TRANSPORT

ASSESSING LOW CARBON TRANSITION

PASSENGER PUBLIC TRANSPORT ACT EXPERIMENTATION IN MEXICO

Authors: Rocio Caicedo Torrado, Romain Poivet

2022

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.

ACTDDP

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.

This project is supported by the Fonds Français pour l'Environnement Mondial (FFEM) and by in-country French representatives such as the local French Development Agencies (AFD) and French embassies.

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 three Mexican companies, including one intercity passenger rail transport company and two urban passenger land transport companies.

All companies in this sector shared the required data for the assessment and were highly involved in the process, which consequently resulted in better data quality and a high reliance on the scores. Nevertheless, some transparency issues remained, such as confidentiality policies or no access provided due to sensitive information. In this regard, companies will need to work towards achieving a higher transparency standard in line with the strict requirements of the ACT methodology and upcoming international standards [1]. An ACT assessment generates three scores: a performance score, a narrative score, and a trend score.

ACT average score

6 C -

6 The average performance score is (6)

The companies assessed obtained a wide variety of scores (between 3 and 9), with an average performance score of 6/20, below the median score of 10/20. This indicates that the panel is rather heterogeneous in terms of its level of maturity, but still not on track towards a low-carbon transition, neither is it aligned with country-level low-carbon urban passenger transport pathways.

C The average narrative score is (C)

The narrative score is rather heterogeneous, ranging from D to A, with most of the companies scoring a D. Most companies lack consistency and credibility for not having taken action to avoid or minimise

the impact of climate risks, for not having undertaken climate scenario testing and risk analysis, and for not having targets in place to reduce their GHG emissions. Furthermore, some companies are already starting to suffer the consequences of climate change in their operations, in the form of disruptions due to flooding and high temperatures. It is unclear whether companies have identified potential climate risk hot spots and developed adaptation or mitigation plans to counteract potential climate-related adverse effects in their operations. It is important to note that most of the transport companies assessed are of high strategic importance – they are the main public providers of transport services in Mexico City's metropolitan area.

The average trend score is "-" since all companies making the panel received a negative trend score. Although companies have already embarked on their climate journey, none of them are directly investing in R&D to mitigate climate change. This, paired with the lack of forward-looking targets, indicates that current actions may be insufficient for achieving the much needed transition to a low-carbon economy.

AVERAGE SCORE PER PERFORMANCE MODULE

None of the companies assessed have set GHG emissions reduction targets for the mid or long term, and most of the companies could not offer historical data for the analysis of their passenger emissions intensity in recent years, making it impossible to determine their alignment with the sector's decarbonisation trajectory.

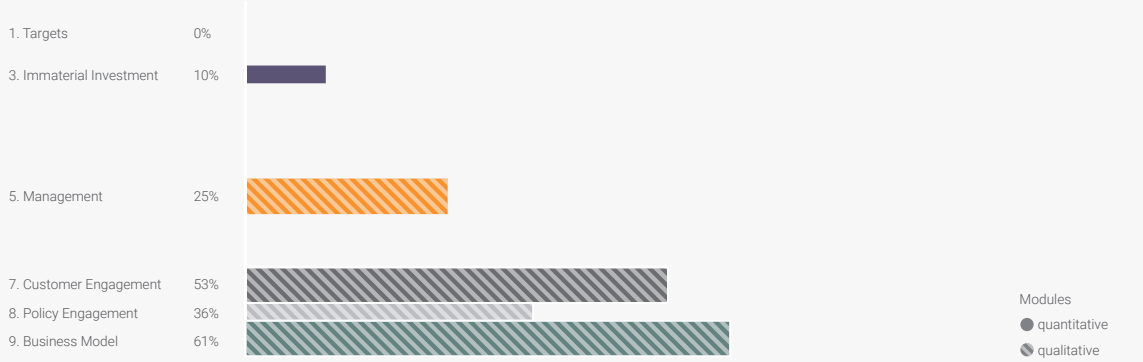
Although public companies demonstrate a high capacity to monitor climate change issues, these entities are only responsible for operational tasks. Decision-making regarding emission reduction targets and climate strategy does not happen at company level, but is part of a broader political process involving various government departments. This made collecting data harder, and hampered the company's ability to integrate the resulting feedback on its strategy

Regarding supplier engagement, only one public company demonstrated that it had engaged with infrastructure operators to commit to developing services enabling the operation of low-carbon vehicles and energies. None of them share information that can be used to assess whether or not they are influencing vehicle manufacturers' choices and behaviour to order to reduce the GHG emissions of their products. On the other hand, although public companies are engaged significantly with public authorities, this dialogue must be improved in relation to climate strategies, goals, and specific targets to obtain a wider perspective on the operations and overall strategies of these companies.

Additionally, it was found that all companies have activities and infrastructure that promote intermodality

Figure 1. Performance modules scores (%)

Sample of three Mexican companies



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

with other low-carbon transport systems influencing customer behaviour to reduce their GHG emissions, and some are also investing in low-carbon vehicles to reduce their impact, as well as in infrastructure to electrify their fleets. However, companies in the sector must still set their own GHG reduction targets, as well as their decarbonisation strategies and transition plans with time horizons, in addition to developing long-term analyses to determine the impacts of climate-related risks.

[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. (see **Figure 1**).

ACT TRANSPORT METHODOLOGY

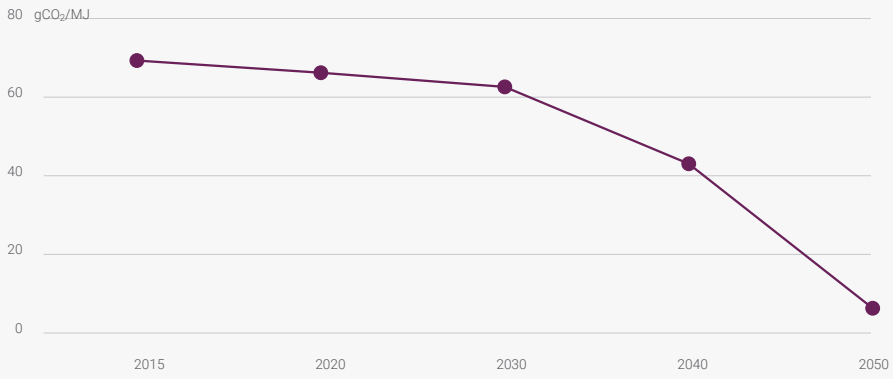
The ACT sectorial methodologies have been developed and adapted to take into account the specific characteristics and decarbonisation levers being implemented by the sectors studied. Thus, the performance score weighting of each module varies for each sector. The following weightings have been used to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

MODULES	URBAN TRANSPORT
1. Targets	15%
2. Material Investment	30% or 0% (subcontracting)
3. Immaterial Investment (R&D)	5%
4. Sold Product Performance	0% or 30% (subcontracting)
5. Management	10%
6. Supplier Engagement	15%
7. Client Engagement	10%
8. Policy Engagement	5%
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 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 for the cement sector (see **Figure 2**).

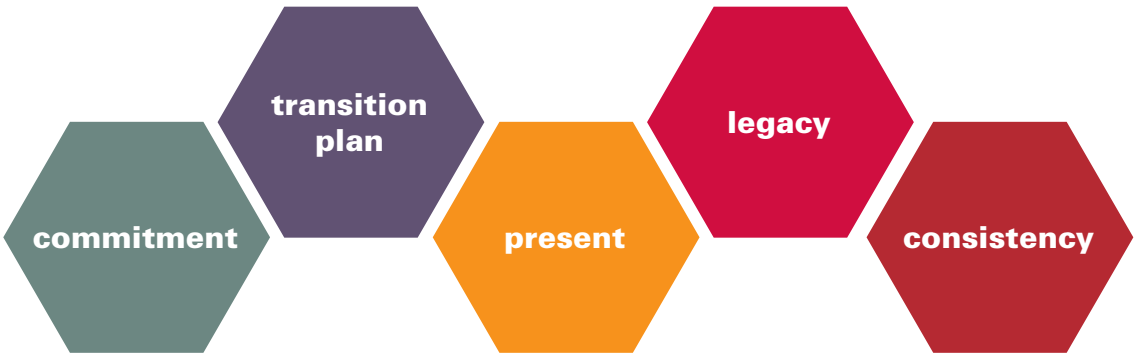
Figure 2. Deep Decarbonization Pathway, Mexican trajectory



DDP trajectories can be found at actddp.org.

ACT LOW-CARBON ALIGNED STATE FOR TRANSPORT COMPANIES

To support the transition of companies in the transport 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 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 for each transport activity, which have a time horizon that covers the lifetime of the vehicles.

2

The company's strategic planning details the investments in low carbon vehicles, modal shift or selection of subcontractors aligned with a low carbon transition. Actions on the demand for transport to reduce GHG emissions are not excluded.

3

Current investment strategy in intangible investment (R&D, trainings) places clear focus on low-carbon transition. Operational optimization of the transport activity is a common practice in the company.

4

A trend is evident of lowering emissions intensity of the fleet or subcontractors over the last 5 years, that is in alignment with the emissions reductions required in the short term through deliberate development decisions.

5

The company's targets, transition plan, present actions and past legacy show a consistent willingness to achieve the goals of low-carbon transition, especially by developing new transport business models.

[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.

ADEME AGENCY FOR ECOLOGICAL TRANSITION
CDP DISCLOSURE INSIGHT ACTION
TEMPUS ANALITICA
COPPE UFRJ Instituto Alberto Luiz Coimbra de Pós-Graduação e Pesquisa de Engenharia
FFEM FONDS FRANÇAIS POUR L'ENVIRONNEMENT MONDIAL
IDDRI