

**Directive 2003/87/EC: opportunities and recommendations for the  
implementation in the Republic of Macedonia**

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## List of acronyms

AAUs:	Assigned Amount Units
BAT:	Best Available Techniques
CDM:	Clean Development Mechanism
CERs:	Certified Emission Reductions
CO <sub>2</sub> :	Carbon Dioxide
COP:	Conference of the Parties
COP/MOP:	First session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
DNA:	Designated National Authority
EATD:	European Allowance Trading Directive
EC:	European Community
ECJ:	European Court of Justice
EEA:	European Environment Agency
EITs:	Economies in Transition (states undertaking a transition to a market economy)
ERPA:	Emission Reduction Purchase Agreement
ERUs:	Emission Reduction Units
EUAs:	European Union Allowances
EU:	European Union
GHG:	Greenhouse Gas
IET:	International Emissions Trading
IPPC:	Integrated Pollution and Prevention Control
JI:	Joint Implementation
KP:	Kyoto Protocol
LULUCF:	Land-Use, Land-Use Change and Forestry
MEPP:	Ministry of Environment and Physical Planning of the Republic of Macedonia
NAP:	National Allocation Plan
OJ:	Official Journal of the European Union
QELRC:	Quantified Emission Limitation and Reduction Commitment
RMUs:	Removal Units
SAA:	Stabilisation and Association Agreement
UNFCCC:	United Nations Framework Convention on Climate Change

## 1 Introduction

This report is finalized to the identification of the first steps and considerations for the implementation of Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community (EATD)<sup>1</sup> in the Republic of Macedonia. The information reported in this document are based on the experience gained in the European Union (EU) in the implementation of the EATD before and after the date of the entry into force of the system (1 January 2005), in particular in some of the new member states<sup>2</sup>. Furthermore, the finalization of this report is the result of a five days mission in Skopje in December 2005 where comments and feedbacks on the possibility to introduce a Greenhouse Gas Allowance Trading or Emissions Trading scheme in the Republic of Macedonia were collected.

In the first section, the report focuses on the legal and procedural aspects of the system as it is currently designed under EC law and tries to underline obligations and institutional constraints which national authorities in the Republic of Macedonia shall face for the introduction of such an instrument in the country (Chapters 2, 3 and 4).

In the second part of this report; needs, opportunities and reasons for the promotion of an Emissions Trading system in the Republic of Macedonia are outlined.

As a result of this first preliminary study a *Proposal for amendment of the current legislation* needed for the establishment of a first legal basis for the introduction of the EATD into the national system is suggested and presented in a separate document to this report.

## 2 Legal and regulatory aspects of the EATD

At the international level, the Kyoto Protocol established under Article 17 the International Emissions Trading (IET) which will be operative from January 2008. According to the Marrakech Accords – the operational rules related to the Kyoto Protocol flexible mechanisms adopted at the COP/MOP1 in Montreal in December 2005 - such a mechanism establishes the possibility for Parties included in Annex B of the Kyoto Protocol<sup>3</sup> to acquire emission reduction units – assigned amount units AAUs - from other Annex B Parties. The IET is a mechanism where units are traded among states and for this reason it can be also defined as *State Emissions Trading*. Nonetheless, the Marrakech

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<sup>1</sup> Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ of the European Communities of 25 October 2003 L 275/32.

<sup>2</sup> In the context of this document, the term new member states refers to the ten Central and Eastern European Countries that joined the EU by May 2004, namely the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. These countries, with the exception of Malta and Cyprus, are Annex I Parties to the UNFCCC and are among those countries classified under the UNFCCC as Economies in Transition (EITs) to a market economy.

<sup>3</sup> Parties listed in the Annex B of the Kyoto Protocol are those Annex I parties of the UNFCCC having assumed legally binding commitments for the period 2008 to 2012 as indicated in article 3.1 of the Kyoto Protocol.

Accords foreseen that “Parties may also authorize legal entities to participate” in the scheme<sup>4</sup>. Similarly, Annex I Parties<sup>5</sup> may also acquire emission reduction units ERUs (from joint implementation projects), certified emission reductions CERs (from CDM projects) or removal units RMUs (from sink activities) from other Annex I Parties. Transfers and acquisitions of these units are to be tracked and recorded through national registries. Finally, the Marrakech Accords introduces also the obligation for Annex I Parties participating in the IET to hold a minimum amount of AAUs in their national registry, the so-called commitment period reserve (CPR). The CPR has been introduced to oblige parties of the Kyoto Protocol to implement the IET only as a supplementary tool for the compliance with their greenhouse gas (GHG) emission targets.

The EATD is the first regional emissions trading worldwide and provides for the exchange of greenhouse gas emission allowances – the so-called European Union Allowances EUAs - among the current 25 EU member states. The EATD is a tool designed by the European Community (EC) to meet the Kyoto targets, either at the Community level or at the member state level. The Kyoto Protocol is the unique international agreement dealing with the reduction of GHG emissions and therefore the establishment of an Emissions Trading scheme covering GHG allowances is not related with any other multilateral environmental agreement. The EATD is in force since 1 January 2005 and it is not directly linked with the IET, although it can be included in those domestic or regional policies and measures adopted for reasons of compliance with the Kyoto Protocol obligations.

The EATD is a domestic, mandatory and entity-based system compatible with the international market created under the Kyoto Protocol. Under such a system, installations falling within the list of sectors indicated in Annex I - namely large plants in key sectors like power generation and heating industries, oil refineries, coke ovens, ore smelters, steel, cement, glass, tile, ceramics, pulp and paper – shall receive a greenhouse gas permit to operate. Such a permit is issued by the national competent authority. The authorized installations receive yearly a certain amount of EUAs - one allowance is a permit to emit 1 tonne of CO<sub>2</sub> equivalent – which have to be surrendered accordingly by each operator in correspondence with the certified greenhouse gas emissions occurred in that year. Installations which have a level of emissions below their assigned pollution amounts may sell emission rights to other entities that are in danger of exceeding their caps. Operators that are not in compliance with the system, namely those unable to surrender sufficient allowances by 30 April each year, shall pay financial penalties accordingly. The EATD is divided in two periods: the first learning by doing phase (2005-2007) and the second phase of 2008-2012 which matches with the Kyoto Protocol first commitment period. Basically, the main features of the EATD are:

- ‘Cap-and-trade’ system;
- Focus on CO<sub>2</sub> emissions in the first phase, all six greenhouse gases in the second phase;
- Focus on big industrial emitters;

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<sup>4</sup> Decision -/CMP.1 - Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol.

<sup>5</sup> Annex I parties are those countries which have committed themselves to reduce greenhouse gas emissions by the year 2000 to 1990 levels as prescribed under article 4.2 of the UNFCCC. They are the OECD countries excluding Mexico, together with the countries with Economies in Transition and Turkey.

- Periodic reviews of the rules of the system;
- Procedures for unilateral inclusion of other gases and sectors, *opting-in*, upon Commission approval;
- Temporary exclusion of certain installations, *opting-out*, upon Commission approval;
- National allocation plans for the distribution of EUAs: voluntary auctioning for the two commitments periods, respectively not exceeding 5% and 10% of the total allocation, while the rest of allowances are distributed through grandfathering;
- Compliance system based on penalties, 40€ tCO<sub>2</sub>eq. for each allowance not surrendered in the first phase and 100€ tCO<sub>2</sub>eq. in the second phase;
- Pooling system: tool for grouping together installations within an industrial sector for distribution of allowances, instead of allocating them to individual companies.

Although the EU system has been designed to be as compatible as possible with the international regime and mindful that implementation within the EC is irrelevant for the IET in the sense that AAUs cannot be gained through the EATD, some differences between the two systems are relevant and need to be stressed. While the EATD establishes a market among “installations”, the IET provides for an exchange of units among states. The ten new EU member states, like any other Annex I parties, can participate in the state emissions trading and eventually sell part of their emission credits from 2008 onwards. The IET goes therefore beyond the scope of the EU scheme and while companies in Central and Eastern Europe will be covered by the EU system, no provisions prevent the EU-15 member states from concluding a deal with some of the new member states under the framework of IET in order to comply with their obligations under the Kyoto Protocol. The EATD in itself does not remove power for the EU-15 countries to implement IET with the rest of EU member states.

One important feature of the EATD is the possibility of such a system to be linked with other similar schemes in third countries (Article 25) and to be open to emissions reduction credits generated through the implementation of Joint Implementation projects JI – within the EU - as well as of Clean Development Mechanism CDM – outside the EU. Respectively, ERUs and CERs can be traded within the market established under the EATD. All reduction units, namely EUAs, ERUs, CERs as well as AAUs are fully interchangeable in the EATD and thus have the same value. In particular, Directive 2004/101/EC - the *Linking Directive* - allows for direct link of ERUs and CERs into the EATD but establishes several limits in this sense:

- National limit on the amount of units from JI/CEM to be traded into the EATD defined by the national authorities on a case by case basis;
- Compliance with the supplementarity criteria – JI and CDM project must be supplemental to domestic actions;
- Prohibition to implement JI and/or CDM projects on nuclear power as well as projects on activities for land-use, land-use change and forestry (LULUCF);
- Limits to the implementation of JI and/or CDM projects in the hydro electric sector;
- Impossibility to double count the emissions reductions;

- Baseline for the ten new member states is given by the *Acquis Communautaire*.

### **3 Implementation of the EATD in the EU**

The EATD covers almost half (46 per cent) of the European CO<sub>2</sub> emissions generated by mainly energy production, metals, construction materials, and paper. EATD is a market-based instrument aiming at the reduction of greenhouse gas emissions in the most cost-efficient way. The environmental integrity of the system, as well as the correct implementation of the EATD, firstly depends on how member states design their National Allocation Plans (NAPs). Such documents, upon approval of the European Commission, identifies each country's national cap of greenhouse gas emissions and the extent to which such a limit is distributed to the national industrial sectors covered by the scheme. The stringency of the cap affects the long term environmental benefits of the system and guide the national sectors involved towards policies and investments aimed at combating climate change and fostering sustainable development. Among the two greatest contributors to the anthropogenic greenhouse gas emissions, the power sector and the transport sector, only the first is included in the scheme. The cap on the national level of GHG emissions is calculated either on the basis of historic data or according to projection scenarios, and often EU member states have left too much space for the inflation of business-as-usual scenarios which could then justify the over allocation of allowances to some sectors.

Under the EATD, the EUAs have a price which is not fixed and depends on the market, namely on the supply and demand of allowances of the installations which have to comply with the system. In terms of economic incentives for installations to participate in the trading of carbon units, the key factor to be considered is given by the price of the abatement of greenhouse gas emissions, namely the marginal cost of the reduction of emissions which an entity must face to meet its targets through investments in carbon intense technologies. When the price of EUAs on the market is lower than the marginal cost for abatement of 1tonne of CO<sub>2</sub> eq. it will be convenient for an installation to go on the market and demand EUAs accordingly.

Approximately, the EATD will cover 12000 installations responsible for the emission of 6,57 billions of tonnes of CO<sub>2</sub> eq. The National Allocation Plans were due by 31 March 2004 for the EU-15 member states and by 31 May 2004 for the ten new EU member states. A few countries submitted the NAP with big delay, in particular Italy, Poland, Greece and the Czech Republic and in a few cases the Commission explicitly requested modifications of the original allocation data. Information on the contents of the NAPs, in terms of allowances and number of installations covered by the scheme follow:

	Allowances (mt CO <sub>2</sub> )	share of allowances	No. of Installs	Registry operating
Germany	1497	23%	1849	Yes
UK	736	11%	1078	Yes
Poland	717	11%	1166	No
Italy	698	11%	1240	No
Spain	523	8%	819	Yes
France	470	7%	1172	Yes
Czech	293	4%	435	Yes
Netherlands	286	4%	333	Yes
Greece	223	3%	141	No
Belgium	189	3%	363	Yes
Finland	136	2%	535	Yes
Portugal	115	2%	239	Yes
Denmark	101	2%	378	Yes
Austria	99	2%	205	Yes
Hungary	94	1%	261	No
Slovakia	91	1%	209	Yes
Sweden	69	1%	499	Yes
Ireland	67	1%	143	Yes
Estonia	57	1%	43	Yes
Lithuania	37	1%	93	Yes
Slovenia	26	0%	98	Yes
Cyprus	17	0%	13	No
Latvia	14	0%	95	Yes
Luxembourg	10	0%	19	No
Malta	9	0%	2	No
TOTAL	6572	100%	11428	

Source: European Commission (2005)

#### **4 Implementation of the EATD and the international climate regime**

There are two main possibilities for the integration of an Emissions Trading scheme established domestically in the Republic of Macedonia with the EATD.

Firstly, a direct link of the two systems. With this regard, in the phase of the design of the EATD, the European legislator already foreseen the possibility for other similar Emissions Trading schemes established out of the EU to be connected with the European system. According to Article 25.1 of the EATD „agreements should be concluded with third countries listed in Annex B to the Kyoto Protocol which have ratified the Protocol to provide for the mutual recognition of allowances between the Community scheme and other greenhouse gas emissions trading schemes in accordance with the rules set out in Article 300 of the Treaty”. In such a case, the Commission have the duty to „draw up any

necessary provisions relating to the mutual recognition of allowances under that agreement in accordance with the procedure referred to in Article 23(2)” (Article 25.2 of the EATD) in order to expand the trading of allowances also outside the EU borders. In concrete terms, the EU is currently discussing the possibility for Norway and many other countries to participate in the EATD. As well, the EU involvement is also quite significant in the current discussion for the definition of the emissions trading scheme for CO<sub>2</sub> emissions among a few US states. With regard to this first option, namely the linking of the EATD with a potential Macedonian scheme, the main obstacle is given by the fact that the Republic of Macedonia is still a non-Annex I country and therefore it is also not included in the Annex B list of the Kyoto Protocol. Nevertheless, the Republic of Macedonia ratified both the United Nations Framework Convention on Climate Change (UNFCCC) on 28 January 1998 and the Kyoto Protocol on 18 November 2004<sup>6</sup>. This means that from the international law point of view, the Republic of Macedonia has no binding obligation to reduce its level of GHG emissions. Like all parties of the UNFCCC, the Republic of Macedonia is nonetheless required to adopt any possible measure to “protect the climate system” and to “promote sustainable development” (Article 2 of the UNFCCC). In a few words, the direct link between the EATD and the potential domestic ET scheme in Macedonia is not allowed unless the Republic of Macedonia changes its status within the international climate regime. On the contrary, with regard to the direct implementation of the EATD in the Republic of Macedonia once member of the EU<sup>7</sup>, the current status of non-Annex I party has no relevance on it. The EATD is a European instrument designed to help the EU and its member states to meet the Kyoto targets and establishing obligations only under EC law. The EATD is a system in force since 1 January 2005 which runs in complete independence from the entry into force of the Kyoto Protocol.

The inclusion in the Annex B list is of course not mandatory and this is confirmed by the fact that Malta and Cyprus, EU member states since 1 May 2004, are still non-Annex I Parties of the UNFCCC. Malta and Cyprus represents a clear example of what already stated, namely the indirect relation between the status of non-Annex I parties to the UNFCCC and the obligation to implement the EATD as part of the EU *Acquis Communautaire*. In fact, both Malta and Cyprus correctly transposed and implemented the EATD so far. The particularities of the EATD implementation in Malta and Cyprus follow:

- They have not been included in the Annex I of the UNFCCC;
- They have not been included in the Annex B of the Kyoto Protocol;
- They were not EU member states when the EU burden sharing agreement;
- They do not have any obligation regarding the limitation or reduction of GHG under Decision 2002/358/EC<sup>8</sup> or under the Kyoto Protocol;

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<sup>6</sup> Official Gazette of Republic of Macedonia No.49/2004.

<sup>7</sup> It is important to stress that the Republic of Macedonia still does not have a date for the starting of negotiations for the EU accession.

<sup>8</sup> Council Decision of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder (2002/358/CE), OJ of the European Communities of 15 February 2002 L130/1.

- The contribution of the individual installations covered by the EATD to the emissions limitations or reduction obligations of Cyprus emissions cannot be determined;
- The allocation of the allowances is being done based on the Business as Usual Scenario and is made at installation level and not at an activity level, since in both countries the number of installations covered by the EATD is very small.

Both Malta and Cyprus will definitively have to change their status in order to negotiate together with the EU a new joint agreement in relation to the Kyoto Protocol future commitments. The same would apply to the Republic of Macedonia and such a problem may be solved on the light of the so-called post-Kyoto phase which was officially opened at COP/MOP1 in Montreal. In the period post-2012 new quantified emission limitation and reduction commitments (QELRC) will be established and Macedonia may find convenient to modify its status within the UNFCCC and to be included into the Annex B list of the Kyoto Protocol. The advantages related to such a change for the Republic of Macedonia follow:

- As underlined under Article 17 of the Kyoto Protocol, only parties included in the Annex B list „may participate in emissions trading for the purposes of fulfilling their commitments under Article 3”, and for the Republic of Macedonia the participation in the IET may turn out to be very convenient from the economic point of view (see chapter 7);
- If we consider the approximation of the Republic of Macedonia towards the EU, the inclusion in the Annex I list assumes particular relevance with regard to the discussion and negotiations related to the post-Kyoto phase. In 2012, at the end of the first Kyoto-phase, Macedonia will be probably be in a more advanced stage towards the inclusion in the EU and as an Annex I party will have the possibility to be included in the new EU burden sharing agreement establishing a new common GHG emissions reduction commitment;
- As an Annex B party, the Republic of Macedonia will be allowed to link its domestic emissions trading scheme with the EATD, even before becoming an EU member state.

With regard to the disadvantages of the inclusion of the Republic of Macedonia into the Annex I list may, such a modification implies the obligation to agree with the COP/MOP a particular QELRC in terms of GHG emissions. This will mean to be bound by international law – and also by EC law once a EU member state - to reduce of a certain percentage the national GHG emissions. Such an obligation will have to be negotiated at the international level - COP/MOP sessions - and the extent of it depends very much on the base year upon which the calculation of the target is based. Like many other EITs, the Republic of Macedonia, may apply the UNFCCC principle of „common but differentiated responsibilities” and ask for a different and more convenient base year other than 1990.

The second possibility for the Republic of Macedonia to participate in the EATD is the indirect participation through the implementation of CDM projects, and therefore through the introduction into the EATD of GHG emission reduction units, in this case CERs,

generated by projects undertaken within the territory of the Republic of Macedonia. To this aim, the Republic of Macedonia is very much committed in the implementation of CDM projects and has already established many types of bilateral cooperation with Annex I parties ready to invest in the country in projects for the reduction of GHG emissions.

## **5 Institutional requirements**

In the Republic of Macedonia, if the national authorities will opt for the transposition of the EATD into the national legal system, the Ministry of Environment and Physical Planning (MEPP) shall be the main responsible for the drafting of the Law on Greenhouse Gas Allowance Trading. Considering that a measure such as the EATD has a very big impact on the national energy sector, the Ministry of Economy of the Republic of Macedonia, which is in charge of all issues related with the energy supply in the country, has also expressed some interest in the implementation of an Greenhouse Gas Allowance Trading scheme. Therefore, it is strongly recommended that that the MEPP establishes an Interministerial Working Group on Greenhouse Gas Allowance Trading which shall be responsible for the design and development of the Voluntary Pilot Phase on Emissions Trading, as well as for the drafting of the Law on greenhouse gas allowance trading. Such a working group shall be coordinated by the MEPP and shall include all relevant ministries and stakeholders affected by the introduction of such a system.

The establishment of an Emissions Trading scheme requires also a few institutional and appropriate administrative adjustments in order to comply with some of the requirements outlined in the EATD text. These are: the identification of a competent national authority, the establishment of an adequate monitoring and reporting system, as well as the establishment of a registry system for tracking the allowances to be exchanged.

The competent national authority has to be designated to ensure the correct implementation of the rules of the EATD. On the basis of the EU experience so far, such a body is usually represented by the Ministry of Environment which includes the major competences and knowledge in terms of legislation aiming at the reduction of GHG emissions.

The competent national authority shall:

- Issue the GHG emissions permits;
- Receive the applications for the issuance of a GHG emission permit from the installation included in the system;
- Define the conditions for and contents of the greenhouse gas emissions permit
- Update such a permit in the case of changes related to the installations;
- Prepare the National Allocation Plan.

Looking at the current institutional structure and functioning of the MEPP and in view of the implementation of the EATD in the Republic of Macedonia, a proper department on climate change shall be established and officially included within the Ministry itself. Such a department shall serve as an advisory body to the MEPP on issues related with climate policy and the implementation of the Kyoto Protocol, as well as with the EU

environmental Acquis on climate. Among others, such a department will function as the competent national authority for the implementation and transposition of the EATD into the Macedonian legal system. Such an authority shall be designed responding to the following criteria:

- Adequate expertise and knowledge on climate policy, as well as policies and measures at the international and European level aimed at the reduction of GHG emissions;
- Adequate technical capacity in terms of GHG sources of emissions, measurement, monitoring and reporting;
- Adequate human resources which will have to be specifically trained;
- Additional financial resources for the implementation of the EATD.

The assistance and the support of different local and/or international experts to develop such an authority is strongly envisaged in terms of capacity building.

With regard to the monitoring and reporting requirements, installations covered by the Emissions Trading scheme has to provide a range of relevant information on their historic and future greenhouse gas emissions. Such information - from the sources of GHG emissions to the indications of measures planned to monitor and report the GHG emissions – are relevant for the identification by the competent national authority of the amount of allowances to be distributed to the installations and for the release of the permit which allows the installation to operate. European guidelines for monitoring and reporting of emissions are based on the principles for monitoring and reporting set out in Annex IV of the EATD as required under Article 14 of the EATD and have been adopted by the European Commission in January 2004<sup>9</sup>. On such a basis “Member States shall ensure that emissions are monitored in accordance with the guidelines” and “shall ensure that each operator of an installation reports the emissions from that installation during each calendar year to the competent authority after the end of that year in accordance with the guidelines (Article 14.2 and 14.3 of the EATD). Furthermore, Article 15 of the EATD requires member states to verify the reports mentioned above and submitted by the operators. The national authority will have to define rules and procedures for the accreditation of verifiers who play a key role in the implementation of the EATD as well as in the maintenance of the environmental integrity of the entire system. Verifiers, usually international consulting firms operating in the field of environmental protection, have an overview on all the activities and their significance for emissions and determine the reliability of the reported data and information on GHG emissions provided yearly by the installations covered by the scheme. There are no harmonised criteria for accreditation of verifiers and accreditation requirements differ between EU member states. A verifier should therefore comply with the national accreditation requirements, subject to the requirement not to restrict the free movement of services pursuant to Article 49 to 55 of the EC Treaty.

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<sup>9</sup> Commission Decision of 29/01/2004 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council, C(2004)130.

With regard to the GHG emission permit and the issuing body, as well as to the mentioned monitoring and reporting requirements, the adoption in the Republic of Macedonia of the Integrated Pollution and Prevention Control (IPPC) decree<sup>10</sup> is definitively a pro in terms of adjusting the national regulatory and institutional structure accordingly. This means that the approach and methodology adopted in the definition of the IPPC rules shall serve as a model for the design of the provisions under the Emissions Trading system.

At the European level, the EATD amends the IPPC directive<sup>11</sup> in a few parts and both instruments are very much related. Article 8 of the EATD clearly states that “Member States shall take the necessary measures to ensure that, where installations carry out activities that are included in Annex I to Directive 96/61/EC, the conditions of, and procedure for, the issue of a greenhouse gas emissions permit are coordinated with those for the permit provided for in that Directive”.

In the Republic of Macedonia, the IPPC decree establishes detailed rules for the integrated environmental permit required for installations undertaking activities set out either in Annex I or Annex II of the decree. Integrated environmental permits – either A or B – are granted on the base of prescriptions indicated in the Law on Environment, articles 95 to 129. According to such a framework law, the IPPC decree already defines the “form and the content of the application” as well as “the manner of submission of the application” for integrated environmental permit. It is therefore relevant that the system for the release of the integrated environmental permit under the IPPC decree shall be integrated in the system for the release of the GHG emissions permit under the Emissions Trading scheme. Furthermore, under the Law on Environment a few definitions falling under the scope of the IPPC coincide with those to be established under the Emissions Trading scheme. These are: installation, existing installation, change in the operation, substantial change, project, investor/applicant, best available techniques, operator, permit.

According to Article 19 of the EATD member states are required to establish and maintain a “registry in order to ensure the accurate accounting of the issue, holding, transfer and cancellation of allowances” either domestically or among installations in different EU countries. The standardized system of registries which will work as a database for the accounting of the different units to be traded under the EATD has to be established in accordance with Commission regulation 2216/2004<sup>12</sup>. Such a registry will be accessible to any person who wish to exchange allowances and who will have to open an account in compliance with the registration requirements indicated in Commission regulation 2216/2004. The exchange of units will be completely electronic, the market will be free and open to the access of the public and the price of units will be defined by the encountering of demand and supply like in any other market. According to the European experience gained so far, the establishment and management of the national

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<sup>10</sup> The IPPC decree is based on Article 95 paragraph (1) and article 135 paragraph (5) of the Law on environment (Official Gazette of Republic of Macedonia no.53/05), Official Gazette of Republic of Macedonia no.89/05.

<sup>11</sup> Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, OJ of 10 October 1996, L 257/26.

<sup>12</sup> Commission regulation 2216/2004 of 21 December 2004 for a standardized and secured system of registries pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision No 280/2004/EC of the European Parliament and of the Council, OJ of 29 December 2004, L 386/1.

registry is granted to a private/public entity differing from the Ministry, which have usually gained adequate capacity and knowledge to manage such a system. Despite the obligations of directive 2003/87/EC so far in the EU only 18 member states have established the electronic registries required for the spot market to start and approximately half of the approved allowances are already in circulation. The registry under the EATD is a standardised electronic databases containing common data elements ensuring “the accurate accounting of the issue, holding, transfer and cancellation of allowances”. Such a registry shall be established and prepared in coordination with the registry already required under the Law on Environment in the section on the IPPC, articles 109 and 126. The registry under the EATD shall contain information on:

- Account holder name;
- Alphanumeric identifier;
- Details of the authorized representative of the account;
- Information related to the operator holding account;
- Permit identification code;
- Installation identification code;
- Number of allowances;
- Verified emissions;
- Allowances surrendered.

The EATD leave the member states free to define the registry according to their national circumstances and according to the experience in the EU so far, such a registry is managed either by an authority related to the national competent authority or by a private company.

The EATD does not explicitly requires member states to set up a national market platform where allowances can be traded. Private companies have already established a few platforms in Europe where the exchange of certified emissions takes place. Such platforms functions electronically and every person can register and participate in the system. As recalled above, the EATD is open to the linking with other emissions trading schemes out of the EU and eventually, Macedonian allowances may be traded in the existing platforms. Such platforms are: Nordic Power Exchange, Pownext Carbon, European Energy Exchange, European Climate Exchange, Energy Exchange Austria, Climate Change Exchange.

## **6 Compliance with the EU accession requirements**

One of the main strategic goals of the current policy of the government of the Republic of Macedonia is the integration with the EU and to this aim Macedonia has gained in the recent past significant progress towards the accession. Countries acceding the EU shall implement and transpose into their national legal system the so-called *Acquis Communautaire*, representing the totality of primary and secondary EU legislation, together with the ECJ cases of law as well as the international agreements to which the EC is bound.

Following the conclusion of the negotiations with the EU at the Zagreb Summit in November 2000, the so-called Stabilisation and Association Agreement (SAA) with the

EU was signed by the Republic of Macedonia in Luxembourg on 9 April 2001 and entered into force on 1 April 2004. The SAA provides the legal framework for relations between the EU and the Republic of Macedonia in the period prior to the future accession. At the end of 2005, the Republic of Macedonia was officially recognized by the EU as a candidate country but the date for the starting of the accession negotiations is still to be agreed.

In terms of approximation of national legislation with the EU requirements, the chapter on environmental protection is one of the most complex and climate change provisions are included in the sub-chapter on air pollution. Even if not yet a candidate country, the Republic of Macedonia is strongly recommended by the European Commission to design its national legislation in line with the *Acquis Communautaire* and the EATD is part of the Acquis. The screening table is a relevant instrument for the Republic of Macedonia to ensure and demonstrate its progress towards the harmonization of national legislation with the EU constraints. Such a document has to be submitted periodically to the European Commission and includes the European legislation which the MEPP is aiming to transpose into national legislation. Such a document already includes a reference to the EATD and the Linking directive, thus establishing a first important legal basis for the transposition of both the instruments into the Macedonian legal system.

In terms of compliance with the *Acquis Communautaire* several pieces of legislation have an influence in the implementation of the EATD. Firstly, as already stressed, the EATD is very much anchored to the IPPC directive, in terms of the coverage of installations, the coverage of the greenhouse gas emissions and the permitting procedures. The EATD amends the IPPC Directive in a way that an installation covered by the emissions trading scheme should not have an emission limit value for direct emissions of carbon dioxide and other greenhouse gases, “unless it is necessary to ensure that no significant local pollution is caused”. The coverage of greenhouse gas emissions is not exactly the same in the two instruments: emission limit values covered by the EATD are excluded from the scope of the IPPC permit process. In the design of the NAPs, Annex III of the EATD does not foresee any explicit reference to Best Available Techniques (BAT) criteria – included in the IPPC directive - and points 3 of Annex III includes “technological potential” as one of the criteria to be followed by states when designing their own allocation plans. In terms of permitting procedures, the EATD refers clearly to the IPPC directive system and this imply that a correct implementation of the IPPC decree in the Republic of Macedonia may facilitate the establishment of the permitting system within the EATD.

The implementation of the EATD, and in particular the definition of the NAPs, has to be performed in compliance with the internal market and competition issues at the European Community level. This assumes particular relevance when defining how and according to which criteria the member states allocate their emissions. A not stringent allocation may be considered as a state aid to the national industries.

## **7 Financial and economic opportunities for the affected national sectors**

According to the latest Greenhouse Gas Inventory of the European Environment Agency

(EEA), CO<sub>2</sub> emissions in the EU-15 have increased by 59 million tonnes (1.8 per cent) between 2002 and 2003. Many EU member states are currently not on track with their national reduction target commitments under the Kyoto Protocol and the necessity to implement the flexible mechanisms for reasons of compliance with the international rules is increasing constantly. To this aim, member states may opt for:

- Exchange of AAUs under the IET: this solution is still not the preferable because the system is either still quite uncertain in terms of international rules and functioning or quite expensive as Annex B parties to the Kyoto Protocol owning a certain surplus of GHG emissions (Russian Federation, Ukraine, Economies in Transition EITs) will probably wait for the very last moment (before 2012) to sell at the higher price carbon units to those countries in a non-compliance situation;
- Implementation of JI and CDM projects through national programmes aiming at facilitating the investments of national companies in such mechanisms or through the establishment of *carbon funds* aimed at the acquisition of reduction units at a lower price than the market price;
- Correct implementation of the EATD as well as of the Linking directive.

For the reasons explained above, the demand of emission credits of the EU member states – Canada and Japan are the other two large potential buyers of emission reduction credits – is building up rapidly. In particular, many big European companies look in particular at the implementation of JI and CDM projects as the best option available at the lowest cost for the compliance with the GHG emissions reduction targets under the EATD. Furthermore, such companies are already very keen to invest in CDM projects in the non-Annex I countries, among which Macedonia or any other Balkan state is by far preferred especially by the South European countries like Italy, France, Spain or Greece which are also among those EU states facing many difficulties to meet domestically the GHG reduction targets. Several are the reasons for this choice, namely the preference given by international investors to countries such as the Republic of Macedonia. First of all, from a legal point of view, the international (Marrakech Accords) and the European (Linking directive) rules practically limits the potential and the space for the implementation of JI projects among EU member states (EU-15 and ten new member states) as well as outside. The operational details, procedures and institutions for the implementation of JI projects have been put in place only at the last COP/MOP1 in Montreal while the CDM process has already started since 2000. Moreover, two of the most attractive countries in terms of potential for JI projects, namely the Russian Federation and Ukraine are still not on track to meet the eligibility criteria for the participation in such a system and still lack of the national infrastructure required by the international rules on JI. At the European level, the Linking directive does not allow the *double counting*, either direct or indirect, reducing the possibility for installations falling under the EATD to invest in projects for the reduction of GHG emissions affecting directly or indirectly the GHG emissions of other installations and/or sectors based in another EU country. In other words, a project for the reduction of GHG emissions is not allowed to generate at the same time ERUs for the investor companies, as well as to free up EUAs to be used in the EATD by the installation in the host country. Space for JI projects among EU member states is only related to projects aimed at the reduction of greenhouse gases other than CO<sub>2</sub> or other sectors not included in the EATD.

Looking at the economic aspects of such a choice, investing in Macedonia for EU countries may represent a cheaper solution in terms of costs for the reduction of GHG emissions. This is particularly true in relation to the lower prices of electricity in the country and to the big potential of investments in key national sectors after a period of isolation and economic breakdown which leave a lot of space for reconstruction and modernisation. The added value for foreign investments in Macedonia related to the exchange of carbon allowances is therefore given either by the exchange of EUAs or similar units within the framework of the EATD as well as by the implementation of CDM projects in Macedonian companies.

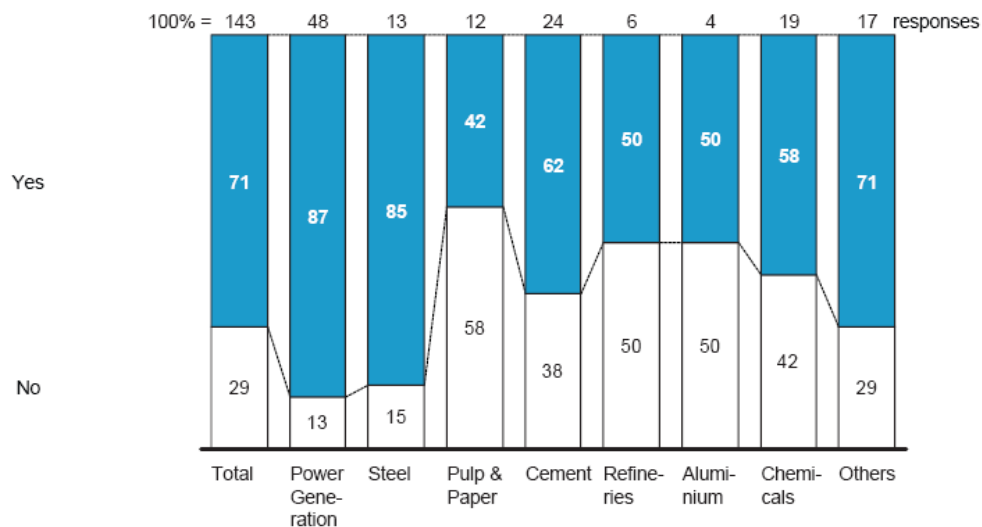
The intention of many EU companies included in the EATD to invest in GHG emission reduction policies and measures is confirmed by a survey released by international consultants on behalf of the European Commission in November 2005<sup>13</sup>. The corporate behaviour in long-term decisions is very much affected by the EATD, either in the current or future scenario.

### Price-in of CO<sub>2</sub> in future marginal pricing decisions

#### PRICE-IN OF CO<sub>2</sub> IN FUTURE MARGINAL PRICING DECISIONS

Companies

Question: What are your plans going forward: Will you "price in" the value of CO<sub>2</sub> allowances into your daily operations, meaning will you factor it into your marginal production decisions (irrespective of how many allowances you get for free)?



Source: Survey EU ETS Review

<sup>13</sup> McKinsey & Company and Ecofys (2005). Survey Highlights - Review of EU Emissions Trading Scheme, European Commission, Directorate General for Environment.

The ten new EU member states may play an important role in the carbon market, as they will have considerable emissions surplus according to the targets agreed under the Kyoto Protocol. According to this, such countries are likely to become net sellers of allowances in the market. The exact amount of such surplus is still unknown and it will probably not be enough to cover the EU demand for emission allowances. The origin of such a surplus is related to the fact that, according to the principle of “common but differentiated responsibilities” (Article 3 of the UNFCCC), many EITs obtained a base year for the calculation of the assigned amounts different from 1990. Such countries asked and chose a base year matching with the economic collapse and therefore with a situation where GHG emissions were very low. The Republic of Macedonia could be in the same position of many EITs which have currently a surplus of GHG emissions. In order to maximize its carbon offset, once negotiating a GHG emission reduction target, the Republic of Macedonia should go for obtaining a base year different from 1990.

With regard to the Emissions Trading scheme, what has to be fixed a priori by the national authorities is the emissions cap on the basis of which the allocation of units will be settled. This is a key decision, which has also important political consequences, especially when the national commitment targets would give space for additional economic growth in the country. A tricky issue when considering the allocation of permits is the distribution of the emissions surplus. The allocation of this surplus to the national state or to private companies could give both the chance to sell units and to generate economic revenues; thus, representing an incentive for private sector participation in the mechanisms.

## **8 Interactions with the implementation of CDM projects**

One of the reasons which make the implementation of an emissions trading scheme in Macedonia very attractive is the strict relation between such an instrument and the Clean Development Mechanism. As already stressed, the Linking directive clearly establishes a direct link between ERUs and/or CERs and the European market. The implementation of CDM projects in Macedonia has a very big potential of attracting foreign investments in the country and such projects may result convenient for several reasons:

- Compliance with the Kyoto Protocol targets for Annex I parties to the UNFCCC;
- Compliance with the obligations established by the EATD for EU installations unable to reduce its level of GHG emissions through domestic “green” reforms or policies;
- Economic reasons related with the added cash value given to the project by the possibility to sell the reduction units on the market.

The Ministry of Environment and Physical Planning of the Republic of Macedonia is very much concerned about the possibility to implement CDM project in the territory of the Republic of Macedonia and to this aim is currently started the discussion for the preparation of national legislation as well as national institutional structure according to the international rules on CDM. In particular, the MEPP has initiated several bilateral cooperation with the aim to get adequate technical and institutional assistance for the establishment of the Designated National Authority (DNA) required to approve internally CDM projects as well as for the definition of a CDM national strategy.

## **9 Recommendations and steps to be undertaken for the establishment of the Emissions Trading system in the Republic of Macedonia**

The importance for the national economy of the introduction of an Emissions Trading system which is supposed to strongly affect different key national industrial sectors, among which the energy supply, makes the process of approximation and adoption of such a provision particularly long. Different steps aiming at the establishment of such a system in the Republic of Macedonia may be identified:

1. Institutional approach: initiate and facilitate the discussion with relevant ministries and stakeholders directly and indirectly involved in the implementation of the system.

Such a phase has been already started and what emerges from the collection of different comments and interviews of relevant stakeholders is the direct involvement and willingness of the MEPP together with the Ministry of Economy in the adoption of an Emissions Trading scheme in Macedonia. The MEPP is strongly committed to promote the correct implementation of the Kyoto Protocol and has therefore explicitly expressed in several occasions its willingness to start the procedure for the introduction of an Emissions Trading scheme in the Republic of Macedonia. This position is confirmed by the inclusion of the EATD, as well as the Linking directive in the section related to climate change of the screening document mentioned above. The department of energy within the Ministry of Economy is the main responsible for the preparation of the framework Law on Energy which is currently under drafting. The attention of such a Ministry towards the new flexible instruments is confirmed by the fact that the current version of the Energy Law draft includes a reference to the Green Certificate scheme (Article 122) as a tool to promote electricity from renewable sources. Such a system is, together for instance with the Emissions Trading, part of the so-called market based instruments designed to match environmental protection together with the economic needs for the affected sectors.

Under the coordination and supervision of the MEPP, the establishment of an Interministerial working group on greenhouse gas allowance trading is strongly recommended. Such a group shall cover all issues related to the establishment of a greenhouse gas allowance trading system and shall put together representatives of the different ministries involved in the EATD implementation as well as other experts, stakeholders and representatives of the Parliament.

2. Starting of the procedure for the modification of the status of the Republic of Macedonia under the UNFCCC and the KP.

For the reasons explained under chapter 4, it is strongly recommended that the focal point to the UNFCCC starts to prepare the procedure for the modification of the status of the Republic of Macedonia within the international climate regime, namely the inclusion in the Annex I list of the UNFCCC.

3. Definition of a first timetable for the transposition of the EATD into national legislation.

Suggested timetable and follow up (to be discussed and negotiated together with the MEPP):

TASK	START	END
<b>Amendment of the Law on Environmental Protection</b>	<b>March 2006</b>	<b>open</b>
<i>Presentation of the proposal to the MEPP</i>		
<i>Adoption of the proposal by the MEPP</i>		
<i>Presentation of the proposal to the government</i>		
<i>Adoption of the proposal</i>		
<b>Amendment of the draft Law on Energy</b>	<b>March 2006</b>	<b>open</b>
<i>Presentation of the proposal to the Ministry of Economy</i>		
<i>Adoption of the proposal by the Ministry of Economy</i>		
<b>Voluntary pilot phase of Emissions Trading</b>	<b>April 2006</b>	<b>December 2008</b>
<i>Design of the system and definition of rules (Interministerial working group on greenhouse gas allowance trading)</i>	<i>April 2006</i>	<i>October 2006</i>
<i>Implementation of the pilot phase</i>	<i>January 2007</i>	<i>December 2008</i>
<b>Adoption of the Law on greenhouse gas allowance trading</b>	<b>January 2009</b>	<b>January 2011</b>
<i>Design of the law package for the transposition of the EATD into the national system on the basis on the experience of the pilot phase (Interministerial working group on greenhouse gas allowance trading)</i>	<i>January 2009</i>	<i>December 2009</i>
<i>Starting of the procedure for adoption of the Law on greenhouse gas allowance trading</i>	<i>January 2010</i>	<i>December 2010</i>
<i>Entry into force of the Law on greenhouse gas allowance trading</i>	<i>January 2011</i>	
<b>Implementation of the Law on greenhouse gas allowance trading</b>	<b>January 2011</b>	<b>December 2012</b>

One of the main aspects of the proposed timetable is the necessity to make coincide the implementation of the Law on Emissions Trading in Macedonia with the end of the Kyoto Protocol first commitment period as well as the end of the second phase of the EATD. During such a period, the potential demand of allowances will probably be very high, either for Annex I countries or for European companies in situation of

non-compliance with their GHG emissions reduction targets, respectively under the IET and the EATD. The role of the Macedonian companies may therefore be very important if they will be in the position of big suppliers of emission reduction units.

#### 4. Proposed amendment to framework laws

Before starting the process of design of the Law on greenhouse gas allowance trading and therefore to transpose the EATD into national legislation, a few amendments to the existing framework Law on Environmental Protection and to the draft Law on Energy are desirable. The details of such proposed amendments are indicated in the *Proposal for amendment of the current legislation*.

#### 5. Establishment of a learning by doing / pilot phase

The introduction of a so-called “pilot phase” for Emissions Trading is suggested for a two year period (2007-2008) in order to let the local authorities, companies and stakeholders involved get the necessary knowledge and experience for the implementation of the system once in force. Many other countries in the EU have chosen to establish a learning by doing phase first to be ready for the implementation of the EATD. As well, the same EATD foresees a first “learning by doing” phase (2005-2007) even if already compulsory. Such a pilot phase will be aimed to:

- helping national authorities to test their capacity in terms of management of a trading system, i.e. establishment of a GHG emissions monitoring mechanism, identification of a market platform and preparation of a registry system;
- get companies ready for the implementation of the real system, i.e. start to collect information on historic GHG emissions data, identification of priorities and areas of investment in terms of reduction of GHG emissions;
- spread the concept of Emissions Trading among stakeholders and the public opinion.

In particular, before acceding the EU in May 2004, Poland, Slovakia and the Czech Republic adopted experienced a few voluntary initiatives similar as much as possible to the EATD in order to acquire the necessary capacity and knowledge before the implementation of the EATD itself. Additional information on such a voluntary initiatives follow.

#### CZECH REPUBLIC

A research on Emissions Trading for the reduction of SO<sub>2</sub> was commissioned in 1996 and published in 1997. The study considered the district of Sokolov and it was supported by the US Agency for International Development (USAID) and the Harvard Institute for International Development. The project considered a single district and positive results were registered on the side of economic efficiency of the Emissions Trading scheme implemented. An interministerial committee on climate change started in 2001 working on the design of a domestic emissions trading scheme based on, voluntary participation, grandfathering, historic emissions level, a system of incentives in the form of a reduction

of air pollution charges or a sort of facilitate procedure to access some national energy efficiency or renewable energy programmes.

#### SLOVAK REPUBLIC

A cap and trade SO<sub>2</sub> market was established in 2002 with a first phase covering the period 2002 – 2004. It is a downstream system based on grandfathering. On the base of such a trading scheme, Slovakia started in 2002 the procedure for the transposition of the forthcoming EATD. Regarding the participation in the scheme, all sectors which are considerably contributing to the national CO<sub>2</sub> emissions were included in the scheme. Following the path designed by of the EU scheme proposal and above all by the existing SO<sub>2</sub> market, the method of allocation of permits was based on a grandfathering distribution with a small portion of allowances granted through auctioning. Considering the economic and institutional changes occurred in Slovakia in 1990 and the problem to find acceptable data, grandfathering was based on a base year given by the average of recent years when the consistency of data is more reliable. Using historic emissions as a basis for grandfathering was strongly recommended also because all trading schemes within the EU will have to be consistent with the EU competition law on state aid.

#### POLAND

Prior to the transposition of the EATD into the national legal system, academics and environmental policymakers in Poland have been involved in the organisation and implementation of three initiatives aiming to diffuse awareness on the ET system among stakeholders and decision makers. A pilot project including a steel mill, a power plant and local, small-scale heat producers aiming at showing how to implement practically such a new market; a computer trading simulation among experts and practitioners from the power and CHP sector which has also provided some legislative proposals; and finally a workshop where Emissions Trading issues and practices were analysed.

Beyond these general initiatives, several workshops and meetings aiming at the promotion of Emissions Trading practices among stakeholders were recently organised in Poland. One economic sector in particular has been so far quite active in Poland: the national energy sector was in fact involved in some trading simulation organised firstly by EURELECTRIC and then by the Baltic Sea Region Energy Cooperation (BASREC). Finally, in the summer of 2002, the Polish Ministry of Environment and some stakeholders representatives decided to start a pilot project financed by the industrial sector and aiming at the introduction of a downstream national emissions trading system to come into force in 2004.

The operational details of such a pilot phase will have to be designed by the national authorities, namely the MEPP and the Ministry of Economy, together with all stakeholders involved.