CDM Potential of Macedonia

Jasminka Dimitrova-Kapac, 22 October 2006,
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Report of Mr. Adrian Stott
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Selection Criteria for potential CDM projects in Macedonia

- Eligibility of the CDM
- Information and data availability
- Prospect of actual project implementation

Feasibility of potential CDM projects in Macedonia

Sveta Petka (Matka 2)

- ✓ High potential as a CDM project activity
- ✓ An average of 60,060 CERs/yr could potentially be generated
- ✓ Likely to satisfy all the applicability conditions

Kozjak 80 MW hydropower project

- Low potential as a CDM project due to possible problems with eligibility

Small run-of-river hydropower project

- ✓ High CDM potential if the concession is taken up by an experienced company
- ✓ Ownership of CERs should be addressed in the contract between ESM and the companies which are commissioned to build and operate the hydropower plants

Hydropower rehabilitation project

- Medium-high potential as a CDM project
- An average of 25,272 CERs/yr could be potentially be generated (from 2008 onwards)

Bitola coal powered plant rehabilitation

- Medium potential as a CDM project
- Further data required before a full assessment of its potential could be conducted
- A new methodology application is likely to be needed
- Project additionally will need to be demonstrated through a financial analysis

Toplifikacija 340 MW natural gas powered cogeneration project

- ✓Medium-high potential as a CDM project
- ✓New baseline methodology need to be prepared and a method for calculating the Carbon Emission Factor (CEF) needs to be proposed
- ✓An average of 785,423 CERs/year

Drisla LFG collection and flaring

- High potential as a CDM project
- Likely to satisfy all the applicability conditions as set out in the consolidated methodology for landfill gas project activities
- Relatively low investment costs
- An average of 71,918 CERs/year

Animal waste biogas and flaring/utilization

- The project could have high potential if relatively large intensive farms could be identified
- At the moment no data available

ESCO energy efficiency for boiler rehabilitation/replacement

- The project could have high potential as a CDM, not enough data was available for a detailed analysis

Reduced transmission loss from the Macedonian grid

- If data for transmission loss could be obtained and loss reduction technology decided upon, this project type could be accessed in the future

Biomass power plant project using agricultural/forestry residue

- This project could have high potential in Macedonia if relatively large sources of agricultural/forestry residues are identified
- No data available

Kocani geothermal central heating system

- Low-medium potential as a CDM project
- No data available to allow determination of baseline emissions

OKTA oil refinery energy efficiency project

- Energy efficiency measures (replacement of catalysts, boilers, pumps, rehabilitation of furnaces and reformer heat trains) could be bundled into small-scale PDDs
- As long as the measures included in the projects are not BAU and baseline data is readily available, the CDM potential will be high

OKTA waste heat/gas collection and utilization projects

- The best option would be to bundle the two waste heat/gas projects under the small-scale PDD
- Although the CDM potential is likely to be high more data will be required to perform a detailed analysis of CDM potential

OKTA CH4 avoidance through fossil fuel evaporation reduction

- High potential as a CDM project
- A new methodology will need to be produced

Makstil heavy oil to natural gas fuel switching

- Medium-high potential as a CDM project
- The additionally will need to be carefully considered once the relevant financial data becomes available
- It must be demonstrated that the project is not the most attractive plausible alternative

Makstil energy switching project from electricity to natural gas

- Medium-high potential as a CDM project
- No applicable accepted CDM methodology currently exists for this project type
- The additionally will need to be carefully considered once the relevant financial data becomes available

Teteks Textile energy efficiency projects

- More data required before an accurate analysis of the project will be possible

Factors affecting the successful registration of CDM projects in Macedonia

- CDM capacity of Macedonian project developers
- CDM capacity of the Government
- Project design
- Financing CDM transaction costs

The Market for CERs generated in Macedonia

- CER buyers
- CER prices and the link to delivery risk

Conclusion

There are a number of emission reduction projects in Macedonia and in order for that potential to be realized, project developers, with support and cooperation from the Government and other institutions, need to work efficiently towards registration of projects with the CDM Executive Board