



## Low Emissions Schools NAMA in Mexico

### Scaling-up a local climate change education programme into a Nationally Appropriate Mitigation Action (NAMA)

The Low Emissions Schools Programme is a NAMA focused on the educational sector in Mexico. It connects education and climate change through promoting sustainable development practices in schools and the wider community, including the measurement of school-level greenhouse gas (GHG) emissions. This case provides an example of how local climate action can successfully be piloted and scaled-up to a National Appropriate Mitigation Action (NAMA).

#### Background

In 2010, Mexico accounted for 1.3% of global GHG emissions, placing it as 11<sup>th</sup> highest emitter worldwide. In 2012 the country passed its pioneering *Climate Change General Law* to guide and provide a mandate for national climate change policy over the coming decades. The law strengthened and expanded existing institutional arrangements to cover the entire country and requires action to incorporate federal, state and municipal levels in implementing the national objective of reducing emissions and achieving sustainable development.

#### The Low Emissions School Programme

Across Mexican society there is still considerably limited awareness of the challenges presented by climate change, the need for improved resource efficiency and the role which individual actions can play in addressing these. Children and young people can play a key role in helping to address these challenges through increasing awareness and transforming their behaviour, as their habits are less firmly entrenched than that of adults.

Acknowledging the potential catalytic role which young people can play, the *Low Emission Schools Programme* established in 2013, engaged schoolchildren aged between 10 and 16 to learn about reducing greenhouse gases in their

Country	Mexico, in 5 pilot states
Sector	Education
Duration	June 2013 – up to 2018
Framework	This programme is supported by the Federal Ministry for Economic Cooperation and Development (BMZ), Foreign & Commonwealth Office (FCO) UK, German Ministry of Foreign Affairs (15 June 2013 to 31 December 2014).
Coordinating entity	General Directorate of Climate Change Policy of the Mexican Ministry of Environment, Natural Resources (SEMARNAT)
Implementing agency:	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
Partners:	National: SEMARNAT (Mexican Ministry of Environment and Natural Resources) States: Distrito Federal, Morelos and Veracruz through Environmental and Education Ministries on state level Implementation in 36 schools

schools and to make more efficient use of resources. As a consequence the schools have begun to significantly reduce their emissions as well as cutting costs. At the same time, the children and young people also transfer this knowledge to their families, friends and communities facilitating wider awareness raising and behaviour change across the community.

### The Low Emissions Schools NAMA

As education is a key focus for development activity in Mexico, aligning this with climate change mitigation activity through the *Low Emissions School Programme* provided a good fit to scale-up the pilot programme into a NAMA.

The *Low Emissions Schools NAMA* is supported by sub-national climate change policies and national climate change laws and has been successfully integrated into:

- the Special Programme for Climate Change 2013-2018 (PECC) that serves as the main policy instrument derived from the Climate Change General Law and identifies opportunities to reduce emissions by 2018 across all governmental sectors.

### The NAMA Registry

Since October 2013 GHG mitigation initiatives being developed in Mexico can be registered in a domestic registry for Nationally Appropriate Mitigation Action (NAMA). The purpose of this NAMA Registry is to centralize information, assist in the international registration process and channel possible support. Submission to the registry is voluntary and independent of adoption of the United Nations Framework Convention on Climate Change (UNFCCC) NAMA registry. Recognition of GHG reductions is undertaken through the National Registry of Emissions (RENE) once the NAMA is certified. Registration of a NAMA in the domestic registry requires that it satisfy of the following criteria:

- Be aligned to the **National Development Plan**;
- Contribute to transformational changes towards a sustainable growth in the country and be replicable;
- Potential to develop a Monitoring Reporting and Verification (MRV) system;
- Potential to be financial sustainable;
- Brief description of the actors involved, with preference for proposals involving multiple sectors (public, private, academic, social organizations);
- Identification of mitigation potential (including calculations for Business as Usual and expected GHG emissions reductions benefits), methodologies and mechanisms to MRV along with potential data sources;
- Implementation plan, including estimated costs for implementation and identified financial sources.

- the Climate Change Action Plan of Mexico City and Veracruz (not yet passed);
- in the national and international (planned) NAMA registry.

### Description of Activities

The *Low Emission Schools Programme* aims to empower students to effectively influence their communities' action on climate change and sustainability, while at the same time reducing GHG emissions originating from their school. It aims to promote sustainable practices resulting in GHG emission reductions in the key areas of: energy, waste, transport, water, material consumption and land-use. As co-benefits it also aims to educate and empower young people and their communities around climate change issues.

The programme is delivered through actions led by the educational community and implemented by local non-governmental organisations that visit the schools on a regular basis. Each school creates a Green Team composed of students, parents and school staff. Together they are in charge of implementing the annual emission reduction action plan. Additionally, the programme is accompanied by a series of climate change awareness raising workshops. So far, more than 4,500 students and 1,000 adults have participated in these workshops.

In the pilot phase (2013-2014) the programme has been implemented in five federal states, where key stakeholders from the Environment and Education Ministry at state-level are responsible for its implementation. The programme is largely driven by a top-down process but does allow for bottom-up participation as schools can voluntarily apply to be part of the programme. The pilot was funded through a combination of support from:

- Federal Ministry for Economic Cooperation and Development (BMZ): €210,000 EUR (Apr 2013 – Oct 2014);
- UK Foreign & Commonwealth Office (FCO): €107,000 EUR (Apr 2013 – Oct 2014);
- German Ministry of Foreign Affairs: €75,000 EUR (Jun 2014 – Dec 2014);

During the pilot, some of the mitigation actions could be implemented without requiring much money. In some cases communities and private companies operating locally supported the project (e.g. by providing trash cans to schools for waste separation).

As a next step, the project team designed a robust and well-structured management and governance plan and established a Steering Committee including representatives from:

- Federal Environment and Energy Ministries
- State Education and Environment Ministries
- Civil Society (non-governmental organisation PIDES)

Scaling the programme up by developing it into a NAMA aims to enable:

- Tracking of GHG emissions in schools;
- Strengthening existing Mexican environmental education programs;
- Supporting a comprehensive approach to climate change mitigation and adaptation in schools and educational communities;
- Transforming students into climate change agents in their local communities.

The estimated level of funding required to implement the NAMA is \$62.77m USD for an implementation period of 6 years. During this time it is envisaged to scale the project from its implementation in 5 states and 36 schools up to 18 states and 10,000 schools, covering approximately 5% of the sector.

### MRV-approach and mitigation potential

All the implemented actions are reported and tracked on a web-based platform ([www.ganalealco2.com](http://www.ganalealco2.com)). This internet platform serves not only as a sustainable and cost-efficient MRV-system but also as an interactive portal for environmental education. On this website the CO<sub>2</sub> emission-calculator-tool allows for stable monitoring and evaluation. The tool allows students to get to know the GHG emission baseline of their school and track the changes. Furthermore, schools share their results, experiences and best practices, thus empowering more students and improving methodologies continuously. After a review by the NGO, an annual report is sent to the National Registry that is operated by the General Directorate of Climate Change Policy, SEMARNAT.

For the pilot, it is envisaged that the total impact will be around 900 t CO<sub>2</sub>eq per year (on average: 25 t CO<sub>2</sub>eq per school).

### Lessons Learnt

- **Media involvement:** The project received attention from many sides and achieved a high level of exposure through both conventional and social media. This helped to encourage stronger stakeholder involvement in the project.

- **Participatory approach and multiplier effect:** Participation and empowerment of the educational community were important pillars of the project. The students were the driven force in connecting the project to their communities, in the words of one participant: *“the project became almost like a social movement. Eventually, it was not about big numbers in GHG emissions reduction, it was more about changing attitudes”*. The interactive website not only served as a good MRV-system, but also as a networking platform to share experiences to help other schools, for example in developing new ideas.
- **Adaptable approach:** The project is potentially easily replicable for other (public) institutions.
- **Invest time in a good management plan:** It takes time to set up an effective management plan after the pilot phase. Learning and refining from the pilot phase simplifies processes, making them more likely to success when scaled-up. A good management plan is also needed to ensure effective collaboration between all the different government levels, to get private donors involved and to help access national funds.
- **Networking:** To get the project on the national agenda was very much an informal process. It involved good timing, building the right relationship with different stakeholders (such as the representatives from the ministry) and making it popular.
- **Effective communication to integrate all levels of governance:** The different levels of government have to sit at the same table and needed to communicate and participate equally in the process. The steering committee provided the focus for this as it is a good place to facilitate closer working relationship between the different levels.
- **Assigning clear roles:** The tasks of the different political levels involved have to be clearly assigned. Strong federal control with sub-national participation/coordination may be one approach; another may involve devolving budget responsibilities, or oversight to the sub-national level. Either way, roles and responsibility should be clearly identified.
- **MRV system:** Invest time in establishing a stable and robust MRV system and keep improving it. The web-based MRV system used in the project helped to gain robust data and to aggregate individual data to provide a more comprehensive overview. It is important that the system is not too complex, and can be fed from everywhere in the country. The monitoring and reporting was undertaken by the students on their own, giving them a strong sense of ownership. The auto-control function prevents unrealistic data being entered and periodic visits to the school provided verification of the data.



## Recommendations

The Low Emission Schools Program aims to promote sustainable practices in schools. Similar programs can be found in many different countries, but this is a good first example of successful up-scaling of local climate action to support national climate mitigation action and the formulation of a NAMA. The following recommendations may be useful for considering in other similar projects:

- Multi-actor, participatory approaches facilitate the process of making a project visible and popular because working with different stakeholders (e.g. policy makers, NGOs, civil society) facilitates awareness rising and enable wider awareness of the project by the public.
- Approaches to linking the different political levels should be considered and addressed right from the outset.

- Establishing a steering committee can provide an effective forum to get the stakeholders involved all sat around the table and engaged in dialogue to support the project.
- The tasks, responsibilities and roles of different political stakeholders and actors should be clearly assigned and addressed from the outset.
- Start building a robust MRV-system right from the start as it takes time to establish.

## Sources and References

Project website and social media:

[www.ganalealco2.com](http://www.ganalealco2.com)  
<http://twitter.com/ganalealco2>  
[www.facebook.com/Ganalealco2](http://www.facebook.com/Ganalealco2)

NGO PIDES

<http://www.changemakers.com/users/pides-ac-plataforma-integral-de-desarrollo-sustentable>



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