

Workshop Minutes

Regional Air Emissions workshop to support West Balkan countries in setting up national level reporting of AE

EEA project CARDS air emissions 2007-2008



hotel Moskva, Beograd

21-23 October 2008

CONTENT

Background.....	3
Main objective of the project.....	3
Main objective of the workshop	3
Participants.....	4
Agenda.....	4
Reporting obligations	5
Electronic systems for data management.....	5
Current status in the region	6
National Inventory system /Inventory management.....	8
Compilation of the next inventory	8
Conclusions/lessons learned	10
Areas for improvement identified by participants/ EEA support in 2009-2010	11
Annex - Italian Task Force for Central and Eastern Europe (TFCEE).....	13

Background

The workshop was organised under EEA project CARDS air emissions 2007-2008.

In parallel with the European Environmental Agency (EEA) member countries, EEA co-operates with the six West Balkan (WB) countries: Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia since 1997, Croatia since 2001, Montenegro, and Serbia since 2002. These six WB countries are participating in the EIONET network of organisations at a similar level as the EEA member countries. The main activities in the cooperation process are:

1. Extending the support of the EEA European Topic Centres (Air and Climate Change, Water, Biological Diversity, Terrestrial Environment, and Resource and Waste Management) to these countries.
2. Building up a regular reporting network and exchange of information for the EEA Priority Data Flows and the Core Set of Indicators. Main aim is to include the WB countries in the pan-European environment assessment reports and other main EEA reports.
3. Ensuring that the communication tool for environmental data and information exchange work across the entire EEA network (i.e. eEIONET telematics network development and application),
4. Executing the European level projects: CORINE Land Cover, Emerald Network and national AE inventories using CORINAIR tools and methodology.
5. Development of the EIONET network of organisations and participation of the country experts in major EEA events.

Main objective of the project

The overall project goal is to strengthen the cooperation between EEA and the six WB countries by further developing EIONET and integrating these countries in all main EEA activities, aiming at preparation for future EEA membership. The project initiates a regional programmatic approach to build capacity for improving the quality of data inputs to national emission inventories, using the good practice for cost-effectiveness.

The main objective is to provide expertise and training to the WB countries to allow the national experts to compile, collect and upload national data on emissions and air quality in EEA's priority data flows and to support the participation of the WB countries in the EEA's work on air and climate change.

Main objective of the workshop

The main objective of the workshop was to strengthen the cooperation between EEA and the six WB countries providing expertise and training to the WB countries on developing/strengthening national inventory systems to allow the national experts to compile, collect and upload national data on emissions and air quality in EEA's priority data flows.

Further more training on calculation methods, selection of activity data and emission factors for regional priority sectors (energy, transport, industry) identified during previous CARDS project was prepared, to assist countries in compilation of next inventories.

Participants

The workshop was organized under EEA project CARDS AE by ETC ACC (Umweltbundesamt Austria) and in cooperation with Ministry for the Environment, Land and Sea Republic of Italy - Task Force for Central and Eastern Europe (TFCEE) and with support of Serbian Environmental Protection Agency Ministry of Environment and Spatial Planning (SEPA). All six WB countries nominated experts, Serbia used the opportunity of hosting the meeting and participated with up to ten experts at different training sessions. All together more that 20 experts participate (see list of participants in attachment). The workshop was coordinated by Katarina Mareckova (ETC ACC, Umweltbundesamt) and co-chaired by Nebojsa Redzic and Tihomir Popovic both from Serbia (SEPA) .



Agenda

Meeting started with speech given by Momcilo Zivkovic director of Serbian Environmental Protection Agency (SEPA). He welcomed participants and introduced main activities of SEPA, which was established in 2002. K. Mareckova introduced main objective of the workshop and agenda (detailed agenda see in attachment). All presentations can be downloaded from CIRCA: http://eea.eionet.europa.eu/Members/irc/eionet-circle/phare/library?l=/meetings/2008/regional_emission .

Roberto Binatti from Italian Ministry for the Environment, Land and Sea - Task Force for Central and Eastern Europe (IMELS-TFCEE) introduced a regional project focused on coordinating the activities of the IMELS in facilitating the implementation of bilateral

cooperation agreements between IMELS and related local ministries in above mention region mainly in the field of energy and environment. The cooperation is finalized to coordinate environmental monitoring and sustainable requalification of selected areas, to provide technical assistance for ratification of Kyoto Protocol and other MEAs, and to promote the use of the renewable energies through CDM, JI, and Green Certificates, as well as improve energy efficiency, waste management systems, reforestation etc.. Moreover cooperation is finalized to facilitate the relation with the international organization present in the area. More details on TFCEE activities see in Annex.

Reporting obligations

The session continued with 2 presentations summarising reporting obligations related to inventories of air emission and GHGs and EEA priority data flow given by K. Mareckova and C. Leonardi.

The reporting under CLRTAP and EU directives is not mandatory for West Balkan countries, but as Parties to the CLRTAP are invited to report annually their Air emission inventories to EMEP. WB countries ratified UNFCCC, and have to report their GHG inventories as part of National communications to UNFCCC in given periods. Exception is Croatia which as Annex 1 Party should report GHG inventories annually. All WB countries should provide/ copy their emission data to EEA under priority data flow.

Electronic systems for data management

The next session was devoted to electronic tools to be used for inventory compilation and/ or for developing emission sources cadastre. Jozef Skakala from Spirit presented new functionalities of revised Collector and Reporter (tools developed by ETC ACC). The most interesting improvement was considered multiyear functionality, which allows calculation and storage of inventories for entire time series in one database. These presentation was highly appreciated by countries although status of electronic data management in region differs a lot¹. Croatia and BiH asked for clarification of specific technical problems related of transfer of data from the old to new version of Collector and input of Copert data. Serbia asked for options to use Copert if limited national data and FEs. Albania, Macedonia and Serbia required further training and support with introduction/use of Collector and Copert tools.

J. Skakala also presented data management system in Slovakia NEIS. The basic NEIS stored information on fuel consumption and production and limited information on large point sources to support national legislation of emission taxation. The system has been developed almost ten years and new functionalities have been introduced step by step. Now the system stores all information on emission sources and allows compilation of national and regional inventories on regular bases reporting of emissions under all reporting obligations under CLRTAP, UNFCCC and EU directives. Experts raised questions on flexibility of the system, the resources needed for development and management of such

¹ (e.g. BiH and Croatia have long term experience with this software , Serbia is at the beginning and plans to use Collector for its inventory compilation. Macedonia developed system during CARDS 2005-2006 and would need further improvements. Montenegro is developing national inventory system based on Italian “Apex.com, Albania did not start yet with development of the inventory system but considers to use Collector.

comprehensive system. It was recommended that countries which start with Collector consider use Collector II and afterwards import all information into Collector III version.

Carlo Trozzi (Italy) presented features of Italian system Apex.com, which can be used on different level (e.g. municipalities, regions, national level) and experience with implementation in Montenegro. Apex.com is the main component of EnviPlan.com (ENVironmental PLAnning) system and is finalized to include air pollutant emission inventory in a more general framework for the evaluation of driving forces and pressure on the environment. The basilar ideas of the system is that information for Emission Inventory is useful to other sector of environmental information and that sharing data between different environmental sectors and energy sector reduce the efforts for updating data and give more value to the information. The system work with the DPSIR approach of European Environmental Agency. APEX.com was designed to manage data base of Driver forces and Emission Factors, to produce reports about input data and emissions estimates and to interface to geographic information systems. Pressure, and in particular emissions, are evaluated for Point sources (main facilities with emissions greater then fixed threshold), Line sources (in local inventories, the main transport lines) and Area sources (all the outer sources). Area sources are evaluated on NUTS0 (national) scale for LRTAP or UNFCC inventories, NUTS3 (sub-regional) for national or continental modelling and LAU2 (municipality) for zone planning. In the absence of specific NUT3/LAU2 driver forces, it is possible to use surrogate driver forces that, because of their high correlation with the activity, allow almost reliable results to be obtained.

Current status in the region

In the afternoon meeting continued with 6 presentations describing current status of national inventory systems (legal, institutional and procedural framework) in individual west Balkan countries. For most of the countries the strategic goal is a full membership to European Union and EEA which involves among others regular reporting of environmental information to the respective international bodies.

Albania ratified UNFCC including Kyoto protocol and CLRTAP. The legal basis for developing of emission sources cadastre is in place since 2002. Institutional and procedural arrangements for compilation of GHG inventories were developed with support of UNDP project and resulted in preparing GHG inventories for initial and 2nd national communications. However framework for regular compilation and reporting of CLRTAP emission inventories is not yet existing and Albania did not report air emission data neither to EMEP not to EEA. Recently the Albania Environmental Agency (AEA) was set up and plans to start with developing of air emission inventories in the near future.

Bosnia and Herzegovina ratified UNFCCC including Kyoto protocol and CLRTAP and EMEP protocol and has in place some legal arrangements supporting compilation and reporting of emission inventories. The law which would support sufficient AD collection is missing. For implementation of laws at regional level are responsible: in Federation of Bosnia and Herzegovina (FB&H) Federal Ministry of Environment and Tourism and in the Republic of Srpska (RS) the Ministry of Physical Planning, Civil Engineering and Ecology. In general the institutional and procedural arrangements in the country seem to be rather complicated. At the time being the Federal Meteorological Institute which has long term experience in with Collector and Copert tools compiles and archives the CLRTAP inventories to be submitted to EMEP. The inventory of main pollutants is available for 1981 but needs small revisions. The

BiH initial national communication to the UNFCCC part of which will be the GHG inventory is under preparation (inventory expected by the end of 2009).

Croatia ratified UNFCCC including Kyoto protocol and CLRTAP and has in place legal arrangements which stipulate compilation of emission inventories and collection of activity data under these Conventions. Institutional and procedural arrangements are set-up Ministry of Environmental Protection, Physical Planning and Construction (MEPPPC) is NFP for both CLRTAP and UNFCCC. Croatian Environment Agency (CEA) has responsibility for inventories and subcontracts executive institution (Ekoneg) to compile the inventories and perform QA/QC. Complete national inventories 2005-2006 NFR, NFR 2002-2004 required recalculation (1990-2001 in Collector) were reported to EMEP and 1990-2006 GHGs to UNFCCC.

Macedonia (FYR) ratified UNFCCC, Kyoto protocol and CLRTAP; all follow up protocols under CLRTAP are in process of ratification. Country poses Law on Environment and Law on ambient air quality which supports compilation and reporting of emission inventories. In August 2007 was also adopted the Law on ambient air quality and set-up legal basis for establishing national inventory system. Rulebook on inventory and determination of the levels of the pollutant emissions in the ambient air in tones per year, for all types of duties, as well as other data needed for submission of the Program for monitoring the air in Europe (EMEP) (enacted on 30.11.2007). Ministry of Environment and Physical Planning is responsible for preparation of inventories and subcontracts different organisation for particular tasks. Macedonia reported NFR inventories for 1999-2006 for all main pollutants of the CLRTAP and 1990-2002 inventories of GHGs in CRF tables.

Montenegro is Party to CLRTAP and UNFCCC and ratified Kyoto protocol as well. Country adopted *law on Air quality* setting general provisions on ambient air quality and emission control. Department for Environmental Protection of the Montenegrin Ministry of Environment and Tourism is responsible for the implementation of the Convention requirements. Environmental protection agency has recently been established (June 2008) and will be responsible for compilation and reporting of emission inventories. The sources of activity data are diverse. Memorandum of understanding was signed with Italian Ministry of Environment, Land and Sea. In the frame of this cooperation are among others developed inventory systems (Apex.com) and first inventory is compiled. Montenegro plans to submit national inventory in the next reporting round.

Serbia ratified the CLRTAP and EMEP protocol, but not yet any of the follow up protocols. The legal support at national level for compilation and reporting of inventories is not appropriate. Legislation is under preparation and relevant "Environmental act" is under ratification process in Serbia Parliament. At the time being Ministry of Environmental and Spatial Planning is responsible for implementation of Convention and Republic Hydrometeorological Service of Serbia (RHMSS) is authorised to compile the inventories. Serbian Environmental Agency (SEPA) was established in 2002 and is responsible for reporting to EEA. Activity data are provided by Statistical office (SORS). In 2008 was set up Integral Cadastre of Pollutants (ICoP) containing information on 380 facilities. Up to now Serbia reported limited emissions (not all sources are covered) of SO_x and NO_x for years 2004-2006. No GHG inventories were reported up to now to any of international bodies. Serbia is under preparation of UNDP project supporting preparation of initial national communication to the UNFCCC.

National Inventory system /Inventory management

2nd day of the meeting started with session related to inventory systems and inventory management. K. Mareckova presented the key elements of national inventory system needed to make the system operational and sustainable. The presentation was based on requirements as set up in IPCC Good Practice Guidance and EMEP /Corinair Inventory Guidebook.

National inventory system (NIS) means **legal , institutional, and procedural arrangements** necessary to prepare national (AE/GHG) inventories and projections are in place. Functioning NIS in place ensures a) ability to develop high quality inventory at regular intervals (e.g., annually, every 2-4 years, etc.), b) resources are focused on the most significant emission sources in the country, c) sources of data are identified, appropriately archived and regularly accessible and c) mission estimates are continually improved; adhere to international guidance (e.g., IPCC Good Practice Guidance, EMEP Corinair Guidebook).

By strengthening institutional capacity to prepare inventories and establishing a trained, sustainable inventory team, countries can reduce uncertainties and improve the quality of inventories for initial /subsequent emission inventories. This, in turn, should enable countries to improve national strategies for improving the air quality and reducing greenhouse gas emissions.

Compilation of the next inventory

The meeting continued with presentation of case studies from Macedonia (A. Krsteska) and Montenegro (A. Pejovic).

In Montenegro emissions inventories were prepared by Techne Consulting in cooperation with Montenegro Institutions, in the frame of cooperation between the Italian Ministry for Environment, Land and Sea and the Montenegrin Ministry for Tourism and Environmental protection. Inventories have been realized according to Long Range Transboundary Air Pollution Convention, United Nations Framework Convention on Climate Change and EU Air Quality legislation. Inventory was realized for GHGs, according to UNFCCC for 1990 - 2003 (first finalized in 2005) , according to LRTAP Convention for 2006 (finalized in September 2008)) and on Local scale for 2006 (finalized in September 2008). Technical assistance to Montenegrin Authorities (in progress).

For LRTAP, inventory cover “Main“ pollutants (nitrogen oxides, sulphur oxides, non-methane organic compounds, carbon monoxide), Suspended particulates with diameter less than 10 μ m and less than 2.5 μ m (PM2.5), Heavy metals, Ammonia, Benzene, Polycyclic aromatic hydrocarbons, Hexachlorobenzene, Polychlorinated biphenyls. Nomenclature used (SNAP) follows the European guidelines produced by LRTAP.

Emission sources are classified as: point sources - single fixed sources which emissions exceed fixed thresholds, linear/nodal sources (the main communication ways such as roads, rivers, railways, and seaways and nodes such as ports and airports) and area sources (all other sources evaluated at municipality level corresponding to NUTS3/LAU2 classification).

Emissions from Point sources are evaluated through data (production, fuel and raw materials consumptions, emissions from stacks) directly supplied by companies, selected from official company register and through a questionnaire, integrated by estimations. Emissions from Area sources are evaluated starting from statistical or survey data supplied by Ministries and

Institutions, by proper estimations. Emissions from Mobile sources (road, air and sea traffic), forests and forest fires are estimated using specific models.

Main problems for point sources are that many companies exist only in institutional data base (do not have production, are under process of liquidation,...) and many active companies didn't have any data on composition of their emissions on stacks or declared not to have all the information to fulfil the request but sent some data related to total annual production and fuel consumptions. Some of the companies didn't show any interest to cooperate. 45 Companies are contacted, 21 Companies sent a filled in questionnaire with necessary data (11 considered as point sources and 10 taken into account as area sources) while 2 big industrial plants didn't answer and were estimated through other sources (statistical data and public information on production, used technologies and ecological inspections) and 2 additional facilities were considered as point sources after the analysis of statistical data.

Regarding Area sources it was relatively easy to get data from Montenegrin ministries and public institutions or from National Statistical Yearbooks, produced by Statistical office of Montenegro.

Training session - Compilation of the next inventory

Next part of the training session was prepared by Italy TFCEE supported by Techne Consulting and was devoted to technical training providing guidance on compilation of the next inventories. The training session, focusing on sectors identified during the CARDS 2005-2006 as key in the region.

A preliminary training presentation recall Pollutants and Large point sources as indicated in LRTAP Inventory Guidelines 2003 and draft 2007 and introduce methodologies that parties within the geographic scope of EMEP [should][shall] use.

The methodologies are contained in the latest version of the EMEP/CORINAIR Atmospheric Emission Inventory Guidebook or countries can use specific national or international ones that they consider better able to reflect their national situation, provided that the methodologies produce more accurate estimates, are scientifically based, are compatible with the Guidebook, and are documented in their Informative Inventory Report.

Next the nomenclature for reporting (NFR) is introduced and the emission estimates techniques and the use of Emission Factors is explained. The Guidebook describes a tiered methodology for estimating emissions: simple (Tier 1) methods are given for all the sources and substances countries that have ratified Convention Protocols need to report; more advanced (Tier 2) methods are given for key categories and further information is given for advanced (Tier 3) approaches for key categories where suitable methods are available. Finally, the NFR and the technologies oriented SNAP classification are detailed and explained.

Next specific session are devoted to:

- **Energy Production and Industry sector** introducing Data Collection with direct survey (based on questionnaires) and indirect survey, Data validation and estimate of emissions conveyed in stacks and fugitive;
- **Area sources** introducing emission factors use, selection of data to be collected, selection of sources (Ministries, public or private Institutions and local authorities to

be contacted), data collection and data validation; in details some examples of emissions estimations for area sources are reported (Non-industrial combustion plants, Combustion in industry, Bread, wine and spirits production, Road paving with asphalt, Fuels distribution, Solvent and other product use and Waste treatment and disposal);

- **Forest VOC emissions estimate** introducing typical Tier3 approach;
- **Forest fires emission estimate** as an example of use of methodology developed by International Panel on Climate Change (IPCC) integrated with the methodology for LRTAP emission inventory;
- **Transportation**
 - **Air transport** where emissions have to be estimated separately for LTO and cruise level introducing LRTAP TIER 1 methodology based on fuel consumptions and TIER 3 detailed methodology based on specific aircraft movements data;
 - **Navigation** where emissions are allocated to NFR categories: International navigation, National navigation, National fishing and Military (Shipping) and Tiered approach is detailed;
 - **Road transport** introducing Exhaust emissions (Fuel combustion in vehicles) and Non- exhaust emissions (Tyres, brake or road ware and Fuel evaporation) and Tiered approach: Tier 1 methodology uses fuel as the activity indicator, in combination with average fuel-specific emission factors according to the four NFR codes for exhaust demi-saisons (passenger cars, light-duty vehicles, heavy-duty vehicles, and motorcycles and mopeds); Tier 2 where the four broad vehicle categories used in the Tier 1 approach to describe the four NFR codes are sub-divided into different technologies according to emission-control legislation; Tier 3 where complex models are used.

Finally a presentation by Carlo Trozzi described the Emission Inventory use in Local Air Quality Management (EU FW directive on air quality) with reference to Montenegro case study.

Conclusions/lessons learned

During the discussion countries raised the remaining problems with: technical capacity, legal institutional and procedural framework, development of QA/QC plans, lacking resources , and awareness of stakeholders. The most of identified barriers can be not solved immediately and require development of mid/long term strategy (3 to 5 years).

Legal framework which would assist compilation of inventories and AD is not appropriate in any country except Croatia and partly Macedonia where it should be further amended in near future. Improvements are on the way in Serbia (draft Air act under discussion in parliament). Albania started with preparation of emission cadastre. Montenegro poses only general law on Air quality and law on IPPC. BiH needs the legal support of data collection.

One of the biggest barriers remains the lack of *appropriate available and/or reliable activity data and national emission factors*. However, some innovative and flexible solutions were proposed during the workshop (e.g. case studies in Macedonia and Montenegro) . Further more improved knowledge of EMEP/Corinair Guide book and IPCC inventory

guidelines/good practices guidance and strengthened technical capacity also means that countries would be better-placed to select the methods and emission factors most appropriate to national circumstances.

National and local authorities resp statistical offices usually do not have data in required formats especially on traffic flows, forest distribution and land use.

All WB countries started with setting up *institutional framework* however the situation among the countries differs a lot of and can be not assessed satisfactorily. Development of sustainable system is an iterative process and at the beginning it could be managed with limited legal support, but crucial is nomination of responsible institution and inventory team leader. However fulfilling all reporting obligations in timely manner and requested quality needs planning and appropriate resources.

Quality control of data is not systematic. In particular, countries have noted that carrying out QA/QC strategies could greatly reduce uncertainties. Documentation and archiving plays an important role, both in reducing uncertainties and enhancing sustainability of the National Inventory System. Initial perceptions had to be changed at the country level, however, about the value of documentation and archiving, both of which can be time- and labour-intensive. If countries implement good practice principles, they can further improve the quality of national inventories.

Areas for improvement identified by participants/ EEA support in 2009-2010

1. The most difficult challenge will be to ensure that the work initiated under the CARDS project continues and that the inventory process becomes sustainable in the participating countries.
2. International technical expertise and financial support is essential for developing country-specific emission factors. Trained and appropriate numbers of technical experts are a basic fundamental for good inventories.
3. All countries stressed that awareness-raising of stakeholders (governments, industries, local authorities..) is needed and should also focus on the multiple benefits of the national air emissions and greenhouse gas inventory, such as improved national resource management, local air quality management, mitigation assessments and infrastructure planning. It was agreed that problem is difficult to solve for inventory experts without EEA/EU assistance. Participants propose that EEA and/ or EU MS high level representatives communicate problems to WB governments (e.g. bilateral visits) and further stress importance of compilation and reporting environmental information particularly emission inventories.
4. Good co-operation and relations among the west Balkan countries could increase sharing of experience and in this way support development of national inventories. The regional workshops are recognized useful for sharing experience however; in the future workshops on inventory compilation could be organized per sector, to enable focused participation of experts. Further more countries stressed that long term projects (3-4 years) could significantly contribute to the sustainability of national inventory teams.
5. The situation in countries differs a lot and regional experts propose to priorities country focused support (e.g. country visits and /or bilateral projects). Part of the problems

identified above are to be managed on the country level however participants would welcome following support from EEA:

- a. Assistance with awareness raising of national and regional stakeholders
- b. Assistance in setting up institutional framework and developing cadastre of emission sources. Identification of data providers.
- c. Assistance during compilation of national inventories (Serbia)
- d. Development of QA QC plans and inventory improvement strategies.
- e. Peer reviews of national inventories
- f. Provision of software tools like Collector, Copert and hands on training with country data
- g. Capacity building of inventory experts, transition of technical knowledge in areas; implementation of EMEP/CORINAIR inventory Guidebook, selection of methods and EFs, uncertainty assessment of AD and EF, sensitivity analyses, KCA and methods for filling data gaps.
- h. Development of environmental statistics and guidance how to use national statistical data in inventory compilation
- i. Series of regional workshops on inventory compilation focusing at max 1 - 2 emission categories per workshop.
- j. On line (ad hoc) assistance during compilation of inventories by solving concrete technical problems and improve reporting (all) and in-country assistance during compilation of national inventories (Serbia).
- k. Assistance with preparation of legal framework (low priority)

Annex - Italian Task Force for Central and Eastern Europe (TFCEE)

Roberto Binatti from Italian Ministry for the Environment, Land and Sea - Task Force for Central and Eastern Europe (IMELS-TFCEE) introduced a regional project focused on coordinating the activities of the IMELS in facilitating the implementation of bilateral cooperation agreements between IMELS and related local ministries in above mention region mainly in the field of energy and environment. The cooperation is finalized to coordinate environmental monitoring and sustainable requalification of selected areas, to provide technical assistance for ratification of Kyoto Protocol and other MEAs, and to promote the use of the renewable energies through CDM, JI, and Green Certificates, as well as improve energy efficiency, waste management systems, reforestation etc.. Moreover cooperation is finalized to facilitate the relation with the international organization present in the area.

TFCEE Structure

- Network: Serbia, Montenegro, Romania, Bulgaria, Russia, Ucraina, Bosnia & Herzegovina, Macedonia, Albania
- 50 human resources (Coordinators, Country Managers, Technical Staff and Engineers)
- More than 15 Memorandum of Understanding and Annexes with different countries (signed and/or in process of negotiation)
- 70 projects on field (renewable energy, water management, waste management, etc.).

TFCEE Mission

- Managing and coordinating the activities of the Italian Ministry for the Environment, Land and Sea in the area of Central and Eastern Europe
- Facilitating the implementation of bilateral cooperation between Italian Ministry for the Environment, Land and Sea and related ministries in above mention area in the field of energy and environment
- Developing cooperation in the field of environmental protection, including renewable energies, sustainable development strategies, environmental impact assessments, rehabilitation of polluted sites, capacity building
- Coordinating environmental monitoring and sustainable requalification of selected areas
- Providing technical assistance for ratification, where necessary, of the Kyoto Protocol and promoting the use of renewable energies through CDM, JI, and Green Certificates, as well as improving energy efficiency, waste management systems, reforestation etc..
- Facilitating, in case of need, the relation with the international organization present in the area.

TFCEE Goals/Activities

- Set up a reference point for the development of bilateral agreements at central level
- Establish the relationship with the local authorities
- Promote the initiatives of the Italian companies in the field of environmental protection and sustainable use of energy disseminating know how and innovative technologies
- Preparation of all technical documentation and information that will be delivered to the respective Governments
- Assessment of the GHG emission reductions potential at regional level

- Contribute to the achievement of the Italian emission reduction obligations under Kyoto Protocol through the investments in the South-East Europe Countries using the opportunities of the Kyoto Protocol's flexible mechanisms (Clean Development Mechanism and Joint Implementation)
- Facilitate the establishment of joint venture and Consortium

Activities under Kyoto Protocol

Potential CDM/JI projects

Landfill/biogas: capture from landfills and farms

- Electricity generation from SHPP (Small Hydro Power Plant), wind and solar energy, biomass
- Fuel switching: from fuel with higher to fuel with less carbon content
- Co-generation

Sinks

Forestation and reforestation activities

Emissions Trading

CERs (Certified Emission Reductions) / ERUs (Emission Reduction Units) production could be traded in ET scheme