Carbon Intensity Indicator for SLBs issued under EMTN Programme of 2021



The Carbon Intensity Indicator for SLBs issued under EMTN Programme of 2021, for now on CII 2021, 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 CO2e/MJ.

Methodology

Repsol's methodology focuses on the primary driver of decarbonization: the primary energy mix produced by the company and supplied to society. Our methodology also prevents undesired results, such as double counting of emissions which could occur if the same emissions were attributed to more than one stage in the production – refining – marketing value chain.

Diagram CII 2021*

The CII is calculated as follows:



* The result of the calculation of the CII 2021, which calculation methodology is detailed in this document, is included annually in the Independent limited assurance report on the Carbon Intensity Indicator and Carbon Intensity Indicator percentage

The terms included in the numerator (CO₂ equivalent emissions) and in the denominator (energy) of the carbon intensity indicator are described in detail below.

Numerator

1. Operational Scope 1+2

Direct and indirect emissions from the E&P, Refining and Chemicals assets and electricity generation operated by Repsol. 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 primary energy-based

Emissions associated with the use of products that can be obtained from Repsol's oil and gas production. Emissions corresponding to the use of products that would be obtained from Repsol's refining and chemical processes scheme from its oil production are included (category 11). For natural gas production, all the emissions resulting from the combustion of this gas are counted (category 11). In addition, emissions from third-party hydrogen plants that supply company's industrial assets (Category 1) are included.

3. Location-Based Emissions Shift

Emissions displacement from fossil electricity mix due to low-carbon electricity generation. Displaced emissions from our low-carbon power generation assets are subtracted in the numerator by replacing the marginal fossil power mix of the country where they are located. This value has a positive impact on the indicator and will change and likely decrease over time, as each country's electricity mix becomes progressively decarbonized.

4. Carbon Sinks

Emissions stored in the case of implementing levers such a as carbon capture, use, and Storage (CCUS) outside the Company's operations, or Natural Climate Solutions (NCS) are subtracted from the numerator.

Denominator

1. Energy products

Includes the energy related to the production of oil and natural gas.

2.Non-Energy Products

Chemical products and other non-energy products (lubricants, asphalts, and others) produced by Repsol from oil, are considered carbon sinks and, thus, the energy contained in the equivalent oil used to produce them is counted.

3.Low Carbon Energy Sources

Includes renewable electricity generation (solar, wind, and hydro) and non-renewable energy used for electricity generation (combined cycle and cogeneration surpluses).