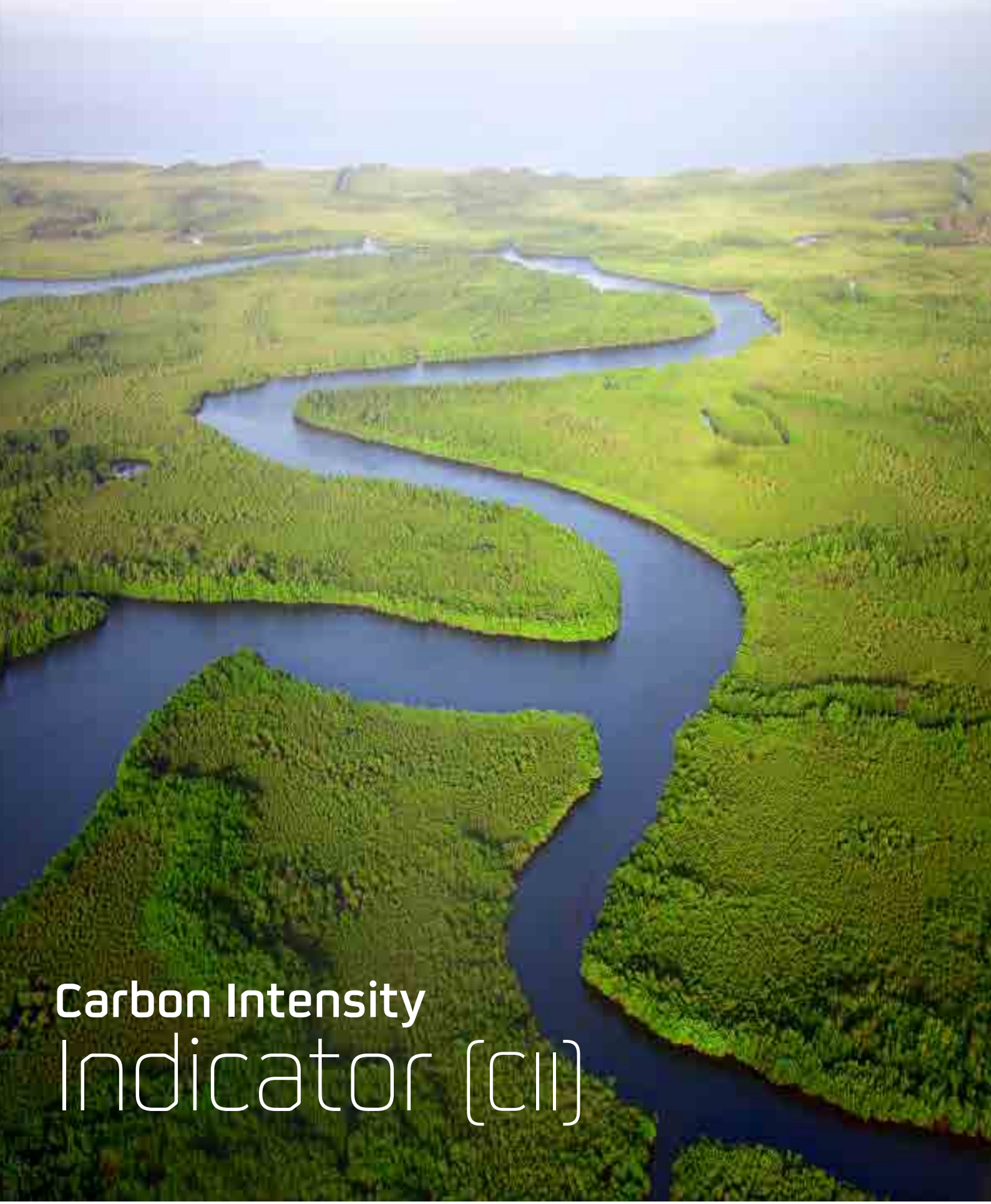

# Carbon Intensity Indicator (CII)

REPSOL

# The Carbon Intensity Indicator (CII)

The Carbon Intensity Indicator (CII)* is a response to the company's need to move towards a business model compatible with the Paris Agreement, achieving net zero emissions by 2050. This indicator will be used to monitor progress and apply the most suitable and timely efficient levers.

## Definition

It embodies Repsol's position on climate change, in its role as an energy company that fulfils society's energy needs with as few emissions as possible.

The **CII is expressed in g $CO_2$eq/MJ.**

## Methodology

Repsol's methodology targets the main lever behind decarbonization: the primary energy mix that the company produces and supplies to society, as well as its degree of decarbonization. Our methodology also avoids undesired results, such as double counting of emissions which would happen if the same emissions were attributed to more than one link in the production – refining – marketing chain or the other way round, not counting an increase in scope 3 emissions from using the products when oil production increases in cases where the volume of marketed products is greater than this production.

## Diagram CII

$$CII = \frac{\text{Operational Scope 1 + 2} + \text{Scope 3 O\&G E\&P based} - \text{Low Carbon Power Bonus} - \text{CCUS / NCS Emissions}}{\text{Energy Products} + \text{Non Energy Products} + \text{Low Carbon Energy Sources}}$$

* The results of the calculation of the Carbon Intensity Indicator (IIC), which calculation methodology is detailed in this document, is included annually in the Company's Integrated Management Report, in the Climate Change section.

The terms included in the numerator ($CO_2$ equivalent emissions) and in the denominator (energy) of the carbon intensity indicator are described in detail below.

## Numerator

### 1. Operational Scope 1 + 2

The direct and indirect emissions (scope 1 and 2) from E&P (operated assets throughout the world), Refining and Chemical industrial sites in Spain, Portugal and Peru and Low Carbon Generation sites world-wide businesses are included. The rest of the businesses and areas of the company have not been included because they are not material (< 1% of the total scope 1 and 2).

### 2. Scope 3 O&G E&P based

The emissions associated with the use of our products from our oil and gas production are also included (scope 3). The emissions from products that would be obtained in our Refining and Chemical processes from our oil production are counted. For natural gas production, the emissions from the combustion of this gas are counted, regardless of their final use.

Emissions from third-party hydrogen plants that supply our refineries are included (as part of scope 3). Thus, they are treated in the same way for the purposes of emissions as our own hydrogen plants, because this component is essential to produce our fuels.

### 3. Low Carbon Power Bonus

Avoided emissions from our low-carbon power generation assets are subtracted in the numerator due to they replace the marginal power mix in the country where they are located. This "credit" has a positive impact on the indicator and will change and probably reduce over time, as the electricity mix of each country progressively decarbonizes. Natural gas would not have this credit whenever and wherever coal is not used for generation.

### 4. CCUS / NCS Emissions

Avoided emissions if levers such as Carbon Capture, Use and Storage (CCUS) or Natural Climate Solutions (NCS) are implemented and are also subtracted in the numerator.

# Denominator

## 1. Energy Products

Energy relating to our oil and gas production in the E&P business is included.

Regarding the oil case, due to we have our own transformation value chain, the energy from the products obtained in our average Refining and Chemicals processes is counted. In the gas case, due to we do not have our own integrated value chain, the energy contained in the natural gas production is counted.

## 2. Non Energy Products

Chemical products are considered carbon sinks and, although they are not strictly energy products, the energy contained in the equivalent oil used to produce them is counted. The same applies for other non-fuel products, such as lubricants, asphalts, etc.

## 3. Low Carbon Energy Sources

Finally, energy from renewable (solar, wind, hydropower) and non-renewable (combined cycle gas turbines and surplus from natural gas cogeneration) electricity generation sources is included.