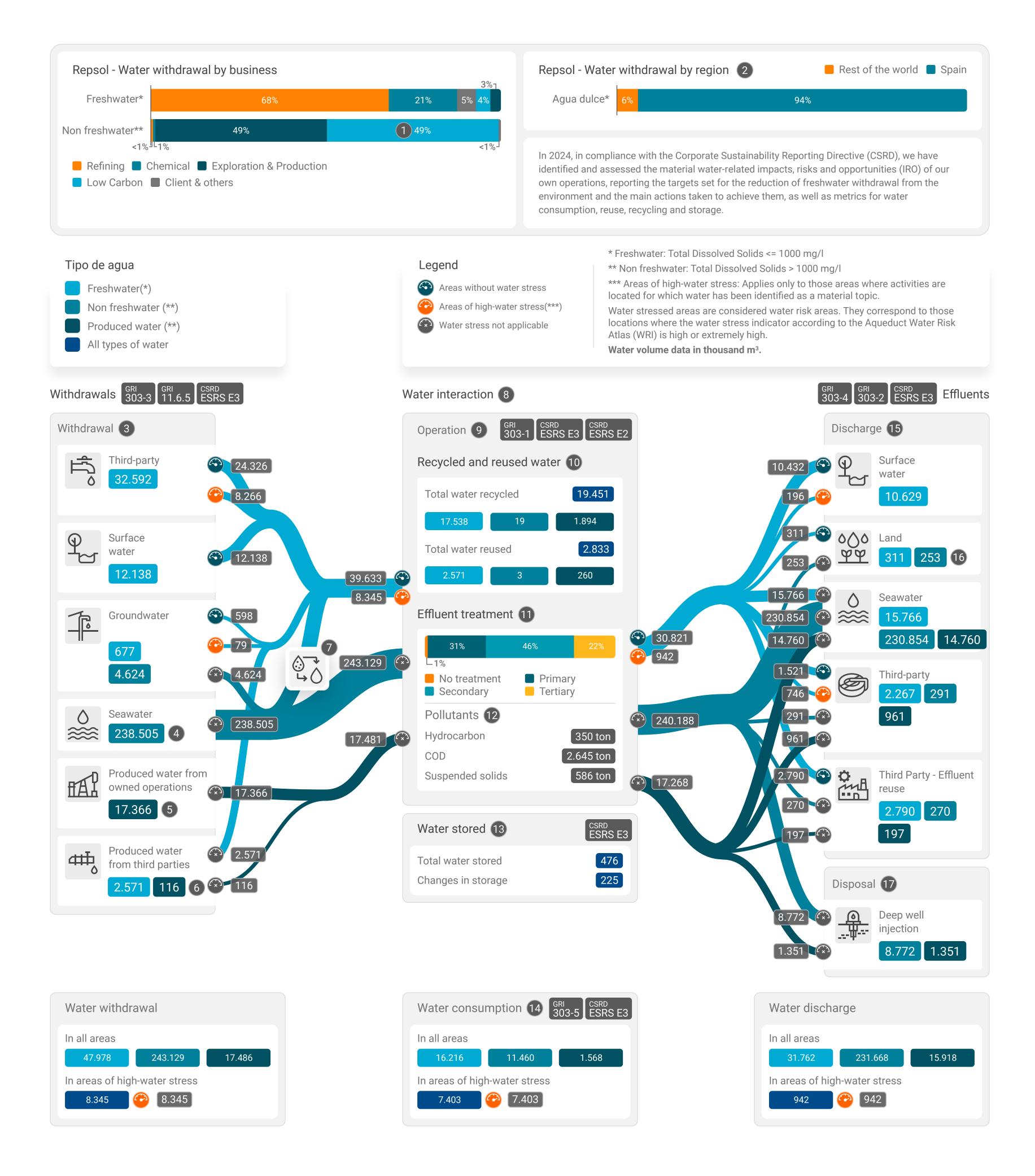
# 2024

### Water and effluents management





#### Non-freshwater withdrawal - Low Carbon Generation and E&P

Low Carbon Generation, at the Thermal Generation Combined Cycle power plant in Algeciras Bay, withdraws 49% of the company's total volume of non-fresh water. In the same proportion (49%), the E&P Business Unit in the United Kingdom withdraws non-fresh water from the North Sea

In both cases, the water withdrawn from the ocean is used in various cooling processes (once-through cooling) and is subsequently returned to the same environment in optimum physicochemical conditions. On the offshore platforms, it also feeds the sea water lift pumps and firefighting systems, among other auxiliary services.

#### 2 Distribution of water withdrawal by region

Repsol's approach in its interaction with water as a shared resource encourages the reuse of freshwater and actions to minimize its withdrawal.

94% of Repsol's freshwater withdrawal takes place in Spain, where water withdrawal by sector of activity is 81% in the agricultural sector, 3% in the industrial and energy sector and 16% in the urban sector (Source: Informe de los usos del agua en España 2021-2022 del Ministerio para la Transición Ecológica y el Reto Demográfico).

#### 3 Interaction with water as a shared resource [GRI 303-1 a]

Repsol plans its water needs at the locations where it operates considering the sensitivity of this shared resource and in a particularly cautious manner in those places where there is water scarcity.

Identification and minimization of water-related impacts (GRI 303-1 b)]

The main potential impacts are associated with the reduction of water availability and/or the deterioration of its quality in the surroundings of the operations derived from its withdrawal, consumption in production activities and processes and the discharge of effluents. Repsol identifies and minimizes its potential impacts on water through the use of specific tools such as, for example:

- Environmental, social and health impact studies.
- Analysis of impacts and dependencies following the READS methodology.
- Product life cycle analysis.
- Water footprint studies.
- Water risk analysis of facilities through the Repsol Water Tool (RWT).
- Application of minimum internal criteria in relation to the quality of water discharged.

#### 4 Sea or ocean water withdrawal

Water withdrawn from the ocean (non-freshwater) represents 77% of the total water withdrawn in the company.

More than 99% of this withdrawn water is used in cooling processes, firefighting systems and auxiliary services.

#### 5 Produced water

Produced water is the water that take place with the hydrocarbons in the reservoirs and is extracted together with the crude oil and gas in the well production stage. Produced water is saline and is not available to ecosystems and other users. Also included in this category is the flowback water from the development/completion stage of the wells.

#### 6 Reuse of third-party effluents

Repsol reuses effluents from third parties as an alternative source of freshwater supply, conditioning them through appropriate treatment for reuse in its production processes.

An example of this good practice is the case of the Tarragona refinery, where 25,3% of the water supply comes from AITASA (AGUAS INDUSTRIALES DE TARRAGONA, S.A), a facility that treats industrial wastewater from chemical companies in the Tarragona industrial area.

#### Water desalination

Part of the water withdrawn from the ocean and saline aquifers is desalinated to generate freshwater, thus reducing pressure on this essential resource and the risks derived from its dependence, while at the same time generating a positive impact on the environment where we operate.

An example of this good practice is the La Pampilla Refinery in Peru, which is located in a region with high water stress.

# 8 Interaction with water as a shared resource [GRI 303-1(a)], Collaborative approach to water management [GRI 303-1(c)].

Although water covers more than two-thirds of the planet's surface, the UNEP considers that less than 1% of this water corresponds to freshwater accessible to ecosystems and human activity. This is why Repsol considers the protection of this resource a priority and promotes sustainable management of water resources, adopting a participatory approach that involves all water users, planners and government agencies at all levels.

This collaborative approach with all stakeholders leads to more effective water management strategies in preventing risks and mitigating impacts at the river basin level.

#### Examples include:

- Participation in working groups at the sectoral level (IPIECA, CONCAWE, AOP, CEFIC or FEIQUE).
- Establishment of permanent dialogue channels between society and business (public advisory panels of industrial complexes).
- Multidisciplinary coordination at the operational level (Operational Excellence Group for water management among industrial complexes).

#### 9 Responsible operation and management of impacts [GRI 303-1-a)]

The main use of water withdrawn at Repsol is for cooling. In addition, it is used to produce steam or to be incorporated into different industrial processes, drilling activities and, to a lesser extent, to supply sanitation networks, fire-fighting networks and cleaning services.

#### Water-related policy [ESRS E3-1]

The commitments included in the <u>Environmental Policy</u> regarding water management are:

- Carry out water management including the use and sourcing of water throughout the life cycle of our operations, products and services, and the long-term protection of available water resources, both terrestrial and marine.

- Reduce freshwater withdrawal from the environment, especially in areas at water risk, encourage the use of alternative sources of supply, internal and external reuse, and reduction of water discharges and treatment of our effluents to prevent and abate water pollution and the deterioration of aquatic ecosystems.

#### 10 Recycled water [ESRS E3-4 28 c)]

Recycled water is water, treated or untreated, that has been used more than once in the same process before being discharged outside the Company's boundaries.

#### Reused water [ESRS E3-4 28 c)]

Reused water is treated or untreated water that has been used more than once in different processes of the Company or by a third party, before being discharged outside its boundaries.

42% of the company's freshwater withdrawal is recycled and reused. Additionally, Repsol recycles and reuses part of its own produced water and third paties' in various production processes of the Exploration and Production business, managing this waste water in order to avoid freshwater withdrawal from the environment and its discharge.

# Management of impacts related to effluent discharge [GRI 303-2, GRI 303-4]

Effluents from Repsol operations are treated to maximize their potential reuse or minimize the potential impact on discharge into the environment, ensuring compliance with quality requirements and facilitating the reincorporation of this water into the environment.

To this end, different types of effluent treatment (primary, secondary or tertiary) are implemented, as shown in the figures above.

In 2024, the distribution of effluent treatments is corrected, excluding cooling water and water from fire-fighting systems. This volume of water is not specifically classified among these treatments and since it has no contact with possible process contaminants, it is subjected to basic physicochemical treatments to control properties such as neutralization, homogenization, chlorination and/or temperature control before discharge to receiving bodies under the conditions established in the legislation.

## Priority substances of concern for which discharges are treated [GRI 303-4.d, GRI 11.6.5]

The priority substances of concern in the discharges from Repsol facilities are: hydrocarbons, suspended solids and oxidizable organic matter (COD).

#### Water stored and changes in storage [ESRS E3-4 28 d)]

Water stored is water withdrawn from the environment that, without having been considered in the reporting of the water consumption metric, either in the current reporting exercise or in the past, is temporarily accumulated to ensure water availability in operations and can be used when necessary for a certain operational purpose, being present or future.

The change in water storage is the difference between the volume stored at the beginning of the reporting period and the volume of water stored at the end of the period.

#### 14 Water consumption [GRI 303-5] [ESRS E3-4 28 a)]

Water consumption is the difference between withdrawals and discharges, which includes both fresh and non-freshwater.

Water consumption in areas with water stress [GRI 303-5] [ESRS E3-4 28 b)]

Water consumption in areas with water risk is calculated by assessing the level of water stress in the areas where both the sources of withdrawals and the discharge points are located, using the World Resource Institute's (WRI) Aqueduct tool. Those regions with a high percentage of water withdrawn (40 - 80%) or very high (greater than 80%) are considered as areas at water risk. This information corresponds to areas where water has been identified as an issue of material importance.

#### 15 Management of impacts related to effluent discharge [GRI 303-2 a]

Repsol considers effluent discharge as the controlled discharge of effluents into the environment.

The company establishes minimum quality criteria to determine the substances to be controlled and their presence in the discharges in accordance with the requirements established by the locally applicable legislation, including these criteria in the discharge authorizations of the facilities.

In establishing these criteria, the requirements set by the European Water Framework and Industrial Emissions Directives are also incorporated, as well as sector specific standards such as the Best Available Techniques Reference Documents (BREFs) and the reference guides or international standards recommended by IOGP, IPIECA or EPA.

Repsol systematically monitors compliance with the minimum quality criteria for discharged water and reports the results to the competent agencies.

#### 16 Land

Certain facilities, particularly those located in areas of water stress, reuse the discharge of treated effluents (freshwater or low-salinity saline water) for irrigation of green areas and to minimize dust generation on access roads to activities and in the vicinity of operations.

#### 17 Disposal

The produced water sourced from the reservoirs as a by-product of the oil & gas extraction can be partially reinjected into the reservoir (increasing production), inyection into a disposal well and/or managed through an evaporation system in a way such it minimize environmental impacts.

The 95% of produced water injected is recicled for enhance oil recovery processes (EOR).