Carbon Intensity



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 CO2eq/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



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 from E&P businesses world-wide, from Refining and Chemical industrial complexes in Spain, Portugal and Peru and from low-emission electricity generation by Repsol Electricity & Gas are included (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, all of 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 Location-Based Emissions Shift

Emissions shift (or displacement) from fossil fuels mix due to low-carbon power generation. Emissions shift from our low-carbon power generation assets are subtracted in the numerator due to they replace the marginal fossil power mix in the country where they are located. This figure 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. Carbon Sinks

Stored 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.

2. Non Energy Products

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, all of the energy contained in the natural gas production is counted.

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.

