CEMENT

ASSESSING LOW CARBON TRANSITION

CEMENT SECTOR ACT EXPERIMENTATION IN BRAZIL AND MEXICO

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ACT

Assessing Low-Carbon Transition is a joint voluntary initiative of the UNFCCC secretariat Global Climate Agenda co-founded by ADEME, the French Agency for Ecological Transition, and CDP, the global environmental disclosure system. ACT provides guidance and assessment methodologies as an accountability framework to support and assess companies' strategies and actions which contribute to the Paris mitigation goals.

ACT DDP

The ACT-DDP research project is an international pilot project, which aims at accelerating the implementation of national and sectoral deep decarbonisation through a better dialogue between private companies and governments and for a mutual enrichment of their low-carbon strategies. Through the synergy between two pioneer initiatives, the Assessing low Carbon Transition (ACT) initiative and the Deep Decarbonization Pathways initiative (DDP), the project partners built and tested methodologies and tools for developing national and sectoral deep decarbonisation pathways compatible with the Paris Agreement and assessing company strategies with them.

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ADEME AGENCE DE LA TRANSITION ÉCOLOGIQUE

CDP DISCLOSURE INSIGHT ACTION

The ACT Initiative, through the implementation of the ACT-DDP project in Mexico and Brazil, assessed the low-carbon strategies of seven companies operating in the cement sector: four Mexican and three Brazilian companies. Only one company participated voluntarily in the experiment and provided assessors with additional data, the other six companies were assessed purely on the basis of public data. Significant data gaps resulted in several indicators having low scores. Indicators with no available information were assigned a score of 0, indicating a lack of transparency. The accuracy of the analysis and the scores results might be improved if companies were to increase climate data disclosure and transparency [1]. An ACT assessment generates three scores: a performance score, a narrative score, and a trend score.

ACT average score

5 C -

5 The average performance score is (5)

The companies assessed obtained a wide variety of scores (between 0 and 9), with an average performance score of 5/20, indicating not only that the panel of companies is rather heterogeneous in terms of its level of maturity, but also that companies are not yet on the right pathway to a low-carbon economy aligned with country-level low-carbon cement pathways.

C The average narrative score is (C)

The narrative score is rather heterogeneous across participating companies, ranging from A to E. Five companies received scores from C to E, as almost no information relating to the operations of assets could be found. This lack of data and the resulting extrapolations that were considered for the analysis increased the level of uncertainty regarding the accuracy of the performance score. It also resulted in lower scores

in the consistency, credibility, business model and strategy categories, which require the disclosure of a low-carbon transition strategy and related financial information.

The average trend score is "-"
Although companies have already started to tackle climate issues, they lack a clear decarbonisation roadmap.

AVERAGE SCORE PER PERFORMANCE MODULE

Cement companies assessed globally have started working on climate strategies, but they display different levels of ambition across Latin America. Mexico does indeed seem to be a step ahead of Brazil: most companies have integrated climate issues into their management by creating specific committees charged with implementing and monitoring their climate strategies, under the supervision of executive management. Additionally, in Mexico, most companies have set mid- or long-term emissions reduction targets, are publicly supporting relevant and significant climate policies, and are engaging publicly with relevant stakeholders (such as their suppliers and clients) through various communications campaigns to support emission reductions. Companies have also started to develop activities to reduce the emissions associated with cement production, such as replacing the clinker, using alternative fuels, and investing in more energy-efficient equipment.

In Brazil, although one company outperforms the other two by seven points, overall, the sector lacks efforts to get suppliers and clients to reduce their own GHG emissions and to engage with policymakers so as to design more ambitious and relevant climate policies. Nevertheless, the most mature company has implemented some actions to reduce its emissions associated with cement production, such as clinker substitution, using alternative fuels, integrating circular economy practices. Still, these separate actions do not constitute structured business models aligned with the needs of the future low-carbon economy.

Overall, the Mexican and Brazilian companies assessed will need to decarbonise at a faster pace as their locked-in emissions exceed their theoretical carbon budget, and – except for one Brazilian company – they have increased the carbon intensity of their emissions over the last five years. They also need to increase the level of investments in mature and non-mature low-carbon technologies (average R&D performance is 8%) to support the development of new and profitable business models aligned with the low-carbon economy and the Paris Agreement goals. Finally, companies from this sector must address the lack of transparency on climate-related data – this is an essential part of their low-carbon journey (see **Figure 1** and **Figure 2**).

Figure 1. Mexico, performance modules scores (%)

Sample of four Mexican companies

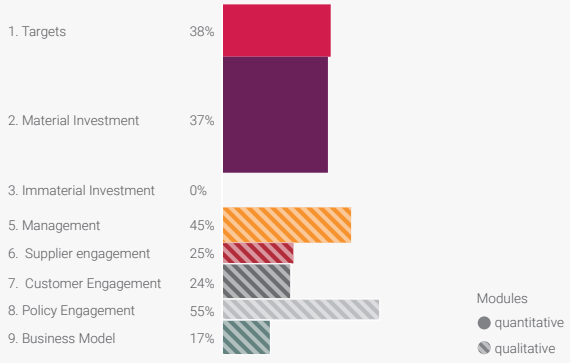
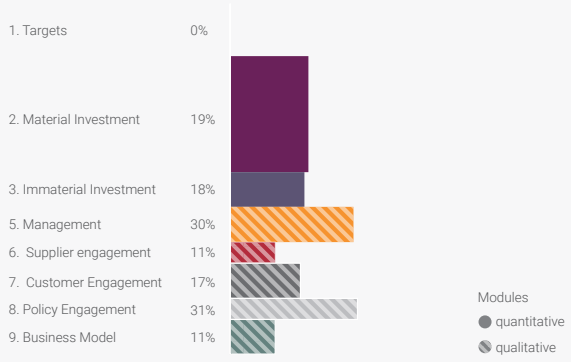


Figure 2. Brazil, performance modules scores (%)

Sample of three Brazilian companies



Note: bar heights represent modules the weighting of modules' scores

ACT CEMENT METHODOLOGY

The ACT sectorial methodologies have been developed and adapted to take into account the specific characteristics and decarbonisation levers being implemented by the sectors studied. Thus, the performance score weighting of each module varies for each sector. The following weightings have been used to evaluate the performance score of companies in the Cement sector (**Table 1**). The ACT methodology for the cement sector is available at https://actinitiative.org/act-methodologies/.

MODULES	CEMENT
1. Targets	15%
2. Material Investment	33%
3. Immaterial Investment (R&D)	10%
4. Sold Product Performance	0%
5. Management	10%
6. Supplier Engagement	6%
7. Client Engagement	10%
8. Policy Engagement	6%
9. Business Model	10%

GHG INTENSITY TRAJECTORY

For the ACT-DDP experiment in Brazil and Mexico, the DDP Initiative developed sectoral decarbonisation scenarios and trajectories with key sectoral transformation considerations which were then used to define the theoretical carbon budget and related emissions reduction trajectories. These served as the main benchmarks for assessing quantitative indicators, such as target alignment, the past and future trend for the intensity of emissions and locked-in emissions, among others. The following trajectories were used to assess companies (see **Figure 3** and **Figure 4**).

ACT LOW-CARBON ALIGNED STATE FOR CEMENT COMPANIES

To support the transition of companies in the cement sector, ACT presents the responses of a low-carbon aligned company operating in the sector to the five questions in the ACT framework: What is the company planning to do? [Commitment], How is the company planning to get there? [Transition Plan], What is the

Figure 3. Trajectory for Mexico

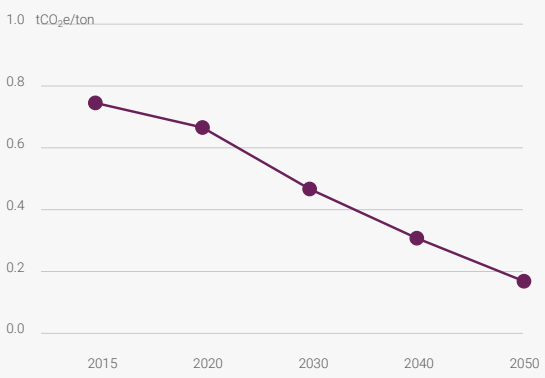
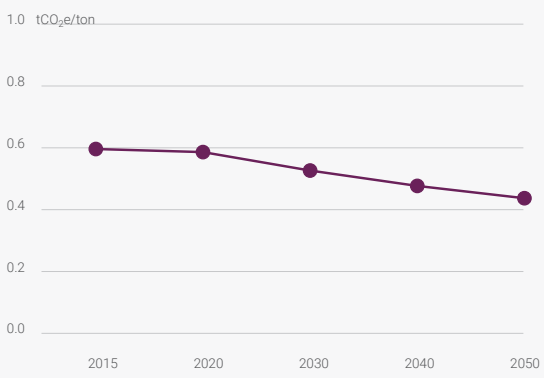
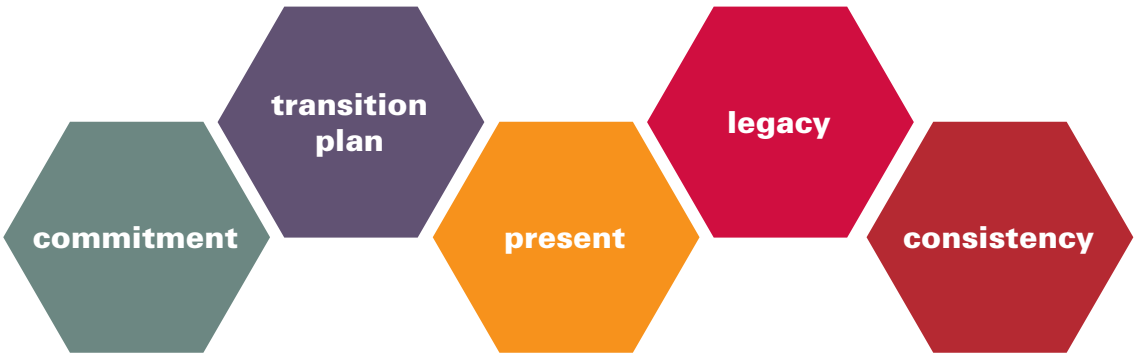


Figure 4. Trajectory for Brazil



DDP trajectories can be found at actddp.org.

company doing at present? [Present], What has the company done in the recent past? [Legacy], and How do all of these plans and actions fit together? [Consistency]



1

The company has science-based targets on several dimensions of the value chain, for high-intensive production processes in particular. The company collaborates with suppliers and clients to making a low-carbon product that is of both high quality and performant to be used in infrastructures and buildings.

2

The company discloses a transition plan that details a growing share of low-carbon systems and services and operational steps to achieve their objectives

3

The investment strategy for new production capacity and R&D places clear focus on low-carbon alternatives or technologies for decarbonization

4

A trend is evident of lowering emissions intensity of delivered product and developing systems and services. The company achieved this decrease through deliberate operational or investment decisions

5

The company's targets, transition plan, present action and past legacy show a consistent willingness to achieve the goals of low-carbon transition.
The company operates as a strong actor in the circular economy during all the life cycle stages of the product

[1] International standards and regulations (IFRS ISSB, EU CSRD, EFRAG ESRS E1, UK TPT…) and recommendations (TCFD, UNFCCC's Race to Zero) about corporates' climate transition plans should increase the availability of climate data from companies in the coming years.