

# CLIMATE ACTION IN COSTA RICA

## Country context

In 2012, the Gross Domestic Product (GDP) of Costa Rica was on the rise, at a rate of 4.8%. The Greenhouse Gas (GHG) Emissions Inventory for 2011 showed its main emitting sectors to be energy (64% overall, to which transport, at 60%, was the highest contributor), followed by waste (17%), agriculture, forestry and other land use (AFOLU) (11%), and industrial processes and product use (9%).

Costa Rica is a leader on carbon neutrality in Latin America. In 2011, the **objective of “achieving a low carbon economy”** was stated in the National Development Plan. In 2012 Costa Rica issued its National Strategy on Climate Change where the goal of carbon neutrality was included.

Two sub-sectors were identified by government as key challenges to achieving this goal: Livestock, within the AFOLU sector of the GHG inventory; and transport within the energy sector.

As such, the aim of the Low Emission Capacity Building (LECB) project in Costa Rica was to improve the capacity of both sectors to develop mitigation measures, with livestock as the priority. It therefore supported the development of emission factors at the country level, the formulation of the livestock Nationally Appropriate Mitigation Action (NAMA), and monitoring, reporting and verification (MRV) system proposals. Transport, and the energy sector as a whole, was also targeted by the LECB project.



# LECB COSTA RICA at a glance



**Total financing**  
US \$1,056,906

**3**

**Timeframe**  
3 years (2013-2016)



**Sectors**  
Agriculture and transport



**Counterparts**  
Ministry of Environment and Energy (MINAЕ), Ministry of Agriculture and Livestock (MAG), Ministry of Public Works and Transport (MOPT)



## Thematic areas

- Institutional frameworks
- GHG inventory systems
- NAMAS
- LEDS
- INDC support
- MRV systems
- Private sector involvement
- Climate finance

## LECB LATIN AMERICA

### Development of tools and a Sustainable Urban Mobility Plan for low emission transport

LECB carried out technical work to directly support the Ministry of Transport (MOPT) to reduce the use of private vehicles, through which a tool was created using data from the MOPT which made information on public transportation alternatives available to users. LECB also provided technical and financial support for the formulation of the Sustainable Urban Mobility Plan (PIMUS) supported by the Inter-American Development Bank (IADB) from the private sector in these focus areas.

### Development of the National Energy Plan

Based on series of high-level roundtables on transport and fuel as well as constant technical support of the project to the Ministry of Environment and Energy (MINAЕ), the 7th National Energy Plan was developed, which has two main sectoral targets: transport and fuel. Following its formulation, the Plan was presented to the public. MINAE will be supported in monitoring the implementation of the Plan, specifically in modernizing the vehicle fleet, improving public transport and ensuring fuel quality.

**+30 experts**

from MAG, INTA and the private Livestock Corporation (CORFOGA) travelled to Panama for training on pasture and grazing management techniques

### Study of national GHG emission factors from enteric fermentation

LECB supported the use of the gas chromatography technique which enabled the study of national GHG emission factors from enteric fermentation in livestock. Capacity was built in technicians within the National Institute of Agricultural Technology Transfer (INTA) and the National Meteorological Institute around this technique. The work around emission factors was published and underwent peer review.

### Approval of the National Strategy for Low Carbon Livestock

The National Strategy for Low Carbon Livestock was approved by presidential decree in 2015. The formulation of the strategy was led by MAG, and LECB supported the work of the “Livestock Table” (comprised of government and private sector stakeholders, which formulated the strategy), by providing funds for their meetings, technical assessment of data generated, communications material, and strengthened capacities in the Livestock Table institutions.

**US \$30,000**

invested by LECB through MAG and CORFOGA in the Brunca region for the acquisition and installation of technical materials

# RESULTS

### NAMA formulation for livestock

LECB enabled the formulation of the Costa Rica livestock NAMA and its associated MRV system, with its official publication in November 2015. LECB directly contributed to the establishment of the monitoring system with specialized training on emission factors, and commissioned research and 20 pilot farms leading to the development of national emission factors. The monitoring tasks included in the manual allow for assessment of environmental and economic sustainability of a farm against a set of initial conditions, which enables the evaluation of the effectiveness of interventions in different farming components, so necessary adjustments can be made before repeating and replicating the experience.

**US \$20 million**

approved by the governmental Banking System for Development as a mechanism to finance farmers to afford technology for scaling up the livestock NAMA

**20 pilot farms**

in the Brunca region participated in the livestock NAMA with LECB support



# IMPACTS



## General overview of the UNDP Low Emission Capacity Building Programme

Since its inception, the UNDP LECB programme has paved the way for effective and lasting climate action by building capacities of government staff to develop policies, strategies and tools that help implement their climate change goals. Focusing specifically on essential building blocks such as strengthening GHG inventory data and systems; formalization of institutional arrangement for climate actions; development and alignment of low emission development strategies (LEDS); and the creation of Nationally Appropriate Mitigation Actions (NAMAs), LECB provided much of the enabling environment necessary for countries to respond quickly to emerging needs, such as the submission of Intended Nationally Determined Contributions (INDCs) and socialization of the Paris Agreement. Given its flexible nature and strong country ownership, often the originally-envisaged and measurable LECB outputs have been exceeded, leading to some unplanned but highly welcomed additional impacts.



### Increased capacity and knowledge for climate change mitigation created through training and technical assistance

LECB organized conferences and seminars and enabled permanent interaction between leaders, technical authorities and experts. A sound contribution was made with the estimation of “tropicalized” emission factors for methane, and capacities for GHG emission accounting in pilot farms under the livestock NAMA.



### Climate change mitigation mainstreamed into national planning

The importance of and capacity to integrate climate change planning at the national level was demonstrated with the development of the Sustainable Urban Mobility Plan (PIMUS) and the National Energy Plan.



### Improved governance and multi-stakeholder and inter-sectoral dialogue in the livestock sector,

resulting from the formulation process and approval of the national livestock low carbon strategy and NAMA plans. The “Livestock Table” dialogue series established through LECB and between MAG, MINAE, INTA, the National Meteorology Institute, and CORFOGA continues to meet and advance actions under the livestock NAMA. MAG and MINAE worked closely together for the first time towards the common objective of developing a livestock NAMA. This high level of coordination and accountability was pinpointed by MAG as a key factor for sustainability of the intervention.



### Strongly engaged private sector, mainly in the livestock sector

Associations like CORFOGA and the National Dairy Chamber of Commerce were strongly involved in the project’s activities. This process started in 2014 around the livestock NAMA with initial training on climate change, and the opportunity for increasing productivity and efficiency in the sector with mitigation co-benefits. Farmers then received free technical advice on how to improve productivity and income from what the LECB project team called “eco-competitiveness”. It was an important outcome for the team that the **farmers saw climate change mitigation as an opportunity and not a threat to their business.**

## CASE STUDY

# DEVELOPING A NAMA FOR LIVESTOCK MANAGEMENT IN COSTA RICA



The LECB project contributed to the development of a livestock NAMA, to support efficient production processes and “eco-competitiveness” to increase productivity in the sector while avoiding heightened GHG emissions.

The process was led by MAG and MINAE, and had strong participation from CORFOGA, unions and businesses, academia, and institutions related to agriculture and environment. The dialogue process led by LECB created an atmosphere of trust, which promoted active and continuous participation.

CORFOGA and the National Dairy Chamber of Commerce were involved in 100 pilot farm projects implemented on a national level by MAG, INTA and CORFOGA. LECB supported 20 pilot farms in the Brunca region with methodology development and training on the “rational grazing” technology, which is based on the efficient use of resources.

The forest cover of farms is measured in order to define the carbon sequestration capacity and identify potential for carbon capture.

An important result of the NAMA development process, including the farm pilot projects, was the approval of a finance mechanism by the Banking System for Development (the system of national funds and banks for development in Costa Rica) to provide USD 20 million for farmers to afford the technology. This is envisioned as a basic condition for scaling up the use of the technology. **The livestock NAMA has now been fully designed** and is led by MAG, and is a core component of the National Strategy for Low-Carbon Livestock, which was established by presidential decree.

The livestock sector has been very active in its participation. Along the whole chain the sector was willing to participate from the first workshops on mitigation, adaptation, biological connectivity and other issues. It was a very open process, very horizontal. There is a strong ownership of the livestock NAMA proposal.



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## LECB Costa Rica made possible by:

The UNDP Low Emission Capacity Building (LECB) Programme was launched in January 2011 as part of a joint collaboration between the European Union, the Governments of Germany and Australia and UNDP. It is a global programme that helps countries build the public and private sector capacities needed to scale up country-driven mitigation actions.



Supported by:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

based on a decision of the German Bundestag

