

CHINA

VOICES FROM THE FIELD



Key Messages

- The LECB project in China is setting-up the basis for certifying low-carbon products. This also involves doing the needed research on establishing such certification via an accreditation system.
- A pilot for selected products, including motorcycles and others with significant aluminum content, in the city of Chongqing and the province of Guangdong is underway.
- Chongqing is China's largest motorcycle manufacturing and export centre, with about 40 percent of the total market share. Implementation of the low-carbon product certification project was based on field investigations, feasibility studies and broad consultations with a variety of stakeholders.



Designing Low-Carbon Product Standards and Certifications in China

China's economy has grown extremely rapidly in recent years. In order to deal with the intertwined accompanying issues of energy needs, resource needs and environmental degradation, as well as to explore China's sustainable development alternatives, the Chinese government made a voluntary commitment to reduce its carbon dioxide emissions per unit of GDP by 40%-45% by 2020 from 2005 levels. The country also aims to integrate this reduction target into its Medium- and Long-Term Plan for National Economic and Social Development.

In an attempt to meet these goals, as well as to build public awareness of the need for greenhouse gas (GHG) emissions reductions, China's Twelfth Five-Year Plan for National Economic and Social Development

The LECB Programme helps to build the public and private sector capacities needed to scale up country-driven climate-change mitigation actions in 25 countries, primarily by providing focus in five areas: GHG Inventory Systems; Low Emission Development Strategies (LEDS); Nationally Appropriate Mitigation Actions (NAMAs); Measuring, Reporting and Verification (MRV); and strategies for including the private sector. More information can be found at www.lowemissiondevelopment.org.

(2011-2015) called for the establishment of low-carbon product standards, including labelling and certification, as a way of controlling GHG emissions in the areas of production as well as consumption. It is hoped that such standards—a combination of administrative supervision and market guidance—will become entrenched within society's day to day lifestyle, resulting in greater public awareness about energy-efficient options.

China is among the 25 developing countries working with UNDP through the Low Emission Capacity Building (LECB) Programme to identify ways to reduce (or mitigate) climate change causing GHG emissions, while still delivering development benefits to citizens, in line with national development priorities. The US\$ 40 million Programme is funded by the European Commission and the governments of Germany and Australia.

As a result of a nationally-driven process, the LECB project in China is developing Low Carbon Product Certification Standards and GHG Accounting Methodologies for selected products in the city of Chongqing and the province of Guangdong. Certification pilots will also be conducted. The aim is to establish the fundamentals for certifying low-carbon products, including doing the necessary research on establishing such certification via an accreditation system.

This work directly supports the August 2010 announcement of the Chinese National Development and Reform Commission (NDRC) to develop low-carbon pilot projects for five provinces and eight cities, including the city of Chongqing and the province of Guangdong.

Chongqing city, in midwestern China, is a national pilot zone for rural and urban comprehensive reform. A long-time industrial city, it is listed as one of China's five major national centres. Guangdong Province has been a leader in China's reform and a pillar of the national economy in terms of, manufacturing, foreign trade and consumption.

In September 2012, UNDP and the NDRC launched the LECB project, which encompasses the development of Low-carbon Product Certification Standards documents for motorcycles and other

products with significant aluminium content, as well as assistance in developing GHG inventories.

Since its initiation, the project's workgroup has developed implementation plans and accounting methodologies. Meanwhile, the Chinese government has released draft versions of measures to be taken towards managing low-carbon product certification, as well as draft versions of other rules. The near-future goal is for China to approve a standardised low-carbon product certification system.

Interim Measures: Management of Low-carbon Product Certification

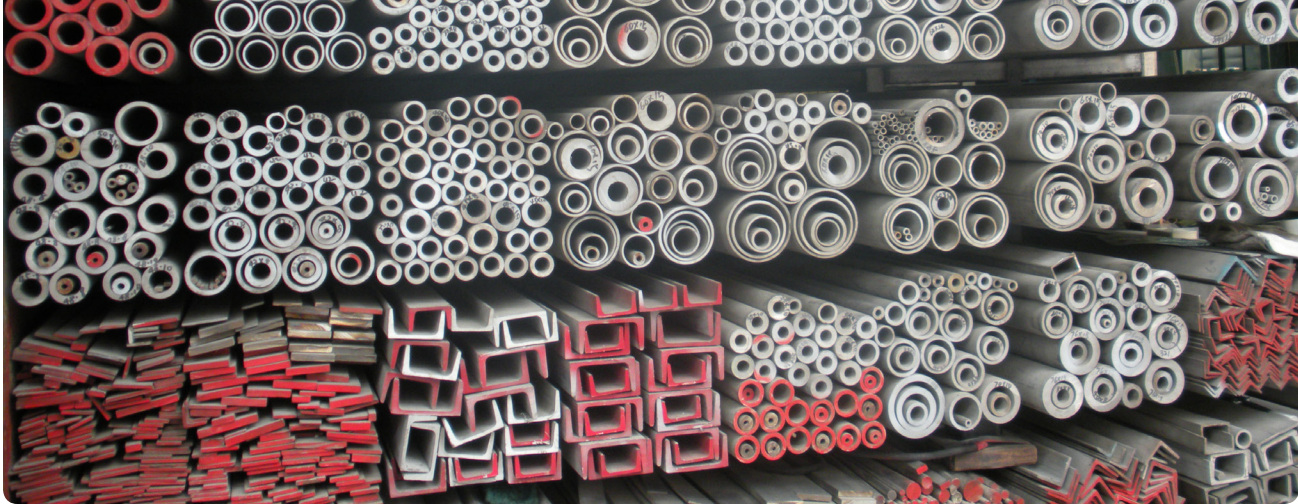
In February 2013, the NDRC and the Administration of Certification and Accreditation of China (CNCA) jointly issued the Interim Measures on Low-Carbon Product Certification Management. The interim measures document establishes the overall organisation for supervising and managing low-carbon certification on a national basis. It also provides information on the qualification and organisation of human resources, the implementation of certification, certificates and logos, and other supervisory and managerial issues.

The product directory of low-carbon product certification prescribed by the interim measures is to be jointly developed, modified and released by the NDRC and the CNCA. The NDRC and the state council will establish a low-carbon certification technical committee, responsible for researching and reviewing issues related to such certification. The CNCA is to be responsible for the organisation, implementation and supervision of the low-carbon product certification process itself.

Summary of Project Outcomes

Chongqing City: Low-Carbon Product Certification Applied to Motorcycle Manufacturing

The project team in Chongqing is comprised of individuals from the International Investment Consultation Group Co., Ltd, the Chongqing Institute of Standardisation and the Chengdu branch of the CNCA. The team is supervised by the Chongqing branch of the NDRC. The plan was developed within real-world circumstances in Chongqing, by considering priority issues, pilot



goals, workplace arrangements and quality control measures, among other aspects.

Chongqing is China's largest motorcycle manufacturing and export centre, with about 40% of the total market share. Implementation of the low-carbon product certification project was based on field investigations, feasibility studies and broad consultations with a variety of stakeholders. Basic parameters of the project state that the product type is the common two-wheeled motorcycle, and the areas for low-carbon evaluation are the product manufacturing period and the product use period. The product manufacturing period is limited to the general assembly phase, and the product use period is limited to the amount of gasoline consumed within general working conditions after assembly and before sale.

By October 2013, the project team for Chongqing had completed a draft of implementation rules for the low-carbon product certification pilot, as well as evaluation methods and requirements. These rules, methods and requirements will be applied to motorcycle manufacturing and to wrought aluminium extrusions for building profiles. The project team is also actively promoting a pilot demonstration of low-carbon product certification. Certifying authorities have been established, as well as a partial list of enterprises likely to participate in the pilot. This has involved much background research and dissemination work, in order to ensure positive, effective results.

Guangdong Province: Low-carbon Product Certification Applied to Wrought Aluminium Alloy Extrusion

The project team in Guangdong Province is comprised of individuals from the Guangzhou Branch

of the CNCA, the Guangzhou Research Institute of Non-Ferrous Metals and the Guangzhou branch of the China National Institute of Standardisation, under the supervision of the Guangdong arm of the NDRC.

Guangdong Province is a leading province—in terms of volume, technology and marketing—in the manufacture and consumption of extruded aluminium building profiles. Annual production of these materials exceeds three million tons, with a total production value of over 100 billion Yuan.

Extruded aluminium profiles are divided into two types: those for industry and those for construction. Due to the tremendous variety and the high complexity of the products, it was determined that aluminium profiles for industry do not provide a solid starting point for developing a low-carbon certification system. This is due primarily to technological conditions and product influence. However, standards for extruded aluminium profiles for construction exist, and so this industry sub-sector was chosen for the pilot. After conducting on-site research, the project team decided to consider only the manufacturing process as the area to be evaluated in the pilot, excluding the aluminium refining process and product distribution.

The team has gathered feedback from various stakeholders in order to create guidance documents for the Guangdong government to use in carrying out low-carbon product certification. These documents will be used to guide third-party certification bodies in the analysis of contents and procedures used to manufacture extruded aluminium profiles. One guidance document focuses on evaluation methods and requirements. It includes information on aspects such as scope,

normative references, terms and definitions, and technical requirements:

- context and background information relevant to the creation of a low-carbon product certification system;
- fundamentals of such a system, which will eventually be nationwide;
- overall requirements;
- suggestions for the development of technical norms;
- guidance on building the capacities of certification organisms; and
- suggestions for the implementation of such a system and guaranteeing its effectiveness.

A second guidance document centres on the certification process itself:

- scope;
- evaluation and approval or rejection;
- certification pattern;
- termination of certification;
- application of certification;
- follow-up;
- accreditation;
- recertification;
- preparing for validation;
- certificates;
- initial onsite visit;
- increase of authentication units;
- validation report;
- use of the low-carbon product logo.

The Future of the Campaign for a Low-carbon Certification System in China

Once the Low-carbon Product Certification Pilot has been completed, project teams will analyse and select other products on which to conduct low-carbon product certification demonstrations locally. Domestically developed products that will likely be included are air conditioners, household refrigerators, flat-panel TVs, small- and medium-sized asynchronous motors, flat glass and general-use Portland cement. So far, project teams have made thorough investigations into the distribution of such products and preliminarily identified enterprises likely to receive pilot demonstrations.

June 17, 2013 was China's first Low-Carbon Day. The project teams organised and participated in the public service campaign related to the dissemination of relevant information and the promotion of low-carbon products. They publicised the need and the common sense of low-carbon production and presented and promoted examples of low-carbon products.



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