

# THE CLIMATE FOOTPRINT PROJECT

TRACKING EMISSIONS / RAISING AMBITION



## YUCATÁN, MEXICO



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### STATE/REGION & COUNTRY:

Yucatán, Mexico

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## CHALLENGES AND OPPORTUNITIES IN SUBNATIONAL GREENHOUSE GAS INVENTORY DEVELOPMENT: THE EXPERIENCE OF YUCATÁN, MEXICO

With the support of the Under2 Coalition's [Climate Footprint Project](#), Yucatán has been working to identify the main sources of its emissions and update its greenhouse gas inventory (GHG). In this case study, the state shares the importance of this work by describing the policies it helps to support, and also provides their recommendations for approaches to planning and methodology when embarking on regional emissions tracking.

## THE CLIMATE FOOTPRINT PROJECT

The [Climate Footprint Project](#) supports state and regional governments to improve their greenhouse gas emissions tracking and reduction efforts.

In order to support the development of regional greenhouse gas inventories, the [Climate Group](#), as Secretariat of the [Under2 Coalition](#), is leading a consortium of partners to provide direct support and training to Pernambuco (Brazil), Chhattisgarh and West Bengal (India), Baja California, Jalisco and Yucatán (Mexico), and KwaZulu-Natal (South Africa).

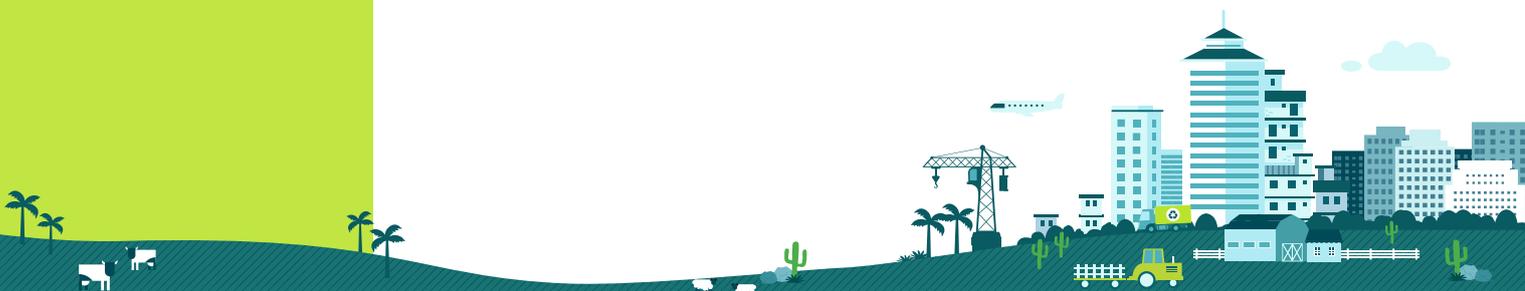
**Project partners:** [Climate Group](#), [Ricardo Energy & Environment](#), [ICLEI – Local Governments for Sustainability](#), [CDP](#), [The Greenhouse Gas Management Institute](#).

**Local partner in Mexico:** [Carbon Trust](#)

## BACKGROUND

Due to its geographical conditions, the Yucatán Peninsula, Mexico is particularly vulnerable to the adverse impacts of climate change. In recent years, for example, the peninsula has experienced an increasing frequency of extreme weather events such as tropical storms and cyclones. To tackle climate change, the State Government of Yucatán has prioritised the development of climate policies, such as the Special Action Programme on Climate Change, which addresses adaptation and mitigation actions.

With the support of the Under2 Coalition's [Climate Footprint Project](#), Yucatán has also been working to identify the main sources of its emissions and update its greenhouse gas inventory.



# THE IMPORTANCE OF A GREENHOUSE GAS INVENTORY

The importance of having a GHG inventory lies in the premise of “that which cannot be measured cannot be improved.” In the last year, Yucatán has tackled the challenges of updating its last inventory (2005), in order to allow the state to develop climate policy in a more informed way.

When Yucatán first started working with the Climate Footprint Project, it already had some processes in place that allowed key actors across institutions to communicate about emissions tracking and mitigation actions. However, for the most part, the processes were not fully developed enough to allow the monitoring of emissions and actions across different sectors in an orderly, simple and consistent manner. Now, after more than a year of implementing the project, Yucatán is close to finishing the newest update of its inventory and has also improved capacities across state sectoral institutions. With strengthened capacities in place, these key actors are able to continue to provide updated information and emissions data for the inventory going forward. In addition, the inventory will feed into the state’s carbon budget and decarbonisation pathway for the energy sector.



**THE IMPORTANCE OF HAVING A GHG INVENTORY LIES IN THE PREMISE OF “THAT WHICH CANNOT BE MEASURED CANNOT BE IMPROVED.”**

## PLANNING

Greenhouse gas inventories can be an important tool for subnational governments. However, their implementation depends on the political will of decision-makers to incorporate the inventory into the state’s regulations and to establish requirements for its continued development.

Thorough planning is the first step to developing an inventory, while time, human resources, capacities and finances are all important resources to consider.

In terms of financial planning, the institutions in charge of developing the inventory must allocate finances for its development in advance and, if necessary, take into account the fiscal years for its execution. Finances can be a challenge due to budgetary limitations and it may be necessary to look for project-specific financial resources, such as through national and international funds.

Yucatán had the opportunity to unlock funds for its inventory through the Administration, Investment and Payment Vehicle Trust<sup>1</sup>, which prioritises actions or projects for the improvement and protection of environmental quality, as well as the restoration, preservation, conservation and sustainable use of the state’s natural capital. Given that the inventory is the tool that will help update the Special Action Programme on Climate Change, which has a time horizon of 2030, and inform the development of the energy sector’s decarbonisation pathway, the case for alignment with the trust fund could be made.

Moving to the challenge of human resources, although some institutions have an organisational structure that accounts for all roles and responsibilities required to successfully develop an inventory, others do not have sufficient human resources or technical capacities within their teams. The recommendation in these cases is to identify whether there are relevant institutions at the local or national level that could provide support, such as academic institutions or research centres with technical capacities. An example of this is Yucatán’s collaboration with the National Forestry Commission, which provided tools and data to complete the forestry sector component of the state inventory. Another option, depending on finances, is the use of consultants. In Yucatán, due to the lack of personnel available for inventory development, consultants were hired to support throughout the process.



**AN EXAMPLE OF THIS IS YUCATÁN’S COLLABORATION WITH THE NATIONAL FORESTRY COMMISSION, WHICH PROVIDED TOOLS AND DATA TO COMPLETE THE FORESTRY SECTOR COMPONENT OF THE STATE INVENTORY.**



<sup>1</sup> Fideicomiso de Administración, Inversión y Medio de pago (FIAMBIYUC)

## METHODOLOGY

When considering methodology, there are several aspects that must be taken into account. These include:

- **defining the methodology to use, which will depend on what type of emissions fall inside the state boundaries;**
- **establishing the baseline year or, where appropriate, the time series (e.g. a year-on-year comparison);**
- **defining the inventory's scope.**

If the state already has an inventory, then the key categories of emissions sources included should be reviewed in order to improve their estimates and thus continuously reduce their uncertainty. One recommendation is to standardise the methodologies used for compiling subnational inventories, while also taking into consideration specific circumstances. In Yucatán, **compilation manuals** provided by the Climate Footprint Project were used, which allowed an orderly and standardised methodology to be followed by the team of consultants and the technical team of the Secretariat.

In addition, it is essential to identify mechanisms for cooperation between actors in order to extend data access and fill in data gaps. Creating spaces for collaboration between different institutions will help to foster necessary exchanges and allow these types of processes to flow more efficiently. The project facilitated the creation of these spaces through face-to-face and virtual workshops that provided stakeholders with technical training on the importance of participating in these processes, which has resulted in agreements between different institutions to improve the state's inventory development.



## CONCLUSION

The development of a GHG inventory is a process that continues to be improved and refined. However, there are basic elements that can help to facilitate this process.

Yucatán's experience exemplifies these elements, as well as some of the advantages and barriers that have been overcome in order to complete their latest inventory. Coordination with the National Forestry Commission was a great help for Yucatán, while one of the most significant barriers faced was limited human resources. Defining these advantages and barriers from the outset can facilitate the process by helping to identify where to start and what may take more time. In the case of Yucatán, getting access to information took more time, however, through collaboration agreements it has been possible to move forward.

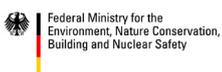
Yucatán's inventory will help inform the state's climate policy, as it is currently updating its Special Climate Change Action Programme as well as developing its energy sector decarbonisation pathway. While the state's carbon budget has already been developed, the completed inventory will help to update it with more precise data. Finally, the inventory will also allow the decarbonisation pathway to be extended to other sectors, in addition to energy.

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