

Accredited Conformity Assessment – Removing Technical Barriers To Trade

Trust is the key component of all trading relationships, whether they are conducted within national borders or internationally. Economies around the world rely on an integrated system of standards, agreements, regulations and assessments to create a quality infrastructure. This helps generate the necessary trust to trade by ensuring that consumers, businesses and regulators procuring goods and services get exactly what they expect.

An integrated network of international quality infrastructures helps to extend the reach of that trust across borders. By helping to remove both doubt and Technical Barriers to Trade (TBTs), quality infrastructures give companies access to a wider international marketplace, whilst simultaneously improving the quality and safety of imports from those territories.

Accredited Conformity Assessment

Standards are vital tools for economic and trade performance worldwide, simultaneously creating a reliable basis for trade and increasing consumer protection. Third party Conformity Assessment Bodies (CABs) provide an independent assurance of whether a product, service or process meets the requirements of a particular standard. In turn, the role of Accreditation Bodies is to independently determine whether a CAB is meeting a required level of performance by assessing its technical competence, the validity and suitability of methods, the appropriateness of equipment and facilities, and the internal quality control procedures.

Every industry sector relies on accredited conformity assessment services (certification, inspection, testing or measurement) to promote overall quality control of products services, processes and systems. The potential for accredited conformity assessment to reduce TBTs has been formally recognised in Article 6 of the World Trade Organisation's Agreement on Technical Barriers to Trade.

An increasing number of organisations, in both the public and private sectors are specifying accredited conformity assessment as a precondition to tendering for contracts. Being accredited or using accredited services can therefore open doors to market sectors that were previously closed, increasing the potential for new business.





Energy Star



One of the key strengths of accredited conformity assessment is that it can be applied to almost any industry sector and business situation. **ENERGY STAR** is both the leading energy efficiency mark and one of the most widely recognised consumer symbols in the US. Its aim is to provide simple, credible and unbiased information that consumers, business and regulators can rely on to make well-informed decisions that save money and reduce emissions.



The US Environmental Protection Agency launched the **ENERGY STAR** scheme in 1992 as a voluntary labelling programme to help identify and promote energy efficient computers and display screens. Over 25 years later, the **ENERGY STAR** programme has expanded significantly to cover more than 60,000 different products in over 75 residential and commercial product categories.

Today, thousands of industrial, manufacturing, retailer, commercial, construction, home improvement, utility, state, and local organisations—including more than 40 percent of the Fortune 500—rely on the **ENERGY STAR** programme to help deliver cost-saving energy efficiency solutions. In 2017, **ENERGY STAR** certified products, homes, buildings and factories helped save the US economy 370 billion kWh of electricity, thereby avoiding \$30 billion in energy costs and making US businesses more competitive.

With more than 700 utilities, state and local government and non-profit organisations using the programme, **ENERGY STAR** creates a common unified platform that reaches 95% of households across the US. This uniformity avoids the need for hundreds of independent efficiency programmes, which would otherwise raise barriers to trade by increasing transaction and implementation costs, as well as risk fragmenting the market and stalling innovation.

The Adoption of Accredited Conformity Assessment

By 2010 the **ENERGY STAR** programme had firmly established itself as the de facto energy efficiency mark in the US. More than 80% of American households recognised the **ENERGY STAR** symbol. To help protect the integrity of the programme a requirement to include full lab reports with every submission was introduced.

That year, covert testing of the **ENERGY STAR** product certification process was conducted in 2010 by the US Government Accountability Office. It concluded that whilst no evidence of actual consumer fraud was found, **ENERGY STAR** was largely a self-certification programme and was therefore potentially open to abuse.





In order to remove this potential vulnerability and maintain consumer, regulator and industry confidence in the [ENERGY STAR](#) programme, the EPA instituted an accredited conformity assessment regime in 2011. Under this mandatory regime, products must be tested in an EPA-recognised laboratory and reviewed by an EPA-recognised certification body before they can carry the [ENERGY STAR](#) label. To become 'EPA-recognised', laboratories providing test data to the [ENERGY STAR](#) programme must be accredited to ISO/IEC 17025, the internationally recognised standard for testing laboratories. Similarly, certification bodies must be accredited to ISO/IEC 17065, the equivalent standard for certification bodies.

The vast majority of active [ENERGY STAR](#) partners signed up for these more rigorous requirements and by March 2011, EPA had recognized 19 Certification Bodies, 24 Accreditation Bodies and more than 200 laboratories. Very quickly, the market evolved to offer competitive services and rates for the full range of [ENERGY STAR](#) partners.

As of May 2019, there are 23 Certification Bodies and more than 600 laboratories in the US that are 'EPA-recognized' for [ENERGY STAR](#) product certification and testing. The majority of these organizations are EPA recognized for more than one product type. In 2018, nearly 1,800 different product models were subject to [ENERGY STAR](#) testing, with 97% of those found to be compliant with the scheme.

International reach

With regulators, industries and consumers adopting an increasingly global outlook, the need for compatibility of conformity assessment regimes between international economies is a crucial aspect of trade. A further condition of becoming an EPA-recognised laboratory or certification body is that the accrediting body needs to be a signatory to the relevant International Laboratory Accreditation Cooperation's (ILAC's) Mutual Recognition Agreement (MRA) and/or International Accreditation Forum's (IAF's) Multi-Lateral Recognition Arrangement (MLA).

Before the introduction of the MRA/MLA, goods and services were often assessed by the importing countries own recognised authority. This unnecessary duplication of already satisfactorily completed testing resulted in unnecessary delays at the point of entry – a potential deal-breaker for time-critical services and perishable goods. Not only is this costly for the exporter, but the importer too suffers through increased costs and damage to reputation.

A key to lowering these technical barriers to international trade is the existence of international recognition agreements for the work of accredited CABs. The MLA/MRA provides assurance that CABs in different economies are operating to the same internationally accepted standards. Together, the MRA and MLA ensure that accreditation equivalence is recognised in nearly 100 signatory economies across the world. This 'accredited once, accepted everywhere' approach facilitates the acceptance of goods and services across national borders. It removes the need for duplicate conformity assessment activity in each new territory, reducing costs for manufacturers and helping exporters develop international trade.

To further global harmonisation in product testing and adoption of energy efficiency, the EPA [ENERGY STAR](#) programme engages in efforts around the world to standardize test methods and promote efficiency of products. The EPA has established international partnership arrangements for use of the [ENERGY STAR](#) label on products with Canada, Japan, the EU and, Switzerland, amongst others. Under these partnership arrangements, energy efficiency metrics, test methods and labelling are shared. The combined effect of the MRA/MLA and EPA partnership arrangements has been to harmonise standards, reduce costs, lower barriers to trade and enable more streamlined testing and certification of [ENERGY STAR](#) labelled products manufactured globally.

In 2017, over 300 million [ENERGY STAR](#) certified lightbulbs along with a similar number of other [ENERGY STAR](#) certified products were sold in the US alone – equating to over 1.5m [ENERGY STAR](#) branded products per day, with a market value of more than US\$100 billion. The programme has delivered significant efficiencies for product manufacturers all over the world as testing need only be carried out once, and accepted everywhere.





Looking to the future



The substantial regulatory, financial and trading benefits of mandating accredited conformity assessment into the ENERGY STAR programme is mirrored by the EPA's Watersense programme for water efficiency. Whilst participating in both the ENERGY STAR and Watersense programmes remains voluntary, the EPA cites the ILAC MRA as providing greater assurance to consumers that products carrying either the ENERGY STAR or Watersense labels meet strict programme requirements. With around 75% of all US households purchasing at least one ENERGY STAR product, it is hoped that similar adoption and benefits will be realised by Watersense and other standards-based EPA programmes in the future.

This case study has been published by ILAC and IAF, the global associations that oversee the development and harmonisation of accredited conformity assessment. Further information can be found at ilac.org and iaf.nu

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