



Main works carried out by TFTEI in the past years

Tiziano PIGNATELLI & Jean-Guy BARTAIRES

Co-Chairs of the Task Force on Techno-Economic Issues



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History of TFTEI



Outlook

- Establishment of the Expert Group EGTEI
- Review of the Gothenburg Protocol Annexes and Guidance Documents
- Development of the Analysis Tool **ERICCA**
- Cooperation with the EECCA Countries
- Upgrade EGTEI to Task Force TFTEI
- Development of the Clearing House of Technologies
- Collaboration with other Air Convention Bodies and the EU COM



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Establishment of the Expert Group EGTEI

The Executive Body, at its 19th Session, December 2001:

(b) Agreed to establish a new Expert Group on Techno-economic Issues (EB.AIR/WG.5/2001/8), to be led by France, noting that its first meeting was expected to be held in the first quarter of 2002.

With the following main tasks:

- update existing techno-economic databases on emission reduction technologies;
- prepare, at the request of the Working Group on Strategies and Review, draft revisions of text on techno-economic issues included in or annexed to existing protocols.



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Establishment of the Expert Group EGTEI

The French Ministry assigned to the Inter-professional Technical Centre for Studies on Air Pollution (CITEPA) the technical leadership of EGTEI

CITEPA availed itself of the collaboration with ADEME (French Agency for Environment and Energy Management) and IFARE (French-German Institute for research on environment), along with the collaboration of the Parties experts, Industry, NGO, EURELECTRIC, EIPPCB Sevilla and others.

The work started, in 2002, with review of existing databases, with ultimate objective of updating the available information on abatement technologies and generate cost curve data for the modelling work (IIASA-CIAM), in the perspective of the GP Annexes review.



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Review of the Gothenburg Protocol Annexes and Guidance Documents

At its 25th session, in December 2007, the Executive Body
(ECE/EB.AIR/91)

“64 (a) Invited the Expert Group on Techno-economic Issues to initiate work for a possible revision of the Gothenburg Protocol and its annexes, including through revising the guidance documents on sulphur dioxide (SO₂), nitrogen oxides (NO_x) and VOCs;”

EGTEI was also invited by WGS&R_41 (ECE/EB.AIR/WG.5/2008/5) :

“18. The Expert Group on Techno-economic Issues will also be asked to draft an annex on limit values for emissions of PM (PM_{2.5} and PM₁₀) from stationary sources. ”



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Review of the Gothenburg Protocol Annexes and Guidance Documents

The Expert Group revised the annexes :

- IV** (ECE/EB.AIR/WG.5/2009/17, Sulphur Oxides)
- V** (ECE/EB.AIR/WG.5/2009/18, Nitrogen Oxides)
- VI** (ECE/EB.AIR/WG.5/2009/19, NMVOC)
- VIII** (ECE/EB.AIR/WG.5/2009/20, mobile sources) (EU-COM)
- New [VII]** (ECE/EB.AIR/WG.5/2009/21, TSP) (Particulate Matter)
- XI** (ECE/EB.AIR/WG.5/2009/22, solvent content in products)

and developed the associated Guidance Documents



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Review of the Gothenburg Protocol Annexes and Guidance Documents



Some sectors examined in Parallel Sessions

Refineries bubble	Sinter plants
Electric furnace	Claus plants
Basic oxygen furnace	Sulphur content of gasoil
Blast furnace	LCP,
Pelletisation plants	FCC
Iron foundries	Cement
Non ferrous	Lime
Pulp	Glass
Waste incineration	

Activities using solvents of annex VI (VOC) :

Printing activities	Coating processes:
Vehicle coating industry	Wood coating
Coatings of metal surfaces	Coatings of plastic work pieces
Other coatings (textile, foil, fabric, paper)	
Coating of leather	Coating of winding wires
Coil coating	Manufacture of pharmaceutical products
	Dry cleaning



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Review of the Gothenburg Protocol Annexes and Guidance Documents



The review work took about 1 year and a half and the final version was submitted to the Secretariat, on the 6th of June, 2009 for consideration of the WGSR, at its 44th session, April 2009, and the Guidance Documents in September 2009, WGSR 45th Session.

Parallel Sessions with the Parties experts took place at WGSR 46 and 47 (2010) to illustrate and discuss the work done.

Three levels of ambition were proposed to the Parties.

The amended GP was finally adopted at the thirtieth session of the Executive Body (30 April - 4 May 2012)



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Development of the Analysis Tool *ERICCA*

According to the mandate of TFTEI, the Analytical Tool *ERICCA_LCP* for Large Combustion Plants (LCPs > 50 MWth) was developed by TFTEI

ERICCA_LCP allows to estimate the cost of emission reductions in relation with the implementation of a number of technological options, for SO_x, NO_x and PM emissions.

ERICCA_LCP has been developed in VBA and offer a user-friendly interface.

ERICCA_LCP is now successfully used by a number of companies in France.

On the same pattern *ERICCA_VOC* has been developed.



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Cooperation with the EECCA Countries

Since 2010, when the English-Russian interpretation was introduced in the annual meetings of TFTEI, a fruitful collaboration started with the Coordinating Group for EECCA Countries.

Ad Hoc works have been carried out, i.e. the retrofitting analysis on the APATITY Plant in Russian Federation and the guidance document on measurement and calculations of VOC emissions.

Every 3-4 years, joint meetings TFTEI-EECCA_CG take place (the last one in September 2018, in Saint Petersburg)



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Upgrade EGTEI to Task Force TFTEI

At its thirty-third session (Geneva, 8–11 December 2014), the Executive Body for the Air Convention adopted the decision 2014/2 (ECE/EB.AIR/127/Add.1), upgrading the Expert Group on Techno-economic Issues to the Task Force on Techno-economic Issues.

At the same time, the experts of the discontinued Task Force on Heavy Metals and Task Force on POPs joined the new Task Force TFTEI, which started the works in 2015.



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Development of the Clearing House of Technologies

In the TFTEI mandate:

Create and maintain a regional clearing house of control technology information for emissions of SO₂, NO_x, VOCs, dust (including PM₁₀, PM_{2.5} and black carbon), heavy metals and POPs, with the aim of being a reference place for dissemination of information to the experts of the Parties

Technologies = end-of-pipe, but also, primary measures (raw material management, process)

<http://tftei.citepa.org/en/clearing-house-home>



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Development of the Clearing House of Technologies



- The main objectives of the Clearing House are:
 - Deliver information on reduction techniques for SO₂, NO_x, PM, VOC, HM and POP coming from different anthropogenic sources through:
 - Updated information on best available techniques to reduce emissions, with a focus on technical descriptions and environmental performances,
 - Information on the latest developments on reduction techniques both for general and specific applications, with a focus on technical descriptions and environmental performances,
 - Operating experience and feedback from operators, with a focus on lessons learned in the field and real-life investments and operating costs.



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Development of the Clearing House of Technologies



The Clearing House web site consists in two main sections:

A **open section**, publicly accessible, with general information on technologies, sorted by pollutant, developed by the TFTEI technical secretariat and, also, information on latest developments of techniques or operating feedback provided by industry

An exchange platform, **reserved section**, accessible only for registered persons/experts for industry and Party experts aimed at:

- Deliver information on reduction techniques (Parties to the Convention, industry or other stakeholders),
- Deliver information on operating experience and feedback, with a focus on lessons learned in the field and real-life, investments and operating costs (plant operators),
- Ask questions (all TFTEI experts).

The new information is carefully validated and then made public



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Development of the Clearing House of Technologies



The quality of the information is essential in the Clearing House. Therefore the new information, on new and innovative technologies, even acquired from industry and manufacturers, is carefully evaluated by TFTEI before making it publicly available.

Links are provided to other relevant sites and documents (e.g. BREFS)

The future perspectives look at:

- Enrich the CH with new information on new sectors / issues of interest (e.g. maritime transport, technologies for methane and black carbon).
- The recent entry into force of the Gothenburg Protocol, will lead to the review of the Protocol, with expected extensive work of TFTEI on the technical annexes, and therefore with revised and new information available.



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Collaboration with other Air Convention Bodies and the EU COM



TFTEI/EGTEI has always maintained a continuous collaboration with other bodies of the Convention and with the EU Commission:

- CIAM/TFIAM for updating technology and cost data in the RAINS/GAINS Model.
- Sharing information with the EU COMM in the frame of the CAFE Project and the with the European Integration Pollution Prevention Control Bureau (EIPPCB) for the Integrated Pollution Prevention and Control (IPPC) Directive.
- Institute for Prospective Technological Studies (IPTS) Seville (EU COMM) on BAT (BREF Documents).
- Common task on ‘agricultural residue burning’, with the Task Force on Reactive Nitrogen (TFRN), in the workplan 2020-2021.



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Future Perspectives

In the revised mandate of TFTEI, new tasks have been included:

- *Initiate work to assess information on emission abatement technologies for the reduction of the atmospheric **emissions of methane** from key sources with the exception of the agricultural sector;*
- *Initiate work to assess information on emission abatement technologies for the reduction of air pollutant **emissions from marine shipping**;*
- *Update and assess on a regular basis the information on emission abatement technologies for the reduction of the atmospheric emissions of SO₂, NO_x, VOC_x, PM, **including black carbon**.....*



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Task Force on Techno-Economic Issue (TFTEI)

You are welcome to visit the official web site of the Task Force

tftei.citepa.org

Thanks for your attention !

tiziano.pignatelli@enea.it
jean-guy.bartaire@citepa.org



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