

Attaining Sustainable Energy Goals in the UNECE region

Group of Experts on Cleaner Electricity Production from Fossil Fuels

Barry Worthington/ 27-28 May 2015



Key achievements and impacts

- The Group of Experts developed recommendations to the United Nations Framework Convention on Climate Change (UNFCCC) on how carbon capture and storage in cleaner electricity production and through enhanced oil recovery should be treated in a Post-Kyoto Protocol Agreement.
- The recommendations were approved by 56 member States and then submitted to UNFCCC. The CCS recommendations were then disseminated to select Environment Ministers (from countries where fossil fuels play critical role for power generation) as well various industry organisation and non-governmental organisations.
- The work on the CCS recommendations was picked up by the main stream media with over 60 articles published.
- The work accomplished thus far on CCS and other topics has solidified the reputation of the CEP as a partner on substance for member States and international organizations. The process demonstrates how UNECE offers a neutral platform that allows solutions to be developed that would otherwise not happen. The convening power and regional coverage of the UNECE provides a unique niche in electricity system development.



Outstanding deliverables, potential challenges and gaps

- **CCS landscape survey report**
<http://www.unece.org/fileadmin/DAM/energy/se/pdfs/clep/ge10/CEP.10.2014.INF.2.pdf>
- **Recommendations to the UNFCCC on how CCS can be used to reduce CO₂ emissions**
<http://www.unece.org/fileadmin/DAM/energy/se/pdfs/clep/ge10/ECE.ENERGY.2014.5.Rev.1.pdf>
- **Baseline Efficiency Analysis of Fossil Fuel Power Plants**
<http://www.unece.org/fileadmin/DAM/energy/se/pdfs/clep/ge10/CEP.10.2014.INF.5.pdf>
- ***Define other activities through electronic exchanges – in progress***

- **Challenges ahead:**
 - further data gathering and analysis on ways to increase the efficiency of power plants and reduce GHG emissions with a view to developing best practices;
 - assessment if further work could be undertaken on the transfer of Carbon Capture Use and Storage (CCUS) technology.
 - encouraging broader participation by UNECE Member States in the substantive activities of the Group of Experts
 - identifying and securing extrabudgetary resources needed to carry out the work plan and related capacity building activities



Elements for 2016-2017 work plan

Future work plans will continue to focus on clean fossil power generation technology, furthering existing work on efficiency of fossil fuel power plants and CCS highlighted above. Potential new efforts could include the following:

- **Coal gasification:** The evaluation of coal gasification best practices across the UNECE region and globally could provide members the opportunity to adjust policy and regulation in a way that could find the right answer to dirty coal requirements.
- **Distributed Generation:** Efforts under this topic area could enable member countries to add to their suite of electricity development tools.
- **CCS:** Building on the success of previous work, UNECE is in a strong position to provide leadership across a range of CCS aspects that are important for many portions of the region.
- **Flexible Fossil Power Generation:** Flexible power generation typically is most typically considered with gas based power generation, but there are many examples where coal based generation is called upon for such balancing.
- **Integrated Sustainable Electricity Systems:** An evaluation of electricity system technologies and electricity system development and modernisation approaches could enable UNECE member countries to operate and plan more optimal electricity systems.
- **Utility business models of the future:** Potential focus on valuing cost of service or quality of service regulation and the impacts on current generation fleets and evolving generation fleets could be of significant interest to UNECE members.



Recommendations for the Committee, conclusions

- Member States are encouraged to continue to support and promote the activities of the Group of Experts on Cleaner Electricity Production from Fossil Fuels.
- UNECE member countries could consider the CCS recommendations to be included to the twenty-first session of the Conference of the Parties (UNFCCC COP 21) in Paris, December 2015, with the goal to achieve a universal agreement to address climate change.
- Member States are asked to consider proposed topics of focus for the CEP and offer opinion on the inclusion of such topics in the next work plan. In addition, Member States are asked to suggest topics of interest for the Group of Experts to focus on, specifically for the ECE sub-region.



Thank you

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