ACT

ROADTEST REPORT

Assessing low-Carbon Transition

Agriculture & Agrifood

May 2022

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SUPPORTED BY:

Co-funded by the European Union

TECHNICAL ASSISTANCE ON THE SCENARIOS PROVIDED BY:

TECHNICAL ASSISTANCE ON THE ROAD TEST PROVIDED BY:

Background and purpose of the document

This document is part of the Assessing low-Carbon Transition (ACT) initiative and provides the main details of the ACT Agriculture & Agrifood road test. As part of the development of a new ACT sector methodology, this road test is conducted to improve the draft methodology developed by the Technical Working Group.

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

The road test of an ACT sector methodology implies the production of detailed feedback and associated reports from the companies involved in the process, which remain confidential. This report aims to provide key findings of the road test and results for the sample of companies assessed.

Contents

1. ACT Agriculture & Agrifood Sector

1.1. CONTEXT OF THE ROAD TEST

AGRICULTURE & AGRIFOOD SECTOR

The land sector is responsible for 10-12 Gt CO_2e/year of net greenhouse gas (GHG) emissions – approximately a quarter of global GHG emissions. Half of these are driven by agriculture, while the rest derive from land use, land-use change and forestry. The largest contributions from agriculture arise from enteric fermentation, manure from ruminant livestock production, crop-related fertilization practices and soil GHG emissions. In addition, some 5% of emissions related to food production come after the farm gate, up to but not including retail. Therefore, it is clear that in order to decarbonize the agriculture & agrifood sector, the largest GHG emissions reduction will need to be achieved at the agricultural production phase.

CONTRIBUTING TO ACT: NEW SECTOR DEVELOPMENT

Since 2015 and COP21, ADEME and CDP have been working together on developing the 'Assessing low-Carbon Transition' (ACT) initiative, a mechanism for assessing companies that have set climate commitments and want to take climate action in line with the Paris Agreement.

The ACT methodologies use 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 pathway.

This methodology is based on a sectoral approach. ACT's ambition is to develop assessment approaches for the most high-impact sectors in terms of CO_2 emissions. Tools and methods need to be adapted for each new sectoral development process to accurately reflect their impact on climate change. The stages of methodology development are as follows:

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

So far, the methodologies for Electric Utilities, Autos, Retail, Cement, Transport, Oil & Gas, Building, Real Estate, Property Developer and Generic have been released. Several more are still in development.

The purpose of this document is to report on the road test carried out for the Agriculture & Agrifood methodology. This document summarizes the main elements and results of the road test and presents the key learnings from the project.

GOALS OF THE ROAD TEST

The project's objectives are the following:

- Broadening the scope of ACT by delivering a new sector methodology that covers both agriculture and agrifood;
- Testing the consistency of a new methodology (including data requirements from a company perspective) and tool that have been previously drafted;

- Testing the new indicators specific to the Agriculture & Agrifood methodology;
- Identifying and keeping track of challenges and gaps in data availability;
- Reviewing feedback from all stakeholders (companies and assessors) and suggesting solutions;
- Updating the methodology.

PHASE 1: RECRUITMENT OF COMPANIES

The methodology considers four segments of companies covering most companies with an activity in the food and beverage value chain: agriculture, agrifood, integrated, and food and beverage services. Integrated companies are companies with activities in both agricultural production and food processing.

A particular focus was placed on the selection of voluntary companies. The main objective was to assess a representative and geographically diverse sample of the agriculture & agrifood sector.

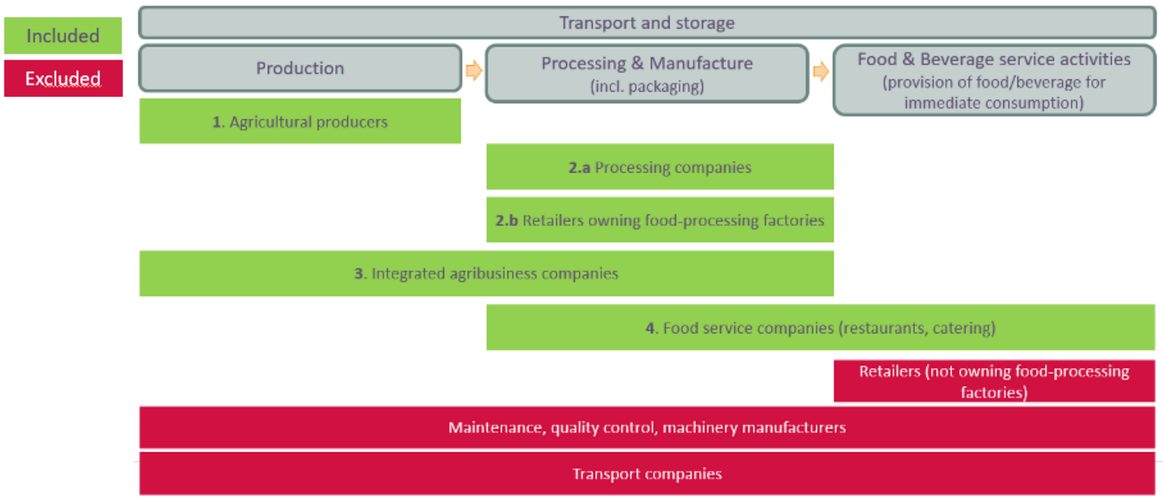


FIGURE 1: SCOPE OF THE ACT AGRICULTURE & AGRIFOOD METHODOLOGY

24 companies participated voluntarily, and five additional companies were chosen and assessed based on public data. In total, the road test sample thus consisted of 29 companies with a diverse range of activities, sizes, and levels of maturity in terms of climate strategy:

FIGURE 2: VOLUNTARY COMPANIES PARTICIPATING IN THE AGRICULTURE & AGRIFOOD ROAD TEST

AGRICULTURAL COMPANIES

- Tendriade
- Elivia (Terrena)
- Public data assessment n°1

INTEGRATED COMPANIES

- Aqualande
- Les Vignerons de Buzet
- Côteaux Nantais
- Tereos Brasil
- Cooperl
- Public data assessment n°2

FOOD & BEVERAGE SERVICES

- McDonald's
- Groupe Butard Paris
- Restoria
- Public data assessment n°3

AGRIFOOD COMPANIES (DIRECT EMISSIONS <40%)

- Agrial
- Fiée des lois (AgroMousquetaires)
- LDC
- Lecofruit
- Nestlé
- Royal Canin
- Triballat Noyal
- Labeyrie
- Lact'Union
- Léa Nature
- Boursin (Bel)
- Greenyard
- Public data assessment n°4
- Public data assessment n°5

AGRIFOOD COMPANIES (DIRECT EMISSIONS >40%)

- Hennessy
- Groupe Kirène

PHASE 2: ACT ASSESSMENT

ASSESSMENT PROCESS FOR VOLUNTARY COMPANIES

Each company received comprehensive support throughout the ACT Agriculture & Agrifood road test provided by ESPERE, TOOVALU, PRE and EVEA.

FIGURE 3: ASSESSMENT PROCESS FOR VOLUNTARY COMPANIES

1. **Kick-off meeting:** This meeting was the first contact between companies and their analysts. It was the opportunity to present the ACT methodology and the agriculture & agrifood specificities, to discuss the first step of the assessment (data collection). The analyst also presented the questionnaire that companies must fill in.
2. **Data collection with company**: Each company had to collect the data requested in the questionnaire to complete the assessment. All companies were encouraged to have a critical point

of view on the methodology and the tool in order to improve them. To make sure that every company was on track in the data collection process and that they were collecting relevant and accurate internal and external data, an intermediary meeting was set up with the analyst for a first pre-review. All questions were addressed. Those that could not be answered by the analysts were addressed during the Steering Committee meetings with the analysts, CDP and ADEME. Some assessments required more than one intermediate meeting, depending on the company's level of maturity with regard to its climate strategy.

3. **ACT assessment by analyst:** assessments were conducted by analysts from ESPERE, TOOVALU, PRE and EVEA. These assessments allowed the team to identify bugs and issues with the questionnaire, the assessment tool and the methodology. Additional technical meetings were organized to discuss specific points before the finalization of the assessment, in order to provide relevant results to the companies.
4. **Tailored feedback and scores with company:** each company received individual feedback on their assessment. In this meeting, the analyst explained the score and the company could ask clarifying questions. After this meeting, feedback from companies on the road test was collected through a satisfaction questionnaire.
5. **Final meeting with group of companies to discuss lessons learned:** the final Technical Working Group meeting took place on the 26th of October 2021 in Paris. During this meeting (with participants both in Paris and online), the results of the road test were presented, and the main updates on the methodology as well. Then, the stakeholders gave their feedback on the road test, and it led to open discussions.

ASSESSMENT PROCESS FOR COMPANIES ASSESSED WITH PUBLIC DATA

Five companies were assessed based on public data. To carry out these assessments, the analysts used the most relevant public data available. This exercise presents significant challenges due to the limited availability of accurate data and proofs, as required by the ACT methodology.

INTERNAL QUALITY CHECK PROCESS

Each assessment was reviewed internally by the technical team, first within ESPERE, TOOVALU, PRE or EVEA and then among all the analysts, in order to ensure consistency between all assessments. In addition, intermediary meetings with the entire technical team were regularly conducted to check that the analysts correctly understood all indicators and data requirements in both the questionnaire and the tool.

This review process also enabled the technical team to gain an overview of the road test in order to provide feedback and potential methodological improvements to the Technical Working Group.

PHASE 3: FEEDBACK AND IMPROVEMENTS

A series of meetings were organized to discuss potential solutions for improving the methodology:

- **Internal meetings between analysts**
- **Technical Working Group meeting:** A TWG was organized at the end of October 2021. In this meeting, companies shared their experience with the other members, average scores for the road test were presented and areas of improvement were discussed. Based on company feedback and previous technical meetings, analysts proposed a set of recommendations to improve the methodology and the assessment. These propositions were then formalized in an Excel report.

1.2. ACT AGRICULTURE & AGRIFOOD METHODOLOGY

GENERAL APPROACH

The main objective of the ACT methodology is to assess, by sector, a company's maturity with respect to the transition to a low-carbon economy. The ACT methodology uses the Sectoral Decarbonization Approach (SDA) developed by the Science Based Targets initiative (SBTi), which itself is based on the scenarios of the International Energy Agency (IEA) for the description of the available carbon budget in a "low-carbon pathway". The SDA determines, for each company, the theoretical carbon intensity pathway to follow in order to be aligned with a low-carbon target. ACT methodology is also focusing on actions taken by companies to achieve the targets. Specifically for the agriculture & agrifood sectors, additional aspects have been integrated into the methodology development, which are key elements for their decarbonization. This includes notably climate change adaptation, actions against deforestation and negative emissions.

For more information, please refer to ACT Framework and other documents available on the website: https://actinitiative.org/

FOCUS ON THE ACT AGRICULTURE & AGRIFOOD SCORE

The ACT Agriculture & Agrifood rating is performed in compliance with the ACT Framework. The assessment generates a three-part rating:

- A **performance score** as a number from 1 (lowest) to 20 (highest)
- A **narrative score** as a letter from E (lowest) to A (highest)
- A **trend score** as either "-" for worsening, "=" for stable or "+" for improving.

PERFORMANCE SCORE

The performance score is structured according to nine modules defined by the ACT Framework. The methodology is based on both quantitative and qualitative modules. They are composed of indicators that have been developed and adapted to consider the specificities of the agricultural and agrifood sector.

Some modules have a fixed weighting defined by the ACT Sector Methodologies Development guidelines, while others have a variable weighting depending on the company's profile.

	Agriculture		Agrifood				Integrated		Food service
	All	Animal feed producers	Direct emissions < 40%		Direct emissions >= 40%		All	Animal feed producers	
Targets	15%								
Material Investments	40%	35%	8%	8%	27% x D	22% x D	38% x D		8%
Immaterial investments	6%		5%				5%		2%
Sold Product Performance	0%	5%	30%	30%	11% + 27% x I	16% + 22% x I	38% x I	38% x I	30%
Management	10%								
Supplier engagement	7%		10%				10%		10%
Client engagement	7%		7%				7%		10%
Policy engagement	5%		5%				5%		5%
Business model	10%								

FIGURE 4: MODULE WEIGHTINGS OF THE ACT AGRICULTURE & AGRIFOOD METHODOLOGY

NARRATIVE ASSESSMENT SCORE

The narrative assessment score is based on three ACT Framework standard criteria:

- Business model and strategy;
- Consistency and credibility;
- Reputation with regard to climate change issues.

Two other aspects were added for the agriculture & agrifood sector:

- Climate adaptation
- Negative externalities

TREND SCORE

The trend score indicates the future direction of change within the company. This score was guided by a table of identified relevant performance indicators (detailed in the methodology) and automatically calculated by the online tool.

OVERALL RATING

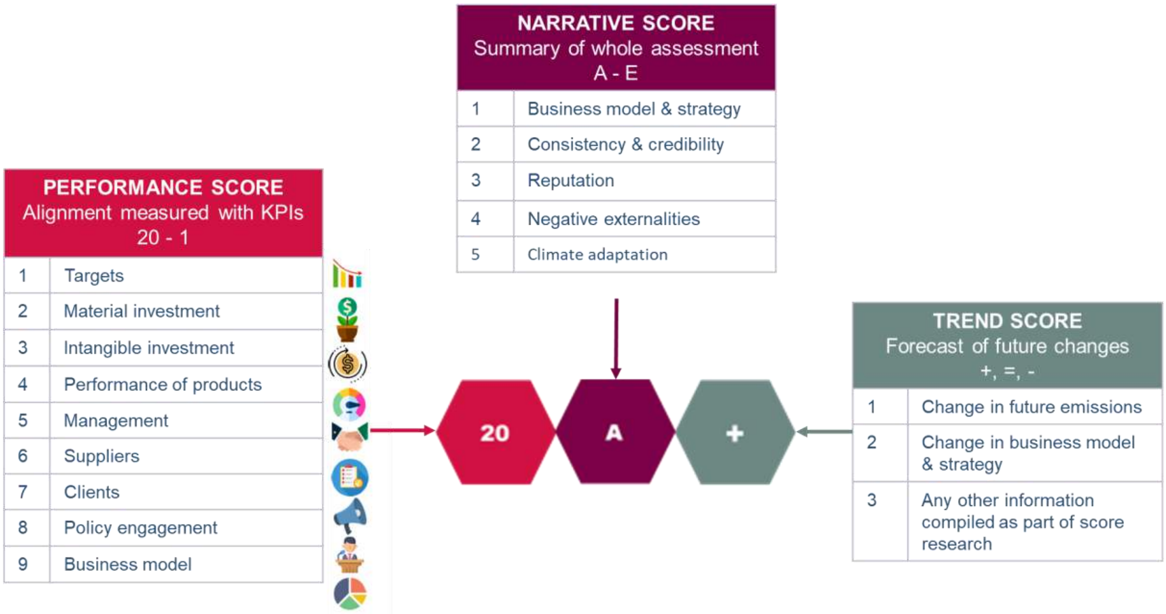


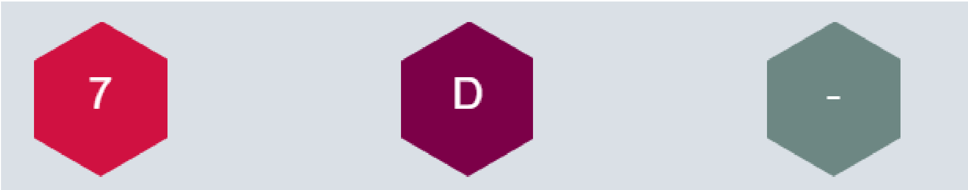
FIGURE 5: OVERALL RATING STRUCTURE AND MODULES

1.3. RESULTS OF THE COMPANY ASSESSMENTS

INTRODUCTION

This section presents the overall results of the company assessments carried out as part of the road test. The scores presented in this report were collected using the latest version (V.0.9.7) of the tool.

OVERALL RESULTS



Performance score | Narrative score | Trend score

PERFORMANCE SCORE

AVERAGE RATINGS FOR THE PERFORMANCE SCORE

The average sector performance score is 7, with a minimum score of 2 and a maximum score of 13. This gap in the performance score underlines the different levels of maturity that were observed in companies' climate strategies. With relatively minor improvements to formalization and GHG reporting, less mature companies can improve the quality of their response. For example, priorities could be given to the comprehensive formalization of their climate strategy regarding supplier and client engagement, or the definition of consistent GHG reduction targets. The deployment of ambitious action plans to reduce their products' footprint and transform the business models would also allow companies to obtain better overall performances.

Performance score	
AVERAGE	7
MAX	13
MIN	2

FIGURE 6: AVERAGE RATINGS FOR THE PERFORMANCE SCORE

AVERAGE RATINGS PER MODULE FOR THE PERFORMANCE SCORE

The graph below shows the average score obtained by the assessed companies. The performance score is calculated by combining four quantitative modules and five qualitative modules.

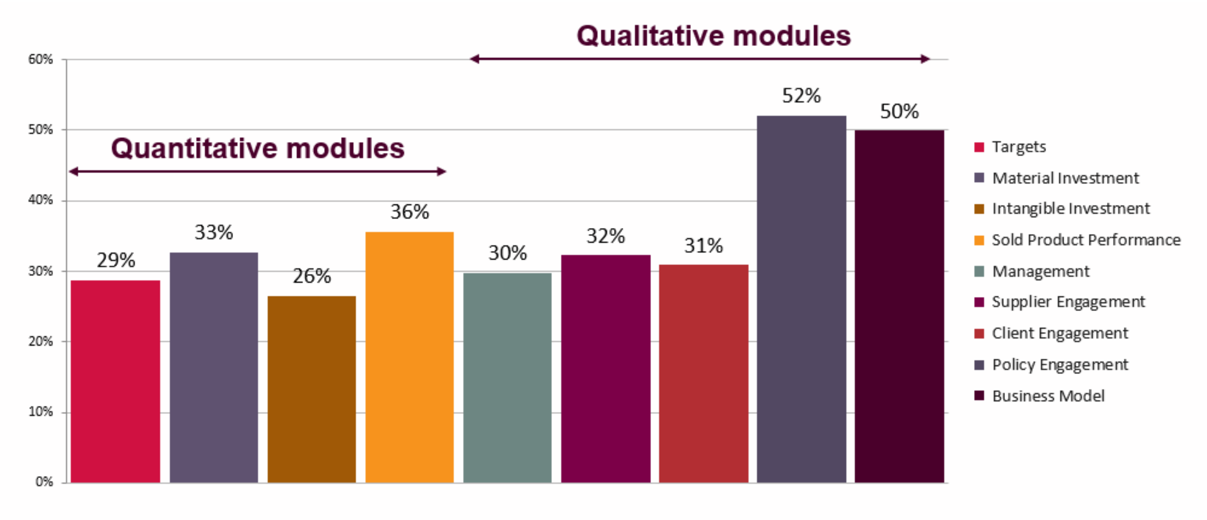


FIGURE 7: AVERAGE RATING PER MODULE FOR THE PERFORMANCE SCORE

Figure 8 shows the lowest, highest and average module-level scores obtained by the assessed companies.

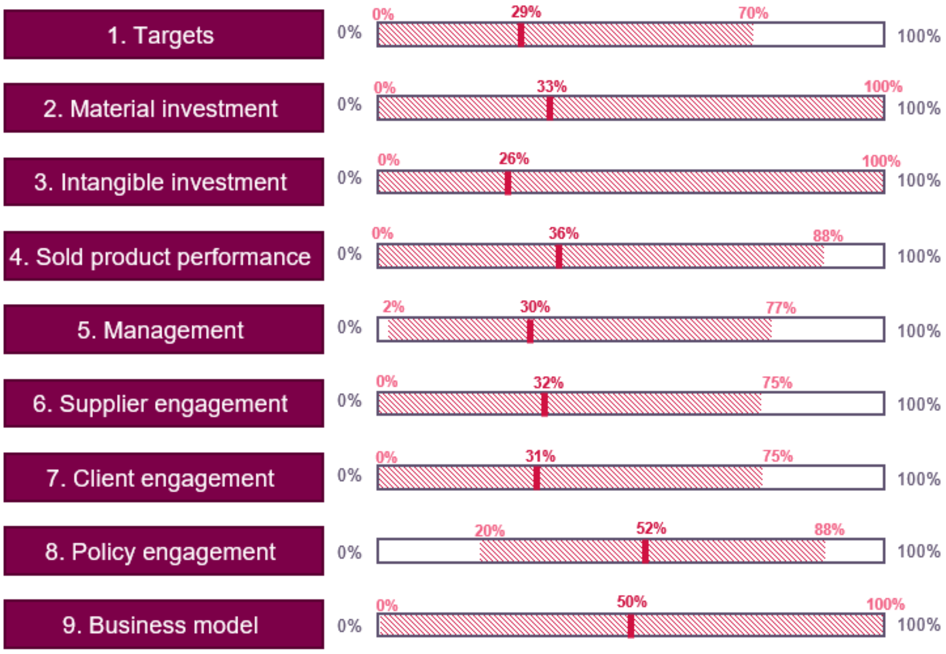


FIGURE 8: AVERAGE RATINGS AND DISTRIBUTION PER MODULE FOR THE PERFORMANCE SCORE

QUANTITATIVE MODULES:

- **Targets (average score: 29%):** this module (weighted at 15%) exemplifies the differing levels of maturity that were observed between companies in terms of their low-carbon transition preparedness. Targets are compared against the relevant low-carbon benchmarks using the gap method. 28% of the assessed companies did not provide any data for this module. Moreover, 60%

of them did not achieve their previous and current targets. This result shows a need for companies to more effectively monitor and plan resources to achieve their emissions reduction targets.

- **Material investment (average score: 33%):** This module is linked to the company's direct emissions and has a variable weighting (between 8% and 40%) depending on the company's profile. There is a high standard deviation for this module (scores are between 0% and 100%). The low scores for some companies were partly due to issues with the availability of past emissions intensity data.

  In this module, we also take into account specific sectoral indicators (such as "food wastage reduction" and "implementation of better farming practices"). Regarding food wastage reduction, the results were either "basic" (no data on food wastage, or below the ambition of the scenario) or "aligned" (the company has performed better than the ambition of the scenario). This also helps to explain the high standard deviation.

- **Intangible investment (average score: 26%):** the weighting for the intangible investment module in ACT Agriculture & Agrifood is quite low, at 2-6% (depending on the company's profile). This module also has a high standard deviation (scores are between 0% and 100%), with an average score of 26% (the lowest average score of all modules).

  Most assessed companies scored 0% in the indicator "share of research & development in mitigation and adaptation technologies", meaning that these companies invest less than 10% of total R&D in mitigation and adaptation technologies. Similarly, most companies scored 0% in the indicator "personal training funding for farmers", meaning that less than 20% of farmers and technical team members receive climate-specific training, and that this training constitutes less than 5% of total training costs).

- **Sold product performance (average score: 36%):** This module is linked to the company's indirect emissions and has a variable weighting (between 0% and 32%) depending on the company's profile.

  The first indicator, "trend in past upstream emissions intensity", was difficult to assess, because of the lack of upstream emissions monitoring and data from the assessed companies (the trend is calculated for a five-year period up to the reporting year).

  "Action on deforestation" is assessed either in module 2 (Material investments) or module 4 (Sold product performance) or both, depending on the company's profile. 40% of the assessed companies show strong commitments and are implementing actions to tackle deforestation, such as supply chain traceability systems and reforestation efforts. Some agricultural commodities (cattle, palm oil, soy, cocoa and coffee) cause a high level of deforestation; however, this topic does not apply to all companies at the same level of materiality.

  Regarding the last indicator, "share of low-carbon products in total sold products", the analysis was done using two dimensions ("share of low-carbon products at Reporting Year-5" and "performance of products per category at Reporting Year"). The lack of data and monitoring made it difficult to assess the first dimension.

QUALITATIVE MODULES:

On average, companies obtained rather low scores for "management", "supplier engagement" and "client engagement" (between 30% and 32%) and better scores for the two last modules ("policy engagement" and "business model": between 50% and 52%)

- **Management (average score: 30%):** This module has a set of six indicators reflecting the overall management of the company's low-carbon strategy. The module has a 10% weighting for all company profiles. Three of the six indicators ("oversight of climate change issues", "climate change oversight capability" and "waste reduction strategy") received relatively high average scores, which suggests that climate issues have been mostly integrated at the highest level of decision making within the company structure. However, the remaining three indicators ("low-carbon transition plan", "climate change management strategies", "climate change scenario testing") received lower scores, stressing the importance of formalizing and implementing climate change issues into the governance and management systems.

- **Supplier engagement (average score: 32%):** this score shows that while most assessed companies do have strategies to influence suppliers to reduce their GHG emissions, these strategies often only applies to a few suppliers. This can be explained by the fact that many companies have only recently started to engage their suppliers in a low-carbon transition, and that they have implemented only basic actions at this stage.
- **Client engagement (average score: 31%):** the score for "client engagement" is roughly the same as the one for "supplier engagement". At this stage, there is either a passive approach or a basic strategy to influence customer behaviour to reduce their GHG emissions. No assessed company reached the "low-carbon aligned" level on the maturity matrix (either for the "strategy" or "activities" indicators).
- **Policy engagement (average score: 52%):** this module's weighting is fixed at 5% for all company profiles: it received the best average result, with scores between 20% and 88%. Most companies are involved in multiple trade associations that support policies against climate change. The best average score for any indicator is the one for "position on significant climate policies" (average score: 68%). This means that most companies assessed publicly commit to international low-carbon commitments, and are engaged in or lead sectoral initiatives against climate change.
- **Business model (average score: 50%):** the business model module received the second-highest score after policy engagement. Most of the companies have started to implement new business models to prepare for their transition to a low-carbon economy. Business activities were assessed in two different indicators:
    - "Business activities shifting supply from highly emissive to low-carbon products". Here, the most significant activities are the following:
        - Animal-based proteins: 41% of companies report reducing the amount of animal-based proteins they produce and replacing them with plant-based proteins;
        - Organic/seasonal: 31% of companies report shifting to organic/seasonal production practices or practices that limit pesticides use;
        - Packaging: Reducing packaging is reported by 28% of the companies.
    - "Business activities shifting to better production practices". Here, the most significant activities are the following:
        - Infrastructures and machinery: 31% of companies report replacing their production machinery with more energy-efficient machines and 28% have an investment plan for new infrastructure and machinery which significantly reduce GHG emissions;
        - Organic/seasonal: 14% of companies report shifting either a share or the entirety of their land to organic agriculture;
        - Climate adaptation strategy: 28% of assessed companies report having a climate adaptation strategy.

NARRATIVE SCORE

The narrative scoring is calculated by combining five criteria, some from the ACT framework and others added specially for the agriculture & agrifood sector.

The average narrative rating is D. 80% of the results are C and D and no company reaches A.

Narrative score		
A	0	0%
B	3	10%
C	8	28%
D	15	52%
E	3	10%

FIGURE 9: AVERAGE RATINGS FOR THE NARRATIVE SCORE

The graph below shows the average score obtained by the companies of the panel per criteria.

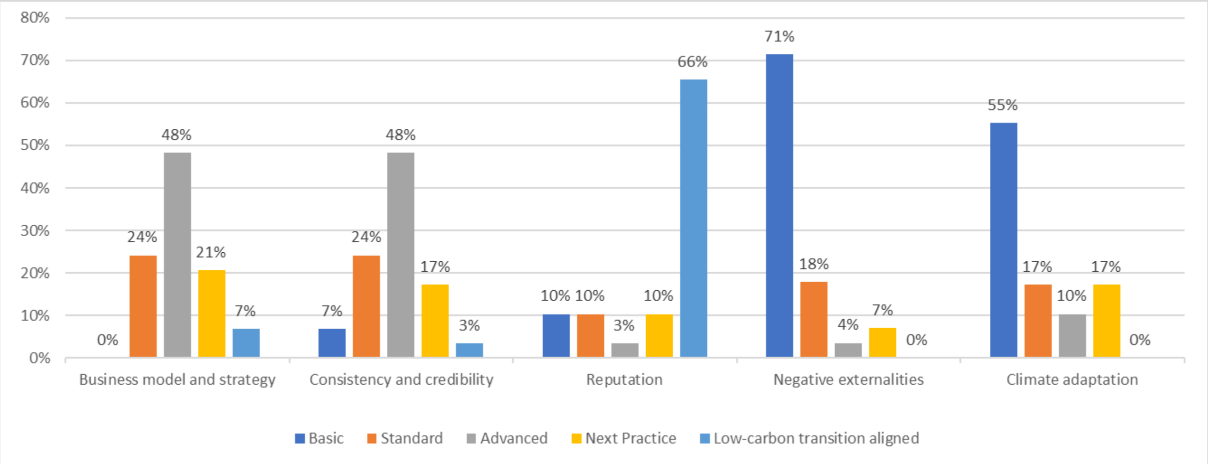


FIGURE 10: AVERAGE RATINGS PER CRITERIA FOR THE NARRATIVE SCORE

- **Business model and strategy**: due to the diversity of the subsectors and maturity, the types of business models and strategies reported vary between companies. The score for this indicator also varies significantly between companies, from 2 to 5.
- **Consistency and credibility**: this indicator is linked to the level of maturity that the company has regarding GHG monitoring and climate management. The score for this indicator varies significantly between companies, from 1 to 5.
- **Reputation** was the highest-scoring criteria in the narrative score. Most companies scored 5. This could be correlated with the fact that companies participated voluntarily in the road test, which might have resulted in a sample without major environmental controversies. However, it could also indicate that it is difficult for analysts to find sufficient validated information about companies' environmental controversies to give a low reputation score.
- **Negative externalities** and **Climate adaptation** are the two criteria added specifically for the A&A sector, instead of the "business risks" criteria. For these two criteria, the level of maturity is very low. Most of the companies have a basic maturity: they neither identify potential negative externalities

that could result from their low-carbon transition plan, nor conduct risk assessments related to climate adaptation.

TREND SCORE

Trend score		
+	5	17%
=	0	0%
-	24	83%

FIGURE 11: AVERAGE RATINGS FOR THE TREND SCORE

The average trend score is mainly negative (83% of the companies got a "minus" trend score). This trend score was automatically calculated by the online tool, and so may not match the general impression of the analyst. Following this road test, the trend scoring is likely to be changed to allow the analyst to adjust the automatically calculated score if it does not match their general impression.

OVERALL PROFILE OF THE FIVE ACT DIMENSIONS

The section below presents the state of participating companies in the road test for the agriculture & agrifood sector to the five questions of ACT.

COMMITMENT: What are the companies planning to do?

Most of the companies have started to set GHG reduction targets varying with different parameters: heterogeneous time horizons, differences in overall ambition, scopes (1+2 vs 3) and target types (absolute or intensity).

Also, having intensity targets per product is not common practice so far. In general, target development processes should be more robust for companies to ensure a science-based low-carbon trajectory, for example by aligning with standards (such as those of the SBTi, which is currently developing specific guidance for the Forest, Land use and Agriculture sector).

TRANSITION PLAN: How are the companies planning to get there?

Several companies already have mature low-carbon strategies. However, few have specific emission factors or detailed product-level emissions. Most companies are currently undertaking actions to reduce the carbon footprint of their activities, but fewer have established a detailed and formalized action plan to reduce their GHG emissions and achieve their targets. Others are currently in the definition stage of their action plan and are not mature enough to present a robust transition plan. Though most of the companies acknowledge that adaptation and negative externalities are important for the agriculture & agrifood sectors, few have concrete strategies in these areas.

PRESENT: What are the companies doing at present?

Most companies have integrated GHG emissions in their reporting, which is a prerequisite for being assessed by ACT. However, the robustness of GHG emissions inventories needs to be improved for some companies, especially for Scope 3, product-level emissions intensity. Some companies do not follow the same metrics used by ACT and the sector benchmark, making it difficult to directly compare their activity to the benchmark: for example, confusion can appear between scope 3 (global indirect emissions) and the distribution of emissions along the value chain (upstream scope 3 – i.e., indirect farm-level emissions- and downstream scope 3). Most companies are currently undertaking actions to reduce the impact of their activity, though these often need to be formalized in a transition plan.

LEGACY: What have the companies done in the recent past?

Very few have consolidated and robust data to measure their trend in emissions intensity along the value chain for more than three years. The use of generic data is often chosen and thus it makes it difficult to assess the overall trend in emissions in past years.

CONSISTENCY: How do all of these plans and actions fit together?

Adaptation to climate change and its consequences in the agriculture & agrifood sector is key and the participating companies identified this challenge and associated risks. They are also aware of the necessity, and urgency, to integrate climate into their business model and sometimes reach a deep transformation to be compatible with a low-carbon trajectory. Targets and transition plans exist for most of the companies (especially for the largest ones) but overall, robustness can be improved to ensure comparability and avoid burden-shifting, i.e., avoid transferring impacts from one category to another one (e.g., climate impact between different life cycle stages or climate impacts to biodiversity impacts). Despite this positive trend, the present and legacy show that the agriculture & agrifood sectors need to be more mature in terms of data, good practices, business model transformation and investments to convert companies' willingness to change into an effective transformation.

2. Outputs

2.1. SUCCESSES AND LIMITATIONS OF THE ROAD TEST:

The successes and limitations of the road test are summarized below, grouped into five key aspects: Recruitment and sampling of companies, Realization of the ACT assessments, Test of the operational applicability of the methodology, Consistency of results and alignment with company expectations, and Extraction of methodological improvements from the road test.

➔ **Recruitment and sampling of companies**

The recruitment phase led to the recruitment of 25 companies. At the start of the road test, the goal was to recruit between 20 and 30 companies, in order to have a relevant and diverse sample. Regarding sampling, the agriculture & agrifood sector is very diverse, so it is difficult to cover all possible sub-sectors. Nevertheless, it is considered that the 25 companies involved formed a diverse sample in terms of products and main activities. It is noted, however, there were significantly more Agrifood companies (16) and Integrated companies (6), compared with Agriculture companies (3) and Food and Beverage Service companies (4). Most companies are French. While some of the companies categorized as Agricultural producers had feed production as part of their activities, the road test sample did not include any companies that can be categorized as only ruminant animal feed producers. This means that this particular category was not tested in the road test. Although a limitation of the road test, this was not considered a major issue since the difference in how the methodology handles Agricultural companies and Ruminant feed producers is small (some difference in weighting and one additional indicator about downstream emissions).

➔ **Realization of the ACT assessments**

As mentioned above, 25 companies participated in the road test by providing their private corporate data. In addition, five assessments were carried out based on public data. Only one company did not go through with the entire road test process (its core business was more closely related to the chemical sector than the agriculture & agrifood sector). The data collection phase was well conducted with multiple meetings between the companies and the analysts. This ensured a good understanding of the companies' activities and helped the companies build a broader understanding of the methodology. Many challenges arose in terms of lacking data as well as difficulties in interpreting some modules for specific sub-sectors. These challenges were documented throughout the road test in a logbook. The assessment phase faced delays due to technical issues with the online assessment tool (see next point), but in the end, all assessments were carried out with the latest version of the tool. Feedback meetings were held with all companies participating in the road test, in which they received a (provisional) score and had the opportunity to ask questions and discuss the result with the relevant analyst.

➔ **Test of the operational applicability of the methodology**

With support from analysts, the companies involved understood the data requirements and the process and result of the assessment. Some assessments included material data gaps. This was especially true for smaller companies or companies with less maturity in formalized sustainability management and reporting. In some instances, such data gaps were filled with extrapolated values, in others no data was available and so scores reflected that fact. The road test also served as a pilot test for the online ACT assessment tool for Agriculture & Agrifood. Many bugs were successfully identified and resolved in the tool during the road test, although these technical issues did cause delays, as mentioned previously. The online tool was significantly improved as a result of the road test.

➔ **Consistency of results and alignment with company expectations**

The results were generally aligned with the companies' expectations. The final presentations and feedback reports were communicated effectively to the companies, who indicated that they found the assessment useful. However, when asked the question 'How likely is it that the same assessment done by a different analyst would result in the same score?', the collective of analysts gave the average score of 1.75 out of 5. This indicates that the methodology is still relatively difficult to apply consistently, mainly linked to possible interpretation of some questions. This need for improvement is highlighted in section 2.2 under recommendation 1: Improve the questionnaire and the IT functionalities. Specific points for improvements are elaborated on in an Excel table which is delivered alongside this report. It should be noted that an "Analyst guide" is also under development, which is an important step towards improved consistency in the application of the methodology.

➔ **Extraction of methodological improvements from the road test**

The road test gave rise to many questions and discussions about methodological aspects. A core point was the diversity of the sector, with sub-sectors that are very different from each other. The road test teams were able to identify several points where the specific context of a certain sub-sector was not sufficiently covered by the methodology. Improvement opportunities were also identified in terms of, for example, data quality guidance, and details on how to input the emission intensity of different types of products. Recommendations for methodological updates were presented during the final TWG in October 2021 and consolidated in an Excel table at the end of the project.

2.2. RECOMMENDATIONS TO EXTEND THE ACT AGRICULTURE & AGRIFOOD METHODOLOGY TO THE REST OF THE SECTOR

To finalize the methodology and make it relevant for the whole sector, it is considered important to make some modifications to the methodology. Listed below are several aspects that should be taken into account:

1. **Improve the questionnaire and the IT functionalities:**
    - Some important precision detailed in the methodology document could be also indicated in the questionnaire in a simple way, such as definitions of technical concepts, or boundaries covered by questions; this would help companies fill in the questionnaire more efficiently.
    - Improved consistency between the data collection questionnaire and the analysis tool would facilitate the evaluation and prevent data gaps.

2. **Ensure the applicability of the methodology to an as-wide-as-possible range of activities within the Agrifood sector by including:**
    - A relevant benchmark (i.e., emission intensity and decarbonization pathways) for most of the segments and types of companies (i.e., the segment "Agricultural producers" covers both agricultural production and is associated with the processing stage).
    - An extended list of products available in the product mix (raw materials, half transformed products such as starch, processed, other, etc.) or guidance to fill in (i.e., convert processed product into simple product).
3. **Clarify key elements of the methodology to ensure it will be recognized by the sector:**
    - Provide details and justifications about how decarbonization scenarios are applied by subsectors for the 4 segments of companies covered by the methodology. The global and regional decarbonization pathways/curves for each product and each parameter could be presented (in an appendix): agricultural product and processed product. This is already available for bovine meat for processed product, and this would provide more transparency for other products.
4. **Concerning the deployment of the methodology among the sector, in its whole diversity (activity, size of companies, maturity, etc.), it is important to consider these aspects:**
    - Ensure that the aim and scope of the methodology are well understood by companies, especially SMEs, by using the quiz on the ACT website to help them understand which approach would be the most appropriate for them according to their level of maturity: https://actinitiative.org/
    - As the number of agriculture and food companies joining the SBTi is growing, it is important to clarify the similarities, differences and links between SBTi and ACT (absolute vs intensity targets, mid-term vs long-term targets, etc.) to encourage the deployment of ACT in the Agrifood sector.
    - A prerequisite for companies could be, not having only one, but at least two GHG assessments to conduct an appropriate ACT assessment, in order to get a trend. Furthermore, another prerequisite could be added on the quality of the GHG emissions inventory which is very important to perform an ACT assessment (e.g. using specific emission factors, covering the entire value chain, i.e. Scope 3, defining appropriate metrics, communicating uncertainties). This should be discussed with companies before launching the assessment, to be sure that the results will be coherent and representative. This would ensure consistency and robustness of the assessment and enhance the analysis of low-carbon strategies and trajectories, especially on the product level.

2.3. CONTRIBUTION OF ACT TO ENGAGE COMPANIES IN LOW-CARBON TRANSITION

A questionnaire was sent to the companies who participated in the road test, including the questions listed below. The questionnaire asked the participants to reflect on their answers and encouraged them to provide recommendations for improvement related to the questions, and to the methodology in general. 13 out of 30 companies answered the survey.

- How did you experience the data collection process of the ACT assessment? (1-5).

    - Average response: **3.1**
- How did you experience the assessment and reporting process of the ACT assessment? (1-5).
    - Average response: **3.6**
- How useful were the findings and recommendations in the assessment report? (1-5).
    - Average response: **3.5**
- Please reflect on your score: Was your score as expected or were there significant deviations?
    - Text-based answers
- On a scale from 1 to 10, how likely is it that you would recommend the ACT assessment to someone else?
    - Average response: **6.9**

Key insights from this questionnaire about the **usefulness of the methodology for the companies** are:

- The companies perceived the methodology as **well-structured and relevan**t, building on a strong awareness of the expectations put on companies in the context of climate strategy and management.
- Several companies saw the results and recommendations as **useful inputs** to structure their continuous work on climate strategy and management. One company explicitly said that it saw the assessment report as a relevant roadmap for pursuing continuous improvement and actively contributing to the reduction of GHG emissions.
- Some companies found the recommendations from the assessment too generic and not specific enough to their particular activities.

Key insights from the questionnaire about the **data collection** experience are:

- Several companies mentioned that **large amounts of data** are requested and that these can be **difficult to access**. One example of data that was difficult to find was the proportion of investments in climate mitigation and adaptation technologies and R&D.
- The **data collection was seen as resource-intensive** for most companies. An example was that it was time-consuming to reprocess available data to fit the product mix table. One company also mentioned that the difficulty in retrieving data is due to the fact that this is the first ACT assessment it has undertaken, and that companies must structure themselves to retrieve this specific data. However, some companies also mentioned that the fact that ACT aligns with, for example, CDP makes it easier because many data points have already been collected for other purposes.
- Several companies mentioned that **regular contact with the analysts over time** (~months) was necessary to support the data collection process. They highlighted that some questions asked in the data collection sheet (questionnaire)were difficult to understand and that more detailed descriptions and examples could be added for support.

Finally, the companies generally agreed with the score that they received and said that it reflected their current maturity in terms of climate strategy and management. However, two issues were highlighted in relation to how the companies were assessed:

- Some companies indicated that the scoring appears to favour large companies with established structures for corporate social responsibility (CSR) reporting.
- Some companies mentioned that the methodology could consider additional product labels, which are currently not credited (e.g., related to local production, organic, or quality). It should be noted,

however, that such labels are not directly linked to decarbonization. In the key learnings, the possibility is discussed for the ACT A&A methodology to consider sustainability aspects beyond decarbonization.

In general, there is a low level of maturity regarding the low-carbon strategy of most companies. Areas of improvement have been suggested, and the most recurring areas of improvement expressed in the panel assessments were the following:

- Improve implementation and monitoring of GHG emissions accounting;
- Set absolute emissions and emissions intensity targets; set science-based targets or improve the ambition of existing targets to meet science-based criteria;
- Create low-carbon transition plans, with appropriate financial, technical and human resources;
- Formalize actions to tackle deforestation;
- Set up management incentives;
- Formalize strategies on supplier, client and policy engagement.

From our assessments, we believe that most companies are willing to engage further in the low-carbon transition. Once they establish ambitious targets, monitor their impact and provide the necessary financial, technical and human resources, we assume that they will be on the right track, be able to empower their stakeholders and be able to transform their business models in order to be low carbon aligned and contribute to the low carbon transition of their value chain.

3. Conclusions and key learnings from the road test

ACT ASSISTS COMPANIES TO STRUCTURE AND CATALYZE THEIR GHG MITIGATION STRATEGIES

As highlighted in feedback from participating companies and analysts, the approach allows relevant questions to be asked, to highlight priorities and to perform a proper analysis of a company's ability to integrate climate issues into its strategy. Short- and medium-term actions can be identified, and consequently, progress against targets. For the most mature companies, the Agriculture & Agrifood ACT assessment allows them to challenge their low-carbon strategy in the perspective of a 1.5°C trajectory and to identify areas for improvement. For the least mature companies, the assessment is a good start to dive into the topic of a low-carbon strategy and embrace its complexity. For all companies, ACT can be the backbone of a low-carbon strategy, bringing a clear and holistic structure with concrete indicators and objectives.

ABSOLUTE EMISSIONS PERSPECTIVE NEEDS TO BE FURTHER STRENGTHENED

So far, the ACT Agriculture & Agrifood methodology only assesses companies regarding their emissions intensities. The benchmarks translate the mitigation potentials from the IPCC into decarbonization curves in $kgCO_2eq/kg$ of product. However, this does not prevent companies from continuing to increase their absolute emissions while reducing emissions intensity, causing the carbon budget for the food sector to be greatly overshot. Consequently, there is a need to ensure that companies are also aligned with the carbon budget of the sector by adding an indicator to score the company’s absolute emissions.

THE DIVERSE COMPLEXITY OF AGRICULTURE & AGRIFOOD SECTORS

The sector is complex because it concerns the interaction between human and animal food production with biodiversity and ecosystems. There are many factors influencing the carbon footprint at the farm gate: location, territories, animal species, plant varieties, genetic selection, animal feed, farming practices (e.g., organic), seasonality, weather, soil, etc. Moreover, agriculture has a role in carbon mitigation, but also a role in negative emissions (sequestration) to achieve carbon neutrality in 2050. Because of this complexity, it is challenging to compare the carbon footprint of different companies and products in the agriculture & agrifood sector. The inclusion of additional features (such as biodiversity, adaptation, sequestration, and other negative externalities) that go beyond decarbonization is important for the agriculture & agrifood sectors and was considered during the road test of this methodology.

ADAPTATION TO CLIMATE CHANGE

Companies in the A&A sector are highly vulnerable to climate change and must consider ways to adapt to the changing climate over the long term in order to stabilize and enhance food security. However, companies are not mature when it comes to climate adaptation.

ADEME is working on the creation of an ACT Adaptation framework. During the A&A road test, various adaptation concepts were included in the methodology to test their integration with ACT. In particular, additional criteria were added to some indicators within the performance score, and an additional full criterion was added to the narrative score. The next step could be to have an additional ACT score related to physical climate risks and adaptation, using a separate ACT Adaptation methodology.