

# 07

## Can standards help developing countries phase into a green economy?<sup>3</sup>

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Climate change and planetary boundaries are global challenges, which require that all countries recognise the need to transform their economies and take action. The international community confirmed this necessity at the last United Nations Climate Change Conference, COP 21, held in Paris, and 174 countries signed the resultant agreement on 22 April 2016 in New York.

The green transformation was described as a “Herculean task” (Lütkenhorst, 2014: 3), which requires “... a fundamentally new growth model, sustainable patterns of behaviour and radical technological innovation ...” and “... must build on acceptance and support by society at large”. The challenge is especially serious for developing countries given their constant struggle to catch up with the leading countries.

There are different pathways for countries to phase into green technologies (see article *Shaping a climate smart*

*and eco-friendly business environment*), for example:

- The textbook case is that polluters pay compensation for the damage they cause. The payment can be mandatory, such as through formal mechanisms of carbon offset (e.g. carbon taxes or purchase of emission rights certificates) or voluntary payments for offsetting CO<sub>2</sub> emissions on air flights.<sup>4</sup> These instruments create incentives to reduce negative external effects and support change towards a more sustainable economy, but they require a lot of coordination efforts.
- Another complementary way to promote green transformation is through setting “mandatory” *technical regulations* or *voluntary standards*. In this article we will explore “voluntary” standards.

The International Standards Organization (ISO) defines *standards* as a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose.<sup>5</sup>

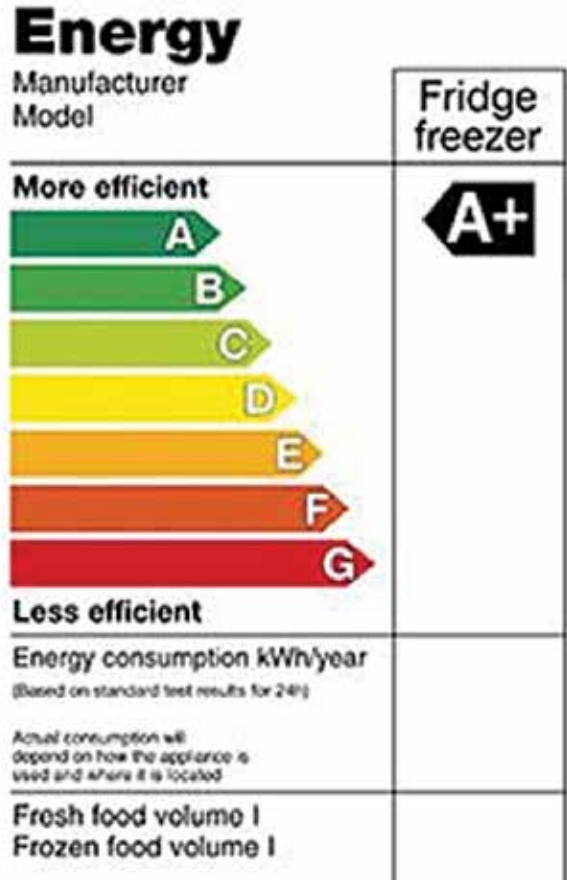
<sup>3</sup> This article was inspired by discussions within the PTB project, Promoting Innovation in the Green Economy by including Quality Infrastructure on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), Germany.

<sup>4</sup> see <http://www.atmosfair.de>

<sup>5</sup> <http://www.iso.org/iso/home/standards.htm>

One specific field is standards to promote the use of *energy-efficient household appliances*. For example, India started its Standards and Labelling Programme as early as 2006.<sup>6</sup> The goal was to provide consumers with information about energy consumption and the related cost-saving potential of electrical appliances. About three years later, the voluntary labels had already gained credibility, and consumers had increased their preference for and purchase of labelled products. The Indian Bureau of Energy Efficiency has encouraged manufacturers to adopt approved testing systems and to self-certify their products, and it has built up a testing infrastructure to check-test samples of household appliances drawn from the market to verify the information provided by the manufacturer.

The Standards and Labelling Programme has thus developed a quality label that has created market transparency while helping firms to widen their product range and increase their product quality. At the same time, it has made a substantial contribution to energy saving in the country. These labels also reduce barriers to entry for participating enterprises, and at the same time make it easier for consumers to select products that are more ecologically responsible. Starting with voluntary standards and building on partnerships with powerful firms proved to be an appropriate strategy to prepare the market and phase in energy-efficient alternatives. Shifting later to technical regulations helped to phase out undesirable inefficient technologies (Chaudhary, Sagar & Mathur, 2012).



**Figure 3:** Label for energy efficiency  
Source: <http://www.which.co.uk>



Another type of standard is *sustainability standards*, which explicitly claim to encourage more environmentally and socially responsible forms of production. These standards are also voluntary, usually third party assessed, and relate to environmental, social, ethical and food safety issues. Companies to highlight the performance of their organisations or products in specific areas adopt them. These standards have forcefully penetrated mainstream markets: for example, the sustainable coffee standards captured 40% of the market share of global production in 2012 (up from 15% in 2008) (Potts, Lynch, Wilkings et al., 2014).

Private standards are relevant because governments alone are unable to generate coordinated action at the global level. The growth of voluntary sustainability standards can largely be traced to a growing recognition of the failure of public action in addressing sustainability issues.

The benefits of standards for developing countries are not as obvious as they are for industrialised countries, as the latter have significant advantages, i.e. the main consumer base and standard owners are mainly located in developed countries and they have higher purchasing power. Nevertheless, developing countries can (or do already) benefit from green transformation by using standards in several ways:

1. Standards connect local producers to global green value chains/markets.
2. Standards help local consumers to make sustainable choices.
3. Standards based on local reality can become a

platform for the development of appropriate technologies.

4. Proximity to natural resources and local processing could be an advantage for a lower carbon footprint and lower resource use.
5. Standards codify indigenous fruits and vegetables and help them to reach foreign “novel food markets”.
6. “Designation of origin” certificates help to protect local indigenous products.



**Figure 4:** Labels of sustainability standards

Source: <http://www.standardsmap.org>



We also have to consider that standards increase transaction costs, especially for smallholders and micro enterprises (Osorio, 2008). The producers not only have to afford the costs of certification itself, but also the introduction and training to establish the required management and food safety systems. So producers in developing countries need support to really be able to benefit from standards. There is also a role for the lead firms in global value chains and the international development cooperation to support farmers and entrepreneurs in the transformation of their production (see private-public-partnership facility at <https://giz.de/de/.../giz2011-en-public-private-partnership.pdf>).

International cooperation is needed to build local capabilities in quality infrastructure services, such as testing and calibration laboratories, and certification and accreditation bodies. Without a local quality infrastructure, companies would need to buy these services from abroad at great cost, which would be another competitive disadvantage. On the other hand, a properly developed national quality infrastructure gives countries in the South the opportunity to adapt services to local needs and compete with exporting conformity assessment services.

Standards are a less explored mechanism to facilitate developing countries phasing into a green economy. Together with the German Metrology Institute (PTB) and the German Development Institute (GDI-DIE), Mesopartner has recently started to explore the relevance of standards for innovation and green transformation in the Latin America and Caribbean regions. Jointly with our clients and knowledge partners we hope to be able soon to provide more evidence on how standards can help developing countries to participate and benefit from green transformation.

## Reference

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