Sustainable Development in the Energy Sector
An EU funded project

Energy sustainability for a better future

REPUBLIC OF SERBIA
MINISTRY OF INFRASTRUCTURE AND ENERGY

# COMPONENT I - KYOTO PROTOCOL AND THE ENERGY SECTOR

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change with the objective to cost-effectively reduce greenhouse gas (GHG) emissions in the period to 2012. In 2007, Serbia became a non-Annex I party through ratifying the Kyoto Protocol and became eligible for implementing the Clean Development Mechanism (CDM).


Serbia's 1st National Communication to the United Nations Framework Convention on Climate Change (2009) was a further milestone for Serbia in intensifying its efforts to reduce the carbon intensity of its economy as part of its commitments under the Energy Community Treaty and the approximation process to the European Union. This will include the adoption of national GHG emission reduction targets.

The energy sector (power and heat) causes a large share of greenhouse gas (GHG) emissions in Serbia. Improved insight in the current and future emissions of the energy sector and in the measures available to mitigate these emissions is becoming increasingly important. This applies to both the mid-term (2020) and the longer terms, taking into account the future availability of low carbon technologies, including carbon capture and storage (CCS).

In addition, Serbia will need to further develop the policy and legislative framework related to climate and energy in compliance with the EU acquis. Particular attention will be given to the EU Emission Trading Scheme for large emitters in the energy sector, which will become the main policy instrument to manage GHG emissions in the energy sector.

This project will support the Ministry for Infrastructure and Energy by improving GHG scenarios in the energy sector, by identifying mitigation measures, by investigation the impact of future obligations as well as any opportunities for participation in carbon financing mechanisms.

The project will prepare the Mid-Term Implementation Plan for the Kyoto Protocol in the Energy Sector (and its possible successor). This Plan will comprise six chapters addressing different topics related to GHG emission mitigation in the energy sector.

1. **GHG emission scenarios in the energy sector in support of climate change mitigation policy.**
   The impact on the energy sector (both in technical and economic sense) of Serbia's potential adoption of a national target and cap for GHG emission (and changing of status to Annex I country) will be analyzed, under various scenarios of GHG emission reduction and/or limitations.

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2. **The use of post-2012 carbon trading/project mechanisms in Serbia and the preparation for the EU Emission Trading Scheme.**
   The options for Serbia's participation in post-2012 carbon financing/trading in light of 1) EU accession and 2) international post-2012 climate change regime. A road map to EU-ETS in Serbia will be drafted and the implications of EU-ETS (third phase) on large emitters in the energy production sector will be assessed.

3. **Mitigation measures for limiting GHG emissions in Serbia's energy sector in the mid-term (2020).**
   An analysis of the mitigation measures for limitation of GHG emissions in Serbia's energy sector in the mid-term (2020) will be made. This analysis will include policy recommendations and an estimation of GHG emission reduction potential and related costs.

4. **Analysis of the existing legislative and strategic/policy framework of MIE from a climate change mitigation perspective.**
   A gap analysis of MIE will be made of existing legal and strategic documents in respect of future EU accession and future participation of Serbia in a post-2012 international climate change regime.

5. **Potential of carbon capture and storage (CCS) in Serbia's energy sector.**
   Technical and economic analysis on the possibility and potential of CCS in Serbia's energy sector (horizon 2030). This includes a description of the legal and administrative capacities that would be required for implementation of the CCS Directive in Serbia (2009/31/EC).

6. **Technology road map to a low carbon energy sector in Serbia (2050).**
   A long term outlook on the potential for GHG mitigation in the energy sector will be given. An overview will be provided on the current and future technologies that could be used for reducing GHG emissions in Serbia's energy sector. The overview will include a high-level cost assessment.

**Duration of project:**
12 Months (April 2011 – April 2012).



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