

Energy Efficiency in the Transatlantic Trade & Investment Partnership

Both the U.S. and EU have large regulatory programs directed at improving the energy and environmental performance of appliances and equipment. The Transatlantic Trade and Investment Partnership (TTIP) is a great opportunity to build bridges between the EU and U.S. policies in the field of energy efficiency and align market access of products and appliances. Policy convergence and regulatory cooperation between the EU and the U.S., and ultimately harmonization in the area of energy efficiency, will provide large scale advantages, which can motivate investments in improved energy efficiency and contribute to address climate change.

This paper applies to products, appliances and equipment (including machinery, mechanical, electrical etc.). Different sectors may have different priorities depending on how their products are now regulated.

The Trans-Atlantic Business Council (TABC) calls for negotiators on both sides of the Atlantic to include energy efficiency in their negotiations, with a specific focus on 3 specific areas:

1. Use of harmonised product measurement standards

Harmonized product "measurement standards" (i.e. describing how to perform the measurement of the product energy consumption and efficiency in a laboratory) mean using either one harmonized standard that applies to both the EU and the U.S., or when this is not possible, accepting each other's (EU and U.S.) standards that are equivalent.

Legal requirements frequently rely on measurement methodology that is defined in standards. With different measurement standards, one for the U.S. and one for the EU, two versions of products often need to be constructed, optimized towards each of the measurement standards. The product will otherwise not be competitive on the respective market.

In addition, with different measurement standards double testing would be needed if one would like to sell the same product in the EU and the U.S.: a measurement according to the EU standard¹ and also to the US standard². Examples of measurement standards that would benefit from harmonization are, for instance, the measurement standards for household appliances and the standards for building materials.

Such standards are used, for example, to determine energy labels and for energy efficiency limits. As measurement standards are the basis for policy on product energy labels and energy

¹ "EU standard" meaning the standard the EU legislation refers to, being either an EU CENELEC standard or an International Electrotechnical Commission (IEC) standard, depending what the EU law specifies

² "US standard" meaning the standards developed by US Standard organizations as ASTM, UL etc.

efficiency limits, TABC calls for the development and use of either one harmonized measurement standard, or when not possible, accepting each other's measurement standards that are considered equivalent.

2. Same energy efficiency limits

Energy efficiency limits set the thresholds that have to be fulfilled to sell a product on the market. These requirements are not the same between the EU and the U.S. As a consequence, a product that is allowed to be sold in the EU, may not comply to be sold in the U.S. and vice versa. Legislation with energy efficiency requirements often contains other product performance related requirements e.g. in the EU there is a legal limit for the minimum washing performance of washing machines, which is not the case for the U.S. Once measurement standards have been harmonized, TABC recommends to develop aligned energy efficiency limits.

The importance of harmonizing efficiency limits varies by product: it is for instance more important for mass produced items such as household appliances compared to large industrial installations.

In addition, different timing of the entry into force of energy efficiency requirements cause non-alignment.

3. Joint accreditation of laboratories combined with mutual acceptance of test results from these laboratories

There would be benefit in setting a uniform accreditation of laboratories that are used for compliance control of authorities and labs used for third party certification. U.S. and EU laboratories should be accredited in a harmonized way, which would significantly ease the market access process. There are already existing global systems for accreditation of laboratories that should be promoted (ILAC and IAF³) and EU and U.S. companies can benefit from the test results when addressing other (global) markets.

Where legislation requires testing, TTIP should encourage mutual acceptance of test results from accredited laboratories using agreed global standards. This makes retesting or double inspections obsolete to the benefit of the industry.

³ International Laboratory Accreditation Cooperation and International Accreditation Forum

ANNEX/EXAMPLES

Energy efficiency related-issues vary according to products and sectors which have to be taken into account in the TTIP negotiations. There is not one solution that will fit all products. Below a few examples covering different products in different areas. This list is not intended to be exhaustive or exclusive.

- **Product measurement standards**

For A/C products in the U.S., measurement standards and certification are jointly addressed by the Air conditioning, Heating and Refrigeration Institute (AHRI) voluntary certification program. Whereas in the EU, the situation is much more complex with: (1) EU measurement standard EN-14825, with specific issues added by the relevant EU eco-design legislation; (2) self-certification with very weak market surveillance under responsibility of the authorities of Member States; (3) voluntary certification program (Eurovent⁴) which is in danger of being disrupted by the new EU eco design requirements.

The PC is a good example where the industry ensured that the measurement methodology that was initially developed through the Energy Star programme, was adopted and developed into an International Electrotechnical Commission (IEC) Standard (IEC 62623). The minimum energy efficiency requirements set by the EU eco design legislation rely on IEC 62623 thus maintaining a consistent approach.

For household appliances the measurement standards are different for the U.S. and the EU. For refrigerators and freezers, recent efforts have updated the international IEC measurement standard to become useful on a global level. Even so, the U.S. still refers to U.S. standards to measure the energy efficiency of refrigerators and freezers.

In the area of Food Service Equipment, test methods was developed by ASTM with, in the end, the inclusion of F26 test methods within the Environmental Protection Agency's (EPA) Energy Star specifications. One challenge is the complexity of food service equipment which dictates that a different test be developed for each piece of equipment.

Sometimes regulations drive the need for new testing methods. This was the case in the U.S. when the EPA decided to develop an Energy Star program for vacuum cleaners. As a result, a test method that will calculate the amount of energy used by a vacuum cleaner relative to cleaning carpet was developed by ASTM.

- **Energy efficiency limits and energy labels**

For A/C products, there are issues for the for smaller A/C systems (typical of sizes subjected to energy labeling), which remain mostly cost (or regulation) driven. For large capacity system, efficiency is driven by markets needs more than by regulation. For smaller A/Cs the EU has a

⁴ <http://www.eurovent-certification.com>

mandatory energy label and minimum energy efficiency limits through the EU eco-design legislation.

As regards the semiconductor industry, the EU has energy efficiency limits through the eco-design legislation that sets market entry limits. Similar market entry requirements do not exist in the U.S. On the other hand the U.S. has the voluntary Energy Star label focused on the top 25% performing products on the market. Such a label does not exist in the EU.

For household products both the EU and the U.S. have energy efficiency limits through legislation that sets market entry limits. The level of the requirements for the EU compared to the the U.S. is different for the same product category. In addition, the EU has a mandatory energy label whereas in the US the energy star label is voluntary.

- **Greater cooperation between the EU and the US**

Energy efficiency is an area of great potential to fight against climate change. However, in a number of sectors, harmonisation of standards is difficult to reach. Therefore, greater dialogue between the EU and U.S. should be encouraged and enhanced in energy efficiency.

This is particularly relevant in the building sector, which is responsible for for about 32% of global energy consumption and for 26% of global total end-use energy-related carbon dioxide (CO₂) emissions. It is critically important that policy makers and stakeholders from both sides of the Atlantic work together to promote energy efficiency in buildings such as: being involved in international fora to promote harmonization of building standards, creating greater awareness, calling for incentives to increase renovation rate and foster new technologies.