Jalisco cuts public sector emissions with Carbon Management Plan

Government: Jalisco, Mexico

Region: Latin America

Sectors: Renewable energy, energy efficiency

Date of publication: July 2018

Summary

Jalisco's Carbon Management Plan was created as part of the Mexico Low Carbon States Programme, an initiative which supports Mexican state governments to create and implement a robust strategy to reduce their own carbon emissions. The program is supported and funded by the Foreign and Commonwealth Office of the UK Government and implemented by the Carbon Trust with guidance and co-funding from agencies of the Federal Government of Mexico. In June 2014, all Mexican state governments were invited to express interest in the program, and the states of Jalisco and Tabasco were ultimately selected as pilot regions.

The purpose of Jalisco's **Carbon Management Plan** is to create a portfolio of renewable energy and energy efficiency projects to reduce the greenhouse gas (GHG) emissions of the Jalisco State Government by 40% by 2018 (compared to a 2013 baseline). The Plan also intends to raise awareness of public servants on the effects of climate change and existing mitigation strategies. It was implemented through the Ministry of Environment and Territorial Development with support of external partners involved in the Low Carbon States program.

The Carbon Management Plan kick-started in 2013 with the quantification of the baseline emissions of the state administration. Although the project comes to an end in 2018, some of the improvements implemented have a scope to 2030.

Results

A total of 27 projects were implemented in eight administrative buildings, resulting in annual savings of over 20,000 tCO2e and MXN$ 4 million. In 2017, emissions had been reduced by 17% compared to the 2013 base year, corresponding to taking almost 4,000 cars off the road for a year. Improvement projects were ultimately selected based on criteria of cost, return on investment and mitigation potential. They covered buildings of several ministries including the Secretaries of Education, Finance, Culture and Mobility and included:

- Switch to LEDs in the eight target buildings
- Installation of solar panels on three of the target buildings
- Purchase of 13 electric vehicles and 80 hybrid vehicles and the installation of the first Level 3 charging station[1] in western Mexico
- Other energy efficiency improvements including efficient A/C systems, solar heaters and automation of lighting.

The state government of Jalisco also signed an agreement for the Eolica Los Altos wind farm to provide at least 41 GWh/year between 2014 and 2018 to power municipalities of the Los Altos region, as well as public transport in the metropolitan area of the state capital of Guadalajara. This supply is equivalent to the annual consumption of about 34,000 households.

Following the successful experiences in Jalisco and Tabasco, the Carbon Trust launched a second phase of the Mexico Low Carbon States Programme to expand to the state governments of Morelos, Yucatán and Baja California.

"This has given us clear step-by-step pathways for our large and complex State Government organisation. The purpose-designed methodology and tools are helping us to make high level (and sometimes abstract) carbon reduction targets credible and achievable."

Project Leader, Jalisco State Government

Enabling conditions

The Carbon Management Plan's success was contingent on a strong motivation of all stakeholders (especially the two leading Ministries) and on the cooperation between local and international partners. The importance of the Carbon Management Plan is also recognized in the State Climate Change Action Plan (Programa Estatal de Acción ante el Cambio Climático, PEACC) adopted in 2017. The PEACC sets out three main climate mitigation strategies: i) sustainable cities, ii) sustainable agriculture and forestry practices and iii) renewable energy and energy efficiency – the latter including the Carbon Management Plan. The PEACC also emphasizes the crucial need for communication and awareness raising, as well as international cooperation.

Challenges

A few challenges were encountered throughout the project implementation, including the limited interest of other State Ministries and the absence of robust reporting system to account for progress. An effective way to keep other ministries involved has been to communicate consistently about the savings achieved.

Key lessons learned

- Initially, the Carbon Management Plan included a portfolio of 92 projects, with a high total cost of implementation. However, only 12 buildings were audited for their energy performances and so far, eight buildings have received improvements. Narrowing the scope of the project ensured more cost-effective results.
- The project benefitted from international expertise and technical support from a range of external partners, including the Carbon Trust and the UK Foreign and Commonwealth Office. The program combined local knowledge with methodologies and tools that the Carbon Trust had tried and tested to support the UK public sector carbon management programs. This international collaboration and transfer of expertise was key to the success of the project.

For more information, contact Ana Cecilia Perales de Dios, at ana.perales@jalisco.gob.mx

[1] Level 3 charging, also known as DC fast charging, supports up to 500 volts charging and can charge an electric vehicle in 20 to 30 minutes.