EQUINOR’S NET CARBON INTENSITY INDICATOR

Date: 06.02.2020

Net carbon intensity represents the net greenhouse gases (GHG) from energy products and services provided by Equinor, divided by the energy produced by the company. It is an intensity metric (a ratio) which takes GHG emissions and energy into account.

Net emissions = \frac{\text{Net carbon intensity (g CO}_2\text{eq/MJ)}}{\text{Net energy production (equity)}}

Why net carbon intensity?
- A transition metric that addresses both energy and emissions

What is included?
- Emissions:
  - Scope 1, 2 and 3 greenhouse gas (GHG) emissions, net of 'negative' emissions from third party CCUS and natural sinks
  - Scope 1 and 2 emissions (100% operator basis)
  - Scope 3 emissions (equity production) estimated based on regional refinery yields
- Energy:
  - Energy products originating from Equinor (equity production) - oil, natural gas, hydrogen, biofuels and electricity from renewable energy
  - Energy is represented as Megajoules (MJ)
  - Renewables are converted to energy using a partial substitution method

What is not included?
- Energy and scope 3 emissions from non-energy products (e.g. plastics, lubricants and asphalt) are excluded as the products are not combusted

GHG emissions (the numerator) – grams of CO₂ equivalents

The numerator includes net scope 1, scope 2 and scope 3 (category 11, use of sold products) GHG emissions associated with the energy provided by the company. The GHG emissions included are CO₂ and methane. A global warming potential of 25 is used to convert methane to CO₂ equivalents.¹

Net emissions are represented as grams of CO₂ equivalents.

Scope 1 and scope 2 emissions are included based on a 100% operated basis, to correspond with the company’s GHG emission reduction ambitions.

Scope 3 emissions are based on the estimated emissions from the use of sold products. The sold product volumes, which form the basis for the emission estimates are represented by Equinor’s equity oil and gas production. Using a refinery output approach, these equity oil and gas volumes are broken down into several product categories, assuming geography-dependent refinery product yields.² The emissions from each product are calculated using low heating value (LHV) based standard emission factors from IPCC, expressed as kg/TJ.³ Equinor assumes an LHV of 5.7 GJ/boe for the Scope 3 emissions calculations⁴.

¹ https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf
² Available through statistics from the International Energy Agency (IEA).
⁴ Norwegian Petroleum: https://www.norskpetroleum.no/en/calculator/about-energy-calculator/ (1 Sm³ crude oil = 36000 MJ, 1 Sm³ = 6.29 boe).
Non-energy products: Not all hydrocarbons that are produced are combusted. Equity production volumes converted into non-energy products (e.g. plastics, lubricants and asphalt) are not included in the net carbon intensity indicator.

Negative emissions: The emissions represented in the net carbon intensity indicator are net of negative emissions. Examples include negative emissions associated with carbon capture, utilisation and storage for third parties (where GHG emissions are permanently stored), as well as carbon offsets through sinks.

Avoided emissions associated with the use of our energy products in place of other energy products (e.g. wind for gas, or gas of coal), are not included.

Energy provided (the denominator) – Megajoules

The denominator includes the amount of energy contained in the energy products derived from Equinor’s equity production, such as oil, natural gas, hydrogen, biofuels and electricity from renewable energy. Energy is represented as Megajoules (MJ).

Oil and gas volumes are converted from barrels of oil equivalents (boe) to MJs by assuming an LHV of 1boe = 5.7GJ.5

Electricity from renewables is converted into primary energy by using a partial substitution method. This method involves the application of a factor to the energy from renewable electricity production, in order to address the conversion losses associated with fossil fuels, by calculating the amount of primary energy (in the form of natural gas, coal or oil) required to produce the same amount of electricity in a fossil power plant6.

Biofuel production will be included in the net carbon intensity indicator by including the energy associated with Equinor’s equity biofuel production in the denominator. Any emissions associated with the production of the biofuel (where Equinor is operator) will be accounted for as scope 1 and 2 emissions in the numerator. Biofuels, where demonstrated to be carbon neutral, will not have any net emissions associated with their use. As such, the production of carbon neutral biofuels by Equinor will not result in the inclusion of scope 3 emissions in the numerator.

Hydrogen: Emissions and energy associated with the equity volumes of hydrogen that Equinor produces will be included in the numerator and the denominator, respectively. Hydrogen production will therefore be addressed in the net carbon intensity indicator in a manner similar to other types of energy production where Equinor is involved. For hydrogen produced from Equinor’s equity gas volumes, care will be taken to ensure that double counting of both energy and emissions is avoided in the net carbon intensity indicator.

Third party volumes: In addition to the energy from the oil, gas and renewables Equinor produces, Equinor buys and sells electricity, oil and gas which Equinor (as an operator or partner) has not produced. As these volumes are bought and sold at other points in Equinor’s value chain than the energy that Equinor produces, neither the emissions nor the associated energy are included.

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5 Ibid
6 Substitution factors for primary energy of electricity derived from IEA historical data for fossil fuel power generation.
CAUTIONARY STATEMENT

This release contains certain forward-looking statements that involve risks and uncertainties. In some cases, we use words such as "aim", "ambition", "continue", "expect", "may", "strategy", "will", "in line with", and similar expressions to identify forward-looking statements. Forward-looking statements include all statements other than statements of historical fact, including, among others, statements regarding Equinor's ambitions, plans, intentions, aims and expectations with respect to Equinor's new climate roadmap, including with respect to its net carbon intensity, carbon efficiency, methane emissions and flaring reductions, renewable energy capacity, carbon-neutral global operations, internal carbon price on investment decisions, future levels of, and expected value creation from, oil and gas production, scale and composition of the oil and gas portfolio, development of CCUS and hydrogen businesses, use of offset mechanisms and natural sinks and support of TCFD recommendations.

These forward-looking statements reflect current views about future events and are, by their nature, subject to significant risks and uncertainties because they relate to events and depend on circumstances that will occur in the future and are beyond Equinor's control and are difficult to predict. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements, including societal shifts in consumer demand and technological advancements, levels of industry product supply, demand and pricing; price and availability of alternative fuels; the political and economic policies of Norway and other jurisdictions where we have assets; general economic conditions; political and social stability and economic growth in relevant areas of the world; global political events and actions; changes in, or non-compliance with, laws and governmental regulations; the timing of bringing new projects on stream; an inability to exploit growth or investment opportunities; adverse changes in tax regimes; the development and use of new technology; geological or technical difficulties; operational problems; issues with transportation infrastructure; the actions of competitors; the actions of governments (including the Norwegian state as majority shareholder); natural disasters and adverse weather conditions and other changes to business conditions; an inability to attract and retain skilled personnel; relevant governmental approvals; labour relations and industrial actions by workers and other factors discussed elsewhere in Equinor's publications, any of which could impair Equinor's ability to meet its climate ambitions. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we cannot assure you that future results will meet these expectations. Additional information, including information on factors that may affect Equinor's business, is contained in Equinor's latest Annual Report and Form 20-F, filed with the U.S. Securities and Exchange Commission (and section Risk review – Risk factors thereof), which is available at Equinor’s website (www.equinor.com).

You should not place undue reliance on these forward-looking statements. Actual results could differ materially from those anticipated in these forward-looking statements for many reasons. Equinor does not assume any responsibility for the accuracy and completeness of any forward-looking statements. Any forward-looking statement speaks only as of the date on which such statement is made. Unless required by law, we will not necessarily update any of these statements.

Equinor is including the emissions from a customer's product use in its calculation of its net carbon intensity solely as a means to (i) more accurately evaluate the emission lifecycle of what we produce and (ii) to respond to the potential business opportunities arising from shifting consumer demands. Including these emissions in the calculation should in no way be construed as an acceptance by Equinor of responsibility for the emissions caused by such use.