# Developing a pathway to decarbonisation in Querétaro, Mexico



Querétaro's emissions in 2050 under various projected scenarios:



2°C goal: 3.2 TgCO2e



Business as usual (BAU): Querétaro's sector emissions by 2050 if no action taken 33.48 TgCO2e



#### Energy

**BAU emissions** 

Priority actions

• Solar energy at scale for public services

#### Industry

- Production of on-site renewable electricity
- Production and use of renewable combustibles
- Production of on-site renewable heatina
- · Electrical energy efficiency

#### **Transport**

- Urban planning
- Vehicle electrification

#### AFOLU\*

- Agroforestry systems
- Soil regeneration of pastures
- Land conservation
- Expansion of forest ecosystems

#### Waste

No prioritised actions in waste sector

#### RCI\*\*

• Distributed solar in commercial sector





Querétaro's economy-wide decarbonisation targets, compared to 2015 levels of total tons CO<sub>s</sub>e emitted:

- 2030 target: 27% reduction • 2050 target: 65% reduction
- **About Querétaro:**

Population: 2.038 million (2015)

Area: 11,687.7 km<sup>2</sup>

GDP (USD): \$19.9 million (2016)

#### Main economic activities:

- Manufacturing of machinery & equipment
- Services trade & real estate

The <u>Climate Pathway Project</u> supports state and regional governments to develop a transformational process, or 'pathway', to reducing emissions while supporting economic and social development, in collaboration with local communities and businesses.

Government partner in Querétaro: Secretaría de Desarrollo Sustentable (SEDESU)

## Interview with Ricardo Torres, Undersecretary of the Environment:

Institutionalisation, nature and a state's mission.

On December 9, 2019, Milimer Morgado, Senior Manager of Climate Transparency and Pathways at the Climate Group, had the opportunity to interview Ricardo Javier Torres Hernández, Undersecretary of Environment at the Secretariat of Sustainable Development for the State of Querétaro, Mexico. Ricardo leads the implementation of environmental and climate change policies, including the Climate Pathway Project, in the Executive Branch of the State of Querétaro.

Here's a summary of that conversation.



### Prioritised actions - renewable energy and land use

- M: Thanks for joining us, Ricardo. To start with, in your opinion, which actions are key to the decarbonisation of Querétaro's economy? And did any of the actions prioritised by the stakeholders come as a surprise?
- R: There have been no surprises in general with the actions. Almost ten years ago, we identified that the transport and energy sectors generate a very important part of the state's emissions. So the related actions selected weren't surprising, however there weren't any actions selected for waste management, and we would have liked to work more with that sector.
  - As for AFOLU, it's a symbolic sector for the State of Querétaro and, while it doesn't represent a lot of emissions, I think the goal of regenerating our ecosystems sparks the interest of residents and local actors.
- M: Homing in on the first sector you mentioned, energy, we want to know what you think motivated this group of stakeholders, including actors within the Querétaro government, to prioritise renewable energy actions? This is taking into account that the federal government does not share this priority to invest in the development or diversification of primary energy sources.
- R: True, I don't think the federal government shares it in the short term. At the end of the day, all administrations have a term limit and the pathways go far beyond the time that a public administration lasts. Even just the first milestone at 2030 would come after the six-year term of this administration.

But the world is heading in that direction. The economy in general is moving towards clean and renewable energy, and we cannot be left behind. As a subnational government, we believe that it is necessary to have all the elements that allow decision-making ready to go as soon as there is an agreement with decision-makers in the energy sector at the national level. I believe that the current federal government, rather than being against clean energy, is in favour of allowing the states to coordinate energy policy.





I think the goal of regenerating ecosystems sparks the interest of residents and local actors."





As soon as there is a change in national policy, we need to be prepared. And I think it is the responsibility of subnational governments to have everything ready to launch as soon as possible."

- M: Moving back to the AFOLU sector, it's interesting that this sector is included within Querétaro's pathway, despite the actions being less impactful than those chosen for the energy sector. What do you think motivated the stakeholders to prioritise natural ecosystem regeneration?
- R: About 45 percent, or 400 thousand hectares, of Querétaro's land is a protected natural area. This area is a large carbon stock, but also, protecting natural resources is part of the state's identity. Queretanos (residents of Querétaro) recognise the natural resources and biodiversity of our state as a heritage for future generations. These actions may not have as much impact on reducing greenhouse gas emissions, but they certainly do have an impact on the acceptance of the pathway and decarbonisation policy by society.





We see the AFOLU sector as a key that will open many doors in terms of the adoption of measures that allow us to communicate with different actors more easily regarding emissions reduction."

## Institutionalisation of a pathway - the three pillars

- M: We consider that embedding the pathway into programmes, frameworks and laws, to ensure its sustainability throughout time, can be difficult to achieve. As you just said, there are going to be various institutional changes and changes in administration over time. In this sense, what do you consider key for the longevity of the pathway?
- R: I think there are three pillars of work that go hand in hand:
  - Communicating with the public about decarbonisation to encourage social acceptance,
  - 2. bringing on board political and governmental actors, as they play an important role in the process, and
  - building a regulatory framework which will allow us to develop strategies, begin implementation and generate results now – opening the door to a new Querétaro oriented towards decarbonisation.

It's not enough to put the pathway into regulations or proceedings.



The important thing is that citizens are truly convinced that the decarbonisation of the economy is both necessary and increasingly urgent for the long-term sustainability, not only of Querétaro, but of Mexico and the whole world."





#### Advice for other states

- M: From Querétaro's experience, what further advice could you give to other states considering developing a long-term pathway?
- R: For states that are intending to initiate this process, I would give two pieces of advice:
- Start off by identifying important stakeholders find allies within the 1. government who work directly with these economic sectors, so that the initial phase of buy-in begins within the government itself.

On the other hand, heavily stress the effort of engaging society in the process and securing the commitment of local actors in the design of the strategies, which is something that in Querétaro generated some issues. Initially, local actors start with a lot of motivation, but as the work gets complicated, they start to lose this energy. You have to check in continuously to make sure that they are still onboard.

Also focus on financing the pathway. You don't need to think that funding necessarily has to be public, but you need to develop strategies and search for other actors who can intervene to better manage this type of support.

For example, we have identified some innovative funds that, considering the projections of power generation and energy costs over the next 30 years, alongside tax considerations, can start to generate very beneficial schemes that can attract companies and other investors to operate within the pathways we want to implement.

Also, another very important challenge that many governments face, especially when they are new to data collection, is to find databases that allow them to generate their pathways. There are many private sector companies that handle a huge quantity of data, which have served us well for the design of the pathways. Insurance companies, for example, hold an impressive amount of data on climate change, energy consumption, and so on, that can help you. So, don't be discouraged by the data collection phase.

- M: And what would be the biggest challenge coming up for Querétaro?
- R: I believe that the biggest challenge that we, and almost any government (subnational and national), will face, is to maintain the interest of economic and social actors.

This interest, in my viewpoint, is maintained in two ways: by generating trust and by simplifying the way we transmit information. First, communication will play a very important role in the implementation of pathways, because not all actors are specialists in climate change. Not all actors carry a lifetime related to climate change issues.

Initially, I see a big challenge coming up to 2030. I think the hard work is between 2021 and 2030, because this first stage lays all of the groundwork. What we then achieve from 2030 to 2050 will follow practically automatically.



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M: Well, I like that we have ended on this last point about the importance of the next nine years. What are the next steps for Querétaro in this regard? Considering the need to act now and cruciality of the coming years.

The next 30 years must focus on action and implementation, but particularly the next 10 because, as mentioned above, the achievements of the next 10 years will provide the foundation for the next 20. And then we will see if we are in a position to achieve the goals set for 2050. It's not something we can start in 2048, we must start this coming year.

The next steps for Querétaro, related to the three pillars and other advice I mentioned previously are:

- 1. Seek social acceptance of the pathway in order to bring it into law.
- 2. Seek medium and long-term funding for these actions.
- 3. Start to execute decarbonisation strategies and implement projects.

The most important action is to start now with the strategies that we already have at hand, for which we already have data, and for which we already have actors on board.

# The most important action is to just start now.





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