

2023 Climate and Energy Benchmark

Oil and Gas FAQ

Q. What is the WBA Climate and Energy Benchmark?

The World Benchmarking Alliance (WBA) Climate & Energy Benchmark ranks the most influential companies in high-emitting sectors by their low-carbon transition efficiency.

WBA* developed the Climate & Energy Benchmark to assess the highest corporate carbon emitters. The goal of the benchmark is to measure corporate progress against the Paris Agreement and a just transition.

The benchmark aims to cover 450 of the world's most influential, keystone companies in high emitting sectors such as automotive manufacturers, electric utilities, oil and gas, transport and buildings. The following sectors have been assessed in the past three years:

- 2021 Automotive
- 2021 Electric Utilities
- 2021 Oil and Gas
- 2022 Transport
- 2023 Buildings
- 2023 Oil and gas

These assessments are updated regularly and are free and available to everyone. They can be accessed on the [WBA website](#).

For the Climate & Energy Benchmark, WBA works in partnership with CDP** who provide the low-carbon transition company assessments.

**WBA (World Benchmarking Alliance) is a not-for-profit organisation running a series of benchmarks that assess the world's most influential companies on their contributions to sustainable development goals (SDGs).*

***CDP is a not-for-profit international organisation that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.*

Q. What is the ACT methodology? How does it work?

ACT ('Assessing low-Carbon Transition') is a set of sector-specific methodologies for assessing companies' transition towards a low-carbon economy.

The ACT initiative was developed by ADEME (French Agency for Ecological Transition) and CDP with the aim of driving corporate climate action.

The assessment methodology evaluates past and expected emissions trends, levels of low-carbon investment and research and development, transition plans, engagement with suppliers, clients and policymakers and progress in developing low-carbon business models. Companies' emissions targets are assessed against a 1.5°C warming scenario.

Based on its past, present and planned work on reducing carbon emissions, each company receives a 'score' - an ACT rating showing how effectively the company is reducing emissions across all business areas.

Q. What is the Oil & Gas Benchmark? How have the companies been selected?

The Oil and Gas Benchmark is a part of The WBA Climate & Energy Benchmark. It assesses the 100 most influential oil and gas companies across the world and ranks them by their low-carbon transition and social transformation efficiency.

The benchmark identifies the companies whose actions are vital for wider, systemic transformation towards a low-carbon economy. These companies dominate global revenues within the oil and gas sector, influence global governance processes and institutions and have a global footprint. The approach to selecting companies is described here: [SDG2000 methodology | World Benchmarking Alliance](#). There is no opt-out principle as the benchmark serves as an accountability mechanism that measures corporate progress against the Paris Agreement and whether companies are contributing to a just transition.

When selecting which entity to assess within a company group (i.e., parent or subsidiary), we consider such factors as the entity's exposure to the WBA transformation in decarbonisation and energy, ownership and reporting structure, governance and accountability. The starting point of the assessment will always be the keystone company (i.e., the parent company/holding company/entity for assessment).

For more information relating to WBA and the classification of keystone companies [here](#). The ACT Oil and Gas [methodology](#) goes into more detail about the indicators assessed and the time horizon under review.

Q. Why has company performance on just transition indicators 3 and 4 dropped notably since the 2021 just transition pilot assessment?

The methodology remains unchanged, but we do not believe that companies perform notably worse on this indicator in comparison to the pilot assessment.

We believe that this change is driven by a better understanding of how to accurately assess some sub-indicators on these topics rather than notably worse performance by the companies. The 2021 pilot assessment was the first time the just transition methodology was applied. Since then, we have launched the 2022 Transport and 2023 Buildings benchmarks, which has improved our understanding of this topic and how to assess company reporting on these topics, which results in fewer companies meeting these criteria.

Q. What is the scope for companies included in the benchmark?

The ACT Oil and Gas methodology addresses the diverse views of the oil and gas sector transition to a low-carbon economy. It has four module weighting compositions for (i) integrated; (ii) upstream only; (iii) midstream only; and (iv) downstream only companies.

Companies with oil and gas equipment and services (only), petrochemical (only), oil and gas trading (only), and exploration (only) activities are excluded from the scope of the methodology. This is because there is a limited scope for action on decarbonisation in these activities. The majority of GHG emissions (around 80% along the value chain) from the oil and gas sector take place in the downstream segment during the combustion of sold products for final energy use. For more information on the benchmark scope please refer to [The Climate and Energy Benchmark methodology report](#).

Q: Are Scope 3 emissions covered in the Oil & Gas benchmark?

Yes, they are.

Each ACT sector methodology identifies the type of emissions that the assessment will focus on. The ACT Oil and Gas [methodology](#) is designed to assess companies operating in different parts of the oil and gas value chain. For each segment, boundaries are defined for scope 1, 2 and 3 (upstream and midstream) emissions. Please see section 3. Boundaries of the methodology for further details.

Q: What reporting period is covered?

The ACT methodologies assess the most reliable, latest available public and verifiable data.

For the 2023 Oil and Gas Benchmark, company data was collected from materials published up to 15 April 2023. For some companies, full-year data reporting was available for 2022. For others, the most recently available data was from 2021. In all cases, the most recent year with full-year reporting was applied as the company's reporting year.

Q: Which scenario is applied for the WBA Oil and Gas Benchmark 2021?

The ACT Oil & Gas methodology was developed with sectoral decarbonisation pathways based on data from both Beyond 2°C Scenario (B2DS) and Sustainable Development Scenario (SDS) from the International Energy Agency (IEA).

To step up ambition and align with a 1.5°C goal, the WBA Oil & Gas benchmarks use a pathway data based on the IEA Net Zero by 2050 scenario [Net Zero by 2050 – Analysis - IEA](#).

Q: Does the methodology cover petrochemicals, chemicals and utilities?

The ACT Oil and Gas methodology applies mainly to exploration, production and processing, transport and refining, distribution and retail.

Many companies in the sector are also active in petrochemicals, electricity generation and transport or pipeline operations. Emissions from these activities are not taken account of in the performance indicators, however the scoring on strategy considers them when they are relevant, for example, by expanding renewable energy production.

Products that are dedicated to non-energy uses are excluded from the ACT Oil & Gas methodology scope. Petrochemicals are considered in the ACT Chemicals methodology. It is assumed that a portion of midstream production volumes will be dedicated to non-fuel uses and these volumes are excluded from the analysis.

The methodology does cover downstream gas distribution and sales activity and, if an oil and gas company also generates electricity for sale to third parties, this activity is also taken into account. Generated heat is excluded as it is usually consumed on site.

Q: How does the methodology allow the use of carbon credits (carbon offsetting), in targets?

Carbon offsetting is excluded from the calculation of quantitative ACT indicators related to targets, material investments and sold product performance.

According to international standards such as ISO 14064-1, ISO 14067, European Product Environmental Footprint and Organization Environmental Footprint, WRI/WBCSD's GHG Protocol, carbon offsetting shall not be included in GHG quantification, but may be reported separately as "Additional Environmental Information". Carbon credits shall not be subtracted from the GHG inventory to minimize the amount of GHG emissions. Therefore, carbon offsetting is excluded from the calculation of quantitative ACT indicators related to targets, material investments and sold product performance. Nevertheless, in the narrative scoring of the ACT assessment, these credits may be considered as additional information that helps to better understand the decarbonization strategy of a company.

Q. How is data on companies collected for the benchmark?

Data for the Climate & Energy Benchmark is collected from publicly available sources.

Data is collected from publicly available sources, including:

- company Financial and Sustainability reports
- responses to the CDP questionnaire, if companies have chosen public disclosure
- company websites and other publicly available materials

- data provided via the Data Validation process

Production volume data gathered from company reports is supplemented with data purchased under licence from commercial data provider Rystad Energy. Gathered emissions data is supplemented with emissions modelling. Information from RepRisk may be used to inform the narrative assessment.

In the event of a lack of corporate disclosure or inconsistent or incomplete data for an indicator, companies score 0 as no assessable data exists. Companies are invited to directly participate in the data validation process by reviewing the data gathered by ACT's analysts, filling data gaps and providing feedback.

Q. What datasets and data were chosen for the WBA Oil and Gas Benchmark 2023?

The ACT methodology uses third-party and publicly available data.

For the WBA Oil and Gas Benchmark 2023, data on past and projected production volumes was sourced under licence from Rystad Energy in March 2023. This covered upstream oil and gas production plus midstream gas processing and hydrogen production. All other qualitative data, plus quantitative data on midstream oil processing volumes and on sold product volumes, was gathered from company reports throughout the March/April data collection period. The Rystad Energy UCube was consulted in May 2023 for further background data on companies' reserves. For midstream refining data, ACT used primary data from publicly available reports. When available, emissions data was collected from publicly available company reports. If emissions data were unavailable, ACT estimated emissions using emissions factors primarily from CDP's own database.

Q. How to read the benchmark's score?

In the WBA Climate and Energy Benchmark rankings, a total score out of 100 is calculated from the ACT rating and the social assessment score.

ACT, core social and just transition scores account for 60%, 20% and 20% of the total score respectively. More information can be found in the [Climate and Energy Benchmark methodology report](#).

The ACT score shows company climate performance across three dimensions, with the highest possible rating being **20A+**:

- Performance score (ranging from 0 to 20). Shows transition alignment measured with a range of quantitative and qualitative performance indicators.

- Narrative score (ranging from E to A). A rating based on a comprehensive review of the performance indicators data and public information summarising the company's overall strategic position.
- Trend score (+, =, -). Predicts future changes in the company's score: improving, staying the same or worsening.

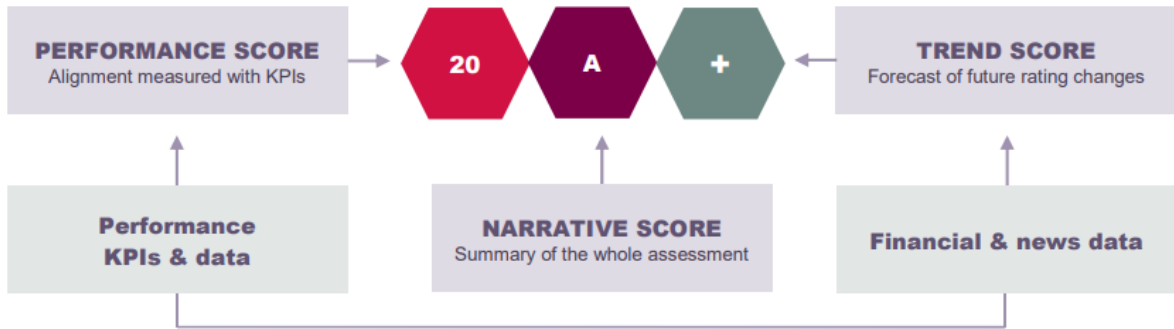


FIGURE 1. THE ACT SCORE: PERFORMANCE, NARRATIVE AND TREND

In the WBA Benchmark rankings, a total score out of 60 is calculated from the ACT rating:

1. The performance score remains as it is i.e. out of 20
2. The narrative score is also weighted out of 20 with each letter receiving the following scores: A=20, B=15, C=10, D=5, E=0
3. The trend score is given the following scores '+' = 2, '=' = 1, '-' = 0
4. The scores are summed and then divided by the maximum possible score of 42, and normalised to give a score out of 60.



FIGURE 2. EXAMPLE OF THE ACT RATING SCORE

The core social score out of 20 and the just transition score out of 20 (normalised from 16) are also created.



FIGURE 3. EXAMPLE OF THE CORE SOCIAL AND JUST TRANSITION SCORE

The ACT rating score, core social score and just transition score are then added together to create the total benchmark ranking score out of 100.

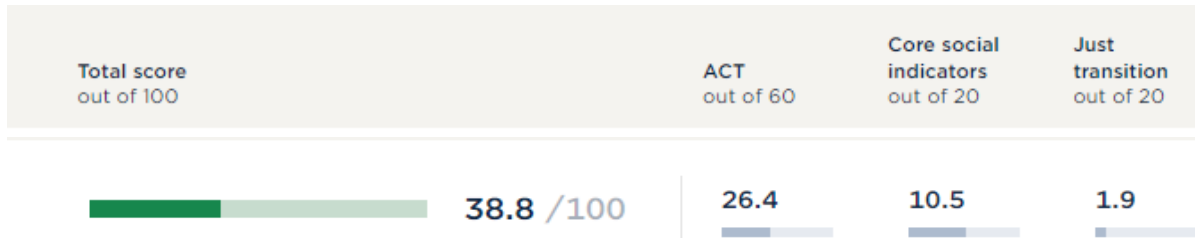


FIGURE 4. EXAMPLE OF THE WBA BENCHMARK FINAL SCORE

Q. What is considered a “Leading Practice”?

A company is considered to have leading practices if it scores or ranks highly for a specific indicator or module.

Leading Practices are areas of excellence by a company identified through the ACT methodology only and do not refer to external awards or commendations for the company’s business/sustainability practices.

Q. What is the difference between absolute emission and emission intensity targets?

Companies can set two types of targets: to reduce absolute emissions or emissions intensity. Progress towards emissions intensity targets is achieved when companies reduce the emissions they produce per amount of product or service provided. Progress towards absolute emissions targets can be achieved via emissions intensity improvements or via activity level reductions.

Absolute emissions refer to total quantity of emissions in absolute terms, e.g. 100 million tonnes of CO₂. Emissions intensity is quantity of emissions per unit of activity ie amount of product or service provided. For the oil & gas sector these measures are kgCO₂/TJ (terajoule) of energy.

The ACT sectoral decarbonisation pathways are defined in terms of emissions intensities. When assessing the alignment of an absolute emissions target, the target is converted to an intensity metric for comparison with the company’s benchmarked decarbonisation pathway (the conversion is done using the past and planned activity values for the ‘from’ and ‘to’ years of the target).

Q. Has the ACT Oil & Gas methodology been applied as originally designed?

Some modifications have been introduced to the ACT Oil & Gas methodology to assess companies against a 1.5°C level of ambition for the C&E Benchmark.

Published in February 2021, the ACT Oil & Gas methodology did not benefit from data linked to low-carbon scenarios that are aligned with a 1.5°C level of ambition, such as the NZE Scenario from the Net-Zero Emissions by 2050 Scenario (NZE) by the International Energy Agency (IEA).

To align with these publications, data used to assess against performance indicators has been updated. These changes relate to:

- Share of unsanctioned projects (indicator 2.4)
- Share of CAPEX and R&D investments in low-carbon and mitigation technologies (indicators 2.5 and 3.1)
- Share of CAPEX and R&D investments in carbon capture, use and storage (CCS, CCUS) technologies (indicators 2.6 and 3.2)
- Share of low-carbon products (indicator 4.3)

Note that the [latest version of the “qualitative” performance modules](#) (published in 2022) has been used as an update to the ACT Oil & Gas methodology.

Q. What is meant by companies’ carbon budget, and “locked-in” emissions?

ACT assessments compare the companies’ “locked-in” emissions to their carbon budget for 2022 through to 2050.

It is acknowledged that both emissions intensity and absolute emissions are important metrics to be tracked, when assessing companies’ contribution to a low-carbon transition. ACT Oil & Gas methodology uses sectoral decarbonisation pathways to assess both companies targets and trend in emissions, referring to emissions intensities, in order to refer to common metrics to compare companies’ performance.

- The locked-in emissions provide valuable information about absolute emissions. They are derived using the projected upstream production volumes of oil and gas products extracted from 2022 to 2050. The production volumes are based on projections from a third-party dataset. Activity from midstream assets such as refineries and liquefied natural gas (LNG) plants is excluded. The scope of the locked-in emissions is limited to in-use combustion emissions, specifically the emissions that are released when the products are burnt. These emissions fall under the scope 3 downstream (category 11 use of sold products) emissions and are not linked to direct operational emissions. To calculate the locked-in emissions, the projected production is multiplied by default emission intensities for the combustion of the oil and gas products. Additionally, non-energy use percentages are factored into the calculations to account for the portion of oil and gas products that are not combusted but used for other purposes, such as petrochemical production. The year-on-year non-energy use percentages

are derived using data from the Net-Zero Emissions by 2050 Scenario (NZE) by the International Energy Agency (IEA).

- The carbon budget is derived by using the projected decrease in global oil and gas production based on data from the Net-Zero Emissions by 2050 Scenario (NZE) developed by the International Energy Agency (IEA). To calculate the production volumes the company must achieve between 2022 and 2050, the proportion of global oil and gas production produced by the company in the reporting year is multiplied by the projected global production year-on-year. The company's carbon budget is determined by applying default combustion emissions intensities and non-energy combustion percentages to the company's required production.

For more information, refer to the ACT Oil & Gas methodology, pp. 43-47.

Q. Does ACT recognise or reward the use of carbon dioxide enhanced oil recovery (CO₂-EOR)?

Some companies disclose the use of carbon capture storage and use (CCUS) technology, using captured CO₂ to feed EOR process and increase yield of oil production while storing some CO₂ into the ground.

CO₂-EOR is the only process at scale that enables (partial) permanent storage of CO₂. However, it is aimed at getting more oil out of the ground, oil that will finally be processed and burnt. While the use of CO₂-EOR allows to decrease the emissions intensity linked to exploration and production of oil, the climate benefit is counterbalanced by the additional in-use emissions coming from higher oil production and consumption.

Considering the above and additional environmental impacts of CO₂-EOR process, the ACT Oil & Gas methodology does not reward the use of CCUS dedicated to CO₂-EOR as a solution enabling the sector to transition to a low-carbon future.

Q. How is hydrogen production taken into account?

Hydrogen is seen as a potential enabler to decarbonise the oil and gas sector. However, the level of emissions linked to its production highly depend on the route/process that is used.

Some companies include their activities and projects linked to hydrogen production as solutions to contribute to decarbonise the sector.

The International Energy Agency (IEA) published in 2023 its *Towards hydrogen definitions based on their emissions intensity* report, listing the emissions intensity linked to the various routes to produce hydrogen. Based on this data, are considered as low-carbon solutions to decarbonise the oil & gas sector:

- Hydrogen produced via electrolysis process, fed by low-carbon electricity, as defined by the Green European Taxonomy. This is typically met with renewables or nuclear.
- Hydrogen produced with fossil fuels as feedstocks with carbon capture and storage (CCS) technologies, ensuring a high enough capture rate and with best practices production.
- Hydrogen produced with biomass, with or without using CCS technologies.

If disclosed elements are not precise enough, or if hydrogen production does not correspond to elements listed above, then linked activities and projects are not rewarded as low-carbon solutions.

Q. How is biofuels production taken into account?

Biofuels are viewed as a potential enabler to decarbonise the oil and gas sector. However, the level of emissions linked to their production highly depends on the route/process used.

Biofuels are, by definition, obtained from biomass, which encompasses a variety of solutions. Biofuels are commonly categorised thanks to three generations: first-generation biofuels use food crops as feedstock, second-generation biofuels are made from waste products, and finally, the third generation aims to use microorganisms (still under research).

ACT assessments only acknowledge sustainable (or advanced) biofuels, as defined by the European Green Taxonomy (Directive(EU) 2018/2001). These exclude the first-generation biofuels, which compete with food production. See ACT Oil & Gas methodology for more details.

Insufficient detail on the source of the biomass used in production prevents the assessment of biofuels as a low-carbon fuel. Without the relevant information, it is assumed that biomass is first-generation feedstock.

Q. Where does the 77% of sectoral low-carbon capital expenditure (CapEx) and research and development (R&D) investments needs come from?

Companies' share of CapEx and R&D investments are assessed against a 77% sectoral value. This reference builds on data from the Net-Zero Emissions by 2050 Scenario (NZE) by the International Energy Agency (IEA).

The IEA – NZE scenario provides the global average annual energy investment needs by sector (see figure 4.2, p.155). The forecasted needed investments for 2021-2030 have been considered for "fuels", "electricity" and "infrastructure". For each section, categories linked to low-carbon solutions have been selected.

Summing all these low-carbon contributions led to annual needs of sectoral low-carbon CapEx of 77%. This value is then used to assess companies' share of CapEx dedicated to low-carbon and mitigation technology (see performance indicator 2.5 in ACT Oil & Gas methodology), considering that every actor should contribute at this level. This value is also



used as a proxy to assess R&D investments dedicated to low-carbon and mitigation technology (see performance indicator 3.1 in ACT Oil & Gas methodology), since no sectoral value of R&D investments have been found.

More Questions?

If you would like to discuss in more detail the Buildings Benchmark results, or the ACT methodologies, please contact the team at info.climate@worldbenchmarkingalliance.org

