

BAHRAIN

Bahrain Standards and Metrology Directorate (BSMD)

New regulation for energy-efficient air conditioners

Overview

In Bahrain, expansion in the areas of infrastructure, new cities, industrial and commercial projects is leading to increased urbanization and development, thereby driving the demand for energy in the region. In the country's air-conditioning market, split and centralized air conditioners have experienced tremendous growth. Bearing in mind the current needs, Bahrain's climate change adaptation efforts have focused on mainstreaming climate change risks into the national planning framework, raising public awareness, implementing climate adaptation measures and putting in place an effective monitoring and evaluation system to track progress.

In this spirit, the Regulation on Energy Labelling and Minimum Energy Performance Requirements for Air Conditioners was released to regulate energy efficiency in the country. Based on a star-rating system, it oversees the minimum energy efficiency of air conditioners sold in Bahrain and helps consumers make energy-efficient choices when purchasing an air-conditioning appliance. The scope of the regulation covers single-package (such as window type) and split-system non-ducted air conditioners using air- and water-cooled condensers and heat pumps employing air-cooled condensers and ducted air-conditioners using air-to-air heat pumps for the residential, commercial and industrial sectors.

Led by the Bahrain Standards and Metrology Directorate (BSMD), within the Ministry of Industry, Commerce and Tourism (MOICT), the Regulation's development involved the participation of a number of stakeholders, including the Bahrain Chamber of Commerce & Industry (BCCI), the Sustainable Energy Authority of Bahrain (SEA) and local manufacturers and importers. In addition, it was examined by World Trade Organization (WTO) members before coming into force in 2016.

A year later, in 2017, the National Energy Efficiency Action Plan (NEEAP) was endorsed and launched by the Cabinet of Bahrain. The Plan sets the national energy efficiency target of 6 % by 2025 and proposes a total of 22 initiatives to achieve it and unlock the energy efficiency potential in the Kingdom. These initiatives cover all sectors of the economy and target efficiency improvements in both energy supply and demand. The Regulation was included as an initiative in this action plan. NEEAP also represents the Kingdom's efforts to deliver the sustainable energy transition envisioned in its

Economic Vision 2030. It embodies Bahrain's international commitments under the Paris Agreement, the United Nations Sustainable Development Goals, and the League of Arab States Renewable Energy Framework.

Outcomes and benefits

The NEEAP, which encompasses the Regulation, helps Bahrain stimulate more efficient electricity use and optimize the use of indigenous gas resources. It also aims to reduce peak electricity demand and promotes investment, employment and innovation in energy-efficient products and services. The expected outcomes from the NEEAP are a reduction in greenhouse gas emissions while making the economy more competitive and improving energy security in the long-term.

Achieving the 6 % energy efficiency target will result in:

- Energy savings of 5 800 GWh on a primary energy equivalent basis by 2025
- Cumulative government monetary savings of BHD 82 million
- Investment savings of BHD 172 million in electricity generation
- An anticipated financial impact of BHD 230 million (minus implementation costs)
- A cumulative reduction of 3.4 million tonnes of CO₂

Partners involved

The Bahrain Energy Efficiency Labelling Scheme was set up as a joint task between the Ministry of Industry, Commerce and Tourism (MOICT) and the Electricity and Water Authority (EWA). In 2015, the Regulation on Energy Labelling and Minimum Energy Performance Requirements for Air Conditioners was approved by the National Committee for Standards and Metrology of the Kingdom of Bahrain.

Timeline

The Regulation took almost a year to complete, including the WTO Technical Barriers to Trade Notification and the commenting period of the Bahrain Chamber of Commerce and Industry (BCCI). The basis for the document was Saudi Standard SASO 2663, *Energy Labelling and Minimum Energy Performance Requirements for Air Conditioners*, which was amended to suit national needs. Registered under Ministerial Order No 70, the Regulation was published in the Official Gazette, No 3223, in August 2015 and came into force in the Kingdom six months later in February 2016. In 2020, the Bahrain standards body BSMD, in cooperation with the Gulf Standardization Organization (GSO), launched a new online platform and procedure for the registration of energy-efficient products.

References

- Ministerial Order No 70 of 2015 with respect to air conditioner technical requirements
- Sustainable Energy Unit (SEU), [The Kingdom of Bahrain National Energy Efficiency Action Plan \(NEEAP\) – Executive Summary](#) (January 2017)