

Assessing low-Carbon Transition

Oil & Gas



December 2020

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Background and purpose of this document

This document is part of the Assessing Low-Carbon Transition (ACT) initiative and provides the main details of the ACT® Oil and gas road test. As part of the development of a new ACT® sector methodology, this road-test is conducted to improve the existing methodologies and adjust the tools and inputs used to assess companies in this sector.

The current report is intended for the Board (ADEME and CDP) and the technical working groups (TWGs), as well as those who will contribute to the TWGs.

This report aims to provide the key findings of the assessment and an overview of results for the sector. Additional materials prepared during the assessment process, including detailed company data and feedback, informed the results summarised in this report but remain confidential.

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1. ACT Oil and Gas Road Test

1.1. CONTEXT OF THE ROAD TEST

OIL AND GAS SECTOR

The oil and gas sector is a major contributor to climate change. According to CDP estimates, over 50% of global anthropogenic emissions are emitted as a result of the combustion of fossil fuels. Whilst 90% of these emissions are derived from the downstream use of hydrocarbons (oil and gas companies' scope 3 emissions), the extraction and manufacturing of oil and gas products is also emissions-intensive and underscores the impact of the sector on global climate change. Additionally, market trends are shifting energy demands away from fossil fuels, with demand projected to stagnate due to strong energy efficiency measures and the increasing competitiveness of renewable energy sources. Consequently, companies in the oil and gas sector face major climate-related transition challenges all along their value chain.

The sector has made some progress in tackling its climate impact by incorporating sustainability strategies into its business. However, given the sector's role in supplying fossil fuels and their derivatives, companies are being increasingly challenged to transform and adapt their business models towards a low-carbon economy. Therefore, companies and investors in the sector are aiming to understand whether the sustainability strategies adopted are sufficiently ambitious to align with a low-carbon transition scenario.

The ACT initiative assesses and evaluates the companies' sustainability strategies to determine whether their proposed actions align with a below 2°C scenario. In the context of this road test, 13 companies were analysed and scored according to the most recent version of the ACT Oil and Gas methodology (version 2.3, dated June 2020). The results of the road test are detailed in this report and in the accompanying Technical Working Group Meeting slide deck presented on 14.12.2020, which lists detailed feedback from the companies by module and indicator.

This report concludes that the companies in this sector must strengthen their decarbonisation ambitions and efforts, and increase their transparency to better allow stakeholders to understand their impacts and the extent of their future ambitions and action on climate change. Current activities and expected future performance are not aligned with a below 2°C transition pathway, exposing companies in this sector to climate and market risks.

CONTRIBUTING TO ACT: NEW SECTOR DEVELOPMENT

For the past five years, ADEME and CDP have been working together on developing the 'Assessing low Carbon Transition' (ACT) initiative, a methodology to assess companies that have set climate commitments and want to take climate action in line with the Paris Agreement. The ACT methodology uses a holistic approach to assess a company's climate strategy and determine its readiness to transition to a low-carbon economy. The ultimate goal is to drive action by companies and encourage them to set their business on a below 2°C compatible pathway.

The ACT methodology uses the Science-Based Targets Initiative's Sectoral Decarbonization Approach (SDA), which compares public commitments with a low-carbon transition scenario. ACT's ambition is to

prioritise the most GHG emissions intensive sectors. This approach implies that tools and methods have to be adapted for each new sectoral development process in order to accurately reflect their impact on climate change. So far, the methodologies for the Auto, Electricity, Retail, Building, Real Estate and Property Developer sectors have been released. As of December of 2020, road tests for the Cement, Transport, and Oil and Gas sectors are all in their final stages.

The stages of methodology development are as follows:

- Stage 1: Methodology development
- Stage 2: Methodology experimentation (road test)
- Stage 3: Methodology refinements & release

The oil and gas methodology is designed to assess a company's climate impacts across its value chain. In practice, not all companies have activities in all stages of the value chain, and, as a result, the ACT methodology categorises companies as Upstream, Midstream, Downstream or Integrated, according to the type of activities they engage with (see Figure 1 and Figure 2). This classification influences the overall ACT performance results through score weightings, which adapt raw scores according to the relevance of each indicator to a company's activities.

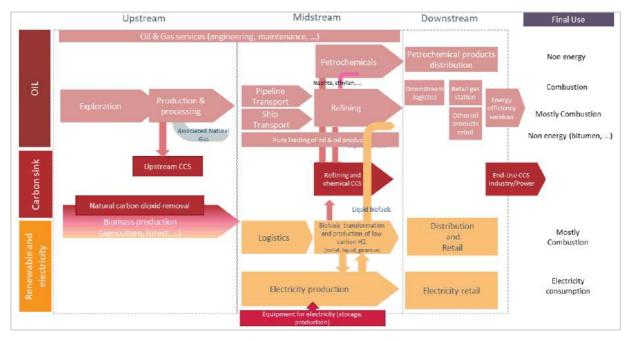


FIGURE 1: ACTIVITIES OF THE OIL VALUE CHAIN

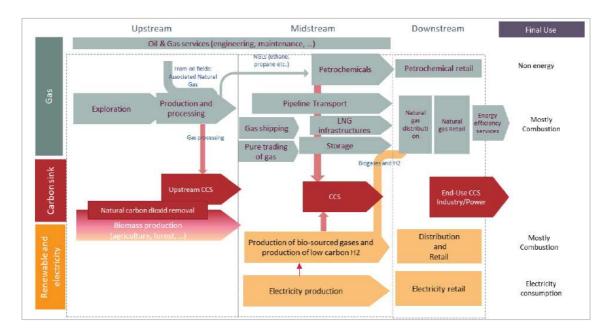


FIGURE 2: ACTIVITIES OF THE GAS VALUE CHAIN

For this road test, the participating companies were classified as follows:

- 8 integrated players with activities in all stages of the value chain (Cepsa, ENI, Equinor, Galp, Origin Energy, Shell, Total and YPF)
- **1 upstream company** (Woodside)
- **2 midstream companies** (Engie and EDF)
- 3 downstream companies (Butagaz, Primagaz, and Rubis Energie)

GOALS OF THE ROAD TEST

The project's objectives were:

- to road test the ACT oil and gas draft methodology and accompanying tools.
- to provide recommendations to refine the methodology in order to ensure that it is relevant and robust for the sector.

The road test for the ACT oil and gas methodology has been carried out, on behalf of ACT, by South Pole and the World Benchmarking Alliance.

ASSESSED COMPANIES

The ACT methodology relies on the principle of relevance, and therefore only the companies that have both significant climate impact and significant mitigation levers can be assessed with ACT's approach. For the oil and gas sector, ACT determined the following types of companies to be covered by the methodology:

- 1. Integrated Oil & Gas companies
- 2. Integrated Gas Utilities
- 3. Exploration and Production pure players
- 4. Oil Refining & Marketing pure players
- 5. Service stations pure players
- 6. Oil products Marketing pure players
- 7. Gas Retail pure players

Conversely, certain activities and subsectors are excluded from the ACT oil and gas methodology due to their limited levers and scope of action. These include:

- Pure actor/player companies in Oil & Gas equipment and services
- Petrochemical or Oil & Gas trading
- Exploration pure players
- Oil and Gas storage and transportation pure players

The road test companies were carefully considered ensuring that different regions, steps in the value chain and fuel types were represented. Initially, 14 companies volunteered for the road test (see Figure 3). However, due to availability issues some participants were not able to complete the assessment, but they still engaged in the road test by offering their comments and feedback. 3 companies were assessed using publicly available data (Engie, Origin Energy, and YPF).



FIGURE 3: COMPANIES SELECTED FOR THE ROAD TEST

ASSESSMENT PROCESS

South Pole planned and conducted the assessment, which involved direct engagement with companies and leading monthly meetings with ACT's oil and gas steering committee. Engagement with companies was conducted by South Pole directly and followed the steps described in Figure 4.

Assessment approach

Data collectionkick-off	 1 hour kickoff call to introduce team members, process, demonstrate tools and answer questions
Data collectionsupport	 Analysts provide email support primarily through email and recently with follow up calls. We have created a questions collection sheet, in order to ensure that we address all questions per module.
Data review & scoring	 Analysts review data sheet and conduct performance scoring, compile questions for the company and team.
Quality assurance	•Leading team collaborates and reviews questions. Any issues are discussed during weekly catchup calls
Consistency	 The team will be reviewing results to ensure consistency across analysts. We have developed additional inputs for narrative and trend scoring. We set up a common area for all analysts to view other analysts' work. Access to a common chat group for the leading team and analysts.

FIGURE 4: OIL AND GAS ASSESSMENT PROCESS

The main inputs for undertaking the assessment were provided to South Pole by way of 3 complementary files:

- The ACT Oil & Gas methodology, version 2.3. This document contains the scoring criteria for each of the indicators and lists how the scores are calculated and weighted. The methodology also provides relevant context for each of the indicators and an overview of the main goals of each module. Here, it is important to mention that indicator 2.4 is listed as 'to be confirmed.' During the assessment process, South Pole incorporated data from Carbon Tracker to evaluate indicator 2.4.
- The Excel calculation tool. While in other ACT road tests companies are asked to provide data so assessors can fill out the Excel tool, in this case companies were asked to directly fill out their response to the ACT sub-indicators with the assistance of the assessor. Once completed, analysts review the responses and score according to the methodology. They record their scores and comments in this same (data collection) tool, which automatically calculates a weighted score based on the evaluation the analyst registers in the file and the company's reported classification (integrated, upstream, midstream, or downstream). For the oil and gas sector, the Excel data collection and scoring tool has an embedded Life Cycle Analysis ('YLCA') emissions calculation tool that requires companies to enter energy outputs by type of fuel, for each stage of the value chain, and for different time periods. It also contains another calculation tool that estimates the "locked in" emissions, which refer to the emissions the company is set to generate with the sources it is planning to develop and exploit. These calculators within the Excel file add a level of complexity to the completion and evaluation of the Oil and Gas ACT assessment.
- The narrative scoring tool. This is an Excel-based tool which includes the narrative scoring maturity matrix (as per the methodology). For the purpose of the road test, and to increase the objectivity of the assessment and ensure alignment amongst the analysts, South Pole provided additional guidance to analysts within this tool. In a first iteration, South Pole's team suggested that analysts focus on the results of certain modules and refer to guiding questions. After receiving feedback from

ACT

the O&G Steering Committee on the draft initial results, South Pole's analysts reviewed the narrative score using a larger set of questions listed in the ACT Framework document.

The process was kicked off by an initial call between the companies and South Pole, with the assistance of a WBA representative. During the one-hour call, the companies' teams were given a brief explanation of the ACT initiative, the expected timeframes and deadlines, a general description of the relevant inputs, and an overview of the Excel tool. Companies were subsequently sent the Excel calculation tool and the methodology documents, and were encouraged to send questions via e-mail or through follow up calls. Company questions were collected in a spreadsheet accessible to all analysts to ensure shared learnings, and consistency in the responses.

Once companies submitted the completed Excel calculation tool with their inputs, analysts reviewed the responses and began the scoring process. Analysts listed their scoring questions and additional questions sent by companies in a 'post-review' company-specific spreadsheet. These questions were often more precise, referring to the company's business model and/or to the interpretation of the scoring criteria given the assessed response. These spreadsheets were reviewed by South Pole's 'lead' team (senior members including the project manager, technical lead and project supervisor), and ultimately provided a valuable source of company feedback as captured in the accompanying TWG meeting PowerPoint slide pack.

After the analysts finalised a company assessment, the lead team would review the Excel responses and ensure scores were consistent and gave an accurate reflection of the company response. If any issues were identified, the response was sent back to the analyst for review and, if necessary, adjustments to the scores were captured.

1.2. THE ACT OIL AND GAS METHODOLOGY

GENERAL APPROACH

While each ACT methodology is sector-specific, they are all based on the ACT Framework methodology and as such there are fundamental commonalities among all of them. The assessment's main goal is to evaluate past, present and (anticipated) future company performance to determine the company's maturity level with respect to its transition to a low-carbon economy. The ACT initiative focuses on five guiding principles to determine company performance:

- 1. Commitment: What is the company planning to do?
- 2. Transition plan: How is the company planning to get there?
- 3. Present: What is the company doing at present?
- 4. Legacy: What has the company done in the recent past?
- 5. Consistency: How do all these plans and actions fit together?

These principles and guiding questions are assessed through a series of modules composed of key performance indicators and sub-indicators, all of which are specifically designed for each sector. For the oil and gas sector, there are a total of 31 indicators organised into nine modules. Figure 5 shows an indicator-level map illustrating how these indicators assess company performance at different points in time.

	Past	Present	Future
1. Targets	OG1.4 His	toric target ambition and company performance	OG 1.1 Alignment of Scope 1+2 emissions reduction targets OG 1.2 Alignment of Scope 1+2+3 emissions reduction targets OG 1.3 Time horizon of targets
2. Material investment	OG 2.1 Tr	end in past Scope 1+2 emissions intensity	OG 2.2 Emissions lock-in OG 2.3 Trend in future Scope 1+2 emissions intensity OG 2.4 Share of unsanctioned projects within carbon budget OG 2.5 Low carbon and mitigation technologies CAPEX share OG 2.6 Carbon removal technologies (CDR) and carbon capture, use and storage technologies (CCS, CCUS) CAPEX share
3. Intangible investment		OG 3.1 Share of R&D in Low carbon and mitigatio OG 3.2 Share of R&D in Carbon removal technolo	
4. Sold	OG 4.1 Tr	end in past Scope 1+2+3 emissions intensity	OG 4.2 Trend in future Scope 1+2+3 emissions intensity
product performance		OG 4.3 Low-carbon products share OG 4.4 Energy efficiency services share	
5. Management.		OG 5.1 Oversight of climate change issues OG 5.2 Climate change oversight capability OG 5.4 Climate change management incentives	OG 5.3 Low carbon transition plan OG 5.5 Climate change scenario testing
6. Supplier		OG 6.2 Activities to influence suppliers to reduce their GHG emissions	OG 6.1 Strategy to influence suppliers to reduce their GHG emissions
7. Client		OG 7.2 Activities to influence customer behaviour to reduce their GHG emissions	OG 7.1 Strategy to influence customer behaviour to reduce their GHG emissions
8. Policy engagement		OG 8.1 Company policy on engagement with trade OG 8.2 Trade associations supported do not have OG 8.3 Position on significant climate policies	
9. Business model		OG 9.1 Business activities that drive the energy m OG 9.2 Business activities that contribute to the re OG 9.3 Business activities that develop CCS, CCL	duction of the energy demand

FIGURE 5: OIL AND GAS METHODOLOGY INDICATORS Y MODULE AND TIME HORIZON ASSESSED

The assessment is carried out based on the information provided for each of these indicators by the company. The oil and gas methodology uses a combination of quantitative and qualitative indicators. Purely quantitative indicators are scored according to a formula and based on the data provided by the company. In these cases, analysts must ensure the calculation is correct and the information provided by the company is consistent and, to the extent possible, verifiable.¹ Qualitative indicators are evaluated by the scorer using the company responses and indicator-level maturity matrices with up to five scoring levels: Basic (0 points), Standard (0.25 points), Advanced (0.5 points), Next Practice (0.75 points), and Low-carbon aligned (1 point). Maturity matrices provide scoring criteria per indicator for each of these levels.

ACT OIL AND GAS METHODOLOGY ASSESSMENT

Like all ACT assessments, the oil and gas methodology generates a three-part score that allows companies to understand how they scored based on the key performance indicators, how their overall strategy is rated with reference to a low-carbon (below 2°C) transition scenario, and if their strategy is being effective in reaching a low-carbon pathway. The final score is presented as the performance score (0 to 20) followed by the narrative score (E to A) and the trend score (+, -, or =). For the oil and gas road test, some adjustments were implemented, as described below:

 The performance score ranges from 0 to 20 and is the result of the sum of all points achieved and weighted according to the company's classification (upstream, midstream, downstream or integrated). The oil and gas methodology includes 4 different weighting profiles, one for each company classification. However, companies may operate in more than one step of the value chain while not being considered fully integrated players (e.g. midstream and downstream). In those cases, South Pole selected the category that was the best fit for the company.

¹ Given the granularity of quantitative data required and the confidentiality of this information, it wasn't always possible to verify the data provided

- 2. The narrative score is the result of the scorer's evaluation of the overall response, complemented by an external data review for the company in question, and graded from E (lowest score) to A (highest score). The narrative score is assessed using a maturity matrix developed by the ACT initiative and composed of 4 dimensions (Business model and strategy; Consistency and credibility; Reputation; and Risk). For the oil and gas sector, the South Pole team included additional guiding questions to inform their review and wider research and indicated to analysts what modules to weigh higher in each dimension of the matrix. The narrative score was later reassessed using the set of questions included in the ACT framework.
- 3. The trend score evaluates whether a company is increasingly aligning with a low-carbon transition pathway or distancing itself from a low-carbon transition pathway. The trend score is indicated by a + sign (best score, reflecting increasing alignment), a sign (worst score, reflecting reducing alignment), and an = sign (indicating no projected change in its alignment). No specific tool or maturity matrix was developed by ACT for the trend score; however, the guidance provided in the ACT Framework Methodology document was drawn on. Based on this, and to help inform the scoring, South Pole built a simple Excel tool to serve as guidance for analysts. The inputs for this tool were taken directly from the oil and gas methodology using a simple grading scale from -1 to 1 that analysts assigned based on the results of indicators:
 - OG 1.1 Alignment of scope 1+2 emissions reduction targets
 - OG 1.2 Alignment of scope 1+2+3 emissions reduction targets
 - OG 1.3 Time horizon of targets
 - OG 2.3 Trend in future scope 1+2 emissions intensity
 - OG 4.2 Trend in future scope 1+2+3 emissions intensity
 - OG 5.3 Low-carbon transition plan, and OG 5.5 climate change scenario testing.

The results shown by the tool implied positive scores (>0) were more likely to be trending in a carbonaligned pathway, while negative scores (<0) were more likely to be diverging from a carbon aligned pathway.

As a result of the road test, additional indicators will be considered for evaluating the trend score. These include: 2.4 Share of unsanctioned projects within carbon budget; 4.3 Low-carbon products share; 5.5 Climate change scenario testing; 9.1 Business activities that drive the energy mix to low-carbon energy; 9.2 Business activities that contribute to the reduction of the energy demand; and 9.3 Business activities that develop CCS, CCUS technologies and negative emissions.

To complete the assessment, the road test requires several files to be created and shared with the relevant parties indicated below.

These files include:

- The Excel calculation tool with the company's response and analyst score. This file includes the scores per indicator and sub-indicator, as well as explanations on the rationale of the scorer. These files also contain company comments and questions about the methodology and the tool. These remain confidential between South Pole and the reporting company.
- 2. An ACT company feedback report (PowerPoint) summarising the results and providing a brief overview of the challenges and opportunities the company may be facing. This presentation is shared only with companies and is built based on a template generated by ACT.

FOCUS ON THE ACT OIL AND GAS SCORE

The oil and gas questionnaire is structured according to nine modules presented in the table below:

Module	9S
1.	Targets
2.	Material investments
3.	Intangible investments
4.	Sold product performance
5.	Management
6.	Supplier engagement
7.	Client engagement
8.	Policy engagement
9.	Business model

TABLE 1: LIST OF MODULES IN THE ACT OIL AND GAS ASSESSMENT

Modules 1 through 4 contain mostly quantitative indicators that are evaluated by the scorer based on the results of a quantitative calculation. These modules rely on companies entering data in the YLCA calculation tools and Locked-in emissions calculation tool, as well as providing financial and GHG targets data. The results from each of the internal calculation tools are described in detail below.

- 1. Emissions intensity calculator: The GHG emissions intensity tool is designed to assess the volume of emissions (tCO₂e) per unit (TJ) of energy produced/supplied by the company. This tool automatically allocates the emissions and volume to the corresponding scope and the final GHG intensity. The company inputs their energy volumes for 3 timestamps, the reporting year (YLCA), reporting minus five years (Y-5) and then, for as far into the future as the company can provide and at least five years ahead (Y+X). Having these 3 timestamps enables the tool to assess the company's decarbonisation pathway, both historic and forward-looking, and how these compare with commitments made by the company. Additionally, the calculation tool compares the company's pathway with a benchmark decarbonisation pathway (IEO WEO B2DS Beyond 2 Degrees Scenario) for each stage of the value chain (Upstream, Midstream, Downstream). In short, the emissions intensity calculator aims to estimate 'global' emissions intensities per company based on their energy production and supply, for three distinctive time periods (past, present and future), for each stage of the value chain, using a standardised methodology for all companies in the sector. The assessment then compares how the GHG intensity values change over time, and how these align with a low-carbon (below 2°) benchmark scenario and trajectory.
- 2. Locked in emissions calculator: This tool measures the company's cumulative emissions from the reporting year up to 2050 from currently producing assets and those under development. It then compares these with the company's emissions budget, defined by the IEA ETP B2DS scenario. The reporting company is required to input their production volumes for oil, gas and coal for the reporting

year and the reporting year +5 years (if the company has data for time horizons further into the future, then it can input the data in the yellow columns). The output of the calculation is the locked-in ratio.

The indicators in the oil and gas methodology that require the estimations generated by both calculators are listed in the table below.

Indicator	YLCA	Y-5	Y+X	Locked-in emissions
1.1 Alignment of scope 1+2 emissions reduction targets	\checkmark		\checkmark	
1.2 Alignment of scope 1+2+3 emissions reduction targets	\checkmark		\checkmark	
2.1 Trend in past scope 1+2 emissions intensity	\checkmark	\checkmark		
2.2 Emissions lock-in				~
2.3 Trend in future scope 1+2 emissions intensity	\checkmark		\checkmark	
4.1 Trend in past scope 1+2+3 emissions intensity	\checkmark	\checkmark		
4.2 Trend in future scope 1+2+3 emissions intensity	\checkmark		\checkmark	

TABLE 2: LIST OF INDICATORS RELYING ON LCA AND LOCKED IN-EMISSIONS DATA

The indicators relying on LCA data calculate emission intensity values and compare them in two different time periods (past and present, or present and future). The construction of these indicators requires companies to provide information for both relevant timestamps to generate a result. Consequently, companies that fail to enter data at any of the relevant timestamps are unable to obtain a score in the related indicator, as it is not possible to compare changes over time with a single time-period reported. For this road test, the Steering Committee indicated non-disclosure in any of the indicators was to be scored with 0 points, as the ACT assessment expects a higher degree of transparency compared to other reporting standards.

• Another element specific to the ACT oil and gas methodology and scoring is the weightings used to adjust the scores according to company activities along the oil & gas value chain. ACT has defined four categories for which different weightings are applied per indicator (see

Table 3). Modules 5, 8 and 9 have the same weightings for all categories. In Module 1, weightings are different per indicator, although for all categories the module weight is 15%. There are some important differences to highlight:

Module 2. Material investment accounts for 40% of Upstream companies' scores, while the other classifications reach, at most, a 15% weighting. Considering that in this road test Module 2 had a low disclosure rate, it is especially important to engage with Upstream companies to encourage disclosure of material investment figures to obtain an accurate indication of their progress in the ACT assessment.

- In **Module 2. Material investment**, 4 out of 6 indicators are weighted with 0% for Midstream and Downstream players. This is consistent with these companies' main activities. However, we would like to note that in this road test Module 2 had a low disclosure rate. Because of these weightings, the scores for Midstream and Downstream companies were less penalized by non-disclosure, but their higher scores do not necessarily indicate more transparency and are instead the reflection of the lower weighting.
- In practice, some companies identified that they performed activities in more than one stage of the value chain, particularly Midstream and Downstream. However, at present company classifications are limited to the four categories shown in Table 3. South Pole assigned a classification to these companies based on their main activities (e.g. primarily a downstream player), as described in the methodology.

Indicator/module	Integrated	Upstream	Midstream	Downstream
1.1 Alignment of scope 1+2 emissions reduction targets	4%	8%	6%	2%
1.2 Alignment of scope 1+2+3 emissions reduction targets	8%	4%	6%	10%
1.3 Time horizon of targets	2%	2%	2%	2%
1.4 Historic target ambition and company performance	1%	1%	1%	1%
1. Targets	15%	15%	15%	15%
2.1 Trend in past scope 1+2 emissions intensity	2%	5%	3%	2%
2.2 Emissions lock-in	3%	7%	0%	0%
2.3 Trend in future scope 1+2 emissions intensity	3%	8%	4%	3%
2.4 Share of unsanctioned projects within carbon budget	2%	8%	0%	0%
2.5 Low carbon and mitigation technologies CAPEX share	3%	6%	4%	0%
2.6 Carbon removal technologies (CDR) and carbon capture, use and storage technologies (CCS, CCUS) CAPEX share	2%	6%	4%	0%
2. Material investment	15%	40%	15%	5%
3.1 Share of R&D in low-carbon and mitigation technologies	4%	5%	5%	2%

TABLE 3: OIL & GAS SCORE WEIGHTINGS

Indicator/module	Integrated	Upstream	Midstream	Downstream
3.2 Share of R&D in carbon removal technologies (carbon capture and storage [CCS], carbon capture, use and storage [CCUS], and carbon dioxide removal [CDR])	4%	5%	5%	0%
3. Intangible investment	8%	10%	10%	2%
4.1 Trend in past scope 1+2+3 emissions intensity	5%	4%	6%	6%
4.2 Trend in future scope 1+2+3 emissions intensity	8%	6%	9%	9%
4.3 Low-carbon products share	5%	0%	5%	4%
4.4 Energy efficiency services share	5%	0%	0%	4%
4. Sold product performance	23%	10%	20%	23%
5.1 Oversight of climate change issues	3%	3%	3%	3%
5.2 Climate change oversight capability	3%	3%	3%	3%
5.3 Low-carbon transition plan	2%	2%	2%	2%
5.4 Climate change management incentives	1%	1%	1%	1%
5.5 Climate change scenario testing	1%	1%	1%	1%
5. Management	10%	10%	10%	10%
6.1 Strategy to influence suppliers to reduce their GHG emissions	2%	0%	5%	10%
6.2 Activities to influence suppliers to reduce their GHG emissions	2%	0%	5%	10%
6. Supplier	4%	0%	10%	20%
7.1 Strategy to influence customer behaviour to reduce their GHG emissions	5%	0%	2.5%	5%
7.2 Activities to influence customer behaviour to reduce their GHG emissions	5%	0%	2.5%	5%
7. Client	10%	0%	5%	10%
8.1 Company policy on engagement with trade associations	1%	1%	1%	1%

Indicator/module	Integrated	Upstream	Midstream	Downstream
8.2 Trade associations supported do not have climate-negative activities or positions	2%	2%	2%	2%
8.3 Position on significant climate policies	2%	2%	2%	2%
8. Policy engagement	5%	5%	5%	5%
9.1 Business activities that drive the energy mix to low-carbon energy	4%	4%	4%	4%
9.2 Business activities that contribute to the reduction of the energy demand	3%	3%	3%	3%
9.3 Business activities that develop CCS, CCUS technologies and negative emissions	3%	3%	3%	3%
9. Business model	10%	10%	10%	10%

1.3. RESULTS OF THE COMPANY ASSESSMENTS

INTRODUCTION

This section presents the results of the ACT oil and gas methodology road test. This summary includes an overall comparison of results per module and a brief outlook on the indicator-level results per company.

The road test revealed that for the quantitative modules (Modules 1-4), many companies reported the data being requested as commercially sensitive, particularly in terms of the current and future energy mixes required in the LCA calculators, and future expenditures in low-carbon technologies and research and development in low-carbon solutions. As a result, the quantitative modules were assessed with incomplete data. Here, it is important to note that low achievement may indicate a lack of transparency as opposed to underperformance. To identify how non-disclosure may have affected module and indicator results per company, we have included a graph displaying which indicators were completed per module and per company.



OVERALL RESULTS

FIGURE 6: OVERALL RESULTS

The average final score for each score dimension is **7.5D**-, where 12.2B+ was the highest and 1.6D- the lowest score. As shown in Figure 7, only 4 companies achieved a performance score above 50%. The top performer's score is driven by its effective strategy aimed at switching their offer from natural gas to biogas. It is also a result of more transparency in their disclosure, as they provided information for all the LCA calculators. Conversely, most companies struggled to achieve a good score in these sections because of non-disclosure.

Midstream companies performed better than several integrated players. Their results are partially explained by the lower weightings in Module 2. Integrated players are required to provide data for more indicators in order to obtain better scores. This is consistent with the larger scope of their business activities.



FIGURE 7: FINAL SCORES OF THE OIL & GAS ROAD TEST

The average narrative score was **D**, indicating an overall low alignment with a low-carbon scenario. In general, companies received lower narrative scores for the Consistency and Credibility dimension, where analysts noted the issues with data disclosure. Risk was another dimension that received lower scores in general. Companies are not diversifying their production and engaging in scenario stress testing at a rate that would be expected in a low-carbon scenario. A few companies were also downgraded due to reputational issues. Here, the analysis relied on online news research only, which may be affected by the analyst's location and may not be comprehensive. For ACT's rollout, providing scorers with a list of sources to review will strengthen data collection and scoring.

The average trend score was rated **negative** (-) for the oil and gas sector. This indicates companies are not on the pathway to a low-carbon scenario and it is unlikely that this trend will be reversed in the near future. Again, this score reflects the companies' lack of transparency. As described previously, the trend score considers the results of indicators 1.1, 1.2, 2.3, and 4.2, among others. These specific indicators rely on companies disclosing data for the LCA emissions intensity calculator. Non-disclosure was scored with 0 points. Without the results from the LCA calculators, analysts were unable to compare past, present and future performance as required by the ACT methodology. As agreed with the Steering Committee, nondisclosure was penalised in the narrative score and in the trend score, as it is not possible to assess whether a company is planning to match its commitments with its projected outputs. Only 3 companies obtained a positive trend score.

OVERALL PROFILE OF THE 5 ACT DIMENSIONS

Like all ACT assessments, the oil and gas road test provides a snapshot of sector performance in each of the 5 ACT dimensions (see Figure 8). The following paragraphs summarize sector-level trends and challenges in these 5 elements. These insights do not apply uniformly to all participant companies and should not be interpreted as indicative of company performance. This is a high-level analysis of common trends identified throughout the road test. Company-specific insights are given in the company feedback reports.



FIGURE 8: ACT ASSESSMENT FRAMEWORK

Commitment

Companies in the oil and gas sector have for the most part set targets to decrease Scope 1+2 emissions. There are some companies that have yet to make these commitments public, which results in lower overall performance in this dimension. Scope 3 targets are less common among companies participating in the road test. Given the sector's climate impact is larger in the use phase of their sold products, companies should aim to implement strategies to reduce their Scope 3 impacts to better align with a low-carbon transition scenario.

Transition plan

Companies in the sector reported exploring low-carbon business activities. However, the level of maturity varies considerably between companies. Participants rarely disclosed information on profitability and effectiveness, limiting the analysts' ability to understand progress in the implementation of transition plans. From a strategic planning perspective, companies in the sector have developed schemes to implement low-carbon technologies and seize the market opportunities created by these. But, with the limited information available, it is not possible to assess if the transition plans are ambitious enough to align with a low-carbon economy.

Present

Most companies have developed sustainability strategies and report current and past targets to tackle their climate impacts. A small sub-set of companies have included Scope 3 emissions in present targets, but this is an area in which more ambition is required to align with a low-carbon scenario. Current levels of transparency are still below ACT's standard and this is an overall challenge for most companies in the sector.

More transparency would provide a clearer picture of how the sector is progressing in the transition to a lowcarbon economy.

Legacy

Past performance varies between companies. Some companies in the road test have not yet made their lowcarbon strategies public and are just starting their sustainability journey. Overall, while some companies are implementing sustainability strategies, the sector is not widely recognised for previous achievements in tackling its climate impact, and this is consistent with the ACT assessment results.

Consistency

Low disclosure rates in the quantitative modules make the assessment of consistency challenging. Most companies did not provide future data, which made comparisons between commitments and projected achievement unfeasible. The Steering Committee agreed that non-disclosure was an indication of overall lower performance in consistency and transparency, which should be penalized in the scores. Therefore, the road test highlighted the current underperformance of the oil and gas sector in this ACT dimension.

AVERAGE RATINGS OF PER MODULE FOR THE PERFORMANCE SCORE

Overall, the sector had a low performance in the ACT assessment (see Figure 9). A majority of modules had average scores below 50%. Only **Module 5. Management** and **Module 8. Policy engagement** had average scores above 50%. Quantitative modules (modules 1-4) had lower average scores than qualitative modules (modules 5-9). The lowest scoring modules were **Module 2. Material investment** and **Module 3. Intangible investment**.

As noted, the poor overall results in the quantitative modules are impacted by the lack of data (nondisclosure). Participant companies considered the information requested to be confidential and/or difficult to obtain.

Disclosure for the qualitative modules (5-9) was more complete. And, while companies had multiple comments on the concepts and definitions used throughout the Excel tool, most participants provided relevant information for the assessment of these modules. Higher achievement in the qualitative modules indicates companies have implemented sustainability strategies and are reporting them for the assessment. High scores in **5. Management** and **8. Policy engagement** show the sector has implemented internal organisational structures that are tasked with overseeing climate change initiatives at a corporate level. The road test found the main challenges lie on the implementation and effectiveness of said sustainability strategies.

Average scores per module

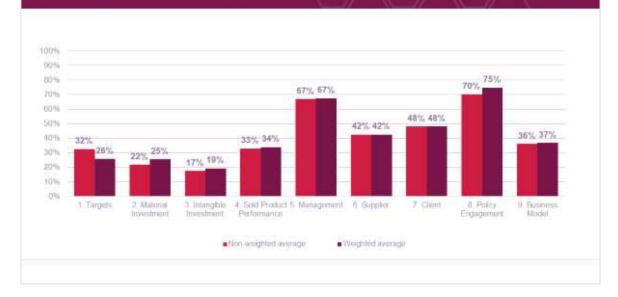


FIGURE 9: AVERAGE SCORES PER MODULE - OIL AND GAS SECTOR

MODULE 1. TARGETS (26%)

TABLE 4: MODULE 1. COMPLETION RATE

Modul	с I.	Tary	JELS										
Indicator	1	2	3	4	5	6	7	8	9	10	11	12	13
1.1 Alignment of scope 1+2 emissions reduction targets													
1.2 Alignment of scope 1+2+3 emissions reduction targets													
1.3 Time horizon of targets													
1.4 Historic target ambition and company performance													
Completed data Incomplete data													

Module 1. Targets

Module 1 assesses a company's long-term targets and aims to compare these with future projected emission intensity values, as calculated by the LCA tools. Most companies (7 out of 13) reported their targets, but did not provide information on future energy outputs, so no emissions intensity value was available to compare the companies' commitment gaps. The overall average score was 26%.

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Module 1. Targets

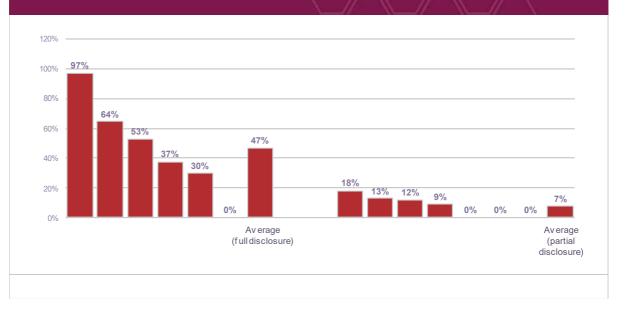


FIGURE 10: MODULE 1. TARGETS - WEIGHTED SCORES

As shown in Figure 10, only one company obtained over 90% in this Module. Their high score is explained by it using its SBT (still to be formally validated by the SBTi) to project its future intensities.

The graph also shows the difference in average scores between companies that reported all indicators, and those that provided just a partial disclosure. Companies that disclosed data obtained on average 47%, while companies that failed to disclose achieved on average only 7%. Therefore, non-disclosure and lack of transparency had a large negative impact in the performance score.

MODULE 2. MATERIAL INVESTMENT (25%)

Module 2 measures material investments in low-carbon activities and technologies. It uses the LCA calculator to estimate how Scope 1+2 emissions intensity values have evolved over time. It also requests figures for investment in low-carbon technologies, and the share of that investment in overall CAPEX.

The calculation for Indicator 2.4 was not detailed in the version of the methodology used for this road test. However, during the assessment process and with the support of the Steering Committee, South Pole reached out to Carbon Tracker to obtain data to include in 2.4. Carbon Tracker assesses the extent to which the unsanctioned projects (discovered but not yet sanctioned for development) of upstream and integrated companies align with two low-carbon scenarios: the B2DS (Beyond 2 Degrees) and the SDS (Sustainable Development) scenarios.² The data used reflects the percentage of CAPEX under a 'Stated Policies' (STEPS) scenario (considered 'business as usual' and aligned with a 50% chance of 2.7°C warming by 2100), that falls *outside* the carbon budget of a B2DS and a SDS scenario for each company (higher % falling outside the low-carbon scenarios = worse performance). South Pole used the inversed calculation of this indicator (1 – the percentage of unsanctioned projects outside the B2DS carbon budget) to award a score in 2.4, also presented as a percentage. Therefore, higher percentages equal higher scores, and indicate that a larger

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² The B2DS scenario is consistent with a 50% chance of approximately 1.6°C warming by 2100, and the SDS scenario is consistent with a 50% chance of 1.65°C warming by 2100.

proportion of the company's unsanctioned portfolio is within the B2DS carbon budget. This indicator is only available for upstream and integrated players, undertaking exploration and production activities. It excludes downstream players and is consistent with the 0% weighting given to indicator 2.4 for downstream players.

Non-disclosure issues were also present in module 2, with only one company providing data for all indicators in this module. The best score was obtained by a downstream company which was not required to provide data for indicator 2.2 and was not scored for indicator 2.4. Compared to other companies, the top rated company had a low disclosure rate as it did not provide data for 2.2 and 2.5. It still achieved a higher score than companies that did disclose for those 2 indicators.

Several companies were unwilling to provide present and future CAPEX data in general. For the score, the Excel calculation tool automatically calculates the percentages of expenditures in low-carbon technologies and this figure is then used to calculate the score. An option worth exploring is to request companies report the share of capital expenditure in low-carbon technologies instead of the spend figure. This may encourage companies to provide the data without the confidentiality issues.

TABLE 5: MODULE 2. COMPLETION RATE

Indicator	1	2	3	4	5	6	7	8	9	10	11	12	13
2.1 Trend in past scope 1+2 emissions intensity													
2.2 Emissions lock-in													
2.3 Trend in future scope 1+2 emissions intensity													
2.4 Share of unsanctioned projects within carbon budget (Carbon Tracker database)													
2.5 Low carbon and mitigation technologies CAPEX share													
2.6 CDR and CCS, CCUS CAPEX share													
Completed data													

Module 2. Material investment

Module 2. Material investment

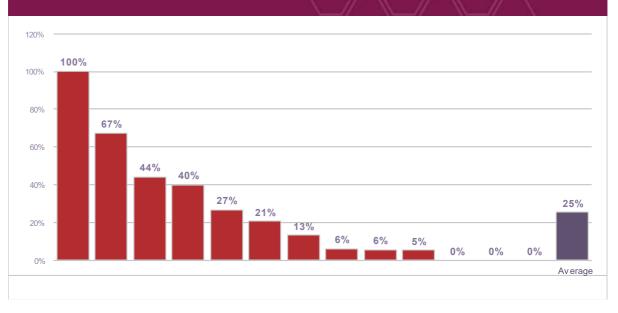


FIGURE 11: MODULE 2. MATERIAL INVESTMENT - WEIGHTED SCORES

Best scores were obtained by downstream companies and 2 integrated companies. Both integrated companies had the highest disclosure rates in this module, resulting in higher scores. Like downstream companies, midstream companies are not required to provide data for 2.2 but their scores were still below those of downstream companies.

MODULE 3. INTANGIBLE INVESTMENT (19%)

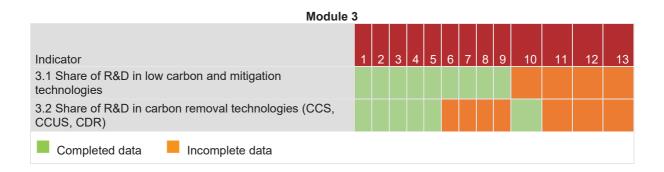
Module 3 measures investments in the research and development of low-carbon and mitigation technologies. As in module 2, this module had a high non-disclosure rate because companies are not willing to share their expenditure in future research and development. Companies are also required to present expenditure figures in "mature" and "non-mature" technologies. While the methodology provides some examples of "mature" technologies, it does not provide them for "non-mature" technologies. Companies will be more likely to share reliable data if the definitions of these concepts are clarified.

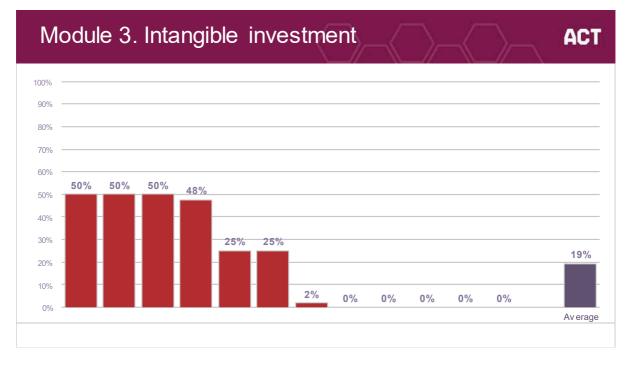
Only four companies completed data for indicator 3.2 (see Table 6). Of these, one was scored with publicly available data and based on estimations from their reported expenditure in its annual report. An issue that might arise when scoring these indicators is how the figures for R&D are measured and whether all companies include similar expense concepts and report them consistently. Providing clearer guidance on what elements of the R&D spend are relevant for the ACT assessment will strengthen the quality of the information obtained and the comparability of the expenditure information provided by companies.

The highest scores in this module were obtained by three companies which achieved a 50% score (see Figure 12). All these companies provided data for indicator 3.1. To score indicator 3.1, the methodology set a benchmark of 6% expenditure in R&D for low-carbon fuel technologies. All companies that provided data for this indicator easily surpassed the 6% benchmark, suggesting that the benchmark should be adjusted to a larger percentage.

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TABLE 6: MODULE 3. COMPLETION RATE







MODULE 4. SOLD PRODUCT PERFORMANCE (34%)

Module 4 analyses companies' past and future scope 1+2 emissions intensity values as calculated in the YLCA tool. Like in other quantitative modules, several companies did not provide data to calculate emission intensity values, which made the assessment of this module more challenging (see Table 7).

Downstream and midstream companies obtained the best results in this module. The highest score obtained was above 90%. This was driven by good results in 4.1, 4.2 and 4.3 which were achieved because the company reported its future emissions intensity by projecting its Science-Based Targets commitments. The Steering Committee was made aware of this approach and it was agreed that calculating future data based on SBT commitments is valid for the ACT assessment. Since this is not explicitly mentioned in the methodology, only one company benefitted from this approach. To ensure that companies that have committed to Science-Based Targets disclose this in their emissions intensity calculators, we suggest future versions of the methodology explicitly mention how SBT commitments can be reported for the LCA calculations.

TABLE 7: MODULE 4. COMPLETION RATE



The road test showed Midstream and Downstream companies have, in general, more engagement with their customers and are pushed further to offer low-carbon products and energy efficiency services. It is also more common for these companies to consider energy efficiency a "main strategic focal point" of their sustainability strategies, scored as Advanced in the ACT assessment. Integrated companies that provided data have a limited offer of low-carbon products. They also offer energy efficiency services but are not often reported as one of the main pillars of their sustainability strategies.

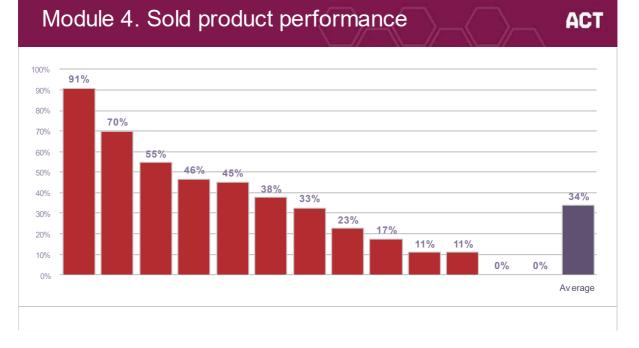


FIGURE 13: MODULE 4. SOLD PRODUCT PERFORMANCE - WEIGHTED SCORES

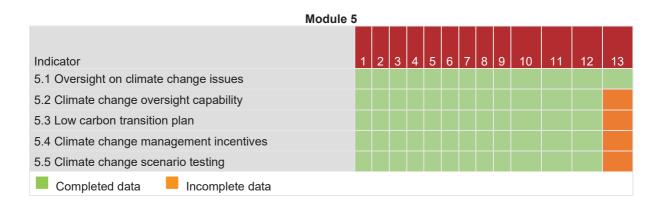
MODULE 5. MANAGEMENT (67%)

Module 5 evaluates whether companies have sound policies, structures, and oversight on climate-related issues. It is the first qualitative module and had an almost 100% completion rate in this road test, as shown in Table 8. Only one company failed to report indicators 5.2–5.5. This is one of the best scored modules, with an average score of 67%.

Compared to the previous quantitative modules, integrated companies scored much better in this module, indicating oversight of climate related issues at the highest corporate level. Top scores surpassed 90%,

achieved by 3 integrated companies and 1 midstream company (see Figure 14). A relevant difference with other modules was the underperformance of downstream companies, none of which scored above the 67% average. Their lower scores were in part driven by the lack of scenario testing.

TABLE 8: MODULE 5. COMPLETION RATE



All companies achieved very high scores in 5.1, with only one failing to achieve 100%. Most companies also received high scores in 5.4, indicating they have set monetary incentives linked to improved sustainability performance. Indicator 5.2, which evaluates the capabilities of a company's climate team, had the lowest scores in this module. To obtain a full score in this indicator, companies should provide the credentials of their climate leading team. Several did not include this in their responses. Some companies explicitly reached out to ask what type of information was required to prove their team's expertise. Making this information request more explicit in the questions or instructions will strengthen the data collection process for this indicator.

Finally, one of the key indicators in the ACT assessment refers to the companies' low-carbon transition plans, which they describe in indicator 5.3. The results for this indicator were highly variable, ranging from 0% to 96%. For the most part, all companies have a low-carbon transition plan but only some were able to illustrate significant advancement and integration of these, for example by providing a detailed description of how the company plans to restructure their assets/portfolio and a scope covering all or almost all business units. Companies with lowest scores have less detailed plans with a limited scope and time-horizon.



FIGURE 14: MODULE 5. MANAGEMENT - WEIGHTED SCORES

MODULE 6. SUPPLIER ENGAGEMENT (42%)

As was the case with most qualitative modules, almost all companies responded to module 6, with the exception of two companies (see Table 9). This module scores the companies' strategies and actions to influence suppliers to improve their sustainability performance. Indicators evaluate the strategy and activities companies are implementing to encourage suppliers to decrease their GHG emissions.

TABLE 9: MODULE 6. COMPLETION RATE



Again, integrated companies performed better than downstream and midstream companies. Companies with the highest scores (above 80%) demonstrated advanced or low-carbon aligned actions aimed at improving their suppliers' climate change impacts (see Figure 15). Only one company obtained 100% in indicator 6.2, while no company obtained 100% in 6.1. In general, companies scored similarly in both indicators, suggesting that the depth of their reported strategies match the activities they have devised to engage suppliers. There are 2 exceptions. The first one, scored with publicly available data, had a significantly higher score in 6.2 than in 6.1. In this case, it is possible that their supplier engagement strategy was not publicly disclosed and could not be evaluated in full. A higher score in 6.1 than in 6.2 suggests the company's strategy is not being implemented successfully.

Module 6. Supplier engagement

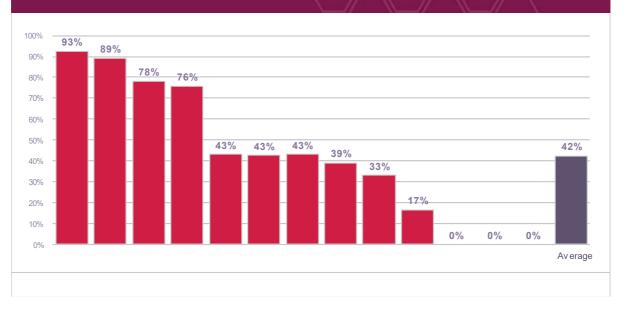


FIGURE 15: MODULE 6. SUPPLIER ENGAGEMENT - WEIGHTED SCORES

MODULE 7. CLIENT ENGAGEMENT (48%)

As shown in Table 10, all companies except one provided full responses for Module 7. This module assesses companies' strategy and activities to influence customer behaviour to reduce their GHG emissions. The midstream companies were the best performers. Each company obtained high scores for indicators 7.1 and 7.2.

TABLE 10: MODULE 7. COMPLETION RATE



Low-carbon aligned criteria require a company to implement a mix of actions to encourage customers to decrease their climate impact, including awareness and education campaigns, monetary incentives, offering low-carbon products, etc. These actions must also target over 90% of customers and must include personalized support for clients representing over 60% of revenues to decrease their GHG emissions. Most companies reported implementing some of these action levers. However, results suggest companies are not implementing several of these strategies at once and covering such a broad percentage of their client base. Therefore, the road test average score is 48% in this module, indicating that companies need to strengthen and broaden the reach of their client engagement activities.

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Module 7. Client

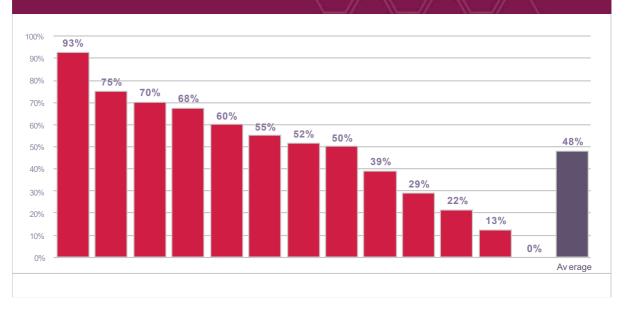


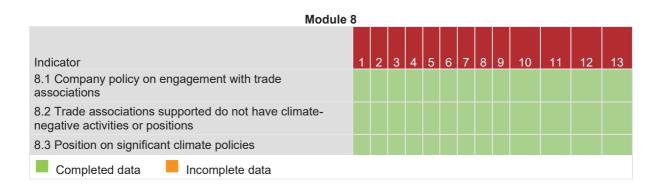
FIGURE 16: MODULE 7. CLIENT - WEIGHTED SCORES

MODULE 8. POLICY ENGAGEMENT (75%)

All companies responded to Module 8. Policy engagement (see Table 11). The module evaluates companies' engagement with trade associations and their public positions on climate policies. Indicator 8.1 requires companies to disclose their internal policies for joining and influencing trade associations. Companies are asked for information on their internal policy and processes for interacting with trade associations. Indicator 8.2 asks if the company supports trade associations with climate-negative positions, but the criteria set by the maturity matrix do not list which associations have climate-negative positions, or which would be the topics and positions considered climate-negative. As currently articulated and phrased, companies can score very well on this basis, which was the case in this road test.

Similarly, indicator 8.3 asks companies to disclose their position on significant climate policies. The maturity matrix used for scoring is based on whether the company supports low-carbon commitments, which is somewhat disconnected from the indicator question. Additionally, it is also not clear which positions should be considered for this assessment. Therefore, providing more guidance to companies regarding the specific topics they should address, and to analysts are the which topics to consider when carrying out the assessment, would result in a more robust evaluation of this indicator.

TABLE 11: MODULE 8 COMPLETION RATE



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Several companies addressed all the requested information and, therefore, obtained very high scores (see Figure 17). The module's average score was 75%. Companies scored using publicly available information did not always disclose their policies and processes for joining, influencing, and addressing inconsistencies with trade associations, which affected their scores. Two other companies did not report any publicly available policy for engaging with trade associations, resulting in low scores in 8.1, and overall low scores compared to the module average.

All companies obtained 100% in indicator 8.2. It is suggested that this was partly as result of the question scoring criteria being very broad and further guidance on which sources to search to review companies' policy positions would help to make the assessment stricter. Mostly good scores were obtained for Indicator 8.3, with only two companies obtaining less than 50% in this indicator. For the most part, companies reported they support international low-carbon commitments, but fewer companies reported leading cross-sectoral initiatives against climate change.

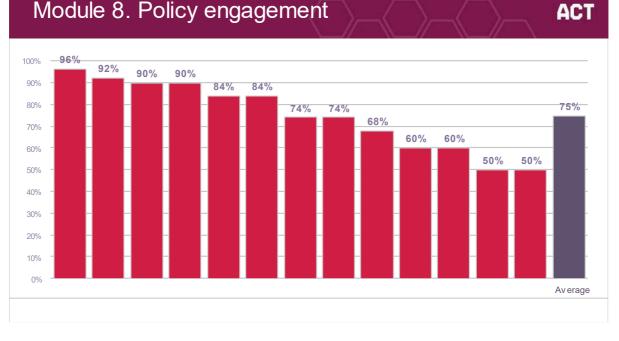


FIGURE 17: MODULE 8. POLICY ENGAGEMENT - WEIGHTED SCORES

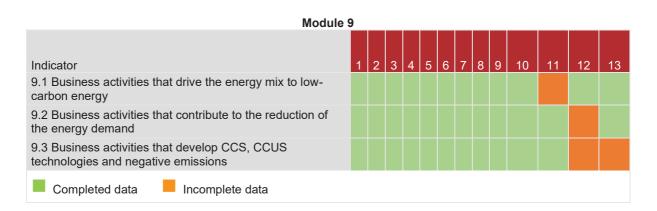
MODULE 9. BUSINESS MODEL (37%)

Most companies responded to all indicators in Module 9, as displayed in Table 12. This module aims to evaluate new business activities that are being undertaken for the low carbon transition. It evaluates activities that contribute to the use of low-carbon energy, reduce energy demand, or increase carbon capture and other negative emissions schemes. Analysts found these indicators more difficult to score because of the subjective nature of the assessment. Companies need to report whether the business activity is profitable and mature. In some cases, companies did not want to disclose profitability. In other cases, it was unclear what would be considered a mature business activity. Therefore, further guidance would provide analysts with a more solid foundation for carrying out the analysis.

While most companies provided information and reported some activities for all the indicators, there were elements requested by the tool that companies were not willing to share. This was the case for turnover or

invested capital in the business activities reported, stage of development including profitability, and how these activities fit into future business plans. Companies considered this information to be commercially sensitive.

TABLE 12: MODULE 9. COMPLETION RATE



The module obtained overall low scores, with an average of 37%. Only three companies obtained scores above 50%, with a highest score of 74%. All companies reported activities for transitioning to low-carbon energy, with varying degrees of success. Fewer companies disclosed activities that contributed to a lower energy demand (indicator 9.2) and to develop carbon capture or similar technologies (9.3).

The results suggest that companies are investing in alternative business activities in line with a low-carbon economy. However, most of the activities reported are still in a pilot or early stages of development, and it is unclear they are being implemented to the degree necessary to drive the evolution of the companies' business models.

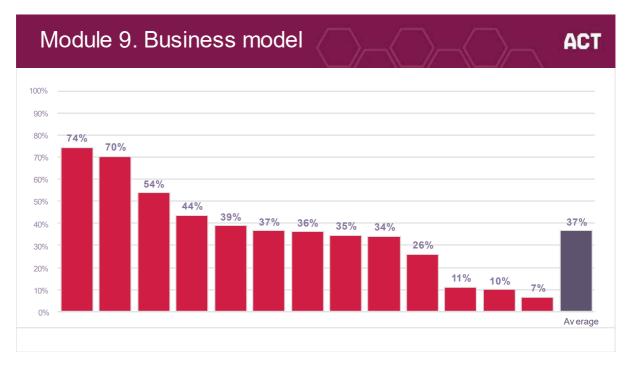


FIGURE 18: MODULE 9. BUSINESS MODEL - WEIGHTED SCORES

AVERAGE ASSESSMENT RATING BY CRITERIA FOR THE NARRATIVE SCORE

The narrative score assesses the overall response of the company in four dimensions: business model and strategy, consistency and credibility, reputation, and risk. Once a company's response was reviewed and scored, analysts completed the narrative score in the tool provided by ACT. It includes the scoring criteria for each dimension using the same achievement levels as other maturity matrices, from Basic (0 points) to Low-carbon transition aligned (4 points), as shown in Figure 19.

		Basic	Standard	Advanced	Next practice	Low-carbon transition aligned
1	Business model and strategy	The company does not seem to be able to be profitable in a low-carbon economy and there is no sign of internal efforts.	ble to be profitable in a low-carbon economy and there is no sign of		The company is in transition toward profitable activities in a low-carbon economy and there is evidence that mechanisms are being put in place for this purpose.	The company's activities seem to be profitable and its short- term strategy and targets are compatible with the low-carbon transition.
2	Consistency and credibility	The past and present actions, and transition plan if there is one, do not demonstrate overall coherence and the company does not seem to be able to achieve its climate objectives. Important efforts are needed for the implementation of a low-carbon transition plan.	potential climate objectives. However, there is some evidence that the company already begun to consider mechanisms to	The past and present actions demonstrate that the company has a climate ambition, but additional efforts may still be needed to achieve climate targets. The company has started to establish an action plan to improve its climate performance.	The past and present actions are coherent with the company's transition plan. Additional efforts are needed but the company has always demonstrated the will to implement the needed mechanisms to stay aligned with its climate goals.	The past and present actions are coherent and already in line or beyond with a low-carbon transition.
3	Reputation	Existence of serious or several environmental controversies harming the company's climate commitments. There is no evidence that the company is addressing or taking the controversies seriously.	Existence of minor environmental controversies. There is no evidence that the company is working to avoid this kind of controversy.	Existence of minor environmental controversies. The company has made reliable commitments to address these types of controversies.	Existence of negligible environmental controversies that do not hamper the company's climate commitments. The company has always resolved environmental controversies with due importance.	No environmental controversies.
4	Risk	There are serious risks that could undermine the company's profitability and its ability to successfully implement a low- carbon transition plan. The company does not consider climate issues related to its activities and remains passive in the face of climate risks.	There are minor risks that could undermine the company's profitability and its ability to successfully implement a low- carbon transition plan. The company has begun to consider climate issues related to its activities.	There are minor potential risks that could undermine the company's profitability and its ability to successfully implement a low- carbon transition plan. However, there is evidence that the company is directing efforts to reduce these risks.	Risks that could undermine the company's profitability and its ability to implement a low-carbon transition plan are very limited. In addition, the company has always addressed and considered climate risks in its strategy.	No potential risk to the future profitability of the company or its ability to implement its transition to a low-carbon economic model.

FIGURE 19: NARRATIVE SCORING MATURITY MATRIX

Analysts found the criteria in the narrative tool to be quite subjective, which increased variance between company scores. To address these concerns, South Pole proposed that analysts continue with the holistic approach but focus on specific modules for each narrative score dimension. While this new approach allowed analysts to obtain a score, it translated into more forgiving scores than expected. After presenting the preliminary results, the narrative scores were revised using the questions included in the ACT Framework document, which addresses a larger scope of actions to consider for this assessment. Table 13 summarizes these adjustments to the narrative assessment process.

TABLE 13: NARRATIVE SCORE - ADDITIONAL GUIDANCE FOR THE ROAD TEST

Narrative score dimension	South Pole proposed relevant modules	ACT Framework questions
Business model and strategy	1. Targets 9. Business Model	 Is the company's short-term strategic direction significantly influenced by decarbonisation efforts? Is the company's core business model threatened by the transition? Is the company strategically repositioning itself, e.g. as a service provider instead of a manufacturer? Are the company climate targets aligned with a low-carbon trajectory? What are the foreseeable implications of meeting these targets? Do they pose significant challenges operationally, technologically, financially or other? Are the company's recent actions such as acquisitions and mergers in line with its targets? Does the company invest R&D in those technologies that it places its faith in for the transition?
Consistency and credibility	 Targets Material investment Intangible investments Management 	 Do the company's recent actions (present and past) show alignment with its climate strategy? Does the company acknowledge climate change as an issue and does it advocate a forward-thinking policy? Is the company's policy position and influence not in conflict with its own climate-related communications? Are there conflicting incentives in place that discourage a low-carbon transition in certain parts of the company? Does the group (that the company is part of) have any conflicting activities that undermine its ability to transition?
Reputation	 Material investment Management (5.2 and 5.3) Policy engagement 	 Is there evidence that the company's behaviour directly impacts climate performance, such as deceptive or fraudulent emissions testing or reporting? Are there serious issues that call into question the credibility of data reported? This relates to the overall credibility of any data reported by the company, which could be damaged by incidents such as accounting scandals or evidence of fraud. Have any extremely serious incidents, calling into question the credibility of the management's ability to deliver on the company strategy or transition plan, happened in the recent past? Has the company previously made any public announcements on which it has failed to deliver, namely announcements related to climate and environmental performance?
Risk	 2. Material investment 4. Sold product performance 5. Management (5.3, 5.5) 9. Business model 	 Does the company's asset base/product portfolio show a lock-in to high-carbon impact technologies that is not consistent with the transition plan? Is there a risk of stranded assets and how significant is it? How reliant is the company on high-carbon activities for its profits? Are there market or policy barriers in place that may block the successful implementation of a particular strategic low-carbon direction? Is the company's technological direction high- risk/unproven/unidirectional/dependent on future innovation that is yet to be realised?

Following the adjustments, the final average narrative score for the sector is **D**, suggesting companies have an overall low performance and are still far from a low-carbon-aligned pathway. As mentioned previously, this score is calculated by assessing each scoring dimension with a maximum score of 4 points. Figure 20 shows the scores obtained per dimension, including the averages. Business model was the best scoring dimension, which obtained an average score of 1.9. This score is still below the 50% achievement, underscoring the underperformance of the sector. The dimensions **Consistency and Credibility** and **Risk** obtained the lowest average scores, with 1.15. This is below 30% achievement. In the case of **Consistency and Credibility**, the low scores are driven by the companies' lack of transparency. The **Risk** dimension was affected by companies failing to report an advanced degree of portfolio diversification, and the inconsistency in scenario testing.

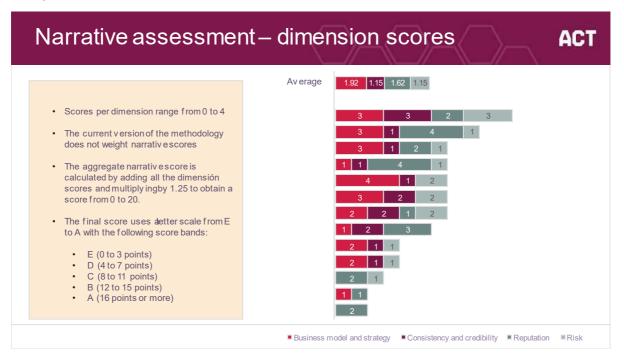


FIGURE 20: NARRATIVE ASSESSMENT SCORES – UNWEIGHTED PER SCORING DIMENSION

Business model

This dimension obtained the highest average score (1.92) but is still below 50% achievement. Only one company obtained the maximum possible score, while 4 companies obtained 3 out of 4 points. These companies are successfully adapting their business activities to a low-carbon economy, by investing and taking advantage of low-carbon market opportunities.

Conversely, 5 companies obtained scores between 0 and 1 points, indicating basic or standard advancement in relation to adapting their business models to the low-carbon transition. These companies reported limited investments for developing a low-carbon offer or have not yet started implementing a low-carbon strategy.

Consistency and credibility

The average score for this dimension is 1.15, a very low score consistent with the minimal transparency rates throughout the sector. This dimension evaluates past, present and future performance and how it drives companies' low-carbon plans and commitments. Since most companies failed to provide information for previous or future sustainability performance, analysts were unable to properly assess progress in this topic. Of the 13 companies, 9 have a basic or standard achievement, indicating their actions are not yet resulting in effective climate action to transition to a low-carbon economy. Only one company obtained a Next Practice

rating (equivalent to 3 points). It reported a low-carbon transition plan with consistent commitments and future performance projections, relying on divestments in natural gas and switching their offering to biogas.

Reputation

This was the second-highest scored dimension of the narrative score, with 1.62 points. As with the other dimensions, this average score indicates the sector is not beyond the 50% achievement, as several companies are facing environmental controversies and have not presented plans to address them, or, if necessary, resolve them. Two companies obtained the maximum score possible (4) as research indicated they have no controversies or reputational issues related to climate impact.

Risk

No companies obtained the maximum possible score in this dimension and only one company obtained a "Next Practice" rating. The result suggests companies are still exposed to climate risks as they have not implemented scenario testing or have not diversified their portfolios sufficiently to align with a low-carbon economy. A total of 8 companies obtained a Basic or Standard rating, suggesting they need to develop more sound processes for identifying climate-related risks and developing strategies to mitigate them.

Final narrative scores

The average narrative score obtained was 7.3, which is equivalent to a high **D** letter score. Only 2 companies obtained a **B** with noticeable differences in their scores. The top two scoring companies had solid results in the **Business Model** dimension. The top scorer had Advanced and Next practice ratings in all dimensions. The second top performer had very good scores also in the **Reputation** dimension, but achieved only a Standard rating in **Consistency and Credibility** and **Risk**.

Most companies obtained a **C** score or above, as shown in Figure 21, but 6 companies had **D** and **E** scores, suggesting they are still lagging behind in the development of low-carbon transition plans, as well as in the implementation of activities aiming to push forward the evolution of their business models. Companies in the sector should work on increasing transparency, boosting their low-carbon offering, and increasing their understanding of climate-related risks affecting their future business activities.

Narrative assessment - Final scores

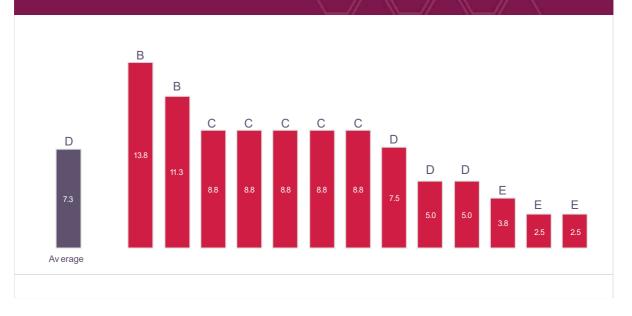


FIGURE 21: NARRATIVE SCORES PER COMPANY

AVENUES OF IMPROVEMENT AND TREND SCORE

As shown in Figure 7, only 3 companies obtained a positive trend score. All these companies reported relevant investments in low-carbon products and are working to substantially increase their offering with more sustainable fuels and low-carbon technologies. These companies have also incorporated suppliers and customers in their sustainability strategies and are implementing schemes to influence GHG emissions reductions beyond the fence, through marketing strategies or by diversifying their sold products.

However, the sector faces serious challenges, as evidenced by the 10 companies that obtained a negative trend score. Areas of improvement are found in most of the aspects assessed by the ACT initiative. Beginning with more transparency in reporting their impacts, companies must prepare for a more demanding market, where sustainability impacts are increasingly being scrutinized. In terms of internal strategy, the sector has not yet diversified their portfolios and developed new business activities that will be viable and profitable in a low-carbon world.

ACT

2. Conclusion and Outlook



SUCCESS OF THE ROAD TEST

There was good engagement from many of the companies involved in the road test, including, in many cases, very thorough feedback on the data collection tool.

South Pole believes that with some work (mainly to improve the usability of the tool and some methodological amendments), the O&G assessment will provide a fair reflection of a company's readiness to transition to a low-carbon economy.

The current assessment methodology illustrates clearly to companies where the main gaps / areas for improvement are and encourages much greater transparency on climate performance, strategies and transition plans and will help to raise the bar for the sector as a whole.

LIMITS OF THE ROAD TEST

Usability of the tool: without making the tool more user-friendly, companies will continue to find it challenging to use the tool and provide the data needed for the assessment. This could lead to a push-back on the methodology / framework itself.

Data confidentiality will be a challenge, initially, for many of the companies. The methodology requires companies to disclose in full commercially sensitive information. This will likely be reflected in (initially) low scores for the sector.

RECOMMENDATIONS TO EXTEND IT TO THE REST OF THE SECTOR

South Pole strongly recommend that before releasing the methodology, enhancements are made to the assessment material (methodology document and data collection tool). South Pole has provided a list of all the comments received by companies and we suggest that these are considered for enhancing all of the methodology and associated tools. These can be found in the accompanying slide deck from the technical working group meeting. The following points summarise the key recommendations to be addressed:

- Provide a more user-friendly tool: The most common feedback theme from companies participating in the road test was associated with companies not understanding what data/information was required from them from the question being asked. This was the case for both the quantitative and qualitative modules. The tool will need clearer instructions and more explanation of what information is required (and in some cases for what purpose) across all modules and calculators, plus access to the full range of definitions. This will improve companies' ability to engage with the assessment the quality of their submission.
- Further enhance the LCA emissions intensity calculator: A core component of the assessment . of modules 1-4 relies on the output of the emissions intensity calculator for three timestamps. Whilst it was agreed during the road test final workshops that these calculators will remain, it is advised to address the comments and recommendations on
 - 1) enabling greater flexibility (including enabling companies to input their own emissions 0 intensity without further details, as long as they can prove that ACT calculation recommendations were followed);
 - o 2) Providing additional and clearer guidance on inputting data (in particular for gas processes);
 - 3) Expanding the fuel types that companies can provide data for, and allowing for shifting 0 fuel type categorisation within each part of the value chain (e.g. merging of fossil and biofuels - two different fuel categories - in midstream). This was a key barrier for many companies

submitting data and addressing this point will greatly enhance a company's ability to provide data.

• Adapt the company classification and boundaries: The road test highlighted that the current framework for classifying companies, i.e. 1) upstream, 2) midstream, 3) downstream and 4) integrated does not cover all of the categories of companies that exist. For example, it is challenging to allocate a company with both midstream and downstream activities to one of these four categories. It is recommended that flexibility or additional categories are included with consideration of how this will influence score weightings and a clear description for both oil and gas processes of what processes are considered for each step.

CONTRIBUTION OF ACT TO ENGAGING COMPANIES IN THE LOW-CARBON TRANSITION

Throughout the road test, most companies showed interest in completing the assessment and acknowledged the role of ACT in encouraging greater shifts within the sector, in relation to increased transparency and ambition around low-carbon transition plans. In addition, companies provided (in some cases very detailed) feedback on the assessment methodology and tools. With a few exceptions, companies in the road test demonstrated they are working towards developing and implementing effective sustainability strategies, but that there is some way to go before these 1) reach the level of ambition required to align with a low-carbon pathway, and 2) are being complemented by real action, for example in transforming their business models.

Given this context, the following themes emerged in relation to the contribution of ACT, and the road test process, in engaging companies in the low-carbon transition:

- Companies understand the importance of having and communicating a robust and ambitious sustainability strategy: Some companies in the road test had sustainability strategies or low-carbon plans in the development process, but not yet finalised or published. These companies indicated their plans will be made publicly available once the plans are approved by their executive boards, and acknowledged that this would improve their performance in the assessment.
- A few companies are not yet reporting through CDP but plan to do so in the next year. Their participation in the ACT road test suggests they are interested in disclosing their climate impacts and actively engaging in the development of more comprehensive reporting mechanisms.
- Companies are better aware the level of transparency being called for: Companies acknowledged that the ACT assessment is more ambitious than other frameworks, and recognise the need to update their GHG accounting and push for a higher degree of transparency in order to perform well in the assessment. However, the feedback from companies and significant data confidentiality concerns suggests it will take some time for them to adjust to this new standard.