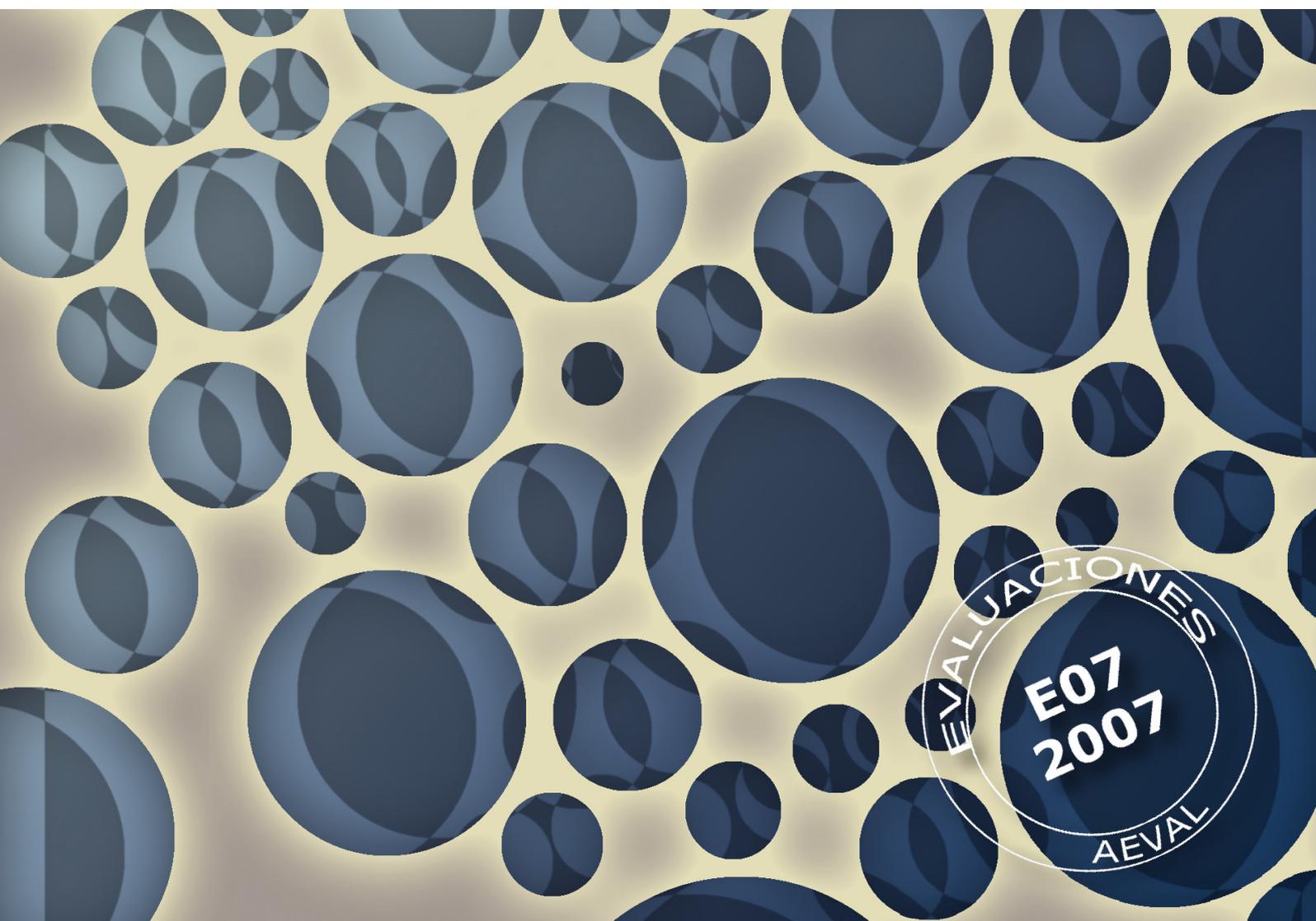


The National Registry of Greenhouse Gas Emission Allowances (RENADE)



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Promoting the evaluation of public programmes and policies, developing transparency and improving the use of resources and quality of services to citizens are government priorities. Every year, the Council of Ministers approves a number of programmes and public policies to be evaluated by the National Agency for the Evaluation of Public Policies and the Quality of Services, within the scope of the functions outlined in its action plan.

On the proposal of the Minister of Public Administrations, the Council of Ministers, in its meeting of 30 March 2007, decided on the public programmes and policies to be evaluated in 2007. These included: The National Reform Programme of Spain; the administrative procedures for the creation of enterprises; the national register of greenhouse gas emission rights and the quality of services in state museums.

The evaluation of The National Reform Programme of Spain was to focus on: the effect of measures adopted for the rationalisation of pharmaceutical expenditure, the effectiveness of energy security policies, programmes to foster research, development and innovation, and the financial facilities to boost entrepreneurial activity.

Please note that the English-language version of this text is a translation of the original Spanish-language document and is for informative purposes only. The Spanish text shall be regarded as official in all cases.

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THE NATIONAL REGISTRY OF GREENHOUSE GAS EMISSION ALLOWANCES (RENADE)

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LIST OF ACRONYMS

CDM	Clean Development Mechanism
CEOE	<i>Confederación española de organizaciones empresariales</i>
CER	Certified Emission Reduction
CITL	Community Independent Transaction Log
CNMV	<i>Comisión Nacional del Mercado de Valores</i>
CR	Community Registry
ERU	Emission Reduction Units
GHG	Greenhouse gases
JI	Joint implementation
NAP	National allocation plan
OECC	<i>Oficina Española del Cambio Climático</i>
RENADE	<i>Registro nacional de derechos de emisión</i>
SERINGAS	<i>Sistema electrónico de registro de información</i>
UNFCCC	United Nations Framework Convention on Climate Change



1. Main conclusions and recommendations

The national emission allowances registry (RENADE) is the cornerstone of the Spanish greenhouse gas (GHG) emission allowance trading scheme, which is part of the EU initiative to enable the European Community and its Member States to meet their obligations under the Kyoto Protocol on climate change.

The RENADE is part of the EU system of integrated registries. This means that it must comply with the rules laid down by the Commission on this matter. In turn, the Commission seeks to guarantee the compatibility of the integrated Community registry, the Community Independent Transaction Log (CITL), with the international system set up under the United Nations Framework Convention on Climate Change. At the same time, the RENADE is based on a complex system for allocating competences between central government, responsible for framework legislation on environmental protection and economic activity (that might be affected by this new emissions market), and the Autonomous Regions, whose job is to execute and manage environmental policies.

Given the above, any evaluation of whether the RENADE is doing the job for which it was designed by the Spanish government must take into account the different levels of competence (from supranational to regional) within which the registry operates and the numerous different actors who are directly or indirectly involved. Analysing the links between these different government levels and how this is reflected in the registry's key procedures is an important part of this evaluation, which also evaluates the functioning of the accounting tool and the system's computer program.

The RENADE is attached to the Spanish Climate Change Office (OECC - *Oficina Española de Cambio Climático*), which in turn is part of the Environment Ministry. The OECC's task is to manage and coordinate all the competent bodies. It has entrusted the RENADE's management to IBERCLEAR, S.A., part of the Bolsas y Mercados Españoles Group, for the first two periods, 2005-2007 and 2008-2012, for which national allocations plans have already been approved. IBERCLEAR manages the registry according to the terms of the cooperation agreement entered into with the Environment Ministry.

This evaluation is based on how the RENADE has worked between 2005-2007, an important period in that the experience obtained should prove useful with respect to the effective commencement of the emission allowance market between 2008 and 2012, the first period under the now-effective Kyoto protocol. To date the balance is positive, confirming the initial view that the system is very well structured at Community and international level, and is run on the basis of highly professional and efficient criteria. This initial 2005-2007 period has made possible adjustments and improvements, for example an amendment of the Community Regulation and the setting up of a new computer system, which still requires some fine-tuning for use by administrators and users in each Member State. As a result, the conclusions and



recommendations given by this evaluation are limited either to detailed technical aspects or to the issue of improving coordination among different public administrations. One specific conclusion reached is that certain aspects regarding the precise legal nature of this new concept of “emission allowances” need to be clarified before the market develops to avoid potential future problems.

The RENADE has completed two full cycles¹ of operations, 2005 and 2006. Overall, those consulted (fundamentally the Autonomous Regions and account holders) are satisfied with its performance. Managers and users take a very positive view of the information and phone helpline service, while both point to the need to make the computer application more user-friendly. Improvements suggested by users include providing the application with the tools to exploit the data and a means of communication to show users and managers the operations carried out.

As regards the functionality and reliability of the computer system and the registered data, certain malfunctions and errors have been detected in the files analysed, which could be easily rectified in the new period.

First recommendation

The computer program needs to be improved. This means making it more attractive and user-friendly and equipping it with tools allowing data to be exploited. It would also be useful if the system sent automatic notifications of the operations executed to the ordering party (e.g. by e-mail).

In addition, the public authorities and IBERCLEAR could look at ways of improving the system so that the method of registering authorisations, validating verified emissions and surrendering allowances makes it easy for the competent bodies to monitor and control effectively the obligations of those operating installations in their territory.

The design and functioning of the RENADE could be improved so that the competent authorities, particularly the Autonomous Regions, can exercise their functions as efficiently as possible, speeding up procedures and reducing the burden on users. For example, the Autonomous Regions consulted² and certain users with multiple installation accounts have drawn attention to the excessive time between the issue

¹ A complete cycle runs from the registration of the annual allowances allocated to each installation at the beginning of the year to their cancellation, once actual emissions for that year have been verified, registered and authorised (in June of the following year).

² The Autonomous Regions consulted were: Andalusia, Catalonia, Madrid and Comunidad Valenciana.



date of the emission authorisation and the opening of the installation³ operator's account in the RENADE. Thus, the EU 24-day limit is currently exceeded by almost two months. In addition, to comply with the basic objectives of security and reliability of the registries, it is essential to have a transparent and rapid system of information exchange and access.

Second recommendation

The 24-day deadline stipulated by the EU for opening an account from the date of reception of the emission authorisation is normally exceeded. The OECC and IBERCLEAR should study how to simplify and speed up the current procedure and, with the Autonomous Regions, look for ways to improve the integration and exchange of information with respect to both authorisation and account opening procedures.

The Autonomous Regions consulted have called for central government to be more involved in drawing up standard criteria for applying the authorisation and verification procedures for which they are responsible. They also want the OECC to be more active in resolving procedural problems or those concerning the interpretation of the registration rules. At the same time, the Autonomous Regions have requested greater input on questions regarding the system's design and registration procedures.

Third recommendation

The OECC and the Autonomous Regions need to analyse in more depth those matters dealt with by regional government where similar criteria should be established. This would help avoid situations where businesses are faced with inconsistent procedures and rules depending on where they are located.

To this end, advantage should be taken of the participation channels for Autonomous Regions established within the Climate Change Policy Coordination Commission (*Comisión de Coordinación de Políticas de Cambio Climático*). A technical group already exists to share opinions and proposals to improve the design and functioning of registration procedures.

³ The legislation regulating Community emissions allowance trading provides that the emission allowances are allocated to previously identified installations and to those which are given a prior authorisation to emit GHG. Under Spanish law, installation is defined as "a complete fixed technical unit where one or more of the activities listed in Annex I are carried on" (categories of activities and gases included within the scope of the law).



One area where the applicable criteria need to be standardised is the certification of verifiers. This is a competence of the Autonomous Regions. The provisional procedure in place until 31 March 2006 allowed the activity of certified verifiers via voluntary adhesion to any of the recognised systems for environmental management and auditing. At the end of this transitional period, the Autonomous Regions are free to adopt additional rules, both as regards the obligations of the certifying body and the criteria for certifying verifiers. This is what Catalonia has done in legislation passed in 2006. The possibility of there being different verification procedures and criteria that affect businesses differently depending on where they are located needs to be avoided.

Further, given that Autonomous Regions (not the verifier) have the power to record and approve the emissions verified annually, there is a need for a clear dispute resolution mechanism to deal with possible discrepancies between the emission figures declared and verified by the operator and those registered by the Autonomous Region in question.

Fourth recommendation

As part of their coordination work, the OECC and the Autonomous Regions should jointly agree to encourage the introduction of similar methods of dealing with possible claims brought due to discrepancies between the emissions declared and verified in an installation and those validated by an Autonomous Region. For example, Catalonia has taken out insurance to cover potential liability arising in such situations.



2. GHG emission allowance registries: an international phenomenon

2.1. The global context: the international market in emission allowances

Global warming caused by GHG emission has become one of the main priorities of governments and one of the public's main concerns throughout the world, particularly in developed countries. The Kyoto Protocol came into force in 2005, developing the UN Framework Convention on Climate Change, with the almost unanimous support of the scientific community.⁴ The international community now seems to have embraced the principle of "common but differentiated responsibilities" and is willing to adopt policies aimed at reducing substantially such emissions⁵. The European Council's most recent commitments to reduce emissions adopted in March 2007⁶ have placed the EU to the forefront in the search for a solution to this global problem.

Cutting GHG emissions under the Kyoto Protocol is based on two main principles: first, objectives are global, therefore it does not matter where the reduction occurs, and second, the reduction has to be produced in the most efficient manner possible, at the least possible cost. Given this, three flexibility mechanisms are included in Kyoto:

- International emissions trading, allowing countries to buy or transfer part of their emissions allowance to another country.
- Clean Development Mechanisms (CDMs). These are mechanisms established for developed countries which invest in sustainable development technological projects in developing countries. The developed country adds the Certified Emission Reduction (CER) obtained through such projects to its assigned amount, while the developing country benefits from additional financing and investment in clean technologies.
- Joint Implementation (JI) or specific international projects, where a developed country or one with a transition economy (countries in Annex I of the Protocol) invests in another Annex I country. The investing country can then use the resulting Emission Reduction Units (ERU) to its advantage in its accounts.

⁴ See the fourth report of the UN intergovernmental panel on climate change (IPPC): <http://www.ipcc.ch/ipccreports/assessments-reports.htm>

⁵ The G8 and the G5 are committed to reducing global emissions by 60% of their 1990 levels by 2050 and limiting the presence of greenhouse gases in the atmosphere to 550 parts per million. Scientists consider that above this limit there is an increased risk of temperatures rising by more than 2°C by the end of this century, the effects of which will be irreversible and potentially catastrophic.

⁶ The EU is committed to reducing its emissions by 30% of their 1990 levels by 2020. See http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/es/ec/93146.pdf



These integrated mechanisms are part of the international emission allowances market, the main features of which are as follows:

1) Establishing emission allowances

Greenhouse gas emission allowances are defined as the right to emit one tonne of carbon dioxide equivalent into the atmosphere by installations coming within the scope of the emissions trading rules⁷.

Member States allocate allowances to those operating certain activities. Authorised operators are allowed to emit a fixed amount of greenhouse gases over a given period of time (generally, these are annual allocations within 5-year national plans, the first of which will start in 2008).

2) The chosen GHG trading mechanism: "cap and trade"

The "cap and trade" system fixes global emission limits. This generates scarcity which stimulates the market. Basically, the system involves:

- Fixing a maximum emissions limit that cannot be exceeded.
- Assigning emission allowances to installations with emission permits.
- Having to surrender periodically allowances equal to the verified emissions figure for an installation in a given year.
- Being able to buy the necessary allowance amount to comply with the previous obligation, or, where appropriate, sell any surplus having fulfilled the obligation.

3) The integration into the emissions market of clean development mechanisms and joint implementation

Clean development mechanisms and joint implementation are linked to the establishment of the international emissions market since they allow, under certain conditions and UN supervision, CDEs and ERUs to be accounted for in the emission amounts assigned to those investing in such projects.

4) The establishment of an integrated system of allocations registries and allowance trading

⁷ The allocation of emission allowances is the political result of the generally held view since the 1980s by governments and international bodies that the lack of property rights over natural resources is ultimately the reason why they have degraded. The writings of Garret Hardin - "*The tragedy of the commons*" etc - and the US "property rights approach" provide the theoretical backbone to this dominant school of thought.



The registries are standardised electronic databases whose purpose is to keep track of units that acknowledge emission allowances and of all unit transactions arising from international emissions allowances trading.

In order for emission allowances to have legal effect they must be registered, hence the importance of the international market's centralised registry (the UN International Transaction Log) to which the registries of the participants in that market must be connected. In the EU, the Community Independent Transaction Log (CITL) ensures connection with the UN Log. All Member State registries including the Spanish registry, the RENADE, are linked to the CITL.

5) The establishment of financial instruments: carbon funds

The carbon funds come within the agreements fostered by the World Bank and entered into with different financial entities to acquire units that make it possible to cover CO₂ emissions. The goal of these funds is to finance the purchase of emission units coming from projects that contribute to reducing greenhouse gases in developing countries and economies in transition, through clean development and joint implementation mechanisms. Carbon funds may be of public, private or mixed origin, as well as being on an exclusive- or multiple-participation basis.⁸

2.2. The European context

The EU⁹ system is based on two pillars: first, an administrative authorisation allowing greenhouse gases to be emitted and the installation's capacity to measure its emissions and second, the assignment, through national plans, of an emission allowance to authorised installations.

- o *The authorization of emissions*

The emission allowance trading system will apply initially to carbon dioxide emissions from installations that produce large quantities of this gas in sectors such as electricity generation, refinery, the production and processing of ferrous metals, cement, lime, glass, ceramics, pulp, paper and cardboard. With respect to energy activities, the scope is limited to installations with a rated thermal output of more

⁸ Different funds have been created (Prototype Carbon Fund, Community Development Carbon Fund and the World Bank's Bio Carbon Fund) whose common denominator is the use of commercial and financial instruments in project-based emissions reductions. These complement the Kyoto Protocol. This in turn has led to the set up of companies that provide advise, design, negotiate, execute and create projects in this field.

⁹ The main Community rules in this area are Directive 2003/87, which sets up a European emissions trading system (*European Trading Scheme*, ETS), and Regulation 2216/2004 for a standardised and secured system of registries, as amended by Regulation 916/2007 of 31 July 2007.



than 20 MW, including cogeneration installations linked to any type of activity. All of the installations affected must have an emissions permit.

- o *National allocation plans*

The national allocation plans (NAPs) state the authorised installations and operators and the allowances to be granted by the EU to each country, as well as to each activity and operator. They provide a framework for each of the three to five-year periods laid down in the Directive. The GHG emission allowances are only valid for the term of each NAP.¹⁰

The number of allowances allocated must be consistent with each country's international emissions commitments. The plan establishes the method of individual allocation and includes a reserve for new entrants.

Operators whose emissions exceed their allocated allowance must acquire rights to surrender a quantity equal to the amount of their verified emissions by purchasing allowances or other units produced by clean development mechanisms (CDM) or joint implementation (JI).

Emission allowances can be transferred between natural or legal persons in the European Union. Finally, in addition to regulating emission allowances trading and setting up its essential mechanisms, the European Commission has also established the necessary accounting and control instruments.

- o *The integrated system of EU registries*

The objective of setting up a system of standardised national registries is to guarantee that there are no irregularities in the issue, transfer and cancellation of emission allowances and that transactions are compatible with the obligations under the-UN run international market. To this end, the following are created:

- A standardised and secured system of registries. This is composed of national registries in the form of standardised electronic databases accessible via Internet. These databases contain common data elements and harmonised operating timetables.
- The Community Independent Transaction Log (CITL), which also contains an efficient system for communicating with the UN International Transaction Log.

In accordance with the Community and international legislation on public access to environmental information, the information contained in the integrated system of

¹⁰ From the 2008-2012 period on, the Directive allows an operator to carry over allowances from one period to another.



registries must be published on a periodical basis, subject to certain confidentiality requirements.

The CITL will verify all of the procedures related to the Community registries system that affect emission allowances, verified emissions, accounts and Kyoto units. For its part, the UN log will verify the processes relating to Kyoto units in order to guarantee that there are no irregularities. Community law provides that all registries of the Member States, the CITL and the UN's ITL be interconnected prior to 1st December 2007.

Once the first commitment period (2008-2012) has concluded, the comparison between the emissions allocated and those available in the CITL will determine whether each country's emission limit and that of the EU as a whole has been complied with.

2.3. Spain. Adjusting to the Community rules.

The Spanish climate change strategy forms part of the international and Community legal framework described above. Spain's concrete commitment is to limit CO₂ emission increases for 2008-2012 to 15% of 1990 levels.

As regards the key processes of authorising and establishing NAPs, Spanish law¹¹ provides that:

- All installations must have a GHG emissions permit from 1 January 2005. This is granted by the competent authority designated by the Autonomous Region in which the installation is located.
- The NAP is approved by the Government, based on a proposal made by the Ministers for (i) Economic and Fiscal Affairs; (ii) Industry, Tourism and Trade; and (iii) the Environment, following receipt of a report of the National Climate Council (*Consejo Nacional del Clima*) and the Climate Change Policy Coordination Commission (*Comisión de Coordinación de Política de Cambio Climático*), at least eighteen months before the beginning of the period in question.

The first NAP ran for three years from 1st January 2005. All successive plans shall be for five years; thus, the second plan, which has already been approved, will run from 2008-2012.¹²

On the basis of objective and transparent objectives, each NAP lays down:

¹¹ Law 1/2005, regulation the greenhouse gas emission allowances trading scheme and Royal Decree 1264/2005, regulating the organisation and functioning of the RENADE.

¹² The NAP for 2005-2007 and 2008-2012 were approved by Royal Decrees 1866/2004 and 1370/2006 respectively.



- a) The total number of emission allowances to be allocated.
- b) The allocation procedure
- c) The amount of Certified Emission Reductions (CER) and Emission Reduction Units (ERU) which are likely to be used.
- d) The percentage allocated to each installation in which the use of this type of credits is authorised to its operator.

The allocation of allowances for the three-year period which began on 1 January 2005 was free of charge even with respect to the reserve for new entrants. For the 2008-2012 period, auctions of emission allowances are not expected, except if there is a surplus of the reserve for new entrants.



3. The RENADE: the accounting instrument for the Spanish GHG emissions trading system

The national emissions registry (the RENADE), which forms part of the Community system of integrated registries, ensures that the ownership and control of emission allowances are accessible and permanently updated. The RENADE's objective is to register the issue, ownership, transfer, surrender, withdrawal, cancellation and other transfers of emission allowances. The suspension of the capacity to transfer emission allowances as laid down in the current legislation is also registered.

To assess properly the functioning of the RENADE as the cornerstone of GHG emission allowance trading in Spain, it is first necessary to analyse not only the applicable legislation but also the way that competences are divided between the different government levels involved in the various procedural phases (particularly authorisation, allocation and verification). It is also necessary to analyse the procedures and the consistency of the most important registry operations.

An important factor in this evaluation is cooperation between central and regional government. Law 1/2005 provides that both levels of government must provide the information in their power concerning the methods applicable to different sectors, technological improvements and any other relevant question affecting the authorisation of emissions, the verification of emissions, the individualised allocation of emission allowances, or clean development and joint implementation projects under Kyoto.

3.1. Defining the scope of government: authorities involved in the management and administration of the RENADE

Competences of the Spanish Climate Change Office (Oficina Española de Cambio Climático)

Under Royal Decree 1264/2005, the RENADE is part of the Spanish Climate Change Office (OECC - *Oficina Española de Cambio Climático*). The latter entity is responsible for managing the registry's activity, coordinating the competent bodies and approving a series of resolutions that directly affect the registry's administration and accounts. These are:

- The opening and closing of accounts
- Attending to requests for information and seizure of accounts made by court or administrative authorities
- Issuing emission allowances
- Suspending the capacity to transfer
- In general, whatever acts or resolutions of a legal nature are required to support the specific activity of the registry.



In compliance with Community law, Spain has notified the Commission that the administrator of its registry is the OECC.

Competences of the Autonomous Regions

The Autonomous Regions have the power to issue emission permits. This is the first step in the system; once a permit is issued, specific emission allowances can then be issued. The Autonomous Regions are also responsible for registering verified emissions in the RENADE, and revoking permits.

Functions of the Coordination Commission

The Climate Change Policy Coordination Commission was created under Law 1/2005 and has an important role. Its functions include ensuring coordination and cooperation between national and regional government, particularly as regards the exchange of information on emissions verification.

National authority for Kyoto project-based mechanisms

In order to act as the designated national authority for the flexibility mechanisms contained in the Kyoto Protocol (CDM and JI), another inter-ministerial commission was set up under Law 1/2005. One member of this commission will be a representative appointed by the Autonomous Regions. The OECC has secretarial functions. The national authority's tasks include proposing to the Spanish Cabinet (*Consejo de Ministros*) the recognition of the units of reduction obtained through applying the said mechanisms (ERU and CER) in compliance with annual obligations to surrender emission allowances. It also promotes cooperation agreements with the Autonomous Regions to encourage and develop the application of Kyoto project-based flexibility mechanisms in Spain.

Management of the registry

By resolution of the Spanish Cabinet dated 19 November 2004, management of the RENADE has been outsourced to IBERCLEAR S.A.

IBERCLEAR belongs to the Bolsas y Mercados Españoles group, holding company of Mercados y Sistemas Financieros, S.A. The management of the RENADE is carried out within the "Payment" business segment, whose main activities are the registration, offsetting and payment of equity securities, corporate bonds and public debt operations.

IBERCLEAR has been contracted until 2012, the end of the second national allocation plan 2008-2012 (the first commitment period under the Kyoto Protocol). Communication between IBERCLEAR S.A. and the inter-ministerial commission which acts as the national authority for the Kyoto flexible mechanisms will be through the Environment Ministry, on which the registry depends.

The agreement between the Environment Ministry and IBERCLEAR sets out the latter's functions, the aspects related to the ownership and management of the computer program and the registry's economic system (analysed below). In 2005,



the Ministry acquired a user's licence for the 2005-2007 period for the SERINGAS application, used by various EU Member States, and made it available to IBERCLEAR in accordance with the contents of the said agreement. In July 2007, SERINGAS was replaced by a new application developed by the EU, called Community Registry (CR). Its installation has not yet been completed.

3.2. The functioning of the RENADE: the most important registry procedures and operations

Annex II to this report contains detailed flow diagrams showing the RENADE's main accounting procedures, including information on the structure of accounts and account holders. The most relevant procedures and operations are described below.

Emission permits

Installations carrying on the activities listed in Annex 1 of Law 1/2005 need to obtain authorisation before emission allowances can be assigned to them. The regional body responsible for granting the permit must inform the RENADE of this. An installation that failed to obtain a GHG emissions permit would operate illegally.

The Autonomous Regions must notify the RENADE of the grant, amendment and extinction of permits within 10 days of the date of the relevant resolution.

Issue of allowances

Once the Spanish Cabinet has approved the NAP, in which global, sectoral and per-installation allowances are allocated, the OECC notifies the RENADE of the data needed for initial registration. The act of registration gives emission allowances legal effect, after which they can be traded during their period of validity.

Transfer of allowances

This operation reflects movements of allowances between different accounts. It is the core of all registry operations. Transfers may be within the RENADE (in which case they are made following the instructions given by account holders) or with another registry, provided that they comply with the Community rules¹³ and the agreement of the receiving registry is given. In any event, all transfers are controlled by the CITL.

Verification of emissions and surrender of allowances

Verification is vitally important for the proper functioning of the emissions market, since it will determine the operator's annual obligation to surrender allowances and

¹³ They can only be transferred to, or from, an account in a country participating in the Kyoto Protocol or in the registry of the CDM in those situations laid down in the Community Directive.



the balance of allowances that determines whether additional allowances must be acquired or any excess may be sold.

Installations with emission allowances must send the verified report¹⁴ on the previous year's emissions to the competent regional body. If the latter accepts the installation's verified report it will register the previous year's emissions in the "table of verified emissions". If it disagrees with the verified report, it will notify the operator of the discrepancies, the proposed way of resolving these in order for the report to be accepted and, where appropriate, its own estimate of emission levels.

Cancellation and withdrawal

Through this procedure, the validity of the NAP-allocated allowances registered in the RENADE expires.

Revocation of authorisations

In general, the RENADE will not transfer allowances to an operator's account whose permit has been revoked due to (i) closure of the installation, (ii) failure to start operating or (iii) a penalty being imposed.

General considerations concerning the transactions registry

All procedures concerning accounts and verified emissions, as well as transfers between accounts, will be treated as finalised once the CITL has notified the RENADE that it has not detected any discrepancy in the latter's proposal and the registry confirms to the CITL that it has updated the data in accordance with the proposal, modifying any discrepancies that exist.

The Resolution of 8 February 2006 of the Accounting and Auditing Institute (*Instituto de Contabilidad y Auditoria de Cuentas*) provides that the operators of installations must treat emission allowances to which they have been assigned by the NAP as an asset.¹⁵ The same applies to purchases of emission allowances that may take place in the emissions market. Since they are assets, they may be seized or affected by insolvency proceedings, and may be offered as security in credit or other operations. Experts are currently debating the legal nature of emission allowances and their place in the Spanish legal system (particularly in relation to insolvency, and civil or mercantile institutions offering security). To complement this, the Spanish OECC could promote the study of the legal implications of certain scenarios: (i) where certain installations' emission allowances changed hands as a result of exceptional procedures (eg insolvency or asset seizure) or (ii) where emission allowances are used as security in commercial or private operations (eg credit agreements). In this way, potential legal lacunae in the RENADE could be filled in time.

¹⁴ The report must be verified in accordance with the provisions of Annex IV of Law 1/2005.

¹⁵ In account 216 "Greenhouse gas emission allowances."



4. Evaluation of the starting up and functioning of the RENADE

Spain was the ninth EU country to become part of the registry system, joining Germany, Austria, Denmark, Finland, France, the UK and Sweden.

Although there were some initial delays, the RENADE has now completed two full cycles of operations, from the issue to the cancellation of allowances. Its implementation and management are generally positively assessed by the Autonomous Regions and users consulted. In addition, year-on-year improvement is also noted in the level of emissions verified and recorded in the registry and the surrender of allowances.

Placing the RENADE in context, the evaluation of the registry since it was set up in 2005 has focused on three main aspects: coordination between the different levels of government and with the private entity to which the running of the registry has been outsourced; the effective functioning of the registry (reliability, consistency and quality of data, computer supports and costs); and the way the service is perceived by users and other stakeholders in the environmental field.

The results summarised below, which form the basis for the final conclusions and recommendations, have been compiled by means of: (i) an analysis of the applicable legislation and the documentation provided by IBERCLEAR (RENADE Procedural manual); (ii) an analysis of the data extracted from the system files supplied by the management company; (iii) the compilation of information supplied by the administrator and the main interest parties (OECC, executives and managers from the Autonomous Regions, trade unions, NGOs, the CEOE) through in-depth interviews; and, (iv), carrying out a survey of users of the service (Annex I sets out in detail the survey methodology and technical file with the main results).

4.1. Management of the registry and coordination with the competent authorities

Coordination between central and regional government

The Autonomous Regions have a greater role with respect to the main registration operations of the RENADE. In practice, the Autonomous Regions have not only been responsible for managing the implementation and functioning of the system (fundamentally the authorisation and verification procedure), but also advising operators of installations and those using the RENADE within their region.¹⁶

An analysis of existing procedures shows the need for better integration of public authority actions at different stages of the procedure. This would enable certain procedures to be simplified.

¹⁶ The OECC and the RENADE itself are also involved in giving advice.



As regards management procedures (in which the Autonomous Communities are involved), the following points are worth noting:

- The procedures for authorising the emission and opening the account

The two different procedures for (i) requesting authorisation and (ii) opening the account are currently handled by different branches of government – the Autonomous Regions in the former case and central government, through IBERCLEAR, in the latter. Further, in some cases different fees are charged. Yet the two procedures are closely linked and have a common goal: the allocation and registration of emission allowances for each installation, in accordance with the decision of the Spanish Cabinet under the NAP.

The representatives of the Autonomous Regions consulted,¹⁷ as well as some users holding multiple installation accounts with the registry, have pointed to the need to simplify the authorisation process. They argue that once a permit is obtained, this should automatically lead to the operator's account being opened, without any further procedural steps being required. This would prevent the process from being extended excessively and would also help reduce management costs.

The emission authorisation is neither registered in the OECC nor is it in electronic format. This prevents efficient monitoring and verification of compliance with the time period between authorisation and the account being opened contained in Law 1/2005. The Autonomous Regions consulted have pointed out that the time taken currently exceeds the 24-day deadline by more than two months.

- The verification process

Royal Decree 11315/2005 is the main piece of legislation regulating the verification process. What the data obtained in the assessment show is that there has been a lack of basic technical criteria, coordinated by central government, when setting up the protocols. Had these existed, the current differences between Autonomous Regions would have been avoided. Instead, each Autonomous Region has resolved verification issues as it sees fit, although most of those consulted have expressed their desire to share more standardised criteria, which should be encouraged and coordinated by central government. The work carried out by the technical group of the Climate Change Policy Coordination Commission points to an improvement in this area.

The Autonomous Regions consulted also called for central government to intervene directly to harmonise the different criteria applied as regards protocols, procedures and other minor rules. A particular issue raised by the Autonomous Regions and users, which is mentioned here by way of example, is the need for operators to have

¹⁷ Andalusia, Catalonia, Madrid and Comunidad Valenciana.



a specific power of attorney to open accounts. This requirement, part of the contract entered into between IBERCLEAR and the company requesting an account to be opened in the registry, has created problems where the request is made by public bodies (in this case, two hospitals in the Madrid Autonomous Region). These bodies have encountered problems in having the documents empowering their public managers recognised by IBERCLEAR. Direct clarification by the OECC in such situations would help resolve these issues more rapidly.

At the same time, the Autonomous Regions consulted would like to be more involved in formulating ideas regarding the whole system and its functioning, making more effective, inter alia, their participation in the Climate Change Policy Coordination Commission or in periodical meetings with the European Commission and the CITL, to which their representatives are sometimes invited by the OECC and IBERCLEAR. While the Autonomous Regions view central government's willingness to cooperate in a positive light, they feel that the results fall short of what was expected.

Relationship between the competent authorities and the management company (IBERCLEAR)

One issue which is closely connected with the last point is the different responsibilities of the OECC and IBERCLEAR as regards administering the registry and, as a consequence, the relationship of these two entities with the Autonomous Region's competent authorities.

In practice, IBERCLEAR is directly responsible for most questions concerning the opening and closing of accounts, attending to requests for information and other acts or resolutions which support the registry's activity. This means that it is almost always IBERCLEAR that is in contact with the Autonomous Regions' competent authorities. This has led some regional government representatives consulted to view IBERCLEAR as being ultimately responsible for administering the registry.

The share out of functions described, which both users and the Autonomous Regions generally view positively in terms of speed and management efficiency, is not a problem in itself, although the Autonomous Regions consulted state that they would prefer the OECC to take a more hands-on approach to certain important registry operations.

4.2. Functioning of the registry

In accounting terms, emission allowances are an asset owned by enterprises, and as such they can be seized, be affected by insolvency proceedings, or used as a guarantee in credit operations or similar. However, at present there do not appear to be any internal procedures to deal with these situations.



Analysis of the transactions carried out in 2006

The main conclusions reached after analysing the files supplied by IBERCLEAR - all of the "installation accounts" (1,049) and "personal accounts" (41) - are as follows:

- Errors have been detected in the data identifying the installations: the PERMIT identification code is incorrect in 5 cases, the province or post code is wrong in 18 cases and the Autonomous Region is incorrect in 12 cases.

As a representative of IBERCLEAR recognised, some of these errors could be due to the fact that when the system was first implemented, some Autonomous Regions may have altered data on installations previously recorded by others, due to defects in the application. This would reflect the lack of sufficient tracking and consistency procedures in the registry operations¹⁸. The application has since been improved, and many of these initial problems have been ironed out, although not all of the problems caused by the initial mass recording of data have been resolved.

Subsequently, however, the Autonomous Regions have complained that the system did not allow them to modify errors that they themselves noticed after recording data, once this was validated.

Since Regulation 916/2007 was passed on 31 July 2007, errors detected can now be modified manually, which will improve matters.

- The following table cross-references allocated allowances with verified emissions:

	Allocated	Not Allocated	Total
Emissions Verified	961	43	1,004
Emissions not Verified	24	21	45
	985	64	1,049

As can be seen, there are 43 installations whose allowances were not counted, yet which are registered in "verified emissions". These are installations which were not included in the NAP 2005-2007 and that, nevertheless, began operating in that period, i.e. "new entrants". The corresponding emission allowances were granted to these installations by the Environment Ministry, but they were not recorded in the RENADE's allocations table because, according to their

¹⁸ Representatives of IBERCLEAR S.A. have responded to such questions by stating that in some cases these registrations were a result of instructions received from the Environment Ministry or the corresponding Autonomous Regions, while in others, they have been unable to clarify the reason for the errors.



administrator, the regulation in force until July 2007 did not provide that they should be computed in this way.

- According to the information provided by IBERCLEAR, the transactions carried out in 2006 and registered in the RENADE were as follows:

SECTORS ¹⁹	Allocated rights (1000's)	Purchases (1000's)	No. of Transactions	Sales (1000's)	No. of Transactions
Pig iron and steel	11,207	308	7	7,254	15
Cement	30,846	260	21	419	19
Ceramics	6,511	378	94	685	85
Combustion	105,770	73,264	211	44,937	266
Coke plants	26				
Metallic minerals	204				
Paper	5,625	382	35	993	72
Oil refineries	15,251	816	10	98	9
Glass	2,721	50	8	484	55
SUBTOTAL	178,161	75,457	386	54,870	521
Individual accounts		35,203	600	27,927	368
Other registry accounts		7,097	342	34,960	439
SUBTOTAL		42,300	942	62,887	807
TOTAL		117,757	1,328	117,757	1,328

As these figures show, combustion (generation and cogeneration of electricity) and oil refineries are net purchasing sectors. As the report on the application of Law 1/2005 stated, these are the sectors where verified emissions exceed the allowance allocated in the NAP. The deficit in these sectors is covered by the excess in others and, above all, the purchase of allowances from third countries.

Results of interviews conducted with the Autonomous Regions and some users

The following points can be extracted from these interviews:

¹⁹ Law 1/2005 provides that natural or legal persons, apart from installations, may acquire emission allowances. To do so, they first need to open an account in the RENADE. These are called "individual accounts". It is important to point out that the operator of an installation may also own an individual account. "Other registry accounts" are those included in GHG emission allowance registries other than the RENADE.



- The computer and communications system is basically reliable.
- They are reasonably satisfied with the registry's functioning in practice, while recognising that they have not yet had any practical experience of certain procedures (e.g. penalties) and there is no procedure for situations that may arise in a more dynamic market, such as having to return, following a court order, allowances already surrendered with respect to registered emissions that do not match those verified by the installation operator.
- The information and telephone helpline is very positively evaluated, the only problem being the long waiting times on certain dates.
- SERINGAS lacked certain basic tools required for certain operations (e.g. downloading data in spreadsheet format) which would have improved productivity. These problems have worsened since July 2007, when the Community Registry (CR) was introduced. This new application is still in the development phase.
- As regards information, while initially much was received (in the opinion of some, an excessive amount, given its commercial nature), the opposite is now the case since the change to the CR in July 2007.
- Some restrictions on information have been pointed out. Thus, no notification is given when emissions verified by the Autonomous Regions are registered, or when transactions are effected by other account holders in the same region, let alone those carried out in other regions. Other registries, such as the Danish one, automatically send an e-mail stating the essential data of the operation being executed. Autonomous Regions and those using the system most often favour introducing a procedure similar to that used in Denmark so that operations can be properly tracked.
- Some Autonomous Regions highlight the delays in the emissions verification procedures by verifiers. In Andalusia, for example, of the 200 verifications carried out in 2006, in 150 cases complaints had to be made to ENAC, the national accreditation and certification entity. That said, these delays have not entailed having to change annual obligations to surrender allowances.
- Catalonia is the only Autonomous Region to have laid down additional rules regulating the system used to certify verifiers of GHG emissions reports, having set up also a registry of verifiers. It has also established a system of fees for issuing emissions permits. Some Autonomous Regions have simply established registers of verifiers. Apart from Catalonia, the other regions consulted have suggested the need to standardise criteria so that there is a single approved procedure which is defined by all.



- The account opening procedure currently exceeds the established time limit by 2 months. Users consulted have called for electronic procedures to be introduced.
- Great importance is given to the authorisation of emissions contained in article 4 of Law 1/2005 and it is understood that this act is the one that should open the allowance registration procedure. At present, it is notified to the OECC.

Computer applications

There are two types of issues concerning the computer applications:

- Functioning

The application initially used was replaced by another –the Community Registry (CR) - in July 2007, supplied by the European Commission.

Its functioning has been subject to the alterations to the EU application and the changes, tests and adjustments that have not been completely resolved during this period.

The Autonomous Regions feel that while the new application is useful, it requires fine-tuning. The OECC has already taken steps to resolve this problem (although the cost involved has yet to be estimated), and to establish the most appropriate financing mechanism.

The Autonomous Regions note that the change in application has meant that there is much less information available and it has made it more difficult for them to exploit. This has obliged them to work with other applications at the same time, in order to handle the data properly. According to information provided by the OECC, other Member States (Germany, Denmark, Belgium, Luxembourg, Portugal) are encountering similar problems with the new application. As a result, it is proposed to discuss the matter within the Coordination Commission's technical group in order to find the most appropriate way of re-establishing the service required by the Autonomous Communities.

Costs related to providing the RENADE services

Providing the RENADE services generates two types of costs: implementation and management costs. Under Article 74 of the Community regulation, the latter can be financed through specific tariffs.

Under the cooperation agreement between IBERCLEAR and the Environment Ministry, the "Economic system of the national registry" has been set up, and an estimate given of the costs of implementing and managing the RENADE for the 2005-2007 period. In the Annex to the agreement an estimate is also given of the income forecast through the tariffs that were subsequently regulated by the Environment



Ministry Order 1445/2006. In addition, the agreement covers the possibility of the Ministry making partial payments on account of the annual contribution to be paid, from which will be discounted income received from tariffs.

An analysis of the management costs for 2006 (€585,824), and the forecast tariff income for 2007 (€775,000) shows that the RENADE's implementation and operating costs are being adequately covered without, in general, an excessive burden being placed on enterprises and users of the service.

4.3. Opinions on the RENADE

4.3.1. Account holders

This section sets out the main results of the survey on the RENADE, the details of which are contained in Annex I.

The service provided by the RENADE obtained a global rating of 7.4 on a scale of 0-10, without any major differences between different segments of activity. In addition, only 2.3% of those interviewed awarded ratings of under 5. Satisfaction with the service is therefore high.

An evaluation of the individual aspects of the service shows that the most valued points are "Friendliness and courtesy" (8.3) and "Willingness to help" (8.1) of the telephone helpline which, in very few cases (less than 2%), received a low rating with respect to its capacity, approach, handling of enquiries and punctuality in resolving doubts, questions or complaints.

The worst-rated aspects were: "Simplicity of the surrender registry" (7.1), "Simplicity of the purchasing and sales transactions registry" (7.0), "User friendliness of the user interface" (6.8), "Cost of account management personnel" (6.7), "Attractiveness of user interface" (6.6) and "Maintenance cost" (6.4). The remaining thirteen aspects received ratings of between 7.4 and 7.9.

The six worst-rated aspects reduced the overall rating. They can be grouped into two categories: "Cost" and "Attractiveness and user friendliness".

By grouping the assessment criteria into four categories, the statistics show that the "Attractiveness and user friendliness" category has the greatest weight (0.561) in the overall assessment.²⁰ Special attention must therefore be given to: (i) making the system more user-friendly, (ii) making it more attractive and (iii) simplifying the surrender registry, in this order. In fact, 28% of users (accounting for 67.5% of suggestions for improvement) want the functionality and user-friendliness of the system to be improved.

²⁰ Followed by "Reliability" (0.557), "Telephone helpline" (0.372) and, finally, "Cost" (0.091).



Other suggestions for improvement are lengthening the validity period of the access passwords (7.2%) and increasing the RENADE's public opening times.

4.3.2. Stakeholders and NGOs

Stakeholders and non-governmental organisations forming part of the National Climate Council (*Greenpeace, Ecologistas en Acción, WWF-Adena, the trade unions UGT and Comisiones Obreras, and the CEOE, etc*) have very limited knowledge of the RENADE. While they know that it has been set up, they have little idea about how it works, and have pointed out that the registry's website provides very little information, is not very transparent as regards data of interest and is restricted to users. Most confess that they obtain the information from the DITC which, in their opinion, is much more complete and transparent. None of those interviewed are aware of the tariff system, or is an account holder in the RENADE.

While the results of the in-depth interviews with stakeholders have provided limited information as regards the evaluation of the RENADE, other questions of interest related to the registry have come to light in the consultations. The greatest concern of stakeholders regarding GHG emission allowances trading is their disagreement with the amounts allocated to the different sectors under the NAP. The different points of view put forward vary widely, from those that consider the allowances to be excessively generous (ecological groups and trade unions) and those that argue that the system is excessively burdensome, particularly for certain sectors, such as electricity (the CEOE).²¹

²¹ This opinion contrasts with that expressed publicly by various electricity companies, which would prefer to be allocated more limited emission allowances with a greater market value.

5. Conclusions and recommendations

Conclusions

First. In a short period of time, a procedure for registering GHG emission allowances has been set up. Satisfaction with the system is high among those consulted, although there have been some delays.

Second. The RENADE has now satisfactorily completed two full cycles of registration operations, ranging from issue to cancellation of allowances.

Third. The allocation and transfer of emission allowances requiring registration in the RENADE involves many different parties (central government, registry administrator, account holders, the Autonomous Regions) at different stages. As a result, implementing the RENADE is a complicated matter, involving dovetailing different laws, cooperation among different authorities and managing resources and administrative capacities. Instruments need to be established to integrate the different stages in the procedures linked to the operation of the emissions allowance market and their registration. The competent authorities should aim to exercise their functions effectively while speeding up the procedures and reducing the burden on users.

Fourth. An essential part of the system is that to be able to emit GHGs, those installations coming within Annex 1 of Law 1/2005 must obtain an express administrative permit from the competent authority. This is also conditional on the installation being able to measure its emissions in accordance with EU and Spanish law, an important requirement aimed at guaranteeing better monitoring and a more reliable method of verifying actual emissions.

Some account holders and Autonomous Regions have pointed to the lengthy period between the issue date of the emission permit and the opening of the installation holder's account. According to the Autonomous Regions consulted and the information provided by some users with multiple accounts, the 24-day period laid down in Article 15 of the Community regulation is regularly exceeded, up to 90 days being required.

Fifth. An analysis of the way the system works shows certain dysfunctions or errors in the criteria used to classify installations. Such errors seem to show defects in the procedures for verifying and monitoring registry operations, but these should be easy to remedy after the 2005-2007 "trial run".

The new computer program, the Community Registry (CR), clearly needs to be made more user-friendly. It should be equipped with tools so that data can be exploited better and a system should be set up to notify those operations carried out, so that there is a record of them. This would help verification and error detection. Following

requests made by users, the OECC and IBERCLEAR are looking into the best way of making these improvements, although any changes will have to take into account the alterations which may be made to the EU application.

Sixth. Account holders have expressed a high degree of satisfaction with the registry, particularly the telephone helpline. That said, they are less happy with the computer program - while its rating is not poor, it obtains the lowest rating, both in terms of user friendliness and visual attractiveness.

Seventh. Stakeholders and NGO members of the National Climate Council have very limited awareness of the RENADE. This is partly due to the lack of information on the RENADE website. In any event, their interest focuses on the range of measures that make up the establishment of an emission allowances market, including allocation plans, as a basic political tool in the battle against climate change.

A Community regulation has been adopted to set up a standardised registry system after some Member States (including Spain) have taken certain decisions relating to the day-to-day working of their registries. This could be the reason for a series of risks and uncertainties, including those now described.

Risks and uncertainties

1. One risk affecting the RENADE relates to the systems for certifying verifiers, a competence of the Autonomous Regions²². Until 31 March 2006, the activity of certified verifiers was permitted through voluntary adhesion to an environmental management system. At the end of this transitional period, the Autonomous Regions were allowed to establish additional rules both as regards the obligations of the certifying body and the criteria for certifying verifiers. This was done by Catalonia in Decree 392/2006. In business circles, this development is viewed with some concern, since installations could be faced with different procedures depending on where they are located.

2. The concept of emission allowances is completely new. This means that numerous questions relating to their legal nature still have to be resolved. As regards the substantive management of the registration of these allowances, it would be worth studying specific cases involving changes of ownership arising from exceptional (e.g. insolvency or seizure) proceedings or the use of allowances as security in commercial (e.g. credit) operations.

²² Under RD 1315/2005, which establishes the ground rules for the systems for monitoring and verifying GHG emissions.

Recommendations

First recommendation

The computer program needs to be improved. This means making it more attractive and user-friendly and equipping it with tools allowing data to be exploited. It would also be useful if the system sent automatic notifications of the operations executed to the ordering party (e.g. by e-mail).

In addition, the public authorities and IBERCLEAR could look at ways of improving the system so that the method of registering authorisations, validating verified emissions and surrendering allowances makes it easy for the competent bodies to monitor and control effectively the obligations of those operating installations in their territory.

Second recommendation

The 24-day deadline stipulated by the EU for opening an account from the date of reception of the emission authorisation is normally exceeded. The OECC and IBERCLEAR should study how to simplify and speed up the current procedure and, with the Autonomous Regions, look for ways to improve the integration and exchange of information with respect to both authorisation and account opening procedures.

Third recommendation

The OECC and the Autonomous Regions need to analyse in more depth those matters dealt with by regional government where similar criteria should be established. This would help avoid situations where businesses are faced with inconsistent procedures and rules depending on their location.

To this end, advantage should be taken of the Autonomous Regions' existing means of participation within the Climate Change Policy Coordination Commission (*Comisión de Coordinación de Políticas de Cambio Climático*), which already has an established technical group for this purpose.

Fourth recommendation

As part of their coordination work, the OECC and the Autonomous Regions should jointly agree to encourage the introduction of similar methods of dealing with possible claims brought due to discrepancies between the emissions declared and verified in an installation and those validated by an Autonomous Region. For example, Catalonia has taken out insurance to cover potential liability arising in such situations.