

THE CLIMATE FOOTPRINT PROJECT

TRACKING EMISSIONS / RAISING AMBITION



PERNAMBUCO, BRAZIL



PROJECT START DATE:
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STATE/REGION & COUNTRY:
Pernambuco, Brazil

AUTHOR(S):
José Bertotti, Inamara Mélo, Samanta Della Bella, Hugo Moraes, João Cumaru, Alessandra Sá, Lenilda Abreu, State Government of Pernambuco, Secretariat of Environment and Sustainability (Secretaria de Meio Ambiente e Sustentabilidade - SEMAS)

KEY SECTORS:

-  Agriculture, Forestry and Other Land Use (AFOLU)
-  Energy
-  Waste
-  Transport



INVENTORY TODAY, MITIGATION TOMORROW: Pernambuco, Brazil works toward climate action

Through the Under2 Coalition's Climate Footprint Project, the state of Pernambuco, Brazil, developed its first greenhouse gas (GHG) inventory in only six months. The project demonstrated that it is possible to undertake such a challenge and successfully produce a quality inventory, in a short space of time, with an agile approach and, most importantly, built on ample stakeholder participation.

Inventories allow state and regional governments to identify their highest emitting sectors and create and implement new policies to reduce these emissions. In bringing together public agencies, climate specialists and other key stakeholders, they can build momentum for lasting change.

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: The Climate Group, Ricardo Energy & Environment, ICLEI – Local Governments for Sustainability, CDP, The Greenhouse Gas Management Institute.

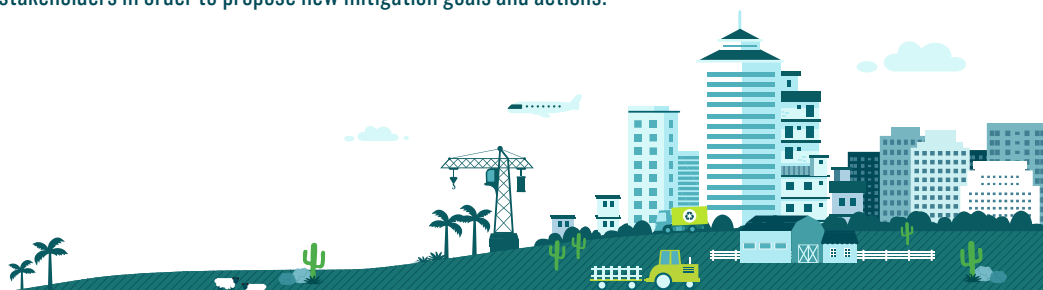
Local partner in Brazil: WayCarbon

BACKGROUND

Pernambuco is not amongst the largest GHG emitting states in Brazil, but it is one of the world's most vulnerable states to the effects of climate change.

In light of the current global climate emergency, GHG inventories are an essential tool for state and regional governments in the design and implementation of their mitigation strategies.

Once developed, Pernambuco's inventory allowed the state to understand their emissions profile, deepen their knowledge on the climate agenda, and mobilize strategic actors from across state sectors in order to foster buy-in and discussion among key state stakeholders. With this momentum, as well as the technical and political structures in place, Pernambuco's next step is to foster dialogues amongst stakeholders in order to propose new mitigation goals and actions.



REGIONAL CONTEXT

The effects of climate change in Pernambuco are present both on the coast, where it suffers from flooding and coastal erosion, as well as the remaining 90% of its territory, which is subject to aridization and desertification due to high temperatures and water scarcity.

Although Brazil already publishes its national GHG inventory (with annual estimates since 2016, and covering the years 1990-2018), gaps in regional information still exist. Due to these gaps, it is not yet possible to decouple state emissions from national emissions. As such, only through a regionalized inventory was it truly possible to understand in greater detail the state emissions profile in order to develop targeted mitigation strategies.

Pernambuco has had policy in place to combat climate change since 2010 (State Law n.14090/2010), which included a recommendation for the construction of a GHG inventory. However, Pernambuco did not develop its first inventory until 2019, with the support of the Climate Footprint Project.

The state inventory was launched in November 2019 at the Brazilian Conference on Climate Change, which was held in Recife, Brazil. The conference brought together 1,700 participants from non-governmental organizations (NGOs), social movements, governments and representatives of the private and public sectors to discuss and develop strategies for the implementation of Brazil's climate goals.



DEVELOPING A GHG INVENTORY IN SIX MONTHS

Apart from the Climate Footprint Project, which supported each part of the process, the main factors which allowed for Pernambuco's GHG inventory to be prepared in a short period of time, and with broad participation across key stakeholders, were:

1. **Political will**
2. **Technical capacity**
3. **The Pernambuco Climate Change Forum**

1 POLITICAL WILL

At the beginning of 2019, the State Secretariat for Environment and Sustainability (SEMAS) underwent an organizational restructuring, in which it created a specific department and appointed specialized technicians to deal exclusively with climate change. It was also decided that the preparation of the state inventory and the re-activation of the Pernambuco Climate Change Forum would become top priorities for Pernambuco, in order to accelerate climate action.

2 TECHNICAL CAPACITY

The technical support offered by the Climate Footprint Project was enthusiastically received by SEMAS. Through workshops, webinars and consultations with technical experts, the project contributed to the data gathering phase for the calculation of state emissions. In addition, the project also trained the staff at SEMAS in data processing and quality control.

During the process of developing the inventory it is also important to note that there were some difficulties at times in obtaining the necessary data, particularly information related to waste treatment and industrial production. In addition, some methodologies needed to be adapted to the local reality, as was the case with the calculations of carbon emissions and removals of Caatinga (a type of vegetation exclusive to Brazil, characteristic of the northeast region) in the AFOLU sector.



THE INVENTORY IS A TOOL WHICH ALLOWS US TO DIRECT OUR EFFORTS AND TO ADVANCE MONITORING OF THE EFFECTIVENESS OF ACTIONS. THE GREATEST CHALLENGE NOW IS TO EFFECTIVELY DEVELOP AND IMPLEMENT ACTIONS THAT CAN, IN A SHORT TIME, ALLOW OUR STATE AND OUR PLANET TO BE MORE RESILIENT AND CARBON NEUTRAL.

Hugo Moraes,
Manager of Low Carbon Policy,
State Government of Pernambuco



3 THE PERNAMBUCO CLIMATE CHANGE FORUM

Another important factor for the success of the Climate Footprint Project in Pernambuco was the support of the Pernambuco Climate Change Forum. The Forum was created in 2009 and, after being inactive for many years, was reactivated in 2019 alongside the project.

The Forum invited participation from representatives of Pernambuco's public agencies, NGOs, and universities, as well as representatives of the various productive sectors, such as agriculture, energy, and waste management.

The Pernambuco Climate Change Forum met four times during 2019. The meetings saw participation from 23 representatives from civil society, 29 from public institutions and 8 from universities.

SEMAS carried out a great deal of work to mobilize and publicize the Forum's meetings in order to ensure broad participation. The workshops offered by the Climate Footprint Project were an important factor in the engagement of the Forum participants, as they provided useful information and increased stakeholder awareness. The proposed agendas of the Forum's meetings, which both delved into relevant topics and fostered discussion amongst the participants, also supported this engagement. Finally, the possibility of directly contributing to the construction of the state inventory, through the establishment of the technical working group, was another incentive to join.

The technical working group of the Pernambuco Climate Change Forum, which met on 8 occasions throughout 2019, was composed of the University of Pernambuco, two civil society organizations (the Northeast Plants Association and the Center for Environmental Research of the Northeast), the Pernambuco Energy Company, as well as the public institutions of the State Environmental Agency and the Secretariat for Urban Development and Housing.

SEMAS led and coordinated the progress of this working group.

The Forum provided both access to data and assistance with analysis, essential items of support which SEMAS would not have been able to secure fully on their own. The Forum also made it possible to disseminate and discuss the results from this work during its meetings. And this effort still continues, both in maintaining the engagement of those who have already contributed, as well as in raising awareness among actors who have not yet been reached, such as the industrial sector.



THE MOBILIZATION AND JOINT ACTION OF THE DIFFERENT GOVERNMENT AGENCIES, CIVIL SOCIETY, UNIVERSITIES, AND PRIVATE INITIATIVES IS THE ONLY WAY TO MOVE FORWARD IN THE TRANSITION TO A CARBON NEUTRAL DEVELOPMENT MODEL.

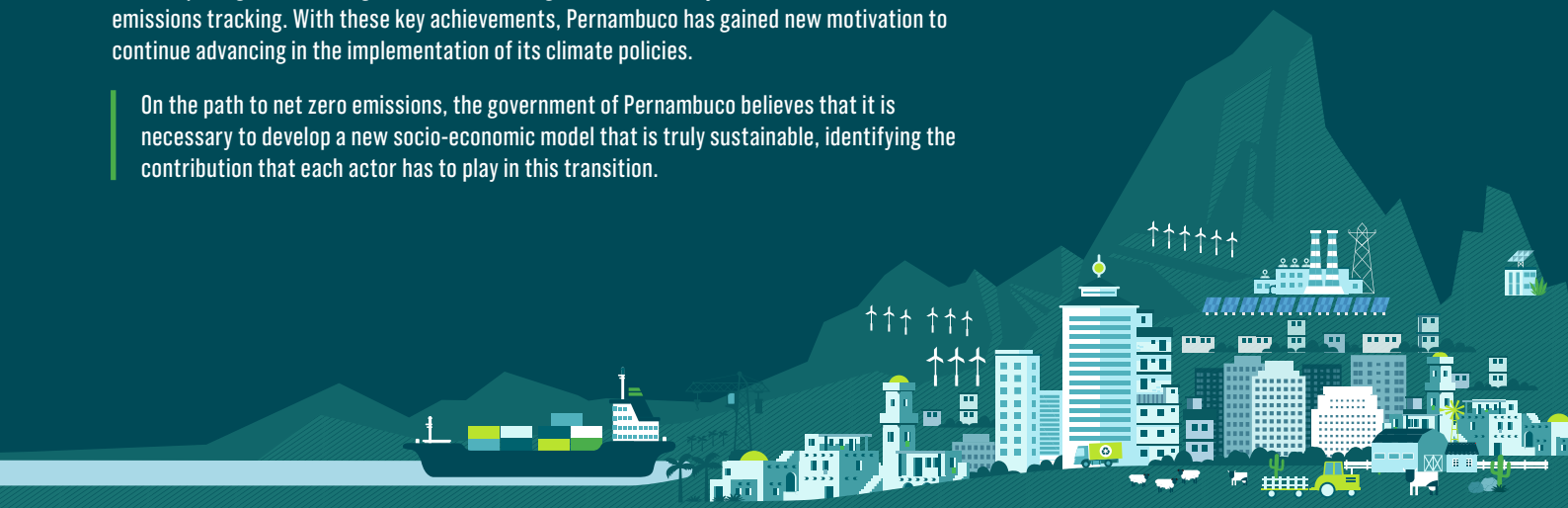
José Bertotti,
Secretary for the Environment and Sustainability,
State Government of Pernambuco



CONCLUSION

The support of the Climate Footprint Project was essential for the preparation of Pernambuco's first greenhouse gas inventory, while also enabling its development to occur in both a short period of time and with broad participation from across the state's key stakeholders. This capacity-building process allowed SEMAS to mobilize actors from across Pernambuco, while also deepening the knowledge and understanding of SEMAS and key stakeholders in terms of emissions tracking. With these key achievements, Pernambuco has gained new motivation to continue advancing in the implementation of its climate policies.

On the path to net zero emissions, the government of Pernambuco believes that it is necessary to develop a new socio-economic model that is truly sustainable, identifying the contribution that each actor has to play in this transition.



NEXT STEPS

The development of the first GHG inventory of the state has allowed Pernambuco to build a regional climate governance structure through the previously detailed Pernambuco Climate Change Forum, which aided in mobilizing key stakeholders in order to obtain and analyse data on state emissions.

With informed stakeholders and consistent data, in 2020, Pernambuco turned to the development of its Sectoral Mitigation Plans for Greenhouse Gas Emissions (across the four IPCC sectors– AFOLU, Energy, Transport and Waste).

These plans will support the establishment of a Monitoring, Reporting and Verification (MRV) system, allowing Pernambuco to be able to assess the progress of its mitigation actions in the near future. It will also promote the dissemination of results, allowing Pernambuco to become increasingly transparent, resilient and capable in achieving carbon neutrality.



THE CLIMATIC EMERGENCY AND THE CONSEQUENT URGENCY OF ACTION DEMONSTRATE THAT WE NEED TO DEVELOP INVENTORIES, ALONGSIDE OTHER TOOLS, THAT ENABLE QUALITY INFORMATION, BOTH IN A SHORT TIME AND WHICH ARE ACCESSIBLE TO SOCIETY.

Samanta Della Bella,
Superintendent of Sustainability and Climate,
State Government of Pernambuco

FURTHER RESOURCES

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1. The IPCC, or Intergovernmental Panel on Climate Change, is an intergovernmental body of the United Nations. The IPCC is dedicated to providing the world with objective, scientific information relevant to understanding the scientific basis of the risk of human-induced climate change, its natural, political, and economic impacts and risks, and possible response options.

This project is part of the [International Climate Initiative \(IKI\)](#). The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag.

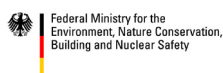
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GOVERNO DO ESTADO
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MAIS TRABALHO, MAIS FUTURO.

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