Country context

Peru has experienced fast economic growth over recent decades, mainly driven by commodities exports and private investment and consumption in areas such as construction. Gross Domestic Product (GDP) tripled from 1990 to 2012. The land use, land use change and forestry (LULUCF) sector was the main source of greenhouse gas (GHG) emissions in 2012, followed by the energy sector, which, however, shows a considerably stronger correlation with GDP.

The Low Emission Capacity Building (LECB) project in Peru started in 2013. At that time, Peru had started efforts for GHG emission reduction, and had some important policy instruments in place such as the National Climate Change Strategy (ENCC), which was under review. Nevertheless, there was little clarity amongst sectoral ministries and the private sector on the need for low emission development. Sectors were only partially aware of their roles and responsibilities, high personnel turnover undermined capacity building efforts, and institutional strengthening was high on the list of needs, together with the necessity for low emission development strategies (LEDS), systems and guidelines.

In this context, LECB had the pioneering objective of supporting the Ministry of Environment (MINAM) in the formulation of a National Low Emission Development Strategy, with enhanced sectoral involvement from the Ministries of Energy and Mines (MINEM); Production (PRODUCE); Housing, Construction and Sanitation (VIVIENDA); and the Centre for Planning (CEPLAN). LECB addressed basic components and capacities for the formulation of a LEDS, including: GHG inventories and inventory systems for the energy sector, Nationally Determined Mitigation Actions design (including monitoring, reporting and verification mechanisms), capacity building, private sector involvement, outreach and awareness building.

The project paid particular attention to the cement, steel and brick industries, taking into account heat generation and energy efficiency processes.
LECB PERU at a glance

- **Total financing**: US $872,000
- **Timeframe**: 4 years (2013-2017)
- **Sectors**: Industry - construction materials (cement, steel and bricks), housing and waste
- **Counterparts**: Ministry of Environment (MINAM), Ministry of Energy and Mines (MINEM), Ministry of Production (PRODUCE)

### Thematic areas
- Institutional frameworks
- GHG inventory systems
- NAMAs
- LEDS
- INDC support
- MRV systems
- Private sector involvement
- Climate finance

### RESULTS

**LECB LATIN AMERICA**

**Strengthening of the national GHG inventory system - Infocarbono**

In an important effort to strengthen the country’s ability to produce GHG inventories regularly, LECB developed a system, including guidelines and manuals for GHG reporting that were validated by each sector for which they were produced. LECB then trained key actors on how to apply these tools which are now the basis for the preparation of bi-annual GHG reports.

During the LECB process the need arose to register all the generated data and make it available in a transparent manner, so all interested members of the public could access the information easily and for free. Thus, Infocarbono’s web platform was created in 2016 to compile and make public sectoral GHG emissions reports available and transparent. As of 2018, five inventories are available on the website, together with guidelines and manuals, as can be seen on: http://infocarbono.minam.gob.pe/inventarios-nacionales-gei/intro/

### Development of three NAMAs in the construction sector

LECB developed detailed NAMA design documents and monitoring, reporting and verification (MRV) systems for the cement, steel and brick industries under the leadership of PRODUCE and MINAM. The cement NAMA has been particularly successful as it has achieved institutional sustainability. This was driven by the Association of Cement Producers (ASOCEM) which has continued to support the NAMA in open forums and is promoting the use of the MRV system proposed by the Cement Sustainability Initiative, titled “Getting the Numbers Right”. The brick NAMA achieved concept note status with input received from industries located mainly in Lima and other small producers located in other cities. The steel NAMA developed a detailed Emissions Reduction Plan for Aceros Arequipa, one of the two big steel companies in Peru.

- **5 Official guidelines** for national GHG inventories developed and validated for five sectors (energy, transport, housing, industry and agriculture)
- **+20 Public officers** trained in GHG inventory reporting
- **3 NAMAS developed** with strong involvement of the private sector
- **1 New Solid Waste Management Law** which includes the concepts of co-processing and extended producer responsibility, both enabling conditions identified by the cement NAMA
LECB LATIN AMERICA

IMPACTS

Increased private sector engagement and investment in GHG emissions reduction efforts through the development process of the three NAMAs.

The NAMAs were developed through consistent dialogue with private sector actors, driven by LECB. The argument for the private sector was that NAMAs would facilitate the modernization of private companies, creating value and long-term growth, while contributing to environmental goals such as the INDC and local air quality limits. The project achieved engagement with important private sector stakeholders, such as cement producers through ASOCEM; two of the largest steel companies in Peru; the Programme on Energy Efficiency in Small Brick Enterprises to Mitigate Climate Change (EELA); the Industrial Brick Manufacturers Guild; and the Peru Green Building Council. The project also linked brick producers and financial entities such as the National Development Bank (COFIDE), to promote mitigation investments based on preferential loans.

Strengthened capacity for climate change mitigation policy making, achieved through focused actions and direct stakeholder engagement around NAMAs

The project facilitated the leadership of PRODUCE and involved other government entities such as the Agency for Environmental Assessment and Control (DEFA) as well as key stakeholders and beneficiaries. In addition, it grouped the main companies in the industry sectors, through guilds and company representatives. Evidence of the impact of LECB is the industry sector’s inclusion of the cement and brick NAMAs in its action plan supporting the achievement of Peru’s INDC mitigation goals for 2030. The cement NAMA required an important additional action for its implementation: the legalisation, under the new Solid Waste Management Law approved by Legislative Decree N°1278 of 2016, of co-processing as a fuel option for cement furnaces, thus allowing the use of waste for cement production. Finally, LECB was also involved in the development of the new Code for Sustainable Buildings.

Improved guidelines and capacities for sectoral GHG inventory reporting

after the approval of the mandate for the National GHG Inventory System - Infocarbono, by Supreme Decree. LECB supported this legal framework by providing technical assistance and training. Official guidelines and a manual were developed and adopted through a Ministerial Resolution. Also, as a result of training provided, the industry and energy sectors no longer need external assistance from LECB for the calculation of sectoral inventories.

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-visualized and measurable LECB outputs have been exceeded, leading to some unplanned but highly welcomed additional impacts.
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.

The LECB project supported Peru in developing a NAMA for the cement industry. Cement production was responsible for around 8% of national GHG emissions in 2010, excluding LULUCF. The development of the cement NAMA was possible because of coordination between the ministries of Environment and Production. MINAM provided technical support through information on methodologies, processes and implications of the NAMA, whilst PRODUCE contributed as a coordinator, and was responsible for leading and convening meetings with the involved ministries and cement companies. The NAMA was designed through a public-private partnership process and conceptualized as a way of working together with the cement producer’s guild, ASOCEM, on a low-risk low emission development strategy that would increase members’ competitiveness. The notion of “eco-efficiency” convinced companies to engage with the NAMA.

The main beneficiaries of the NAMA are companies in the cement sector, due to the reduction of costs and stronger market positioning and competitiveness. Companies are now able to adopt new technologies and practices aligned with sustainable development practices. Populations located close to their installations also benefit, due to a decrease in air pollution and because now they can efficiently and permanently remove problematic and hazardous waste such as scrap tires, solvents and paints, as these can be used as fuel in cement furnaces. This development has also increased the possibility of finding better alternatives to the disposal of their organic waste.

The cement companies have incorporated eco-efficiency as part of their current and future planned operations; thus their engagement with the NAMA is on-going, and currently drives its implementation. The inclusion of this NAMA in PRODUCE’s action plan for the NDC will also ensure its implementation in coming years.

The successful results in the cement NAMA are relevant because, as a traditional industry, it was difficult to transform. Having a success story increases the likelihood of interventions in other industries.

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