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Committee on Technical Barriers to Trade

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**THEMATIC SESSION ON REGULATORY COOPERATION
BETWEEN MEMBERS: ENERGY EFFICIENCY¹**

14 JUNE 2016

REPORT BY THE MODERATORS TO THE TBT COMMITTEE

This Report was delivered by the Moderators² of this Thematic Session of the WTO TBT Committee at the meeting of 15-16 June 2016.

At the Seventh Triennial Review, Members agreed to continue to hold thematic sessions in conjunction with regular meetings of the Committee.³ Members agreed to dedicate the 14 June 2016 thematic session on **regulatory cooperation between Members** to the topic of energy efficiency.⁴ The presentations summarized below, as well as audio recordings, will be made available through the WTO website.⁵

Panel 1 Use of standards and conformity assessment procedures in the area of energy efficiency

1.1. This Panel, moderated by **Ms Esther Peh** (Singapore), explored regulators' use of standards in promoting energy efficiency of products, as well as approaches used to facilitate the acceptance of conformity assessment results of such products. The following presentations were made.

1.2. **Ms Melanie Slade**⁶ stressed the importance of energy efficiency in the context of reducing Greenhouse Gas (GHG) emissions. She said that, based on IEA analysis, energy efficiency standards will become increasingly important in contributing to the objectives of the UNFCCC 2015 Paris Agreement. Moreover, the share of energy consumption covered by mandatory efficiency regulations is projected to grow significantly over coming decades. In addition, she said, significant growth in energy demand in emerging economies (particularly China and India) requires renewed focus on energy efficiency to provide least-cost pathways to decarbonization. Ms Slade stressed that one of the main purposes of energy efficiency policies is to help reduce fossil fuel dependency but they could also improve standards of living and reduce investment needs in energy supply systems. Cooperation on energy efficiency regulation is important to reduce the costs of efficient appliances for consumers all around the globe. Developing economies which manufacture energy-using products are a key priority for introduction of Minimum Energy Performance Standards (MEPS) as long as they are set at levels appropriate for their markets. Transparent schedules describing increased MEPS levels over time would allow manufacturers to improve their products within reasonable production cycles.

¹ The list of speakers is contained in JOB/TBT/169.

² Ms Esther Peh (Singapore) and Mr Alejandro Buvinic (Chile). The reports are provided on the Moderators' own responsibilities.

³ G/TBT/37, para. 8.3.

⁴ See Chairperson's fax of 17 March 2016.

⁵ https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm

⁶ Senior Programme Manager, Energy Efficiency in Emerging Economies, International Energy Agency (IEA). The full presentation is contained in RD/TBT/161.

1.3. **Mr Adrian O'Connell**⁷ said that the WTO's trade and environment goals are aligned with the UN Sustainable Development Goal (SDG) 17: "Revitalize the global partnership for sustainable development". Goal 17 in particular seeks to "promote the development, transfer, dissemination and diffusion of environmentally sound technologies...". He highlighted the role of ISO and IEC as two of the main international organizations that develop and manage energy efficiency standards for a number of products, including: electrical and home appliances, lamps and lighting equipment, and solar energy equipment. Mr. O'Connell shared Australia's experience on the application of the Equipment Energy Efficiency (E3) programme responsible for implementing current MEPS for electrical appliances (e.g., air conditioners, televisions, fridges, washers, dryers, and other appliances). He noted that one key challenge in the field of energy efficiency is the complexity of the subject area and reaching consensus on standards with all stakeholders. However, he noted that the adoption of MEPS standards by WTO Members through their National Standards bodies remains one of the key opportunities to achieving electrical appliance energy efficiency. Finally Mr O'Connell noted that ISO and IEC energy efficiency standards are not just limited to product standards, and referenced other standards such as those for energy and environmental management systems.

1.4. **Dr Liu Meng**⁸ noted that starting from the end of the 1980s, 64 national mandatory energy efficiency standards have been developed in China, including with respect to household appliances, lighting equipment, commercial devices, and industrial and office equipment. These are based on minimum allowable values for energy efficiency (so as to phase out low efficient products), energy efficiency grades (labelling programmes to inform the consumer) and an index for evaluating energy saving products (a certification scheme). In terms of achievements of Energy Efficiency Standards (EES), by 2012, 20 energy efficiency standards were estimated to have reached the accumulative energy savings of 900 TWh (9 times the generating capacity of Three-Gorges hydropower station in 2012). Moreover, after 7 years (2005-2012) of implementation, the China Energy Label Programme was estimated to have reached accumulative energy savings of about 420 TWh, equalling 30 million tonnes of CO₂. There are also significant challenges, including, for example, the obvious differences in labels in terms of shapes and energy efficiency grades. He suggested that Members: be encouraged to adopt ISO and IEC testing methods; promote mutual recognition of laboratory test results; and promote the application of QR code electronic labels. He further suggested that capacity building be undertaken in developing Members.

1.5. **Mr Wayne Morris**⁹ noted that the Association of Home Appliance Manufacturers is composed of 150 manufacturers. He said that standards help contribute to energy efficiency goals in different ways. First, they allow manufacturers to measure energy efficiency. Second, they allow regulators to compare product values and provide accurate measurements. Third, they allow consumers to compare products. Mr Morris also mentioned some challenges, such as obtaining information, time needed to develop standards and regulations, and the needs of developing countries. He further elaborated on the use of energy efficiency standards and highlighted the importance of the use of international, regional and private standards. Finally, issues related to conformity assessment were presented, including private third party certification and verification systems, as well as AHAM Verifide.

1.6. **Ms Sauw Kook Choy**¹⁰ explained how the three pillars of their national quality infrastructure, i.e. standards, conformity assessment and regulation, work in tandem to achieve desired public policy objectives and build trust in Singapore's products, services and enterprises. Singapore has pledged to reduce its emissions by 36% by 2030 as part of its UNFCCC commitments. Given its small size, Singapore has limited alternative energy sources and relies heavily on natural gas for electricity generation. Therefore, improving energy efficiency through the use of policy tools including best practices, standards, and mandatory regulations, is a key strategy to support this commitment. SPRING, an agency under the Ministry of Trade and Industry, brings together industry, regulators, academia and consumers to identify, develop and promote energy efficiency standards. Priority is given to the use of international standards where applicable but when these are not available, national standards are developed taking into account

⁷ Deputy CEO, Standards Australia.

⁸ Deputy Director of Energy Saving Department, CNIS, Convenor of ISO/TC 257/WG3, on Energy Efficiency Standards in China: Achievements and Challenges. The full presentation is contained in RD/TBT/144.

⁹ Vice President, Technical Operations and Standards, Association of Home Appliance Manufacturers (AHAM). The full presentation is contained in RD/TBT/147. Data on energy efficiency available to consumers is available at www.ahamverifide.org.

¹⁰ Assistant Chief Executive, SPRING Singapore. The full presentation is contained in RD/TBT/160.

local needs and current technology. As examples, regulators use energy efficiency standards to define (i) best practices in energy management systems (ISO 50001), (ii) minimum energy performance of equipment used in buildings, (iii) test methods for home appliances, and (iv) Green Mark Assessment Criteria to speed up the pace of green building development. The objective of the Green Mark system, introduced in 2005, is to promote environment-friendly buildings. To date, more than 1,500 buildings have already been certified against its requirements. This also generates cost savings in electricity bills, resulting in win-win outcomes.

1.7. **Mr Jay Taylor**¹¹ focused on the evolution of energy efficiency in data centres and shared his experience as Chair of the JTC 1 (ISO/IEC) SC39 Subcommittee on "Sustainability for and by Information Technology" and of the "Green Grid – Global Harmonization of Data Center Energy Efficiency Metrics" initiative. He said that the global regulatory and standards landscape for data centres is complex, involving a multitude of standards development and regulatory bodies and requiring adaptation in light of climatic differences. For example, non-evaporative cooling systems are needed in water-scarce areas such as Texas and other arid climates. MEPS in this area are driving some savings. International standards are available for Global Energy Efficiency Measurements - such as IEC 62623 on measurement of energy consumption of desktop/notebook computers and IEC 30134-2 on power usage effectiveness of data centres. At the same time, voluntary programmes and Public-Private Partnerships, such as the US EPA ENERGY STAR, EU ENERGY STAR Programme, the Japan Top Runner Programme and the US Department of Energy Better Buildings Programme, have been successful in moving beyond minimum requirements and efforts, further enhancing energy efficiency savings. However, he cautioned that pushing MEPS to the edge to try to generate further energy efficiency gains might be counterproductive and in fact lead to a reduction of industry innovation and product performance. For example, some energy is required to set up and connect devices that are network-aware (such as Internet of Things), which is not linked to the intended use of the device but still needed to be accounted for in the MEPS regulations.

1.8. **Mr David Hanlon**¹² emphasized the opportunity to reduce global electricity consumption by as much as 10% by changing to a new technology for industrial motors and employing simple but effective operational practices. 30% of the world's electricity consumption is from electrical motors used by industry, typically for pumping, mechanical movement, fans and compressors. In many cases, their size, speed and operation are not optimal, providing an opportunity to save energy. Firstly, inefficient motors could be replaced by new, more efficient ones. The IEC International Standard IEC 60034-30 specified three energy-efficiency classes for cage-motors. The European Union has adopted this standard and made the highest energy-efficiency class mandatory for all new motors installed starting from 1 January 2015. Secondly, motors could be controlled more efficiently, for example by using variable speed, soft-start options and simple automatic on-off controllers. New efficient motors, controllers and efficient operational practices offer huge potential savings in both cost and energy. Examples from industry show 30 to 50% savings, and since the purchase cost of new motor and controller is only about 4% of the lifetime operational cost, it also makes strong economic sense. To achieve these savings, industry needs to be informed and encouraged to voluntarily move toward new technologies through incentive packages (such as tax breaks) and access to such technology through simplified trade, import and regulatory formalities. At the same time, the continued use of the old inefficient motors needs to be discouraged through stronger regulatory formalities, penalties and other available and appropriate mechanisms. Hence, a carrot-and-stick approach is needed. Moving on to the topic of energy efficiency labels, he pointed out the multitude of national and regional labels and asked whether the TBT Committee, which recently celebrated its 20 years of promoting international harmonization of standards, would address this issue as a technical barrier to trade in the coming years. At IEC level, some years earlier there had been discussion concerning the development of a global label but it had not been pursued due to lack of support, possibly because of concerns by some that this would add yet another label to the mix.

¹¹ Schneider Electric, United States and Chair of ISO/IEC JCT 1 Subcommittee 39 on Sustainability for and by Information Technology. The full presentation is available in RD/TBT/148.

¹² Secretary of the International Electrotechnical Commission (IEC) Conformity Assessment Board. The full presentation is contained in RD/TBT/145.

1.9. **Mr Edoardo Gianotti**¹³ emphasized the need for a worldwide harmonized regulation for vehicles. He mentioned the regulatory challenges of pacing the development of emerging technologies and new technical requirements. Mr Gianotti presented the three agreements administered by the World Forum, concerning adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts used in it, and conditions for reciprocal recognition of approvals (the 1958, 1997 and 1998 agreements). He briefly highlighted the rationale behind the adoption of those agreements and their geographical spread. Mr Gianotti subsequently familiarized the Committee with the structure of WP.29 and elaborated on the WP.29 activities in connection with energy efficiency, such as the 2010 climate change and transportation round table and the ForFITS model projecting activity, energy consumption, and CO2 emissions, under different economic scenarios and policy interventions. A new technical regulation on Electric Vehicle Safety, developed under the 1998 Agreement, will be likely finalized in 2017, and most of the provisions of the future regulation are expected to be transposed in national legislations in a harmonized way, paving the way for a mass production of electric vehicles worldwide.

1.10. **Dr Elsabe Steyn**¹⁴ highlighted the attempt of governments to influence energy and climate change policies by introducing programmes to encourage sustainable development. She provided examples of taxation and other monetary measures, which aim to encourage reduced energy demand, or to penalize the undesirable behaviour. Dr Steyn presented the case of the South African national standard for Energy Efficient Measurement and Verification (M&V), the SANS 50010:2011, which was developed to support the introduction of a South African tax incentive for energy efficiency. At the time of its development, no equivalent international standard existed. To ensure the competence of the Energy Efficient (EE) M&V agencies, the South African National Accreditation System (SANAS) also introduced an accreditation programme for the EE M&V bodies, which would verify the savings of companies/tax payers applying for tax incentives. Dr Steyn further emphasized that SANAS assesses factors relevant to an organization's ability to produce accurate inspection data, bearing responsibility for confirming the verification, by looking at suitability, quality and assurance processes of the EE M&V bodies. She introduced the processes of EE M&V bodies' accreditation, followed by the procedure of obtaining a tax incentive certificate by a tax payer and its submission to the Revenue Services. SANS 50010:2010 standards provided input to the development of ISO 50015:2014.

1.11. **Mr Doug Johnson**¹⁵ emphasized the diverse membership of the Consumer Technology Association (CTA) and the aim of the Association to engage all stakeholders. He mentioned the three goals of the CTA: save energy, protect innovation, and promote consistency with international trade obligations. He specified that the consumer technology industry is characterized by rapid changes in technology and consumer demand, as well as intense competition and changing product definitions. This means that traditional energy efficiency regulation based on mandatory energy limits set by government is not appropriate and that flexible, innovation-friendly voluntary approaches are needed. Mr. Johnson mentioned several areas where he sees challenges and opportunities. The first challenge is to avoid imposing mandatory regulation based on minimum energy performance standards when other approaches will work better for consumer technology products. He emphasized that the best results come from voluntary programmes, including, but not limited to, ENERGY STAR. Such a market-driven approach helps to achieve energy savings much faster than traditional regulation and also protects innovation and competition. Another challenge arises from industry test procedure standards, on which governments should rely and also avoid locking into regulation. Mr Johnson noted the importance of having a product tested once and being able to ship it everywhere. A third challenge relates to marking and labelling, where Mr Johnson hopes to see greater flexibility, such as electronic labelling, and recognition of international protocols and approaches. The last challenge is to avoid pre-market third-party certification, which imposes time and cost burdens that are significant for the consumer technology industry. He concluded that there is room to expand the use of voluntary agreements and align those agreements around the world to facilitate trade and meet energy savings goals. Industry-supported mandatory efficiency requirements for external power supplies and battery charges should be aligned as well. Mr Johnson stressed the importance of energy efficiency and trade policy dialogue between governments and other stakeholders, the latter not

¹³ UNECE Sustainable Transport Division, Vehicle Regulations and Transport Innovations Section WP.29 - UNECE World Forum for harmonization of Vehicle Regulations. The full presentation is contained in RD/TBT/150.

¹⁴ South African National Accreditation System (SANAS). The full presentation is contained in RD/TBT/146.

¹⁵ The US Consumer Technology Association. The full presentation is contained in RD/TBT/149.

limited to industry, and he cited recent and helpful CTA experiences in bilateral and multilateral dialogues with governments.

1.12. **Mr Makoto Kubo**¹⁶ presented the ILAC/IAF multilateral mutual recognition arrangements, and explained how these global networks of laboratories, certification bodies and accreditation bodies help facilitate trade by reducing unnecessary duplication of conformity assessment, in order to realize the objective of "tested, inspected, certified or accredited once, accepted everywhere". He then explained how ILAC/IAF network support energy efficiency through accreditation, including the IAF Multilateral Recognition Arrangements (MLA) for ISO14001 and ISO14065. IAF is in the process of enhancing the scope of its MLA to support accredited certification of energy management systems under ISO 50001. IAF members also provide a range of accreditation services to support verification of greenhouse gas emissions under mandatory and voluntary emissions mitigation schemes (e.g. EU-ETS, UNFCCC CDM). Finally he stressed the benefits of the ILAC/IAF network – for government, business and consumers – in supporting organizations and products to demonstrate improvements of environment and energy performance.

1.13. To conclude, **Ms Esther Peh** (moderator) highlighted four broad themes that the speakers of the first panel on energy efficiency had covered. First, different types of energy efficiency standards existed. There were standards relating to (i) minimum energy performance of products; (ii) testing methods – or testing procedures for energy performance; and (iii) energy management systems. All types mattered for consumers, businesses and regulators. Second, standards applied to a variety of products and systems, ranging from consumer appliances to motor vehicles; and standards for commercial and residential buildings, even data centres for systems. Third, it was important to align these standards to international standards, such as ISO and IEC energy efficiency standards. However, geographical and climatic factors affected the relevance and applicability of those standards. Finally, Ms Peh noted that the acceptance of conformity assessment was also important. Options to facilitate the acceptance of conformity assessment results included, amongst other things, multilateral, mutual recognition arrangements (such as ILAC and IAF) as well as regional and bilateral voluntary arrangements – as well as greater cooperation between regulators. On the whole, in Ms Peh's view, the session had been a broad, interesting information-sharing event – and Members had been given the opportunity to benefit from a variety of perspectives.

Panel 2 Regulators' experiences when cooperating on energy efficiency

1.14. This Panel, moderated by **Mr Alejandro Buvinic (Chile)**, was intended to share experiences of regulators in respect of energy efficiency regulations.

1.15. **Ms Laura Barhydt**¹⁷ said that one of the most effective ways to ensure energy efficiency is through the use of mandatory energy efficiency standards. However, energy efficiency is difficult to define, requiring different metrics for different products and test procedures having to be carefully developed. An appliance standard sets the mandatory performance levels for the energy efficiency of the covered products, and manufacturers have to meet the standard for the product to be sold in the United States. She said that the United States works in a variety of fora to share information and experiences to support good policy development in the field of energy efficiency, including the IEA-4E initiative, the Super-Efficient Equipment & Appliance Deployment Initiative (SEAD), and national and international standardizing bodies – including the ISO and IEC.

1.16. **Mr Takuya Yasui**¹⁸ described Japan's "Top Runner Programme". Established in 1998 under the Act on the Rational Use of Energy, this programme develops standards that promote high energy efficiency for a wide array of products (currently 31). The programme covers equipment and materials in the residential, industrial and transportation sectors, including building products. Since its inception, and driven by the objective to encourage manufactures and importers to achieve the front-runner's efficiency, the programme has been successful: for example, there has

¹⁶ Senior Advisor, Japanese Accreditation Board (representing ILAC and IAF). The full presentation is contained in RD/TBT/155.

¹⁷ Assistant General Counsel for Enforcement, U.S. Department of Energy, on the U.S. Department of Energy's participation in the Super-Efficient Equipment and Appliance Deployment Initiative (SEAD) and IEA. The full presentation is contained in RD/TBT/151.

¹⁸ Multilateral Trade System Department, Trade Policy Bureau, Ministry of Economy, Trade and Industry, Japan. The full presentation is contained in RD/TBT/143.

been more than a 60% improvement in energy consumption efficiency of passenger cars. Evaluating manufactures' and importers' achievement based on weighted average of products, the programme also ensures the diversity of products in the market and makes it possible to promote a range of innovations.

1.17. **Mr Fabrizio Sacchetti**¹⁹ introduced the energy efficiency policies in the EU. There is a 20% energy efficiency target to be met by 2020 in all EU member States through a broad range of measures aiming at a more efficient use of energy at all stages of the energy chain, from its production to its final consumption. This policy mix combines different elements, such as product requirements on energy performance and labelling, "green" public procurement policies and specific measures for the building sector, the biggest energy consuming sector in the EU, accounting for about 40% of total energy consumption. In this regard, there is a substantial energy saving potential by setting minimum requirements on key building elements, e.g. heating, roofing, etc. and on new buildings and renovations. EU-wide measures dealing with TBT aspects relate mainly to product energy performance ("eco-design") requirements (push the market by allowing on the market only products that meet minimum requirements for energy efficiency, influence supply side), energy labelling (pull the market, influence demand side). EU harmonization pre-empts member States' regulatory action in this area. Criteria for action for specific product categories include: significant trade volume, significant environmental impact and significant energy saving potential. Currently, for labelling, an A to G ranking is applied. However, due to the market transformation, most products are now in class A so differentiation is made by adding up to three "+" to the A ranking (A+/A++/A+++). As this could cause confusion for consumers, the EU is currently reviewing the energy labelling directive in order to return to a single A to G label for all products to help consumers to distinguish the most efficient products more clearly. Regular rescaling would be provided to ensure that the A to G ranking continues to reflect market reality. It was noted that, with respect to conformity assessment, the EU Supplier's Declaration of Conformity (SDoC) applies to both eco-design and labelling requirements.

1.18. **Mr Christopher O'Toole**²⁰ said that Canadian energy efficiency regulations cover a wide range of product categories, and include references to mandatory minimum energy performance standards. They are viewed as a cost-effective way of reducing energy consumption and GHG emissions, and have been particularly effective in removing the least efficient products from the marketplace. Mr O'Toole noted that as primarily a standards-taker in the area of energy efficiency, Canada's regulatory approach has largely been to mirror the US DOE national standards. However, he indicated that industry, through its involvement in the Canada-U.S. Regulatory Cooperation Council (RCC), has recently identified that gaps in the alignment of those standards have begun to open up, increasing costs for businesses (e.g. duplicative testing, separate distribution channels for each export destination) and creating consumer confusion because different test methods produce different energy consumption values on mandatory energy consumption labels. As a result, the RCC, a bilateral forum for regulators that also allows for engagement with stakeholders, including multinational corporations, has taken up work on this topic. Mr O'Toole further noted that the greater cooperation and more open channels of communication fostered by the RCC had also prompted Canada to consider different ways to regulate, including referencing US requirements in Canada's regulations so that any changes would automatically apply. This meant, he said, that the default for many products would be alignment with US requirements unless a strong case is made that alignment should not be pursued. Mr O'Toole stressed that regulatory cooperation works best when it was collaborative; i.e. driven by consumers having similar preferences, stakeholders having similar concerns and regulators having mutual interests.

1.19. **Mr Daewan Kim**²¹ discussed voluntary and mandatory programmes set up to stimulate energy efficiency and achieve market transformation. He said that voluntary schemes target emerging markets and SMEs (e.g. building sector, technology sector) and aim to incentivise new or emerging sectors and companies. Once the market has expanded, mandatory schemes apply (e.g. home appliances, offices appliances, etc.). He noted that mandatory schemes are efficient but are sometimes used by conglomerates to rationalize expensive prices burdening the consumer. Several labelling approaches are applied according to the specific characteristics of products. The

¹⁹ European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs. The full presentation is contained in RD/TBT/162.

²⁰ Deputy Director, Global Affairs Canada.

²¹ Korean Energy Agency on Energy Efficiency Policies in Korea. The full presentation is contained in RD/TBT/153.

first labelling approach discussed was 'Ratings' (B to C, e.g. refrigerators, TVs), the second one 'MEPS' (B to B, e.g. adaptors, electric transformers) and the third one 'High level Standard' (30% higher than the energy efficiency standard of the 1e grade, e.g. refrigerators, AC). He noted that approaches have sometimes changed over time due to the market evolving.

1.20. **Mr Rafael Nava's**²² presentation focused on the Mexican regulatory process. Mr Nava noted that Mexico started developing energy efficiency regulation more than 20 years ago. The country decided to opt for the mandatory approach taking into account several issues, including the consumer culture in Mexico. He said that the process to define regulations starts with the consideration of existing national regulations or standards on the topic. Subsequently, the existence of international standards (ISO or IEC) was taken into account. He stressed that the composition of the committee that works on the new regulation engages all stakeholders (e.g. consumers, regulators, academics, companies, etc.). Before the regulation is established, the WTO is notified and a commenting period applies to ensure that all stakeholders can review the new measure. The committee then reviews the comments and decides on the best way forward. This process is fully transparent. He said that at the Pan-American level efforts were also undertaken to harmonize energy efficiency labelling requirements. One key challenge is that products need to be comparable in terms of energy consumption.

1.21. **Mr Keith Mason**²³ spoke about the US Energy Star program. He stressed that this is a global voluntary labelling programme relying on performance specifications, testing and verification. More than 5.2 billion products have been sold (since 1992, excluding light bulbs) across more than 70 product categories preventing more than 2.4 billion metric tons of GHG emissions. The programme is managed by the EPA whose main task is to: develop technical specifications for all Energy Star certified products, negotiate formal agreements with other nations, validate and maintain a world-wide database of internationally recognized testing laboratories, accreditation and certification bodies, and promote international harmonization of methods, certification approaches and data sharing. It was stressed that EPA's product specification development cycle is elaborate, transparent and provided opportunity for international input. All Energy Star products need to be third party certified before they can carry the label. As of February 2016, there are 615 accredited and manufacturer's laboratories globally that can issue such certificates.

1.22. To conclude, **Mr Alejandro Buvinic** (moderator) highlighted some of the key points from the various presentations. He said that experiences showed both the usefulness of mandatory regulation and voluntary standards, but perhaps in particular the advantages of mandatory requirements in certain cases. He noted that rapid technological change imposes the need for regular revisions of the regulations – and, in some cases, the least energy efficient products are removed from the market. He also remarked on some of the differences between Members, for instance, certification systems varied: in the EU, SDoC was used while, in the United States, third party certification was more common. He stressed that despite differences, it remained possible to achieve greater harmonization thereby facilitating trade and protecting the environment (by increasing energy efficiency). He stressed that these thematic sessions need not finish as a one-day event – but could be seen as the start of more collaboration and coordination between Members so as to facilitate a better exchange between regulators when regulating to achieve the objective of energy efficiency.

²² Chief Executive Officer of the Mexican Council of Standardization and Conformity Assessment (COMENOR) and Council Member of the National Household Appliances Association (ANFAD). The full presentation is contained in RD/TBT/154.

²³ Senior Advisor, Office of Air Quality Planning and Standards Office of Air and Radiation, US Environmental Protection Agency (EPA). The full presentation is contained in RD/TBT/152.