

EGTEI – Expert Group on Techno-economic Issues

Co-Chairs' report to
51st WGS&R Session

State of progress in the work of the EG
(ECE/EB.AIR/WG.5/2012/4, ECE/EB.AIR/109/Add.2)



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Premise

This presentation refers to the activities carried out by EGTEI in the second half of 2012, and the beginning of 2013, according to the work plan adopted by the Executive Body at its 31st Session, December 2012 (ECE/EB.AIR/109/Add.2).

The activities are grouped following the item numbering as in the work plan.



(a) Continue the work on emerging techniques in combustion plants with a capacity lower than 500 MWth.

This activity has been concluded with the final report of the **EmTech50-500** sub group established on purpose.

The outcomes of the work were presented by Emmanuel Fiani (ADEME) Chairman of the **EmTech50-500**, at the 50th session of WGSR, September 2012. The final report has been delivered to the LRTAP Secretariat and remains available for downloading, also on the EGTEI web site.



(b) Cooperation with the Coordinating Group for EECCA Countries

(i) The final results of the Pilot Study carried out on the Apatity Power Plant (Russian Federation) have been presented at the workshop, held in Murmansk (Russian Federation), on the 30th of November 2012. The outcomes of the analysis on the Apatity Plant have demonstrated the feasibility of the EGTEI Methodology, even on an old plant, and has highlighted the benefits in terms of emission reductions, according the obligations of the Gothenburg Protocol, compared with the costs of implementation for the techhnology upgrade.

Extention of application to other plants, sectors, countries has been discussed.

A seminar was held in Saint Petersburg with the EECCA Coordinating Group (19-20 March 2013) on Emission Inventory calculation and other EGTEI activities.



- (b) Cooperation with the Coordinating Group for EECCA Countries (cont'd)
- (ii) The joint session EGTEI Coordinating group for EECCA countries, planned to take place back to back the ATMOSPHERE Congress 2013, has been postponed, as well as the Congress, to 2014.



- (b) Cooperation with the Coordinating Group for EECCA Countries (cont'd)
- (iii) Translation in Russian Language of relevant EGTEI technical documents is still at the highest attention of EGTEI, due to the clear importance of the translation in the dissemination of relevant information among the EECCA countries. However, the accomplishment of this task is strongly dependant by the funds which could be made available in the next future.



- (c) Cooperation with the Centre for Integrated Assessment Modelling (CIAM)
- (iii) The cooperation between CIAM, EGTEI and industrial sectors, namely the *Iron and Steel* sector and the *Electricity Production sector*, is now well consolidated and a number updated sector specific parameters have been revised and made available for inclusion in the GAINS Model.



(d) Continue to update the methodology developed by the Expert Group for large combustion plants (LCPs) and refineries (on costs).

A meeting was convened, on the 5th of February, 2013 in Paris, at the CITEPA headquarter, among the concerned experts to discuss and finalize:

- Results from the questionnaire distributed/filled by the experts
- Still missing information / Data to be verified,
- Presentation of the Excel tool for cost calculation
- Additional work to be carried out

The next meeting is planned on the 27th of June with the aim of finalizing the results by the end of 2013.



(e) Continue to cooperate with the European Integrated Pollution Prevention and Control (IPPC)Bureau

The outcomes of the work carried out by EGTEI on LCPs are made available to the experts of the EU IPPC Bureau, in particular the work on emerging technologies, in the frame of the consolidated cooperation with the EU IPPC Bureau, for consideration in the revision of the LCP BREF. The sharing of data on costs of technologies, in LCP sector, is quite important for the IPPC Bureau



(f) - Continue to explore further work on black carbon, in cooperation with other technical bodies of the Convention

The main challenge for EGTEI, is definitely the collection and validation of further information on Black Carbon

While for stationary sources, the work has been satisfactory and data are regularly updated, however, a gap remains for what concerns the mobile sources.

EGTEI absolutely needs the contribution of a number of experts nominated by the Parties, to successful carry out the task on mobile sources (all pollutants), through setting up an ad hoc sub-group.



Expert Group methodology for comparison between the Annex emission limit values (ELVs) and the emission scenarios developed by the GAINS Model (referred as "new activities work plan)

This activity aimed at estimating the potential technological upgrade in some EECCA countries, analyzing the consistency between the GP Baseline scenario, developed by IIASA for the purposes of the Gothenburg review, and the ELVs in the Annex X, in terms of penetration of abatement technologies in the Power Plant sector and related costs of implementation, for technological upgrade.

The calculations performed till now need to be revised, due to the new Power Plant structure recently implemented in GAINS. The new results will be delivered by the end of 2013.



Expert Group work plan 2014- 2015

The revised work plan of EGTEI for 2014 – 2015 is presented in the new format, focusing on: Expected Outputs/Deliverables/Time of Delivery



Expert Group work plan 2014- 2015

<u>Activity</u>: Explore further best available techniques (BAT) for emission abatement, including their efficiencies and costs;

<u>Outcome</u>: Workshop/event to promote awareness and understanding of the Guidance document on control techniques for emissions of sulphur, nitrogen oxides, volatile organic compounds and particulate matter (including PM10, PM2.5 and black carbon) from stationary sources, notably with EECCA countries in **2014**



Expert Group work plan 2014- 2015

<u>Activity</u>: Develop a techno-economic tool (as evolution of the existing ECODAT database) and methodologies for evaluating costs

<u>Outcome</u>: Techno economic tool developed as evolution of the existing ECODAT database, develop data and methodologies to estimate costs, in different sectors. Large combustion plants are covered in 2013. Other sectors will be covered in the following years depending on assessment expressed by the EGTEI experts, including the EECCA country experts.



Expert Group work plan 2014- 2015

<u>Activity</u>: explore further work on black carbon, in cooperation with other technical bodies of the Convention.

<u>Outcome</u>: Collection of relevant data on mobile sources, and other potential major sources of black carbon, carried out by ad hoc group of experts.

Develop a guidance document on control techniques for emissions of sulphur, nitrogen oxides (NOx), volatile organic compounds (VOCs) and dust (including PM10, PM2.5 and black carbon) from mobile sources. Draft to be presented in **2014**, final version in **2015**



Expert Group work plan 2014- 2015

<u>Activity</u>: Cooperation with the Coordinating Group for EECCA Countries.

<u>Outcome</u>: Potential implementation of pilot studies on emission abatement cost assessment for electricity generation and other sectors such as oil, non-ferrous metal industries in countries of the sub-region (ongoing project in the Russian Federation, in electricity generation sector and potential projects in other countries, 2014 and 2015)

Joint session of the Coordinating Group for Eastern Europe, the Caucasus and Central Asia and plenary session of EGTEI jointly with the annual ATMOSPHERE Congress (tentatively **June 2014** and **June 2015**)



Expert Group work plan 2014- 2015

<u>Activity</u>: Cooperation with the Coordinating Group for EECCA Countries (cont'd).

<u>Outcome</u>: Translating the guidance document on mobile sources into Russian, once, developed, to be completed, tentatively, in **2015**

Post processing analysis of the available Gothenburg GAINS scenarios developed by IIASA (runs by GAINS_Europe and ad hoc developed routines) to estimate the potential tech upgrade to in some EECCA countries, to comply with the provisions of GP Annexes (e.g. PM ELVs). Analyses delivered by **end of 2013**, in form of tables and Excel files. Verification with EECCA, in workshop, e.g. ATMOSPHERE annual Congress and/or on bilateral basis, in **2014**.



Expert Group work plan 2014- 2015

<u>Activity</u>: Cooperate with the Centre for Integrated Assessment Modelling (CIAM)

<u>Outcome</u>: Provision of data to IIASA for inclusion in GAINS. Workshop with IIASA experts are convened, at necessity, when new infos become available. The activity is carried out continuously



Expert Group work plan 2014- 2015

<u>Activity</u>: Cooperate with the European Integrated Pollution Prevention and Control Bureau

<u>Outcome</u>: Update cost data for BAT reference documents for selected sectors (e.g. electricity generation). The activity is carried out continuously

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Next EGTEI Meeting

Nice, France

October 18th, 2013

Thank you for your attention!