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Related documents: CC 503 Rev

DECISION OF THE ENERGY CHARTER CONFERENCE

Subject: Report by the Chairman of the Working Group on Energy Efficiency and Related Environmental Aspects

The Energy Charter Conference at its 25th Meeting held on 26th November 2014 **took note** of the Report by the Chairman of the Working Group on Energy Efficiency and related Environmental Aspects as contained in document CC503 Rev (attached hereto).

Keywords: Report, Chairman, Working Group, Energy Efficiency, related Environmental Aspects

Report by the Chairman of the Working Group on Energy Efficiency and Related Environmental Aspects

1. This Report provides an overview of the activities of the PEEREA Working Group in 2014, highlighting the role of energy efficiency and energy saving as the most important means to meet climate and energy security goals in cost-effective manner.
2. The Working Group had two regular meetings in the course of the year, both held in Brussels. The first meeting took place on 25 March 2014 and the second meeting was on 31 October 2014. A high level special session of PEERERA “Incorporating energy efficiency into energy security planning” took place on 30 October 2014 in Brussels.
3. The Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) has a proven record as a successful international instrument for the promotion of energy efficiency by providing a well developed framework for peer reviews, exchange of information and dissemination of good practices. In 2014 the activities within the Working Group continued to be an important part of the Energy Charter implementation and the Group worked as a dynamic forum for policies sharing and advice for member and observer countries on energy efficiency and related aspects.
4. The core activity of the Group was the review process as a tool to monitor and facilitate the implementation of the protocol. The PEEREA Working Group continued to serve as a forum for networking and exchange of information among international organisations and other organisations active in the area of energy efficiency and maintains strong and productive relationships with a range of international organisations. The following is a summary of the key activities of the Working Group in 2014.

Country or Region-specific Activities

In-depth Country Reviews of the Energy Efficiency Policy

5. The review process still remains the core activity of the Group as the main tool to monitor and facilitate the implementation of the Protocol. Following the recommendations of the Conference in Rome in 2009, the focus continues to be on countries with highest potential for improvements in their energy efficiency policy framework, namely Eastern European, Caucasus and Central Asian countries. Recommendations made by the review teams and discussed in the Group are consistently seen as an important tool to set the framework for energy efficiency policy and to formulate concrete objectives and strategies for improvements in national energy efficiency policy, legislative and institutional framework. Two In-depth energy efficiency reviews (IDR) were on the agenda of the Working Group in 2014.
6. The **In-depth Review of Republic of Turkey** was started in October 2013 with the support of experts from Norway, Albania, The Netherlands and the EC Delegation in Ankara. The review mission to Ankara took place from 19-22nd November 2013. The report was discussed at PEEREA meeting in March and the final report with the recommendations to the Turkish government was published and officially launched during a meeting of the Energy Efficiency Coordination Board in Ankara on 11 November 2014.
7. The Turkish energy sector plays a central role in the economy of Turkey. Energy production largely relies on imports of fossil fuels, namely coal, oil and natural gas. At present, 74% of the primary energy supply of Turkey comes from imports.
8. The priority for the development of Renewable Energy Sources (RES) is reflected by the Law on Utilization of RES for the Purpose of Generating Electrical Energy (2005), and by Turkey's accession to the International Renewable Energy Agency (IRENA) in June 2009, and the adoption of the MENR Strategic Plan (2010–2014).
9. The assessment of RES potential in Turkey showed that there was already about 26,000 MW of RES installed capacity (including hydro resources) as of January 2014. There is considerable potential for RES in Turkey, which is three times the gross demand. The availability of dam hydro can be used to balance the intermittent output of wind and solar. Moreover, the output of thermal power plants could be significantly reduced by developing this RES potential, which could make GDP growth more sustainable and long lasting.
10. Turkey's Energy Efficiency (EE) policy is guided by the Energy Efficiency Law, which aims to increase efficiency in the use of energy resources, to reduce the burden of energy costs on the economy and to protect the environment. The EE Law and its secondary regulations provide the legal basis and measures to promote and support EE improvements, including establishing and operating service markets including energy service companies (ESCOs), energy auditors and projects, and Voluntary Agreement schemes to encourage energy-saving investments.

11. The EE Strategy Paper in 2012 proposes determining a political framework supported with result-oriented and solid targets and to define, together with the enterprises responsible for performing them, the activities required to be made in order to reach targets.
12. Privatisation in the power and gas sector continues: power distribution company privatisations are completed and generation asset privatisation is ongoing. The privatisation of generation assets has been preceded by a large-scale rehabilitation of power plants, and this process is expected to continue after privatisation. Moreover, most gas distribution companies are privatised as well. The eligible customer limit has been reduced to 5 GWh since January 2013. Also, due to the distribution company privatisations, a process is now in place to reduce theft and losses.
13. The main objective of the Government of Turkey in the field of energy has been to become less dependent on imports for meeting energy demand. To meet this objective, a strategy document was published in 2009 which set targets for 2023: to achieve 30% of power generation from RES and to reduce the share in power generation of natural gas below 30%.
14. International Financial Institutions (IFI) have set up large funds for energy efficiency investments together with renewable energy investments. The size of these funds is impressive with over \$3 billion.
15. Concerning energy pricing, Turkey is well on track. The introduction of the Automatic Pricing Mechanism (APM) in early 2008 has improved the cost reflectiveness of energy prices considerably. Nevertheless, actual import costs are not always directly reflected in consumer prices as dictated by the APM. Hence, the APM is not always implemented as planned, which leads to temporary price subsidisation.
16. The government is commended for their work on the EE strategy paper of 2012. This paper has set out seven strategic goals, which are further subdivided into concrete actions and timelines.
17. The recommendations provided in the report include proposals for energy efficiency and renewable energies to continue to be given high priority by the government. In particular, the government's energy policy should continue to reflect the potential contribution of energy efficiency to decreasing fuel import and supporting economic growth and the environment.
18. Additional efforts are required to strengthen the capacity of the newly established General Directorate of Renewable Energy (GDRE), possibly by forming an effective dedicated authority with a clear coordination function which is appropriately staffed. The government, with the assistance of the Energy Market Regulatory Authority (EMRA), should continue their work with cost reflective pricing.

19. The energy efficiency strategy paper of 2012 should be supplemented by an energy efficiency policy road map for 2023 and beyond. This road map needs to be made operational through short term action plans with priorities and intermediate monitoring and evaluations. Government needs to allocate sufficient financial resources for increasing energy efficiency in public and state owned buildings and public lighting and at the same time introduce incentive system for private and residential sector initiatives in energy efficiency and RES.
20. Within the Memorandum of Understanding between the Secretariat and “Kazenergy” Association a **study of the energy efficiency policies of Kazakhstan** was developed. The main objectives of the study were to provide a comprehensive review of the current status of the energy saving and energy efficiency policy of the Republic of Kazakhstan; analyse key challenges and barriers by sectors of economy which hinder the successful implementation of this policy, and provide best practice examples from developed countries in implementing energy efficiency that are best suitable for replication in Kazakhstan. The report was discussed during October 2014 PEEREA meeting and publication officially presented on 26 November 2014 in Astana.
21. With the adoption of the Concept of Kazakhstan on transition to green economy and “Strategy 2050”, the country has chosen a principally new way of economic and social development. Improved energy efficiency and energy conservation have been high on the country's political agenda and a regulatory framework is currently in place. The government authorities are making good progress in creating a fully operational energy efficiency system, including efforts to modernise various sectors of the national economy, introduce technical regulation and energy accounting systems for businesses, improve management quality and upgrade operating personnel skills, raise energy efficiency awareness among local communities, and scale up investments in energy efficiency projects.
22. Since 2012, a number of legislative acts, defining the basic requirements in the field of energy efficiency were adopted in the country and a number of sectorial and regional energy efficiency programmes are being implemented. Important documents include the Law on Energy Saving and Energy Efficiency and the Program “Energy Efficiency 2020”, setting at least 40% energy intensity reduction target until 2020. The government’s main task in order to reduce the energy intensity is the successful implementation and enforcement of the existing legislative framework, thus improving the energy efficiency in most energy intensive sectors.
23. The Program “Energy Efficiency 2020” sets a number of tasks aimed at modernisation and improved energy efficiency of industry and power sectors, reduced losses in power and heat supply networks; raising public awareness of energy efficiency; development and introduction of financial mechanisms and incentives to promote energy saving and energy efficiency; reduced fuel consumption in the transport sector.

24. One of the main implementing mechanisms introduced within the new regulatory framework is the establishment of National Energy Register, which will incorporate individual entrepreneurs and legal entities consuming 1,500 tce (1,050 toe) or more per year, as well as state institutions and state companies. Entities included in the Register must undertake an energy audit at least once every five years as well as implement and maintain an energy management system.
25. Energy efficiency building codes are introduced for new buildings. Design documentation for the construction of new buildings, facilities, and major repairs and reconstruction of existing buildings are subject to mandatory energy saving and energy efficiency analysis. The analysis is to be carried out by an independent organisation accredited in this particular area for all buildings, facilities, and structures consuming more than 350 toe per year.
26. To improve the efficiency of **generation, transmission and distribution** of electricity and heat resources the report recommends to further promote investments into the modernisation of deteriorated infrastructure of electricity production; transmission and distribution and thus further minimise losses and introduce energy saving incentives through the adjustment rules and procedures for tariff formation and consideration of the possibility to grant preferences to those companies that reduce losses.
27. In order to utilise the significant energy efficiency potential of *industry* the report recommends to increase state control and establish monitoring of the implementation of energy efficiency measures prescribed by energy audits; actively promote the adoption of ISO 50 001 standards to large industrial enterprises incorporating a standardised approach to energy auditing and encourage further industrial enterprises to implement actions to deliver cost-effective energy savings; revise existing industrial equipment standards and minimum performance standards to allow for best available technology applications solutions; develop and introduce various incentive schemes (voluntary programmes, subsidies, fiscal incentives) for industrial enterprises that undertake energy audits in order to support the implementation of the recommended measures; train and upgrade personnel at relevant research and academic institutions engaging energy savings and energy efficiency departments, hold professional training sessions, as well as qualification and retraining programmes.

28. According to the report, the government of Kazakhstan can succeed in eliminating the obstacles to increasing energy efficiency in the **residential and public sectors** and uncover considerable energy savings potential in these sectors by strengthening the energy performance requirements for new and existing buildings and allocating sufficient resources for monitoring compliance, and proper enforcement of the legislation and building codes; introducing individual apartment heat metering for new buildings to create incentive for final consumers to regulate their heat use; stimulate regional and local authorities to undertake energy audits of all public buildings and develop dedicated Programmes for improving the energy performance of public buildings; develop financial incentive schemes for final consumers, stimulating investments in energy efficient retrofit of existing buildings; accelerate the process of development and adoption of common minimum energy performance standards for energy using products within the Eurasian Union and create the necessary conditions to support regional/local authorities to develop and implement projects for high-efficiency street and public lighting. Introduce incentives in forms of grants or subsidies to facilitate the fast deployment of energy efficiency street lighting throughout the country.
29. To reduce the energy consumption and level of associated emissions in **transport sector** it is recommended to introduce policy packages (regulatory and incentives) that encourage more rapid turnover of the old vehicle fleet; enhance state control for fuel quality, available at the market; introduce financial incentives that support the use of energy-efficient vehicles and mode of transport and introduce requirements to relevant state and local authorities for improving the quality of service, efficiency, accessibility and comfort of existing public transport systems in order to create an alternative to private vehicle use in urban areas.

Follow-up on Member States Reviews

30. The Energy Charter Secretariat started in 2013 a follow up of the recent In-Depth Energy Efficiency Reviews. The aim is to assess their effectiveness in practice and identify support activities for the implementation of recommended measures. Such activities might be in the form of provision of further policy advice, capacity building and support for development of future energy efficiency projects or information provision. After the first evaluation phase developed in 2013 through a questionnaire, in 2014 the Secretariat undertook missions to Albania and Bosnia and Herzegovina to define with the national energy officials the activities to be developed together towards the better deployment of the energy efficiency policies and strategies. Base on the identified policy support needs, concrete activities are in a process of discussion with donors and IFIs.

International Cooperation Activities

31. The Energy Charter Secretariat took the opportunity of its Spring PEEREA Working Group meeting to invite two organisations with relevant work developed in energy efficiency indicators and energy efficiency markets to come to the meeting to explain its methodologies and results. The organisations which participated were ENERDATA/World Energy Council and IEA. Following this initiative, the Secretariat will continue its co-operation with the World Energy Council in the framework of the project “Energy Efficiency Policies and Indicators” as Knowledge Network Members.
32. Following the exchange of information on the UN Sustainable Energy for All (SE4All), Energy Efficiency Accelerators Initiative was presented at the October meeting.
33. The PEEREA Working Group also organised a high level roundtable discussion on means of incorporating energy efficiency into energy security planning. Although the potential of energy efficiency in achieving energy security is well acknowledged, energy policy makers often do not take into account the impact of reduced energy demand to the energy security balance equation. By addressing the main drivers and benefits of energy efficiency deployment in the context of energy policy and energy security, the roundtable aimed at initiating a debate among the Contracting Parties and Observer States on how to pursue an integrated and sustainable energy security policy.

Implementing PEEREA at local level

34. The DACO project started at the beginning of 2012. The aim is to support the local authorities in the Central Asian Area and ENP-East Area to acquire a common methodology to correctly monitor, evaluate and reduce their energy consumption and CO₂ emissions. This general objective is reached by joining the Covenant of Mayors’ principles, rules and goals. This project benefits from a grant from the European Commission.
35. Four cities are partners in the DACO project: Sumgayit (Azerbaijan), Novogrudok (Belarus), Taraz (Kazakhstan) and Somonyon (Tajikistan).
36. In 2014 local partners finished their Sustainable Energy Action Plans in accordance with the established format of the Covenant of Mayors. Finally, as part of the DACO work plan, concrete demonstration pilot projects were implemented and inaugurated.

PEEREA Working Group organisational issues

37. In line with the conclusions of the Review pursuing Art. 34(7) PEEREA Delegates discussed the possibility of initiating a process for changing the status to a Standing Group. Terms of Reference for the future operation of the Group including possible changes in the way it practically operates and meets were initially discussed during the October meeting and delegates agreed to invite the Strategy Group to consider initiating a process for changing the status of the PEEREA Working Group to a Standing Group.