

CLIMATE ACTION IN CHINA

Country context

In 2009, China was the world's second largest greenhouse gas (GHG) emitter. In the face of this, it committed by 2020, to reduce its carbon emissions per unit of GDP by 40-45% based on 2005 levels. To help achieve the country's emission reduction targets, the 12th National Five-Year Plan (2011–2015) called for the **establishment of low carbon product standards**, including labelling and certification, as a way of controlling GHG emissions in both production and consumption.

In 2010, China's National Development and Reform Commission (NDRC) identified five provinces and eight cities as pilot low carbon regions to explore low carbon development experiences. Key measures to be taken in these pilot regions for GHG emission reduction included implementing GHG emission control frameworks, enhancing the monitoring, reporting and verification (MRV) systems at the regional and enterprise level, and exploring effective government guidance through economic incentive policies and market mechanisms.

China sought to design and promote locally applicable standards and certification systems for low carbon products, and to scale this up at the national level through demonstration.

The Low Emission Capacity Building (LECB) project in China directly addressed the national government's priorities and needs listed above. Specifically, the project supported China in its efforts to develop a low carbon product ecosystem and to demonstrate application of related certification across seven categories of products, through activities in the pilot low carbon regions of Chongqing City and Guangdong province.



LECB CHINA at a glance



Total financing
US \$1,067,900

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Timeframe
3 years (2012-2014)



Sectors
Energy and Industry



Counterparts
National Development and Reform Commission (NDRC)



Thematic areas

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

LECB ASIA

Planned and drafted implementation plans to setup low carbon product certification systems

Detailed implementation plans to help establish low carbon product certification systems in Chongqing City and Guangdong province were drafted by LECB. The implementation plans provide guidance on overarching principles, data management requirements, communication strategies, setting up a certification process, and building competence among actors for effective implementation of local low carbon product certification schemes.

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Field assessments

undertaken in aluminium alloy profile manufacturing enterprises to support the design of low carbon product standards and rules

Approved national and local standards and low carbon product certifications for motorcycles and aluminium alloy extruded profiles

LECB led the design of technical documents to establish and implement low carbon product certification system for two products: motorcycles and wrought aluminium alloy extruded profiles. Workgroups set up in Chongqing City and Guangdong province developed two documents for each product: Evaluation Methodologies and Implementation Rules, through field investigations, feasibility studies, and stakeholder consultations. The methodology document outlines the technical evaluation methods and requirements for conducting low carbon product certification, while the Implementation Rules provide instructions and specific operating guidelines to enterprises and third-party certification bodies on the certification process. Both the Evaluation Methodology and Implementation Rules for wrought aluminium alloy extruded profiles were issued as national standards, while those for two-wheeler motorcycles were issued as local standards in Chongqing City.

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National Standards

developed for low carbon product certification issued for the aluminium alloy profiles industry

RESULTS

Piloted low carbon product certification for seven products

LECB carried out pilot demonstrations in Chongqing City and Guangdong province in 28 private enterprises for application of low carbon product certification systems, across seven categories of products. The pilots enabled testing facility-level application of the methods and certification and provided on-the-ground learnings, ultimately enhancing practicality and scalability of the certification system.

28

private enterprises

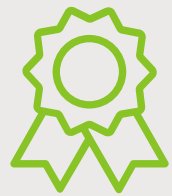
participated in pilot projects for field testing of the low carbon product certification system

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private enterprises

issued low carbon product certification during pilot demonstrations

IMPACTS



Supported future low carbon development in China, through the development of a strong base to scale up low carbon product certification

The formal issuance of standards and certification rules for two products at the national and local level is a successful demonstration of how to design and accelerate implementation of technically-sound and locally-applicable low carbon product methodologies and certification standards. Valuable experiential learning and practical field results were also generated.



Strengthened community of stakeholders, with technical capacity and awareness on low carbon practices and product certification for different products and production processes

Improved stakeholder relationships and collaboration between public institutions, private sector, certification entities, and consumers, around low carbon product certification following direct engagement and close coordination through LECB's activities.



Establishment of a holistic low carbon product and certification ecosystem

This has been demonstrated through tailored capacity building activities to targeted government agencies, private enterprises, and certification entities, based on their envisaged role in the certification process. Promotional activities within the selected industries and to consumers sought to create a market for low carbon products and promote continued uptake of the certification system.



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.

CASE STUDY

DEVELOPMENT AND ISSUANCE OF NATIONAL LOW CARBON PRODUCT STANDARDS

LECB China's Guangdong workgroup delivered two guiding technical documents for the extruded wrought aluminium alloy profiles industry, on low carbon certification standards and GHG accounting methodologies, and on low carbon product certification rules, which have been issued and implemented as national standards.

Guangdong province is a prominent hub for the manufacture and consumption of extruded aluminium alloy profiles. The project team selected profiles manufactured for use in building construction as the target product type for the study given their extensive use, limited product variety, and relatively mature operational technologies.

The study began with a detailed review of international and national low carbon product certification standards and GHG accounting methodologies, product-related technical standards and documents, and extruded aluminium profiles industry characteristics.

Then information was gathered on industry output, production processes, key components, and energy consumption by extensive engagement with private enterprises and experts through questionnaires, meetings, and field visits conducted from 2012 to 2013. Based on these activities, two technical documents were drafted, to outline the standards and methods and the certification rules respectively.

Subsequently, the Guangdong project team demonstrated the certification system in eight extruded aluminium profile manufacturing enterprises to test its field application, and incorporated findings into the technical standards and rules as part of finalizing the documents. These were issued as national standards by the Certification and Accreditation Administration of China in May 2014. Technical guidelines, developed in similar fashion, for two-wheeler motorcycles by the Chongqing workgroup have been issued as local standards by Chongqing City's administration.

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.

LECB China made possible by:



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based on a decision of the German Bundestag



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