible approach towards communities and water scarcity</td>
<td></td>
</tr>
</tbody>
</table>

W-OG1.3

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

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

---

**Business division**
Midstream/Downstream

**Water intensity value (m3/denominator)**
0.58

**Numerator: water aspect**
Freshwater withdrawals

**Denominator**
Other, please specify
MWh produced

**Comparison with previous reporting year**
About the same

**Please explain**
This metric corresponds to IGRP division, and more precisely to the activity of 7 combined cycle gas turbine (CCGT) power plants and does not include Cogen production associated with RC activities. It is calculated as the total water withdrawals of the plants (11.57 Mm3) divided by the electricity produced in 2022 (19.93 x10^6 MWh).

Compared to last year, we record a decrease of 9% (0.58 m3/MWh in 2022 // 0.64 m3/MWh in 2021). This is part of a better efficiency of the process, linked to a biggest use of the power plants, enabling to run at an optimal level. The numerator is chosen to represent sensitive water resource while the denominator is the main indicator of activity. In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower.

This metric is observed and is subject to a detailed sector benchmark, which helps review our strategy to reduce water intensity and identifying
possible margin for improvement or possible needs for innovative technology implementation. The power plants located in water scarce areas have launched a project to get a detailed water balance and identify actions to reduce withdrawals, this indicator should decrease in a long term. We have put in place dedicated support teams and budget in our long term planning to achieve this target.

---

**Business division**
Other, please specify
Water Stress Sites

**Water intensity value (m3/denominator)**
0.12

**Numerator: water aspect**
Other, please specify
Water withdrawals in water stressed areas

**Denominator**
Other, please specify
Adjusted Net Operating Income €

**Comparison with previous reporting year**
Much lower

**Please explain**
The overall water withdrawals in the main sites located in water stressed areas in 2030 are 263 Mm3 in 2022, compared to 276 Mm3 in 2021. The net operating income of these sites was 2,121 M€ in 2022, (270 M€ in 2021). The calculated intensity is therefore 0.124 in 2022 vs 1.02 in 2021 so a 88% decrease.

In 2022, due to the specific context of the energy demand, we use the following thresholds for monitoring trends: deviation +/- 25% = about the same; deviation between +/- 25-50% = higher / lower; deviation > +/- 50% = much higher / lower.

This metric has been calculated for the first time for our 2021 reporting regarding the COP (Communication On Progress) to United Nations
Global Compact. Numerator and denominator are imposed by the UN Global Compact COP. This metric helps us to get a detailed benchmark and identify margins for improvement or needs for innovative technology implementation. A dedicated team located in our technical direction is in charge of assisting sites to diagnose their withdrawals and consumptions and identify technical solutions to reduce them. All sites in Water stress area are progressively undergoing this process. The water intensity has decreased compared to 2021 because of higher income in 2022. We expect the intensity to decrease again in the next years thanks to our strategy to reduce the freshwater withdrawals of 20% up to 2030 of these sites located in water stressed areas. For this, we have dedicated support teams and budget in our long term planning, defining actions to optimize internal usages of water within the sites and reusing water from external municipal wastewater treatment plant, as the project validated for Antwerp platform.

W1.4

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

<table>
<thead>
<tr>
<th>Products contain hazardous substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
</tr>
</tbody>
</table>

W1.4a

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

<table>
<thead>
<tr>
<th>Regulatory classification of hazardous substances</th>
<th>% of revenue associated with products containing substances in this list</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex XVII of EU REACH Regulation</td>
<td>More than 80%</td>
<td>The majority of our products included in our revenue are related to the Oil and Gas industry. All the hydrocarbons’ products are classified as hazardous into the European framework REACH. The fossil products are chiefly classified as inflammable, CMR (carcinogenic, mutagenic or reprotoxic substances) and dangerous for environment. That includes oil extracted from wells within EP Branch, and products made by RC branch</td>
</tr>
</tbody>
</table>
and sold by MS branch (gasoline, diesel, fuel, bitumen, and all petrochemical products)… That includes also the gas from the extraction to the sale or use in our power plants. The investments into renewables energy will enable TotalEnergies to decrease the % of revenue associated with these hazardous substances.

**W1.5**

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

<table>
<thead>
<tr>
<th>Suppliers</th>
<th>Engagement</th>
<th>Primary reason for no engagement</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppliers</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other value chain partners (e.g., customers)</td>
<td>No</td>
<td>We are planning to do so within the next two years</td>
<td>TotalEnergies is currently focusing its effort on the supplier part of the value chain rather than the other parts of the value chain. The approach is however currently being evaluated. It should be noted that TotalEnergies engages with its clients on water pollution risks through labelling information on its products, by providing regulatory end-of-life information. TotalEnergies has engaged in promoting vis-à-vis customers services with lower water content like carwash systems using recycled water. We consider deploying these systems more widely and promoting their water/environment benefits vis-à-vis our customers within the next 5 years.</td>
</tr>
</tbody>
</table>

**W1.5a**

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

**Row 1**

**Assessment of supplier impact**

Yes, we assess the impact of our suppliers

**Considered in assessment**

Supplier dependence on water
Supplier impacts on water availability
Supplier impacts on water quality
Procurement spend

Number of suppliers identified as having a substantive impact
0

% of total suppliers identified as having a substantive impact
None

Please explain
We proceed to annual suppliers risk mapping with the assistance of the French Normalization Association. In 2022 none has been identified dependent on water or to have heavy impacts on water availability or quality. No supplier has substantive potential impact meaning an impact reaching a threshold of 2% of the Company revenues.

The qualification process for our main suppliers includes an assessment of their organization's level of maturity with regard to the environmental issues. TotalEnergies works with a network of over 100,000 suppliers of goods and services. We expect our suppliers to adhere to the Fundamental Principles of Purchasing. These principles state a responsible use of natural resources such as water. Audits are implemented by an external service provider to evaluate their impact, to mitigate risks identified, track actions and report/communicate, internally & externally. To that end, the suppliers' relations are coordinated by a dedicated cross-functional entity.

W1.5b

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

<table>
<thead>
<tr>
<th>Suppliers have to meet specific water-related requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
</tr>
</tbody>
</table>

W1.5c

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

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

% of suppliers with a substantive impact required to comply with this water-related requirement
100%

% of suppliers with a substantive impact in compliance with this water-related requirement
100%

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

- Certification
- Off-site third-party audit
- On-site third-party audit

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

Retain and engage

**Comment**

The identification of at-risk suppliers starts with a sustainability mapping. Out of 5 criteria, 1 is related to water resources and 1 related to water pollution. A parallel mapping is performed related to At-risk countries list. The risk evaluation of the suppliers has identified in 2022, 300 Environment at-risk suppliers.

Audits are performed through EcoVadis as well as on site audits. 120 audits have been performed through July 2023, with one remark on testing treated sewage water before discharged it into environment. At the end of the audit a Corrective Action Plan is provided.

The requirements refer to the quantity of water withdrawals, the license associated, the site location (water stress areas), to carry out a water risk assessment and implements a water management plan accordingly, whether the Supplier collect/recycle water...

As no supplier has been evaluated having a substantive impact, 100% of our suppliers comply with the water-related requirement.

Water-related requirement
Complying with going beyond water-related regulatory requirements

% of suppliers with a substantive impact required to comply with this water-related requirement
100%

% of suppliers with a substantive impact in compliance with this water-related requirement
100%

Mechanisms for monitoring compliance with this water-related requirement
Supplier scorecard or rating

Response to supplier non-compliance with this water-related requirement
Retain and engage

Comment
A qualification process is implemented for the suppliers, before being selected by TotalEnergies. This qualification process occurs before the official selection and subsequent mapping and audit described above. Here is an extract of the qualifying questions related to environment and water:
- My organization obtained a satisfactory score during a desktop assessment (EcoVadis, Acesia, Sedex remotely ...). And/ or My organization is in compliance with the regulations and is engaged in a process of continuous improvement (and is able to prove if required) and
- My organization has analyzed the environmental risks related to its activity (waste management, discharges into water, ) and
- My organization has taken control measures and / or measures to improve the environmental performance related to my activity (action to preserve water quality)

W1.5d

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

Type of engagement
Innovation & collaboration
Details of engagement
Encourage/incentivize innovation to reduce water impacts in products and services

% of suppliers by number
Less than 1%

% of suppliers with a substantive impact
Less than 1%

Rationale for your engagement
In 2022, we established an agreement with WaterLink at Antwerp in Belgium to purchase treated wastewater to replace the use of potable freshwater. We encouraged WaterLink to invest in further treatment and piping (around 1 Million Euros) as an innovation to reroute a wastewater discharge to replace our freshwater supply. The quantity of water sustainably displaced will equal around 10% of our fresh water withdrawals in a 9 Millions cubic meters water recycling action. This action pertains to 1 supplier among our 100 000 suppliers, it is however very significant at the level of our freshwater withdrawals (10%).

Impact of the engagement and measures of success
The Antwerp area is currently a Water Stress Area according to the WRI Aqueduct Baseline Water Stress. Our engagement with our supplier will drastically reduce the pressure on freshwater supply sources for the Antwerp City while decreasing the pressure on environment caused by the current WaterLink discharge. The measure of success of the project will be to actually reduce our freshwater supply at Antwerp totalEnergies refinery by 9 Mm3/y by 2025. We will measure the quantity of freshwater replaced by Waterlink Wastewater (in Mm3/y) at the end of the project infrastructure construction that started in 2022.

Comment
This action is very virtuous both in term of impact on the resource and on the environment. Additionaly the area is in water stress which gives even more value to the action and it contributes to our target to reduce by 20% our freshwater withdrawals in water stress area in 2030.
W2. Business impacts

W2.1

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

No

W2.2

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

<table>
<thead>
<tr>
<th>Water-related regulatory violations</th>
<th>Fines, enforcement orders, and/or other penalties</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1: Yes</td>
<td>Fines, but none that are considered as significant</td>
<td>All possible environment violations are reported into the HARPE system (Company wide centralized Environnement reporting database) by each site with the description of the violation and the amount of any possible fine or penalty. In 2022 A hydraulic oil leak occurred at Port-Arthur site and was reported in the HARPE system.</td>
</tr>
</tbody>
</table>

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

<table>
<thead>
<tr>
<th>Total number of fines</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total value of fines</td>
<td></td>
</tr>
</tbody>
</table>
1,042

% of total facilities/operations associated
0.01

Number of fines compared to previous reporting year
Higher

Comment
In 2022, one fine was recorded at Port-Arthur site (0.006% rounded to 0.01 by the ORS of the 16000 total facilities) whereas none was recorded in 2021. While loading barges with naphtha a passing ship had strong drift that pulled barge away from dock. This caused the mooring lines and loading hose to break. The operators initiated the emergency shutdown and shut down the pump. Total of 3.73bbls of Naphtha was released into the river, which was the residual amount of product in the hose. Natural attenuation was performed immediately. Operations wiped down structure with sorbent pads. Regulators were notified. Corrective actions were defined: install breakaway couplings, training to highlight compliance to Company Rules & General Specifications, perform gap assessment and meet barge operator regarding response actions taken by barge crew which is in the high-risk situation from multiple hazards. The amount of 1042 Euros is largely insignificant compared to the threshold of 2% of our income.

W3. Procedures

W3.1

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

<table>
<thead>
<tr>
<th>Identification and classification of potential water pollutants</th>
<th>How potential water pollutants are identified and classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Yes, we identify and classify our potential water pollutants</td>
</tr>
</tbody>
</table>
(Barcelona Convention, OSPAR). TotalEnergies refers to industry best practices, from IOGP, IPIECA and CONCAWE, which play an important role to address these issues for E&P and RC. The guidances emitted by IPIECA and CONCAWE (notably the IPIECA reporting guidance) are listing the specific pollutants and pollution metrics pertaining to our sites types. TotalEnergies participates in industrial working groups, to identify and anticipate potentially dangerous substances contained in effluents, through studies and extensive analysis campaigns, by asking the sites to respond to Surveys, to establish benchmarks and cross information from sites. TotalEnergies has a strong policy to manage water pollutant consisting of rules and guidelines that the Company’s Subsidiaries use to identify the nature of the pollutants and limit the quantities discharged. The key metrics used to classify substances are: Toxicity, Ecotoxicity (EC50), Bioaccumulation (Log KoW) and Biodegradation (%). Substances assessments are done in line with the EU Technical Guidance Document on Risk Assessment (EU TGD ECHA). TotalEnergies has a research centre with pilot rivers and is testing various methods to determine the ecotoxicity of effluents.

W3.1a

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

---

**Water pollutant category**

Oil

**Description of water pollutant and potential impacts**

Hydrocarbons are organic compounds that naturally occur in crude oil and for some of them like PAH regulated through the REACH system. If massively released to the environment (during production, refining, transport of supplied feedstock) through water discharge, hydrocarbons can significantly impact natural environments (both fauna and flora). The scale of impacts generated can vary depending on the chemical concentrations of hydrocarbons discharged and can go from very localized impacts for minor concentrations to major environmental impacts for large concentrations. Among potential impacts it can be noted: fishes, benthic fauna, plankton, and invertebrates mortality.

**Value chain stage**

Direct operations
Supply chain

**Actions and procedures to minimize adverse impacts**

Beyond compliance with regulatory requirements

**Please explain**

The Company has set up a policy to design and operate its installations and supplied feedstock transportation to limit as much as possible the quantities of hydrocarbons released to the environment through the discharge of produced waters. Installations are fitted with hydrocyclons, API bassins, flotattors and tertiary treatments or scrubbers as needed depending on the nature of the wastewater to be treated. The performances of these procedures and measures is monitored through the measurement of the Total Hydro Carbons concentration out of the outlet water. The lowest Total Hydro Carbon concentrations are securing the absence of induced mortality on fishes, benthic fauna, plankton, and invertebrates. In order to measure the success of these procedure to manage the risk, TotalEnergies considered in 2022 a new 1 mg/l Total Hydro Carbons target for the quality of onshore discharge water by 2030. This new target is more stringent than the EU regulation target for Total Hydro Carbons and thus ensure the absence of significant mortality. We measure and evaluate success against this goal. Compared to the current target, it divides by 15 the maximum hydrocarbon content expected for discharges. In 2022, 100% of the onshore sites comply with the 15 mg/l objective and 73% with the considered objective of 1 mg/l by 2030. Studies have been launched to improve the discharges from sites not yet in compliance with our 2030 goal.

**Water pollutant category**

Inorganic pollutants

**Description of water pollutant and potential impacts**

Upstream: 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 benthos biodiversity) could be significantly affected and get much lower than 2 by improper release of high levels of particulate material from cuttings in the water column that have the potential to asphyxiate the benthos.
**Value chain stage**

Direct operations

**Actions and procedures to minimize adverse impacts**

Implementation of integrated solid waste management systems

**Please explain**

Cuttings discharges are subject to a risk assessment approach. In certain countries and some specific operations, 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. In other geographies, TotalEnergies uses the MEMW (Marine Environmental Modelling Workbench) model to assess the potential risk of the cutting's particles on the water column which is used to support drilling and fluid program strategy in order to reduce the impacts on water column as much as possible.

In order to monitor the success of these measures TotalEnergies implements a water column and sediments monitoring program every 5 years in order to monitor possible impacts during the whole life of the field. The Shannon Winner Index is then measured and allows to verify the absence of asphyxiation of the benthos.

As a success measure, no major pollution or fines on that topic have been recorded in 2022.

Since year 2000, TotalEnergies has engaged in different programs assessing and reducing drilling waste impacts on water topics and has now a strong set of tools and practices that are shared in the countries where EP has operations.

**W3.3**

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

Yes, water-related risks are assessed

**W3.3a**

**(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.**
Value chain stage
   Direct operations

Coverage
   Full

Risk assessment procedure
   Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment
   More than once a year

How far into the future are risks considered?
   More than 6 years

Type of tools and methods used
   Tools on the market
   International methodologies and standards
   Databases

Tools and methods used
   GEMI Local Water Tool
   WRI Aqueduct
   Environmental Impact Assessment
   Life Cycle Assessment
   ISO 14001 Environmental Management Standard

Contextual issues considered
   Impact on human health
   Water regulatory frameworks
   Status of ecosystems and habitats
   Access to fully-functioning, safely managed WASH services for all employees
Stakeholders considered
Customers
Employees
Investors
Local communities

Comment
We implement a comprehensive risk management system based on a continuous process of identifying and analysing risks to determine those that could prevent the achievement of the Company objectives as well as affect its operations. The ExCom, with the Risk Management Committee, is responsible for risks. The activities, RC, and those of the IGRP, may potentially have an impact on water resources, particularly when the activity concerned is in a water resources sensitive environment. TotalEnergies monitors water withdrawals to identify priority sensitive sites, carries out a risk assessment and improves water resources management by adapting the priority sites’ environmental management system certified to ISO14001.

To identify facilities exposed to water stress, we record the withdrawals on all operated sites and assess these volumes on the current and future water stress indicators of the WRI Aqueduct tool. In 2022, 9% of the overall Company's water withdrawals (including brackish water and seawater) are from areas where human demand for water exceeds 40% of resources available. For priority sites located in water stress areas and withdrawing more than 500,000 m3 per year, TotalEnergies assesses water resources risk levels using the Local Water Tool (LWT) for O&G from the GEMI tool. A water balance done locally helps guide the actions taken to mitigate the risks and to make optimal use of water resources on the sites when necessary. This risk assessment establishes that the activities of the sites operated by the Company have 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.

Water-related risks are systematically evaluated as part of projects’ Environmental Impact Assessment (EIA) and design phases use LCA as a decision-making Tool to figure out overall water impacts and risks . 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. Impacts and risks for human health are also evaluated for employees and local communities through EIA.

For the future, we anticipate increasing the efficiency rate through an optimised used of water at operations and from the value chain. TotalEnergies committed to reduce freshwater withdrawals to 20% in 2030 for sites located into high or extremely high scarce areas.
Value chain stage
Supply chain

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment
Annually

How far into the future are risks considered?
3 to 6 years

Type of tools and methods used
Tools on the market
International methodologies and standards
Databases

Tools and methods used
WRI Aqueduct
ISO 14001 Environmental Management Standard

Contextual issues considered
Water availability at a basin/catchment level
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered
Employees

Comment
The activities of The Company's subcontractors and suppliers are likely to present the same environmental risks as those associated with our activities. They relate for the use of natural resources such as water. In 2022 TotalEnergies Global Procurement finalized the risk mapping of the various purchasing categories, which will be reviewed annually. This assessment did not identify any supply chain risks specifically related to the impact of our suppliers on water. This mapping includes risks to pollution, adverse impacts to biodiversity and resources (including water). It is available to buyers. The mapping of the risks and impacts is supplemented by CSR mapping of the risks linked to procurement, by category of goods and services.

TotalEnergies has put in place a Supplier assessment procedure with a view to identifying and preventing risks of severe impacts. The Company periodically audits Suppliers to assess working conditions during the life of the contract. A targeted annual audit plan is defined every year and includes Suppliers at risk with the objective of auditing strategic Suppliers as well as Suppliers at risk every 3 years. In 2022, the Company updated the Fundamental Principles of Purchasing to better integrate climate, biodiversity, circular economy, and responsible use of natural resources (water). A new awareness-raising campaign of the suppliers will be conducted.

Performing environmental audits of suppliers: TotalEnergies promotes care for the environment in its supply chain. Starting in 2023, environmental audits of most impactful suppliers have been deployed, with a specific focus on responsible use of natural resources such as water like ISO14001 certification and employees access to water (Wash). Biodiversity is also a concern particularly Ramsar Wetlands possible impacts. 120 audits have been performed through July 2023, with one remark on testing treated sewage water before discharged it into environment. One of the criteria used for the assessment specifically deals with possible suppliers’ impact on water resource areas (WRI Aqueduct). TotalEnergies' purchases do not include water intensive products, but supply chain water risks are assessed where relevant. 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.

W3.3b

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

<table>
<thead>
<tr>
<th>Rationale for approach to risk assessment</th>
<th>Explanation of contextual issues considered</th>
<th>Explanation of stakeholders considered</th>
<th>Decision-making process for risk response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1 To identify facilities exposed to water stress, we record the withdrawals on all operated sites and assess these volumes based on</td>
<td>Risk factors are continually assessed as per the MAESTRO system:</td>
<td>Customers: The customers are at the heart of MS strategy, which proactively</td>
<td>The Executive Committee is responsible for identifying and analysing internal and external</td>
</tr>
</tbody>
</table>
the current and future water stress indicators of the WRI Aqueduct tool. This applies to 100% of the sites of the Company. For priority sites located in water stress areas withdrawing more than 500,000 m3/year, TotalEnergies assesses water resources risk using the Local Water Tool for O&G from the GEMI tool. Water-related risks are systematically evaluated as part of projects’ Environmental Impact Assessment (EIA) in their prospect and design phases LCA as a decision-making Tool. EIAs are systematically used for projects and enable information to ExCom through CORISK (Committee of risks evaluation using semi quantitative Red, Yellow and Green risk levels). The material sites must be certified ISO14001. TotalEnergies has defined procedures to assess its Subsidiaries and Suppliers, including in collaboration with independent bodies, which help identify and prevent risks of impacts on the environment. The projects identify thus their impact through a EIA, LCA is done on new products, especially in new markets such as biogas, H2, solar panels. Audits are performed through EcoVadis. Staff training, particularly managers, is the necessary complement to assist the Subsidiaries in the Our sites operate in compliance to their permits and to applicable water regulatory frameworks. - Mitigation hierarchy approach for preservation of ecosystems and habitats is systematically performed. Biodiversity action plans (BAP) are defined in all sites: in 2022, 43 biodiversity surveys and 7 BAP were carried out. For suppliers, impacts on wetland ecosystems are investigated. - WASH: we are committed through the code of conduct to respect the International Labour Organization convention to provide employees with adequate access to potable water, toilet facilities. Audits are conducted every year. This applies to suppliers audits too. - Impacts and risks for human health are evaluated for employees and local communities through Environmental Impact supports its customers in their transition to more sustainable energy and mobility. All around the world, the stations services provide its customers to have access to potable water and toilets. In certain places our petrol stations are the principal source of water supply in the area. Employees: We contribute to the well-being of our employees, whose skills and commitment are the primary factors driving our long-term performance. Accordingly, our aim is to be a model employer and a responsible operator, and for that purpose we draw on the principles at the heart of our business model. We are committed through the code of conduct to respect the International Labour Organization convention to provide employees with adequate access to potable water, toilet facilities (WASH). Audits are conducted every year. This applies to suppliers audits too. Investors: risks that could impact the achievement of the Company’s objectives. Our activities are carried out in adherence to laws and Company’s Code of Conduct within the framework of compliance and risk management procedures. Our high level water risk mapping 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 our strategy with the evolution of water-related risks. The evaluation of risks includes assessing the impacts on human health, on ecosystems, on water availability and quality at each level of the value chain. Each assessment is followed by a stage-gate review and a decision process regarding the go/no-go for projects; so water risks are fully integrated into project assessments. Detailed studies
implementation. All of this process (suppliers, Projects people training, sites) is part of the MAESTRO system that is the Risk identification and management system for the Company.

| Assessment or specific safety studies. Actions plans are defined to prevent accidents and limit impacts. | We got a third party review on our targets and integrated to our reflexion, the comments from investors and NGOs, to define our policy and tackle proper water risks according to their points of view (ex. COD content of water discharge added in 2022 in our ESG databook) |
| Water assessment of our suppliers are performed with audits, including HR questions rising fundamental rights of individuals (WASH). | relating to water management are established according to projects’ scope and nature. For operating sites, further to the assessment process, sites potentially exposed to water risk or with a significant impact on water resources conduct a Local Water Tool test, including other relevant risks. For suppliers both the qualification process and the audit process embed water risk analysis. Continuous monitoring of water risks is ensured through the company-wide reporting systems at least on a yearly basis. |
| - Water availability and quality risks at a catchment level are assessed using tools and studies carried out when necessary to guide the actions to mitigate the risks and to make optimal use of water resources on the sites including suppliers. | - New water targets were set to reduce the freshwater withdrawal of the sites located in water stress area and limit the hydrocarbon content of water discharges. |
| - Local Communities: Our strategy commits at avoiding, reducing and offsetting the impacts linked to the Company’s activities and developing initiatives to create a positive impact on neighbouring local communities. We contribute to give an access to basic needs such as water in ex. Ouganda. | |
W4. Risks and opportunities

W4.1

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

No

W4.1a

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

To define if there was substantive financial impact on our business (more than 2% of the total company income), a calculation has been made for the largest priority sites to assess the financial impact of a potential closure. To identify its facilities exposed to the risk of water stress, TotalEnergies records the withdrawal of water on all of its operated sites 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 2022, 18% of water of our total water withdrawals were in areas of water stress according to the WRI definition, areas where human demand for water exceeds 40% of resources available. 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 Local Water Tool (LWT) for Oil & Gas from the GEMI. This 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.

The CSR risk mapping for the Company's procurement of goods and services 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 greenhouse gases; waste and end-of-life management; air, water and soil pollution). This mapping is the result of methodological work carried out with external support from AFNOR. 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 Local Water Tool and WRI Aqueduct.

The risks of our direct operations include the possibility to be affected by water scarcity and/or the permit granted by local authority could ask the site to reduce its water withdrawal in case of droughts. If a severe drought occurred, a site should stop its operation during several weeks or months. In the event of a very maximal drought of 2 months, the lack of income would be less than 2% of the Company income: in 2022, the calculation made on the
major 10 sites - in water stressed areas by 2030 - shows that the financial impact for these 10 sites might be below 350 million € that is less than 2% of the Company Income of 19.8 billion €. Moreover, the likelihood (no materialization of risks in the past years) and low magnitude (less than 2% 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 project under analysis. Based on "financial significance" thresholds, the environmental risks will be assessed through different processes and undergo different levels of validation. 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 process. Due to the nature of TotalEnergies’ activities, this approach to water risks related changes is applied to TotalEnergies’ direct operations, where most of water risks are concentrated. It is also applied to TotalEnergies’ assets operated by third parties.

W4.2b

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

<table>
<thead>
<tr>
<th>Primary reason</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks exist, but no substantive impact anticipated</td>
<td>Any investment, sale or financial commitment is subject to different levels of decision-making based on financial thresholds. 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. However, decisions with significant CAPEX implications will be discussed and approved by the Company’s executive committee. 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. Different levels of water risk exposure have been defined for the projects reviewed by the Company’s executive committee (and branches), 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 process. Due to the nature of TotalEnergies’ activities, this approach to water risks related changes is applied to TotalEnergies’ direct operations, where most of water risks are concentrated. It is also applied to TotalEnergies’ assets operated by third parties.</td>
</tr>
</tbody>
</table>
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).

To determine if there was substantive financial impact on our business, a calculation has been made for the largest priority sites 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 site to reduce its water withdrawal in case of droughts. If a severe drought occurred, a site should stop its operation during several weeks or months. In the unlikely event of a very maximal drought of 2 months, the lack of income would be less than 2% of the Company income. For example: in 2022, the calculation made on the major 10 sites- in water stressed areas by 2030- shows that the financial impact for these 10 sites might be below 350 million € which is less than 2% of the Company Income of 19.8 billion €. Moreover, the likelihood (no materialization of risks in the past years) and low magnitude (less than 2% 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.

W4.2c

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

<table>
<thead>
<tr>
<th>Primary reason</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1 Risks exist, but no substantive impact anticipated</td>
<td>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. 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. It reflects the responsible purchasing principles applicable to relationships with Suppliers. The risk mapping, done in 2022, will be reviewed every year. No issue on water has been identified. For</td>
</tr>
</tbody>
</table>
qualification of our suppliers, Water pollution risks are among the parameters used by the Company to assess its suppliers. In particular, as an example, it identifies suppliers with production facilities located in Ramsar sites, which are of prime importance for recovery and natural water resources. Sourcing of chemical products must also focus on minimizing their toxicity, bioaccumulation and resistance to degradation in the environment in order to protect both the environment and human health. 120 audits have been performed up to now, and will be continued to assess the 300 major suppliers by end 2023. For some products or process that we buy (as chemicals products), we ask our suppliers a full Life Cycle Analysis, that we analyse chiefly on carbon intensity but water issues are also considered.

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 footprint of solar panels) are currently not anticipated to have a substantive impact over the Company (the impact would be less than 2% of the total revenue of the Company).

W4.3

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

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

W4.3a

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

<table>
<thead>
<tr>
<th>Type of opportunity</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary water-related opportunity</td>
<td></td>
</tr>
</tbody>
</table>
Water recovery from sewage management

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

Reducing freshwater withdrawals in our direct operations: The Antwerp refinery complex in Belgium

Located in a water-stressed area, the Antwerp complex was the first Refining & Chemicals facility to approve a large-scale project for reducing freshwater withdrawals in 2022. The project involves reusing treated waste-water from local households to supply our refinery in Antwerp. The initiative is part of the Flemish government’s Blue Deal program, which aims to attenuate drought and water shortage in the region. It will help our refinery reduce its drinking water use by more than 9 million cubic meters a year, or almost 65% of its freshwater withdrawals. This represents the consumption of 280,000 Antwerp residents, out of a total population of 620,000 so an opportunity to preserve a water resource equivalent to nearly 50% of the consumption of Antwerp inhabitants and also the possibility for the refinery to reduce its dependancy on freshwater by 65%.

The studies completed in 2022 made it possible to launch the project and sign agreements with Waterkracht, the joint venture in charge of developing this water treatment plant. TotalEnergies Antwerp refinery plans to adapt the internal networks (additional pipes and construction of a buffer tank), and will purchase the water at the same cost as drinking water. The work should be completed in 2025. This project is strategic for the platform to be sustainable, and for the Company to achieve its target to reduce by 20% its water withdrawals in water stress area by 2030.

**Estimated timeframe for realization**

1 to 3 years

**Magnitude of potential financial impact**

Low

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4,500,000

**Potential financial impact figure – minimum (currency)**
Potential financial impact figure – maximum (currency)

Explanation of financial impact
The project helps the site to reduce its drinking water use by more than 9 million cubic meters a year. The price of treated wastewater will be similar to drinking water, but we can assume that the price of potable water will increase. With the hypothesis of a 0.5€/m³ increase for biggest consumers. At an average price of 1 euro per cubic meter, the estimated financial impact represents 4.5 Million euros, which is rather low at Company level but significant for the refinery.

Type of opportunity
Markets

Primary water-related opportunity
Stronger competitive advantage

Company-specific description & strategy to realize opportunity
As TotalEnergies evolves in extremely competitive markets, differentiating its products with an optimized environmental performance is a clear strategic business opportunity. 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 products and services provides with a competitive advantage. Part of the research activity on water management is used to develop intellectual property and build a capability for differentiation.

Examples of ongoing project development in 2022:

• On-site water quality groundwater dynamic characterization. The research will be proposed for commercial development to a third-party company.
• Microsensors with Caltech and with a French start-up to improve the ground water and effluent quality characterization while very significantly reducing the cost and improving the quantity of available data.
• Optimized solution for renewable energy-based water treatment allowing to minimize water uptake, minimize chemical consumption, use fatal energy otherwise lost and improve renewable energy efficiency.
• Compacity of water treatment units leads to significant savings on CAPEX for the offshore installations while reducing consumption.
• Technology to recover lithium from our waters including produced water from O&G activities and eventually from other sources. A pilot plant has started operations in 2022. A success could be directly transformed in commercial operations eventually feeding the electricity storage activity of SAFT.
• Based on the pilot rivers, mimicking the environment of a river, by providing better fitted data with actual environmental conditions for selected products commercialized.
• 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 (95 departments in France were with water restrictions in August 2022). TotalEnergies Carwash systems in France are fitted as much as possible with water recycling/reuse units.

Estimated timeframe for realization
More than 6 years

Magnitude of potential financial impact
Low

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

Potential financial impact figure (currency)
7,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact
In the IGRP division, 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 m3 of water/year (for example: withdrawal of 2000 m3 in 2020).

The water opportunities bring direct financial benefits and water efficiency and energy 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 limited.

W6. Governance

W6.1

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

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

W6.1a

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

<table>
<thead>
<tr>
<th>Scope</th>
<th>Content</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company-</td>
<td>Description of the scope (including value chain stages) covered by the policy</td>
<td>TotalEnergies water policy is publicly available on its website and in different publications: 2022 Universal Registration Document, Sustainability and Climate 2022 Progress Report. TotalEnergies Water Policy is company-wide and does apply worldwide. The Company’s activities may have an impact on, as well as be dependent on, water resources, particularly when the activity concerned is located in a water resources sensitive environment. In 2022 we joined the CEO Water Mandate, part of the United Nations Global Compact, joining a group of more than 200 companies committed to advancing water management. The CEO Water Mandate establishes five principles for managing water that the Company already follows with several action plans and a commitment to transparency.</td>
</tr>
<tr>
<td>wide</td>
<td>Description of business dependency on water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description of business impact on water</td>
<td></td>
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<tr>
<td></td>
<td>Commitment to align with international frameworks, standards,</td>
<td></td>
</tr>
<tr>
<td>Commitments</td>
<td>Policy Details</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>and widely-recognized water initiatives</td>
<td>To reduce risk exposure, TotalEnergies has adopted a water stewardship approach. The water challenges identified are quality, quantity, governance, water-related ecosystems and biodiversity, access to safe water, sanitation, and hygiene, and extreme weather events. To respond to priority challenges, TotalEnergies has defined SDGs targets.</td>
<td></td>
</tr>
<tr>
<td>Commitment to prevent, minimize, and control pollution</td>
<td>OVERVIEW OF THE POLICY</td>
<td></td>
</tr>
<tr>
<td>Commitment to reduce or phase-out hazardous substances</td>
<td>1. Develop water risk management strategy: Our activities are carried out in adherence to laws and Company’s Code of Conduct within the framework of compliance and risk management procedures.</td>
<td></td>
</tr>
<tr>
<td>Commitment to reduce water withdrawal and/or consumption volumes in direct operations</td>
<td>2. Set water targets across business units: we have maintained the hydrocarbon content of water discharges below 30 mg/l for offshore sites and we define a target beyond regulatory limit to 1 mg/l for the onshore and coastal sites for 2030. Moreover, we established a target to reduce the freshwater withdrawal in water stress areas by 20% between 2021 and 2030.</td>
<td></td>
</tr>
<tr>
<td>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</td>
<td>3. Develop site water stewardship plan and obtain third-party certification</td>
<td></td>
</tr>
<tr>
<td>Commitment to water stewardship and/or collective action</td>
<td>4. Manage water-related performance: To identify exposure to water stress risk, we record the water withdrawals and discharges on operated sites and assess volumes based on the current and future water stress indicators of the WRI Aqueduct tool.</td>
<td></td>
</tr>
</tbody>
</table>
W6.2

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

Yes

W6.2a

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

<table>
<thead>
<tr>
<th>Position of individual or committee</th>
<th>Responsibilities for water-related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Chair</td>
<td>Our CEO is also the Chairman of the Board. He is responsible for water inclusion in the long-term strategy. The Chairman of the Board is the highest level of the organization. The Chairman 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&amp;D program”, in which the water management is included, with projects to improve water quality of our discharges, to desalinate, or to decrease the volume of resource water used. Furthermore, TotalEnergies’ ExCom in alignment with the Board’s strategy, decided to reorganize its Environment division, to reinforce the expertise, especially in water by the creation of a position of Environment Senior Delegate for Water. In February 2022, the CEO validated within an ExCom committee new objectives related to water resources and water quality. Namely a new target to reduce by 20% the freshwater withdrawals in water stress area by 2030 and a new target of 1 mg/l total hydrocarbons for on onshore site waste water discharges.</td>
</tr>
<tr>
<td>Director on board</td>
<td>The Board of Directors is a collegial body that determines the strategic orientation of the Company and supervises the implementation of its vision. Apart from 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.</td>
</tr>
</tbody>
</table>
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.

Each year the TotalEnergies Board of Directors reviews the relevance of its ambitions, as well as the appropriateness of its strategy and targets for reducing greenhouse gas emissions in the light of progress in international and national policies, new scenarios concerning decarbonization trajectories, advances in low carbon technologies, action taken by other sectors, including its customers, and other changes in society in terms of energy transition and sustainable development. The new targets in hydrocarbons content and freshwater withdrawal were released in early 2022 and presented during the Board Audit Committee.

**W6.2b**

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

<table>
<thead>
<tr>
<th>Frequency that water-related issues are a scheduled agenda item</th>
<th>Governance mechanisms into which water-related issues are integrated</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1 Scheduled - some meetings</td>
<td>Monitoring implementation and performance</td>
<td>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. During the last Audit Committee, a specific discussion took place during which Board members insisted on the necessity of taking care of global water resources, also beyond water stressed areas as a strategic guidance. 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</td>
</tr>
<tr>
<td></td>
<td>Overseeing major capital expenditures</td>
<td>Non-exhaustive summary of the Board’s oversight of water-related issues includes:</td>
</tr>
<tr>
<td></td>
<td>Overseeing the setting of corporate targets</td>
<td>Non-exhaustive summary of the Board’s oversight of water-related issues includes:</td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding risk management policies</td>
<td>Non-exhaustive summary of the Board’s oversight of water-related issues includes:</td>
</tr>
</tbody>
</table>
Reviewing and guiding strategy points of information and decisions were made during planned Board’s meetings along the year. The Board yearly approves the release of water-related information. 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. Significant CAPEX decisions related to water are for instance part of board’s discussion (Water major investments at RC sector, R&D programs etc.).

Through 2022, 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 Corporate Sustainability Responsibility reviews. ExCom members meet, as a minimum, on a quarterly basis at HSE Business Reviews to discuss about HSE issues (for example to set new targets on water as in February 2022, and to monitor progress of the actions plan defined to achieve these targets). Further these meetings, feedback is done through ExCom to implement the decisions taken into the branches.

In conclusion, the governance related to water issues is shared throughout the TotalEnergies management scheme (from Board to sites).

W6.2d

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

<table>
<thead>
<tr>
<th>Board member(s) have competence on water-related issues</th>
<th>Criteria used to assess competence of board member(s) on water-related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>The Board of Directors defines TotalEnergies’ strategic vision and supervises its implementation by taking into consideration the social and environmental challenges of its activities. The Governance and Ethics Committee conducts</td>
</tr>
</tbody>
</table>
its work within the framework of a formal procedure to ensure that the directors’ skills are complementary, and their backgrounds are diverse. In 2022, out of the 14 Directors of TotalEnergies board, 9 Directors have specific competencies on climate/ sustainable development issues, i.e. 64% of the Board members. One Director comes from the mining industry. All of them have been trained on climate related issues as described below.

In 2014, we appointed our current CEO. He is a graduate of École Polytechnique and a Chief Engineer of France’s Corps des Mines. He is embarking on a major transformation of TotalEnergies. He has set TotalEnergies a new ambition in terms of sustainable development and of energy transition to carbon neutrality. He also has taken the initiative to organize strategic seminars and brings his strategic vision on the major global issues of sustainable development to numerous international forums such as the World Economic Forum or the Global Compact of the United Nations. Our CEO previously held environment regulation responsibilities and was a member of the Water Agency Board in the Nord Pas de Calais region in France prior to being appointed Environment Advisor to the Prime Minister in France. This level of implication in the governance water related institutions as well as his base training is considered as a proof of high level competency for water related issues.

The skills of the Directors is maintained through a continuing training program relating for directors rolled out in 2022. It includes the Climate Fresco (a scientific, collaborative and creative workshop designed to raise awareness of climate change), as well as various modules: Energy, Climate Change and Environmental Risks; Energy and Climate; Climate Change and Financial Risks and Opportunities.

<table>
<thead>
<tr>
<th>W6.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).</td>
</tr>
</tbody>
</table>

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

Chief Executive Officer (CEO)
**Water-related responsibilities of this position**

- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities
- Setting water-related corporate targets
- Monitoring progress against water-related corporate targets
- Managing major capital and/or operational expenditures related to low water impact products or services (including R&D)

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

More frequently than quarterly

**Please explain**

The CEO who is also the Chairman of the Board represents, organizes and oversees the work of the Board of Directors. He ensures that the Company’s corporate bodies operate effectively and in compliance with good governance principles.

The CEO chairs the monthly Company Performance Committee that deals with HSE including water-related issues like major spills. During the URD review, the CEO analyses our response to CDP Water and orientates the strategy for a better performance. He also approves the 2022 Sustainability & Climate Progress Report (which includes our progress through the principles of CEO Water Mandate), the budget and Long Term Plan, including projects on water and R&D projects. All major investments are validated in ExCom committee chaired by the CEO.

A new strategic environmental roadmap was discussed at several ExCom meetings in 2021 & 2022, which enabled ExCom to release a new set of water targets early 2022, whose progress is monitored through Business Reviews HSE.

**W6.4**

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

<table>
<thead>
<tr>
<th>Provide incentives for management of water-related issues</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>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 individual performance (quantitative and qualitative attainment of previously set targets), managerial practices, if applicable, and the employee’s contribution to collective performance evaluated on the basis of</td>
</tr>
</tbody>
</table>
HSE targets set for each business segment, which represents up to 10% of the variable portion. In 2022, 82.6% of the Company’s entities (WHRS scope) included HSE criteria in the variable compensation. TotalEnergies HSE corporate targets contains 3 targets pertaining specifically to water: reduction of freshwater withdrawals in water stress area, Total hydro carbons content in onshore discharged water, Total hydro carbons content in offshore discharged water.

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

<table>
<thead>
<tr>
<th>Role(s) entitled to incentive</th>
<th>Performance indicator</th>
<th>Contribution of incentives to the achievement of your organization’s water commitments</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary reward</td>
<td>Chief Executive Officer (CEO)</td>
<td>Reduction of water withdrawals – direct operations Improvements in wastewater quality – direct operations Reduction of water pollution incidents</td>
<td>The compensation awarded to the Chairman and Chief Executive Officer is indexed to key performance indicators used to measure the success of the Company’s strategy. The variable portion of the Chairman and Chief Executive Officer’s compensation takes into account both quantifiable targets and qualitative criteria (personal contribution). In 2016, to better take into account the achievements of Corporate Social Responsibility (CSR) and HSE targets of the Company, specific criterion were introduced. In 2022, TotalEnergies has set a new target for the freshwater resource protection for 2030. The ambition of the Company is now to improve its water efficiency to reduce by 20% its freshwater withdrawal in water stress area between 2021 and 2030. A new target has also been set on wastewater quality of onshore</td>
</tr>
</tbody>
</table>
discharges. For 2022, the variable portion of the compensation allocated by virtue of his duties as Chairman and Chief Executive Officer has been set at €2,731,875 (of a maximum of 180%) of his base salary, considering the results of the economic parameters and the evaluation of the personal contribution of the Chairman and Chief Executive Officer. These targets include 15% related to CSR objectives including water targets as water resources and water quality.

| Non-monetary reward | No one is entitled to these incentives | There is no non-monetary reward associated to water at TotalEnergies. |

**W6.5**

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

- Yes, direct engagement with policy makers
- Yes, trade associations
- Yes, funding research organizations

**W6.5a**

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

In all the countries in which it operates, TotalEnergies has adopted a lobbying ethics charter widely distributed available online and a Code of Conduct defining our values. We apply a zero-tolerance policy to the Lobbying Ethics charter which implies possible sanctions up to dismissal in
according with applicable law. We have also published our Advocacy Directive in 2021 (publicly available). A referent in charge of the Company positions including environmental and water issues, follows and coordinates advocacy with Strategic departments of each branch and public affairs Department in order to ensure technical and ethical uniformity of the positions taken by the representatives of TotalEnergies in the different activities seeking to influence policy. Our Ethics Committee oversees 100+ Ethics Officers and addresses situations or behaviours that violate the Code of Conduct. In 2022, 150 reports were processed in a confidential manner. Corrective measures are applied whenever necessary. We are members of 929 organisations with lobby activities and we have published a list of our affiliations since 2016, reviewed annually. Example: in 2021, as American Petroleum Institute opinions on climate differed from our strategy, we left this organisation. TotalEnergies demonstrates its involvement in public affairs and business dialogue initiatives to progress on main topics of common interest including water security, and continued in 2022 to play an active role within partnerships.

W6.6

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

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

Documents for CDP WATER security questionnaire.docx

W7. Business strategy

W7.1

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

<table>
<thead>
<tr>
<th>Long-term business objectives</th>
<th>Are water-related issues integrated?</th>
<th>Long-term time horizon (years)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term business objectives</td>
<td>Yes, water-related issues are integrated</td>
<td>21-30</td>
<td>For a business perspective, TotalEnergies anticipates risks and opportunities in its Long-Term Plan exercise (LTP 2022-2032), including water-related issues over 10 years. In LTP, alternatives to water withdrawal sources and process water reuse and desalination are being considered to reach...</td>
</tr>
</tbody>
</table>
the new water targets by 2030 and beyond.

For a project and operational perspectives (25 years), installations designs integrate stress resilience to water issues. The following aspects are considered on that 25 years perspective:
- evolution of the Hydrocarbon content of discharged water and retrofit on projects
- water regulation evolution and retrofit on water CAPEX on projects - for example Antwerp
- water-stressed on our operated sites and projects
- resilience to centenary events: floods, seawater rising, waves. This has been revisited in 2022 to take into account particular consequences related to climate change. Actually, climate change has a potential to increase the frequency of extreme water-related events and their intensity. Following that assessment, the decision has been taken to keep the current basis of design since they are sufficiently conservative to prevent any risk to the installation on a 25+ years perspective. Water experts are mobilized among the Company through sharing of good practices, support functions, water networks, PERL laboratory and technical assistance and the technical experts from OneTech. They all regularly follow-up the R&D water management program.

<table>
<thead>
<tr>
<th>Strategy for achieving long-term objectives</th>
<th>Yes, water-related issues are integrated</th>
<th>21-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>To achieve long-term objectives, TotalEnergies rely on the different teams within the Company, as water experts, HSE risk managers, technical experts from OneTech department, as well as R&amp;D water management program. Actions plans are reviewed every year to ensure the long-term objectives are on track, within the Long-Term Plan exercise (LTP) and the 25 years perspective studies. For example, the action plan was defined in 2022 to comply with the objective of reducing freshwater withdrawals of 20% in water stress areas. Moreover, TotalEnergies signed major agreements with the Iraqi authorities for the sustainable development of natural resources in the Basra region: The construction of a large-scale seawater treatment unit to increase water injection capacities in southern Iraq fields without increasing freshwater withdrawals as the country is currently facing a water-stress situation. This water injection is required to maintain pressure in several fields and as such will help optimizing the production of the natural resources in the Basra region.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TotalEnergies anticipates risks and opportunities in its Long-Term Plan exercise (LTP 2022-2032), including water-related issues over 10 years. In LTP, alternatives to water withdrawal sources and process water reuse and desalination are being considered to reach the new water targets by 2030. LTP exercise is done every year to update the CAPEX needed to achieve our targets. Each business unit is responsible for its LTP. In 2022, RC, GRP and EP segments included CAPEX to comply with the target of reducing our freshwater withdrawal into water-stressed areas of 20% up to 2030, and the 1 mg/l of hydrocarbons content of onshore discharges: global investments are estimated to 163 M€. They included for example some process optimization, repair of water leaks, reuse projects, new water treatment...

For a project and operational perspectives (25 years), installations designs integrate stress resilience to water issues.

W7.2

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

<table>
<thead>
<tr>
<th>Row</th>
<th>Water-related CAPEX (+/- % change)</th>
<th>Anticipated forward trend for CAPEX (+/- % change)</th>
<th>Water-related OPEX (+/- % change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>213</td>
<td>0</td>
</tr>
</tbody>
</table>

For a business perspective, TotalEnergies anticipates risks and opportunities in its Long-Term Plan exercise (LTP 2022-2032), including water-related issues over 10 years. In LTP, alternatives to water withdrawal sources and process water reuse and desalination are being considered to reach the new water targets by 2030. LTP exercise is done every year to update the CAPEX needed to achieve our targets. Each business unit is responsible for its LTP. In 2022, RC, GRP and EP segments included CAPEX to comply with the target of reducing our freshwater withdrawal into water-stressed areas of 20% up to 2030, and the 1 mg/l of hydrocarbons content of onshore discharges: global investments are estimated to 163 M€. They included for example some process optimization, repair of water leaks, reuse projects, new water treatment...

For a project and operational perspectives (25 years), installations designs integrate stress resilience to water issues.
Anticipated forward trend for OPEX (+/- % change)

0

Please explain

The CAPEX and OPEX were reviewed in 2022 within the Long-Term Planning exercise in concordance with the projects needed to comply to our new targets, and the possible evolutions of regulation:
- reduce freshwater withdrawals by 20% up to 2030 in water-stressed areas: investments for 2023-2028 period are planned to 107 M€ (RC and GRP divisions) vs 0 in 2022
- hydrocarbons content of 1ppm for onshore sites’ discharges: the investment estimated to comply to this target is 56 M€ (EP division)

Compared to 2022 (52M€)

So an overall increase forecasted of 213%

OPEX are related mostly to employees wages in this matter and have not evolved significantly between 2021 and 2022. OPEX are not expected to increase in the future due to stability of the number of employees affected to water issues.

Water CAPEX will increase due to new TotalEnergies objectives for discharge below 1mg/l oil in water onshore / coastal.

W7.3

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

<table>
<thead>
<tr>
<th>Use of scenario analysis</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>The scenarios from IPCC are taken into account into the future water stress in the WRI Aqueduct Water Atlas. TotalEnergies assesses its sites according to the 2030 baseline water stress of the WRI Aqueduct scenarios.</td>
</tr>
</tbody>
</table>

The IEA’s 1.5 °C scenario is aiming for carbon neutrality by 2050. In 2022, with more than 110 GHG emissions reduction projects coming to fruition, the Antwerp refinery (Belgium) reduced their emissions by 0.8 million tons of CO2 across our operated assets. TotalEnergies wants to become one of the top five worldwide producers of renewable electricity (solar and wind) to get to net zero by 2050. TotalEnergies’ CCS projects are helping to reduce its own emissions, but via additional available capacity, they will also help it develop services for transporting and storing carbon on behalf of industrial customers intent on reducing their emissions.
**W7.3a**

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

<table>
<thead>
<tr>
<th>Type of scenario analysis used</th>
<th>Parameters, assumptions, analytical choices</th>
<th>Description of possible water-related outcomes</th>
<th>Influence on business strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-related Climate-related Socioeconomic Land-use change</td>
<td>Water is the most direct and vulnerable sector influenced by climate change. Urbanization is also exacerbating water scarcity. Droughts and water scarcity are no longer rare or extreme events. Climate change is expected to make the problem worse. The world faces shortages in water sources because distribution of water resources in many arid regions create water scarcity. Only 10% of the total renewable water resources are currently used by people, and 80% of the world’s population is exposed to high levels of threat to water security. We need to strengthen the resilience of its ecosystems and use water more efficiently to minimise the impacts of water stress on people and the environment. The IEA’s 1.5°C scenario is aiming for carbon neutrality by 2050. Oil and gas companies and governments worldwide are increasingly looking to hydrogen as their pathway to decarbonization. Diversion of renewably</td>
<td>The possible water-related outcomes of IPCC scenarios are well-known now, with possible higher droughts in some part of the world, and higher temperature. These events can have a direct impact on our operations, as some of our sites need water to function. In case of droughts, the sites concerned should shut down their activities. Moreover, with greater temperatures, the cooling process would need more water. Thus, TotalEnergies assesses its portfolio’s resilience, based on relevant scenarios and sensitivity tests. In particular, we use the 2030 estimated water-stressed indicator from WRI to define our priority sites. TotalEnergies is working with its suppliers and partners to decarbonize the hydrogen used in its European refineries by 2030. The Company aims to pioneer</td>
<td>In 2020, in order to face a possible water crisis and give more resilience to our site, we set a target to reduce the freshwater withdrawal in water stress area by 20% between 2021 and 2030. We implement water risk management actions: - monitor withdrawals to identify priority sensitive sites and risk assessment. - improve water management by adapting the priority sites environmental management system. For example, in Abu Dhabi, a gas-fired power plant combines electricity generation and seawater desalination (capacity of 385,000 m³/day). Another construction project is a large-scale seawater treatment unit in Iraq without increasing water withdrawals as the country is currently facing a water-stress situation in the next 10 years.</td>
</tr>
</tbody>
</table>
generated electricity to produce green hydrogen is a concern. To develop a “green hydrogen economy” where emissions-free hydrogen is widely used in daily life, we use electrochemical water electrolysis to generate hydrogen from electricity and water. As renewable electricity prices drop and improvements in electrolyzer efficiency are achieved, the question is to assess if there is enough water to support a hydrogen economy. However, the potential within specific countries or regions depends on the land available. In water scarce regions, desalination could be used. Even in regions far from the coastline, water transport could be considered, which will increase the cost of water supply.

Climate change can make it more difficult for communities to provide drinking water and wastewater services, protect water quality, and maintain healthy aquatic environments. The Adaptation Strategies offer possible ways to address anticipated climate risks to water management.

More than 70% of Earth’s surface is covered in water yet lack access to clean water is one of the most pressing challenges of our time. Poor water quality affects various aspects of society, from the spread of disease to crop growth to infant mortality. In some regions of mass production of clean and low carbon hydrogen to serve demand for hydrogen fuel as soon as the market takes off. Water is used for electrolysis is perceived as one of the critical parameters for green hydrogen production. The regions where this constraint restricts the hydrogen potential the most are Saudi Arabia; the Middle East; Morocco; and the rest of Asia.

TotalEnergies is deeply engaged in the process of European Water Framework Directive fitness check and participates directly and indirectly through CONCAWE to the Public Consultation issued by the EU Commission. TotalEnergies’ sites or affiliates conduct water education and awareness campaigns in partnership with local stakeholders.

TotalEnergies is investing in a network of hydrogen supply stations for road transportation. The Company aims to operate up to 150 truck-oriented hydrogen stations in Europe by 2030. TotalEnergies, with Engie, is developing a green hydrogen project at the La Mède biorefinery. The project, powered by solar and wind farms, will produce during 20 to 25 years.

TotalEnergies social performance is reflected in the quality and durability of its relations and by its ability to avoid, reduce and compensate its impacts on communities beyond contractual obligations. In African countries we have fostered the deployment of a community supply system for running water from wells drilled by the Company.
the world, lack of sanitation infrastructure, water treatment facilities, or sanitary latrines lead to dire clean water crises. We cross these different factors with our sites locations embedded in our Geographical Information System and modelize their possible impact on our existing installations. For project we do the same on our project locations.

W7.4

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

Row 1

Does your company use an internal price on water?
Yes

Please explain
Putting a water price gives an incentive to shift faster to reduce water consumption. Over the long term, it offers a way to channel investment to research into low-water technologies and storage. TotalEnergies defines for each project the CAPEX according to the treatments for the regulatory discharges - these are monitored and used for Net Present Values calculations. The OPEX are evaluated to assess globally the cost of the water treatment. The freshwater cost depends essentially on the water quality, it is estimated according to the local providers. The European cost of 1 m3 of freshwater varies between a few centimes of euro and 1 euro.

We are chair of the Task Force in IPIECA and we have studied natural capital valuation, which involves pricing water resources based on local scarcity parameters. 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 to determine CAPEX & OPEX.
**W7.5**

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

<table>
<thead>
<tr>
<th>Products and/or services classified as low water impact</th>
<th>Definition used to classify low water impact</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Yes</td>
<td>TOTALENERGIES WASH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At the MS segment, low water impact services are proposed at the carburant stations where TotalEnergies Wash services are proposed. Wash is the largest car wash network in France with more than 1100 car wash centers. Present throughout France, Wash washing centers offer complete and quality washing offers for optimal cleaning of cars, utility and two wheels: Washing multiprogram rollers, High-pressure washing, Maintenance and care area with vacuum blowers, perfumers and carpet washers and Professional hand wash. More than 17 million washes are sold in Wash washing centers every year. For several years, Wash has been committed to a sustainable approach and has been pursuing numerous projects to limit its impact on the environment. At Wash, we do our utmost to limit the environmental footprint of our centers: biodegradable products, water control, recycling, greener energy... Our washing solutions combine quality and control of water consumption. To go even further, our Wash centers are gradually equipping themselves with water recycling, allowing even more virtuous water consumption.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECOSOLUTIONS</td>
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</tbody>
</table>
steps to save energy and reduce the environmental footprint of our activities and products by developing new products and new types of energy that dovetail with our traditional oil business. The Ecosolutions by TotalEnergies program is designed to provide customers/users with products and services that, for an equivalent outcome, deliver superior environmental or health performance compared with the market standard. Bringing together different businesses and skills within the Company, from research and sustainable development to strategy and marketing, the program serves as an improvement driver, enabling TotalEnergies to continuously expand our line-up of eco-efficient solutions. The program also fosters dialogue with all stakeholders, including direct customers, sold-to parties and our partners. Ecosolutions label by TotalEnergies promotes internal eco-efficient products, services and solutions. By relying on them our customers can demonstrate their efforts in reducing their environmental and health footprint.

The highlighted performances are based on Life Cycle Assessment (LCA). The candidate of Ecosolutions label by TotalEnergies is compared to its market reference, throughout its life cycle (right from raw material extraction to end of life) on its key Environmental and health impacts (CO2 emissions reduction, Water, Energy and Non-Renewable resources savings, Impacts on Health and on the Ecosystem).

The objective of this multicriteria approach is to ensure that there is no significant impact transfer, that an environmental benefit doesn't trigger a significant deterioration of another environmental or health impact.
W8. Targets

W8.1

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

Yes

W8.1a

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

<table>
<thead>
<tr>
<th>Target set in this category</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water pollution</td>
<td>Yes</td>
</tr>
<tr>
<td>Water withdrawals</td>
<td>Yes</td>
</tr>
<tr>
<td>Water, Sanitation, and Hygiene (WASH) services</td>
<td>Yes</td>
</tr>
<tr>
<td>Other</td>
<td>No, but we plan to within the next two years We are currently auditing our suppliers regarding their possible impacts on wetlands of international importance as regulated by the Ramsar Convention. This could potentially lead to a target pertaining to avoidance for the possible water-intensive production sites of our suppliers.</td>
</tr>
</tbody>
</table>

W8.1b

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

Target reference number
Target 1

**Category of target**
Water pollution

**Target coverage**
Company-wide (direct operations only)

**Quantitative metric**
Reduction in concentration of pollutants

**Year target was set**
2015

**Base year**
2015

**Base year figure**
97

**Target year**
2022

**Target year figure**
100

**Reporting year figure**
100

**% of target achieved relative to base year**
100

**Target status in reporting year**
Achieved

Please explain

In 2015, TotalEnergies set a target for the quality of onshore water discharges to 15 mg/l of hydrocarbon content for 100% of the onshore sites. Progress is monitored using milligrams per liter (mg/l) as the unit of measurement for each of our onshore sites. This target was set because hydrocarbons are the heart of our activities, and so improving the treatments of our discharges implies improving the hydrocarbons content of our discharges.

In 2022, 100% of the onshore sites comply with the objective of 15 mg/l, with a global Hydrocarbon content of onshore continuous water discharges of 1.8 mg/l for the Company.

For the future, TotalEnergies has considered a new target of 1 mg/l to be achieved before 2030.

Studies have been launched to improve the discharges to be compliant to a level of 1 mg/l, with an estimated of 52M€ investments.

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Target reference number
Target 2

Category of target
Water withdrawals

Target coverage
Company-wide (direct operations only)

Quantitative metric
Reduction in total water withdrawals

Year target was set
2022

Base year
2021

**Base year figure**
54,400

**Target year**
2030

**Target year figure**
43,520

**Reporting year figure**
53,841

**% of target achieved relative to base year**
5.1378676471

**Target status in reporting year**
New

**Please explain**

In 2022, we set ourselves a target of reducing our freshwater withdrawals by 20% overall between 2021 and 2030, at sites located in water-stressed areas in 2030. We focus on water-stressed areas because this is where usages’ conflicts could occur if there is not enough water for all the users, and consequently where we are a risk of operational disruptions (social unrest, administrative shut-down,...). Progress is monitored using cubic meters as the unit of measurement, based on flowmeters, measuring the water intakes. This approach aligns with the Science-based Target Network (SBTN) methodology. In 2022, we conducted basin-by-basin analyses. The Company was one of the first in the industry to publish measurable improvement targets in these areas. Our water-stressed areas are located mainly in Western Europe, they represent 51% of the Company’s total withdrawals in 2022, the other water areas are not in stress. In 2022, we established action plans to reduce the withdrawal in the water-stressed areas. For each site, we address both operational excellence and specific projects. These action plans integrate local context, and are tailored to local risk levels. Consolidated investments at Company level needed to reach this target are estimated to 107 M€.
We expect to decrease our freshwater withdrawals in the next 2 years, mostly, at first, through optimization and leak detection campaigns. On a second phase, starting 2025, the planned investments will produce their effects with more substantial reduction.

Target reference number
Target 3

Category of target
Water, Sanitation and Hygiene (WASH) services

Target coverage
Company-wide (direct operations only)

Quantitative metric
Other, please specify
Absence of non-compliance to the ILO (International Labor Organization) WASH recommendations

Year target was set
2018

Base year
2018

Base year figure
90

Target year
2022

Target year figure
100
TotalEnergies CDP Water Security Questionnaire 2023 Wednesday, July 26, 2023

Reporting year figure
100

% of target achieved relative to base year
100

Target status in reporting year
Achieved

Please explain
In 2018, the Company decided to adhere to the Global Business and Disability Network Charter of the International Labour Organization (ILO) and is gradually implementing these principles in its subsidiaries. Progress is monitored using the number of internal complaints pertaining to the absence of access to WASH services in the operated affiliates of TotalEnergies.
If there is no complaint pertaining to WASH services, the target is considered to be achieved at 100%.
In the frame of the “better place to work” program, the Company has deployed measures to improve the working conditions of the employees, those benefits are also shared with the suppliers working into our premises.
The expected trend is consequently to have an improvement of the services including the WASH services, if ever possible.
Moreover, TotalEnergies committed to the CEO Water Mandate in February 2022, one of whose principles concerns WASH services for the local communities. We are deploying actions in the locations where we operate according to the local communities needs, for example in Uganda, Nigeria, Mozambique, Argentina or Bolivia.

W9. Verification

W9.1

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

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

<table>
<thead>
<tr>
<th>Disclosure module</th>
<th>Data verified</th>
<th>Verification standard</th>
<th>Please explain</th>
</tr>
</thead>
</table>
| W8 Targets        | Selection of some environmental indicators audited:  
• Hydrocarbon content of onshore water discharges  
• % of sites that meet the target for the quality of onshore discharges  
• Fresh water withdrawals in water stress area | ISAE 3000             | Verification has been performed by EY, an independent third-party entity, accredited by the COFRAC. The report is presented in chapter 5 of Total's 2022 Universal Registration Document (p. 370). 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 work mobilized the skills of ten people and took place between September 2022 and March 2023 on a total duration of intervention of about thirty weeks. This work was carried out on a selection of contributing entities and covers between 3% and 17% of the consolidated data relating to the key performance indicators and outcomes selected for these tests (11% of freshwater withdrawals). Based on their professional judgement, it is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures. In 2022, 38 HSE audits were conducted. These subsidiaries also undertake self-assessments at least every two years. The Company’s HSE audit protocol is based on the One MAESTRO framework. 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 ISO14001 certified within two years of start-up of operations or acquisition: 100% of these 80 sites were compliant in 2022. |
W10. Plastics

W10.1

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

<table>
<thead>
<tr>
<th>Plastics mapping</th>
<th>Value chain stage</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Yes</td>
<td>TotalEnergies’ activities include polymer production including biopolymers and recycled polymers obtained from chemical or mechanical recycling. In 2022, 3569 kt of polymers (polyethylene, polypropylene &amp; polystyrene) were produced. TotalEnergies also buys and uses plastic packaging for some of its products (lubricants in particular).</td>
</tr>
</tbody>
</table>

W10.2

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

<table>
<thead>
<tr>
<th>Impact assessment</th>
<th>Value chain stage</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Yes</td>
<td>Direct operations : The main potential impact identified for our production activities is the loss of pellets to the environment. To avoid this, since 2015, all our plastic production sites worldwide have taken part in the Operation CleanSweep® program. Operation CleanSweep® is an international program that aims to avoid losses of plastic pellets during handling operations by the players in the plastics industry (target = zero pellet loss). Moreover, our production sites have also deployed SQAS (CEFIC’s Safety &amp; Quality Assessment for Sustainability) for the Risk Management of their logistics activities. The SQAS reports provide a good insight in the strengths and weaknesses of their (potential) service providers. SQAS reports are used to support the dialogue between TotalEnergies and the Logistics Service Providers as part of a continuous improvement process. The potential impact of plastics (ex. pellets</td>
</tr>
</tbody>
</table>
loss) is evaluated through the SQAS too. Supply chain: For all “plastic packaging” calls for tender, the environmental and climate performance of suppliers as well as purchased products is assessed through a specific questionnaire sent to suppliers. The result of this evaluation is taken into account in the RTA (“recommendation to award”).

W10.3

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

<table>
<thead>
<tr>
<th>Risk exposure</th>
<th>Value chain stage</th>
<th>Type of risk</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Direct operations</td>
<td>Regulatory</td>
<td>The main identified risk for TotalEnergies is the loss of plastic into the environment. This loss can occur during the production process, and could lead to regulatory and reputational damage. This is why TotalEnergies has implemented the Ocean CleanSweep program. But loss can also occur during the use or end-of-life of plastics if waste is not properly treated. As a plastics producer, TotalEnergies can also be impacted by this situation, mainly in terms of reputation. To help tackle end-of-life plastic pollution, TotalEnergies is currently developing recycling solutions (mechanical and chemical) for plastics, and aims to produce 30% circular (i.e. recycled and bio-based) plastics by 2030, i.e. 1Mt/year. Additionally, TotalEnergies is a founding member of the Alliance to End Plastic Waste, which brings together more than 90 companies, project partners and supporters committed to implementing solutions to eliminate plastic waste in the environment, particularly in the oceans.</td>
</tr>
<tr>
<td>Supply chain</td>
<td></td>
<td>Reputational</td>
<td></td>
</tr>
<tr>
<td>Product use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>phase</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

W10.4

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

<table>
<thead>
<tr>
<th>Targets in place</th>
<th>Target type</th>
<th>Target metric</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>Yes</td>
<td>Plastic polymers Plastic packaging</td>
<td>Activity applies</td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>-----------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Reduce the total weight of virgin content in plastic polymers</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduce the use of plastics additives</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eliminate problematic and unnecessary plastic packaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase the proportion of post-consumer recycled content in plastic packaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase the proportion of plastic packaging that is reusable</td>
<td></td>
</tr>
</tbody>
</table>

**W10.5**

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

<table>
<thead>
<tr>
<th>Activity applies</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of plastic polymers</td>
<td>Yes</td>
</tr>
<tr>
<td>Production of durable plastic components</td>
<td>No</td>
</tr>
<tr>
<td>Production / commercialization of durable plastic goods (including mixed materials)</td>
<td>No</td>
</tr>
<tr>
<td>Production / commercialization of plastic packaging</td>
<td>No</td>
</tr>
</tbody>
</table>
| Production of goods packaged in plastics | Yes | TotalEnergies buys and uses plastic packaging for some of its products (lubricant cans, polymer bags…)
| Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services) | No |

**W10.6**

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

**Row 1**

| Total weight of plastic polymers sold during the reporting year (Metric tonnes) | 3,569,000 |
| Raw material content percentages available to report |  |
| % virgin fossil-based content |  |
| % virgin renewable content |  |
| % post-industrial recycled content |  |

**% virgin fossil-based content**

97.76

**% virgin renewable content**

1.43
% post-industrial recycled content
0.81

Please explain
In 2022, 3569 kt of polymers (polyethylene, polypropylene & polystyrene) were produced. TotalEnergies launched its new product range "RE:clic" in October 2022 for its circular polymers (i.e. mechanically & chemically recycled polymers and biopolymers). TotalEnergies is committed to produce 30% of circular polymers by 2030, i.e. 1Mt/y

W10.8

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

<table>
<thead>
<tr>
<th>Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)</th>
<th>Raw material content percentages available to report</th>
<th>% virgin fossil-based content</th>
<th>% post-consumer recycled content</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic packaging used</td>
<td>30,637</td>
<td>% virgin fossil-based content</td>
<td>% post-consumer recycled content</td>
<td>TotalEnergies defines targets for PCR content in the main plastic packaging purchased: 50% PCR in cans (92% of the material purchased), 30% in grease cartridges, 40% in IBCs and 30% in caps. In addition, TotalEnergies is currently working on setting reuse targets for as many of its containers as possible and/or reducing the quantity of plastics by optimizing transport volumes.</td>
</tr>
</tbody>
</table>

W10.8a

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

<table>
<thead>
<tr>
<th>Percentages available to report for circularity potential</th>
<th>Please explain</th>
</tr>
</thead>
</table>
TotalEnergies is currently assessing the potential recyclability of its used plastic packaging. In the future, we aim to use 100% recyclable plastic packaging for polymer applications, and as much recyclable plastic packaging as possible for packaging lubricants and other hydrocarbon-derived products.

**Plastic packaging used**

| None |

**W11. Sign off**

**W-FI**

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

**W11.1**

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

<table>
<thead>
<tr>
<th>Job title</th>
<th>Corresponding job category</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIEF EXECUTIVE OFFICER and CHAIRMAN of the BOARD</td>
<td>Board chair</td>
</tr>
</tbody>
</table>

**SW. Supply chain module**

**SW0.1**

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

<table>
<thead>
<tr>
<th>Annual revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
</tr>
</tbody>
</table>
SW1.1

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

SW1.2

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

<table>
<thead>
<tr>
<th>Row 1</th>
<th>Are you able to provide geolocation data for your facilities?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SW2.1

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

------------------

Requesting member

Category of project

Type of project

Motivation

Estimated timeframe for achieving project

------------------
Details of project

Projected outcome

**SW2.2**

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

**SW3.1**

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

Submit your response

In which language are you submitting your response?

- English

Please confirm how your response should be handled by CDP

<table>
<thead>
<tr>
<th>Please select your submission options</th>
<th>I understand that my response will be shared with all requesting stakeholders</th>
<th>Response permission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Public</td>
</tr>
</tbody>
</table>

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

- Yes, CDP may share our Main User contact details with the Pacific Institute
Please confirm below

I have read and accept the applicable Terms