
I. DEVELOPMENT CHALLENGE

According to the Paris Agreement under United Nations Framework Convention on Climate Change adopted at the 21st Conference of Parties and enacted on 4 November 2016, it was decided to confine the increase in global average air temperature within 2°C above the pre-industrial levels, while pursuing even slower increase of up to 1.5°C. Currently, 190 states have submitted their national plans for reduction of greenhouse gases emissions and have agreed to revise their commitments each five years starting from 2018 based on applicable scientific achievements. The Paris Agreement also sets forth general principles and mechanisms of technical and financial contributions to support low carbon development policies and increase resilience to climate change.

Baseline: Total energy consumption in the EEU countries makes about 130 billion kWh per year. Lighting, household appliances and buildings' engineering equipment energy consumption makes about 30% or 39 billion kWh per year. According to the economic growth scenario of 2-3% per year, the energy consumption in the EEU countries can increase from 130 billion kWh per year in 2017 to 150 billion kWh per year in 2030. The transfer and application of energy efficient technologies can enable up to 40% reduction of energy consumption or 15.6 billion kWh per year which corresponds to about 9 million tons of CO₂ equivalent emissions per year. Realization of this potential may provide stable economic growth without significant increase in generation capacities. 50% of the existing potential can be achieved by 2030 due to introduction of modern standards of energy efficiency.

Regional context: Energy saving, called in the EEU "The Industry of the Future", is identified as priority area for implementation of the integration challenges and climate change mitigation policy in the region. The introduction of common energy efficiency requirements in the partner countries will provide stimulus for energy-saving products manufacturing industries and will create conditions for their promotion in the market. The consumer rights protection can be ensured through establishment of quality control system for common market of energy saving products, and through optimization of the costs associated with building necessary institutional infrastructures e.g. testing laboratories. A regional initiative in EEU will provide platform for general information exchange, tools and training to partner countries with a focus on regional cooperation in harmonization of EE standards and verification means and procedures. The experience of RF related to introduction of MEPS and HEPS as part of promotion of energy efficiency in lighting, household appliances and engineering equipment was quite successful. The introduction of MEPS in lighting and stimulation of the use of LED technologies in the RF has ensured 5 million t CO₂ eq. emissions reduction on annual base.

The EEU countries have already started establishing common policy in the field of technical regulation of energy efficiency, in particular, the draft Technical Regulation on energy efficiency requirements of energy consuming products was developed several years ago. Unfortunately, the adoption of the Technical Regulation was delayed due to disagreement on number of requirements and lack of necessary infrastructure in some countries (laboratories, experts, energy efficiency control systems). Currently, the draft Technical Regulation requires updating; moreover, it does not cover certain important energy consuming products (e.g. all types of lighting fixtures). The document revision and update is virtually impossible to conduct without the support of professional community in the countries of the EEU. There is also need to develop the system of HEPS and introduce them at a national level (e.g., for public procurement regulation), thus ensuring practice for gradual increase in MEPS. For example, in the absence of a technical regulation, the RF and Kazakhstan developed and adopted energy efficiency requirements to procure lighting equipment for government needs. These standards are more stringent than the requirements presented in the draft technical regulation. Armenia has also developed a draft on national energy efficiency requirements for lighting and established a laboratory for the testing of lighting equipment. The 2nd National Energy Efficiency Action Plan adopted by the Government of Armenia, Protocol Decision #4 of February 02, 2017 defines areas and measures to improve energy efficiency and makes forecast of energy consumption reduction for each sector, including the ones to be achieved due to the introduction of energy efficiency standards and due to raising awareness on labeling among consumers. The issues of energy saving and energy efficiency in Kyrgyzstan are regulated by the "On Energy Saving" and "On Energy Efficiency of Buildings" law that provide for organizational arrangements for energy conservation and promotion of energy efficiency policies. Program on Energy Conservation and Energy