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Annual report to Parliament on implementing France's **Environment Round Table** commitments



Énergie et climat Développement durable Ressources, territoires, habitats et logement

Prévention des risques Infrastructures, transports et mer

Présent pour i'avenir

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Program Law relative to implementation of the Environment Round Table commitments

Article 1

"The State will report to Parliament on the implementation of the commitments undertaken by the Environment Round Table in an annual report to be submitted by 10 October at the latest, as well as on the impact on public finances, local taxes and compulsory deductions relative to the principle of maintaining stable tax pressure on private individuals and businesses."

Article 31

"The report mentioned in Article 1 will include a specific study on the impact on the agricultural sector of the measures contained in this Act."

Introduction

Immediately following his election in May 2007, the French President, based on the observation that France was in the midst of a major climate and ecological crisis, decided that any action to be taken should be defined by society as a whole, since the objective was to mobilise everyone, immediately and in the long term.

France's Environment Round Table was ground-breaking in several ways:

- All sectors of civil society were invited to take part in this project, aimed at defining a shared vision and a strategic plan to improve environmental protection. Discussions were held between five panels, all the same size, designed to represent the different stakeholders in environmental issues. As was to be expected in dealing with such a subject, these included the State, local authorities and business; the involvement of a "trade union" panel made it possible to introduce a social dimension to the discussions in a more systematic fashion, while the fifth panel, made up of environment protection associations, was, for the first time ever in this type of forum; given an equal footing as the other panels. This configuration enabled environmental issues to be tackled within the framework of a sustainable development approach, since it meant that representatives of each of the mainstays of sustainable development were involved.
- The scope of the discussions was particularly broad,, encompassing all the different environmental issues as well as public policy, for instance, on energy, transport, building and agriculture, each considered from the angle of its environmental impact. The discussions were structured according to 6 main themes: fighting climate change and managing energy demand, protecting biodiversity and natural resources, developing a healthy environment, adopting sustainable production and consumption behaviour, constructing an ecologically-responsible democracy, promoting ecologically-responsible development methods that boost competitiveness and create jobs.
- No documentation was drawn up prior to the discussions, thereby ensuring that any proposals put forward by the players were their own;
- The various national and local players had only five months, including August, to examine all the problems raised and reach a consensus, a particularly short amount of time.

The work carried out by the six workgroups demonstrated that all the panels shared the same desire to take action to deal with the increasingly urgent environmental challenges. By the summer of 2007, these six workgroups, within the "5-panel governance" model, had drafted several hundred proposals. A large-scale consultation then followed: Nineteen regional meetings involving nearly 17,000 participants, 2 Internet forums, generating 11,000 contributions, two debates in Parliament and referral to 31 advisory bodies. The level of media attention and public interest in the entire process was exceptional. The four Round Table discussions that followed, held on 24, 25 and 26 October 2007 and chaired by the Minister of State, enabled the five panels to reach agreement on 268 commitments which were all endorsed by the French President.

Finally, in December 2007, the Minister of State set up 34 operational committees, each led by a Member of Parliament or recognised expert, tasked with proposing concrete action to implement the commitments. Most of the studies were completed by May 2008, opening the way to the "Parliamentary stage".

1 - Mobilising all the stakeholders

1.1 - Legislative texts resulting from the Environment Round Table

1.1.1 - "Grenelle 1": Law on implementation of the Environment Round Table commitments

To transmit the conclusions of civil society players to the Senate and the National Assembly for debate, the Minister of State decided to present a Program Law to Parliament, known as the "Grenelle 1" Act (First Environment Round Table Act), which sets out the Environment Round Table's commitments, with different wording, as appropriate to a legislative text.

In-depth debate was pursued from October 2008 to July 2009: 3,290 amendments were proposed, 689 of which were adopted. Following two readings in each House, on 21 October 2008 and 17 June 2009 before the National Assembly, and on 10 February and 1 July 2009 before the Senate, all resulting in a practically unanimous vote, the Program Law relative to implementation of the Environment Round Table was eventually adopted by Parliament on 23 July 2009 and was enacted on 3 August 2009 (published in France's *Journal Officiel* on 5 August 2009).

The Senate and the National Assembly ultimately confirmed the major commitments made by the Environment Round Table, including the following:

- **Fighting climate change**, mainly by speeding up the energy-efficient renovation of buildings, harmonising guideline and planning documents relative to urban areas, developing renewable energy sources and alternatives to road transport,
- **Protecting biodiversity, ecosystems and natural environments** thanks to the development of the green and blue belt networks, designed to facilitate the circulation of natural species all over France, and reducing the use of pesticides by half within the next ten years provided that alternative solutions are available,

- Preventing environmental and health risks, and developing tighter policy on reducing waste thanks to measures aimed at improving knowledge of nanomaterials and the effects of electromagnetic waves, a ban on equipment for children that emits electromagnetic waves, with the priority being to reduce the production of household waste and encourage recycling.
- Developing an ecologically-responsible democracy with new forms of governance and better public information, including, among other measures, giving representative environmental organisations access to the same discussion bodies as trade unions and employee unions wherever there is a risk of an impact on the environment.

All these measures are intended to pave the way toward a new form of competitive economy, in which development goes hand-in-hand with reduced demand for energy, water and other natural resources.

As emphasised by the ministers, "at the end of an unprecedented democratic process, we have developed a shared vision of the future, because it has been constructed together, uniting society's stakeholders and the representatives of the Nation in a way that has never happened before. Through this Act, France has demonstrated that concerted ecological change is possible."

1.1.2 - "Grenelle 2": The Bill on the national commitment to the environment

The Bill on the national commitment to the environment, known as the "Grenelle 2" Bill (Second Environment Round Table Bill) is a "conventional" bill. Its adoption is seen as a matter of urgency: it contains nearly all the legislative standards and measures required to implement the Environment Round Table commitments, and which do not come under a Budget Act: This is the case for 58 Environment Round Table commitments.

Adopted by the Council of Ministers on 7 January 2009, the text is impressive in size, containing 125 pages and 102 articles and relating to 25 different codes. The Bill was declared urgent and the text was recently adopted by the Senate. A thousand amendments were examined by the Economic Affairs Commission before the summer, and a further 900 were brought before the National Assembly for debate, 253 of which were adopted. The text is divided into six sections taking up the six main themes of the Environment Round Table. It is due to be examined by the National Assembly at the beginning of 2010.

In the summary of its contents that follows, the text in italics refers to measures added by the Senate.

Section I, Buildings and Urban Planning, makes the renovation of public buildings and service sector buildings obligatory, with works to commence as of 2012 and to be completed within eight years. To this end, local authorities may be eligible for loans at special rates. A number of tools have also been made available to improve energy efficiency in buildings: obligation to supply, upon application for a building permit and upon completion of the works, a certificate attesting that energy efficiency regulations have been taken into account, change to the legislation applicable to co-ownership to facilitate the organisation of energy-efficiency renovation works, obligation to provide information regarding a building's energy efficiency to its future occupants prior to occupancy, the majority decision rule extended to all co-ownership arrangements insofar as concerns energy-saving works, obligation to publish energy efficiency information in property advertisements, urban planning restrictions lifted on the use of energy systems, vegetated rooftops and renewable materials. Lastly, low-cost housing schemes defined at "département" level must include measures aimed at combating energy insecurity.

All urban planning texts must include more concrete objectives in terms of sustainable development, especially with regard to limiting the use of land in an effort to protect farmland and natural spaces as far as possible. They must also be aligned with Regional and local coherent ecological development plans (SRCE, schémas de cohérence écologique). Local authorities are provided with incentives to extend Regional and local coherent development plans (SCOT, schémas de cohérence térritoriale) by 2012 in the case of areas in proximity to major agglomerations or the coast and by 2017 for all other areas. In addition, certain conditions relative to energy efficiency or public transport services may be enforced in a bid to open up new sectors to urbanisation.

Finally, regulations regarding advertising billboards have been reformed, to manage such advertising more effectively and limit the impact of billboards, especially on approaches into towns and near infant and primary schools.

Section II, Transportation, defines the powers of local authorities more clearly (development plans, transportation and urban planning) in a bid to improve planning and management of all modes of transport (reserved-lane public transport networks, self-service

cycle hire schemes, parking, etc.), develops the concept of car-sharing¹ with a special label, subjects urban transportation plans (PDU) to an assessment regarding CO₂ emissions, extends the option of recourse to emergency procedures to develop public transport infrastructures, and allows, under certain conditions, the authorities in charge of organising urban transportation to introduce a fixed-sum tax on capital gains made from developing undeveloped land and existing buildings as a result of building public transport infrastructures.

It sets out the terms and conditions relative to the development of barrier-free tolling on motorways and also provides for different toll rates for trucks carrying freight depending on a truck's greenhouse gas emissions and for passenger transport vehicles, the possibility of adjusting tolls depending on the time of day.

It permits experimental urban toll schemes in agglomerations with over 300,000 inhabitants. Lastly, it facilitates the development of rechargeable electric and hybrid vehicles by organising the installation of charging point infrastructures in the home, at the workplace and on the roads.

Section III, Energy, introduces regional climate, air quality and energy plans, jointly defined by the Prefect of the region and the President of the Regional Council, the aim of which is set out guidelines to alleviate the effects of climate change or to adapt to it, manage energy demand and, at the same time develop renewable energy sources and reduce air pollution. Every company with more than 500 employees operating in a greenhouse gas emitting sector must draw up an audit of its emissions. The same applies to municipalities with a population of over 50,000 inhabitants, which must also draw up a regional climate and energy plan (Plan Climat Énergie Territorial, PCET) aimed at reducing emissions. *Such a plan may also be drawn up by municipalities with less than 50,000 inhabitants*.

Schemes to facilitate the installation of energy-saving collective heating equipment are now extended to air-conditioning equipment. The energy savings certificate scheme will be extended to fuel suppliers and eligible initiatives can include training, information and innovation initiatives. Local authorities can receive energy saving certificates directly, while those required to comply can form groups to implement collective actions to save energy.

¹ Car-sharing is a system whereby vehicles are available for successive use, for a limited amount of time, by a number of different "authorised" or entitled users, in return for payment.

A legal framework is to be provided for the experiment to collect and store CO₂. *Départements* and regions may benefit from the obligation to purchase renewable energy produced using public facilities. Lastly, the conditions relative to creating wind farm development zones have been added to, *while an objective of 25,000 MW produced by wind power is set for 2020.*

Section IV, Biodiversity, deals firstly with the subject of agriculture, providing a framework for controlling trade and advisory activities related to plant protection products, *banning aerial pesticide spraying, unless otherwise specifically authorised*, taking measures to eliminate stocks of plant protection products that can no longer be used, protecting drinking water catchment areas, introducing a voluntary environmental certification scheme for farms, and enabling chambers of agriculture to manage water catchment for irrigation collectively.

Insofar as regards biodiversity, a green and blue belt network is to be developed to facilitate the free movement of natural species, mainly by means of the Regional integrated ecological plans (SRCEs) jointly defined by the Prefect of the region and the President of the Regional Council; this will be developed on the basis of a national and local consultation supervised by a national committee and regional monitoring committees involving the players concerned. Plans to protect endangered species will be consolidated and the Water Agencies will be given the power to acquire, for the purposes of conservation, wetlands up to a maximum are of 20,000 hectares. Lastly, the widespread use of 5-metre wide grassed strips along the banks of waterways will be an effective way of reducing nonpoint source pollution.

A right of pre-emption is granted to owners of woodlands to purchase plots of woodland put up for sale by the neighbours and a State-run public body is set up to be responsible for water management and biodiversity in the Marais Poitevin.

Lastly, in the wake of the Oceans Round Table the "Grenelle de la Mer"), the foundations of a national marine strategy have been laid, in implementation of the related EU directive.

Section V, Risks, Health and Waste, defines measures to regulate artificial light pollution (including illuminated advertising), initiates the organisation of indoor air quality monitoring and a framework for eco-materials certification, enables a ban on all radio terminal equipment manufactured specifically for children under the age of 6, bans the use of mobile phones in

primary and lower secondary schools, requires regular monitoring of electromagnetic fields generated by electricity transmission lines, requires companies that manufacture, import or sell substances in a nanoparticulate state to declare such substances and their use, enables the introduction of restrictions on infrastructure nodes for the transportation of hazardous materials, sets up a "one-stop" office to assist public works firms in locating networks, and implements the EU directive on the assessment and management of flood risks.

Insofar as waste is concerned, the most significant measures include setting up special collection and processing channels for syringes, hazardous household waste and furnishing products, the introduction of a minimum refund for the return of gas bottles, requires food stores covering a surface area greater than 500sqm to install a voluntary collection point for packaging waste, the introduction of waste assessment before demolishing certain types of building, imposes capacity limits on the elimination or burial of household waste in a bid to encourage prevention, recovery and recycling, sets up mandatory selective collection of organic waste by major producers, introduces plans at "département" level to manage waste produced by public building works, giving priority to the use of recycled materials.

Section VI, Governance, extends the requirement to present a social and environmental accountability report to management and investment firms and to the majority of companies with over 500 employees. *In the case of groups, this data should be consolidated, except in the case of French subsidiaries that own classified facilities that are subject to licence or registration.* It instigates an initiative to make parent companies, or even grandparent companies, financially accountable, either on a voluntary basis or, in the case of a violation, in compensation for environmental damages caused by subsidiaries in breach of the law. As of 2011 and progressively up till then, taking account of the specific nature of small businesses, displaying the carbon cost and other impacts on consumer products as well as for passenger and freight transportation, without any limits in terms of distance, will be a mandatory requirement.

Impact assessments may be required based on criteria relative to the sensitivity of an environment, and not, as before, exclusively on the basis of automatic limits, while the number of different kinds of public enquiry is drastically reduced, from 180 to 2, and consultation possibly far in advance of such public enquiries is made simpler. It will also be possible, still in advance, for petitioners to request that the administration define the level of precision of the information to be provided during an impact study.

Prefects can set up site monitoring commissions that can have third-party assessments carried out. Bodies in charge of monitoring measurements designed to prevent, reduce or offset the effects of a transport infrastructure on the environment will be formed on the principle of "five-panel governance".

Local authorities of areas with over 50,000 inhabitants will draw up a sustainable development report before adopting their budgets. Local Agenda 21 and regional sustainable development programmes are harmonised on the basis of the national reference framework. Lastly, regional economic, social and environmental councils will be formed at regional level and in due proportion, according to the same form as that of France's Economic, Social and Environmental Council.

1.1.3 - Other texts that transcribe the Environment commitments: application laws and texts

Where, for the purposes of implementation, the Environment commitments require taxrelated provisions, these were voted on at the end of 2008, within the framework of France's 2008 Budget Amendment Act, or that of the 2009 Budget Act, combined under the single label, "Grenelle 3" (Third Environment Round Table Act): This is the case for 19 Environment Round Table commitments. The related provisions, together with their financial and economic impact, are presented in Section III of this Report.

Four commitments are the subject of legislative provisions under other Acts. These include the commitments relative to rail freight organisation (Commitment No.38) under the draft law relative to rail transport organisation, revitalising city centres (Commitment No.48) under the 2009-323 Housing Act of 25 March 2009 on Mobilisation for Housing and the Fight against Exclusion, boosting growth in the wood industry (Commitment No.77) under the 2008-776 Act on the Modernisation of the Economy of 4 August 2008. Regarding the collection of rainwater (Commitment No.118), this was already dealt with in the provisions of the 2006-1772 Act on water and aguatic environments of 30 December 2006.

The scale of past and future legislative studies should not let us forget that a major regulatory project needs to be undertaken, since an initial study estimated that 140 decrees are required

to implement the Environment Round Table commitments, in application of the Budget Acts the "Grenelle 1" and "Grenelle 2" Acts and other laws.

Lastly, while the "Grenelle 1" Act was being debated in the French Parliament, from one amendment to the next, the MPs asked the State to draw up 45 reports and studies, 14 of which are to be submitted to them. The majority are annual reports and have to be drawn up within one year of passing an Act, in other words, by mid-2010. The "Grenelle 1" Act also requires the State, without fixing a deadline this time, to undertake around twenty European or international programmes.

1.2 - The Environment Round Table - a joint process

1.2.1 - The Panels' continuing dialogue and consistent commitment

1.2.1.a - The Environment Round Table Monitoring Committee chaired by the Minister

Since the very outset, the Environment Round Table has been monitored by a committee that meets every two months, chaired by the Minister of State and bringing together all five panels: the State, represented by the MEEDDM, the local authorities, the employers, the trade unions and environmental NGOs. This committee has played a central role in ensuring that all the panels involved in defining the Environment commitments have also been kept regularly informed and involved in monitoring implementation, and are able to contribute to this process.

In addition to regular plenary meetings, chaired by the Minister of State, the members of the Monitoring Committee were invited to take part in discussions on specific subjects (mainly with a view to preparing for the Copenhagen Summit, drafting the national transportation infrastructure plan (SNIT, the *Schéma national des infrastructures de transport*), and developing National Sustainable Development Strategy (SNDD, the *Stratégie nationale de développement durable*), etc.).

Article 1 of the "Grenelle 1" Act provides for this committee to become official and permanent, and sets out its remit. Thus, the Act looks ahead to extending the scope of the committee's responsibilities, to include:

- monitoring operational implementation of the Environment commitments,
- taking part in defining and monitoring the National Sustainable Development Strategy (SNDD) and the national biodiversity strategy.

A decree is currently in the process of being signed to make the committee permanent. It replaces the former National Council for Sustainable Development (CNDD), whose members'

mandate came to an end in 2008. Given that the scope of responsibility has been extended to encompass all the issues involved in sustainable development, beyond the Environment Round Table, in addition to the five panels that were the initial stakeholders of the Environment Round Table, this committee now includes legal entities representative of civil society and active in other areas of sustainable development (social integration and welfare, the family, consumer rights, cooperation and youth work). A representative of chamber of commerce and industry networks is also provided for (cf. Art. 49 of the Act of 3 August 2009).

The five panels' active participation in monitoring the commitments is a crucial factor in ensuring the successful implementation of the Environment Round Table, and, more generally, in effectively taking sustainable development into account in public policy.

Based on the experience gained during the Environment Round Table, the Oceans Round Table was arranged according to the same methods of consultation and the participation of the five panels, to define and apply through shared commitments a sustainable development strategy regarding activities related to maritime space and the coast, as well as to preserve and develop the potential riches of these spaces. A monitoring system along the same veins as the Environment Round Table Monitoring Committee will be proposed.

A Blue Book of the Oceans Round Table commitments was produced as a result of the Round Table discussions on 10 and 15 July 2009; this contains the 138 commitments on which the partners reached consensus.

To continue on from this initial stage, around fifteen workgroups, of variable size, duration and form are currently being set up with a view to deciding how best to proceed to implement these commitments. Depending on the subject focused on, these workgroups will complete their work within two to six months.

A Blue Book on Maritime Strategy will be drawn up by the end of 2009. This will be divided into three parts:

- national governance
- international governance
- the Blue Book on Commitments in the form of a synthesis and an Appendix containing a list of all 138 commitments

An interministerial committee on the oceans is to ratify this Blue Book on Maritime Strategy in December 2009.

A monitoring committee will be set up to monitor implementation of the Oceans Round Table commitments. The five panels will be involved in this committee. Studies are underway to define how it will be structured and organised.

1.2.1.b - Actions of the panels representing civil society

The Environment Round Table aims to successfully achieve a transformation throughout the entire social system, something that would not be possible if it was imposed from above by the State or through legislation defined in Parliament. It implies deep-rooted changes in attitudes and behaviour. Action taken by other civil society forums show that all the players involved are receptive to this message. Thus, around fifteen different agreements on voluntary Environment Round Table commitments have already been signed by the Minister of State with various professional sectors². From the distribution sector to road infrastructure construction, together with estate agents and companies operating in civil aviation or the pharmaceutical industry, these agreements affect all fields and represent a sector's formal undertaking to apply the Environment commitments, whether this implies planning ahead to apply regulatory requirements or a commitment to take action in non-regulatory areas. Each voluntary commitment agreement entails an annual report and, in the case of the first such agreements (2008), the reports submitted have shown positive, not to say very positive, results

Employee unions and environmental protection associations have, like the other panels, started to develop the means required to take part in the many workgroups and play an active role in the discussions. Given that this is their field of expertise, the environmental protection associations have, naturally, played a major role in proposing action.

Local authorities have stepped up action on different scales in line with the aims of the Environment Round Table or sustainable development, but; so far, these have been freely developed and no review has yet been drawn up. Examples of such action might include the multiplication of Agenda 21 initiatives in parallel with the Environment Round Table; there are

² See list and details at: http://legrenelle-environnement.fr/grenelle-environnement:spip.php?rubrique236

550 local Agenda 21 initiatives currently in progress in France³. Above all, the greatest effort has been and must continue to be made in the area of education: raising awareness among school children, local authorities setting the example insofar as regards waste recycling, ending the use of pesticides in parks and gardens, organising meetings, etc. Many small municipalities are starting off with a very concrete approach.

1.2.2 - Coordination relayed through the involvement of decentralised services and public institutions

1.2.2.a - Coordination by central administrative departments

The Department of the Commissioner-General for Sustainable Development (CGDD, the *Commissariat Général au Développement Durable*) is in charge of centralised coordination for the Environment Round Table. It decided to mobilise a small team, supported by liaison officers at the different directorates-general. There are three main tools that can be used:

- a software application has been specially developed to facilitate the work of the Cabinet and the departments in examining the Environment Round Table texts in Parliament. This software is essential given the size and the cross-cutting nature of these texts. It can automatically retrieve amendments from the assemblies' websites and then, thanks to document sharing, manage the responses made to them. It is known by the acronym PSP, standing for "Parlement Sans Peine" (Parliament made simple), and may well be used in other fields given its proven performance and responsiveness during its initial trial period.

- more recently, another software application has been used to give a consolidated overview of the state of progress on each commitment.

The Rio Earth Summit (1992) sees local authorities as playing a determining role in tackling the challenges of the 21st century effectively. In Chapter 28 of the Rio Declaration, local authorities are encouraged to develop "local Agenda 21" initiatives, involving all the local inhabitants, local organisations and businesses. The approach, based on a joint audit, should serve to develop local strategy plans, given concrete form in programmes of action that are regularly assessed and improved upon. Far from being nothing more than an environmental management system, Agenda 21 is a policy programme, driven forward by the mayor and constituting a break from non-sustainable modes of development. Portal relative to Agenda 21 initiatives in France: http://www.agenda21france.org/france.html

- lastly, a set of performance indicators for the Environment Round Table is being defined to enable efficient monitoring without requiring an analytical approach: it lists a limited number of indicators relative to results and resources for each field.

At the same time, unprecedented financial resources have been devoted to informing and raising awareness among citizens and consumers, either generically (TV campaign on ecolabels in April 2008 or the Environment Round Table campaign at the end of September 2009, for example), or on specific themes (0% interest rate eco-loans, bonus-malus schemes for new car purchases, etc.). Implemented by the ADEME, these campaigns are primarily aimed at encouraging and supporting the necessary changes in householders' behaviour and investment decisions. To finance these campaigns, the ADEME's budget has been increased by €40 million in terms of commitment authorisations and payment appropriations as of 2009 to cover these campaigns, and a total budget of €78 million will be allocated for public relations from 2009 to 2011.

1.2.2.b - Commitments relayed through the involvement of decentralised services and public institutions

The Ministry would have failed to demonstrate its total commitment without the involvement of the Prefects, decentralised departments and public institutions in the Environment Round Table.

The Round Table's implementation throughout the regions is especially important. The Prefects and decentralised departments were mainly been mobilised thanks to the Minister of State's memo dated 23 March 2009, "*Territorialisation de la mise en œuvre du Grenelle de l'environnement*" (Implementing the Environment Round Table commitments in the regions).

Five themes in particular are highlighted in this memo, because they require the definition and implementation of local initiatives adapted to each individual region:

- Fighting climate change, based on three priorities for action: energy-efficient renovation of existing buildings; transport services and transportation through infrastructure projects,

mobility and transportation, clean and "carbon-neutral" vehicles, air transport; and the development of renewable energy sources.

- <u>Urban planning</u>, especially insofar as regards diversity of activities, revitalising city centres in decline, nature in the city, reducing greenhouse gas emissions, tackling the issue of population density with a view to developing denser cities and districts that are more economical in terms of the use of space, and regional adaptation to the effects of climate change.
- High quality natural environments and protecting biodiversity, thanks to the development of the green and blue belt network, the protection or rehabilitation of endangered species, Natura 2000 sites, the development of the protected area network, the promotion of organic farming, boosting growth in the timber industry and the protection of drinking water catchment areas, etc.
- Waste management, by reducing waste production at source, recycling and elimination of residual waste.
- Risk prevention through application of the National Health and Environment Plan, together with measures relative to contaminated orphan waste disposal sites, noise pollution black spots and health and environmental monitoring, reducing exposure of the public to the risk of flooding and preventing natural risks.

Implementing the Environment Round Table commitments requires developing and consolidating partnerships between State departments and other stakeholders in the Round Table, local authorities, business and industry and civil society as a whole. Working together to define local priorities is thus the first step for which the Prefects and decentralised MEEDDM departments have been mobilised. The Prefects are tasked mainly with defining and proposing - in liaison with the other players – suitable consultation and monitoring procedures, which, in some regions, may entail changes to the form of pre-existing consultation bodies, to bring them into line with the five-panel governance model.

In addition, all public institutions have been invited to play an active role in implementing the Environment commitments in their specific fields of competence and in incorporating the achievements of the Environment Round Table into their multi-year contracts of agreed objectives. In cases where renewal of these contracts is too far ahead in the future, "Environment Round Table" riders to the existing contracts have been signed.

In all, these riders set out 201 measures for implementing 108 commitments. They are broken down as follows: 28% relative to fighting climate change, 24% relative to protecting biodiversity and natural environments, 12% relative to protecting health and the environment, 32% relative to establishing ecologically-responsible democracy and 3% relative to waste management.

1.2.3 - The involvement of new institutional players not included on the five panels

Several major initiatives have been developed during this period with a view to improving knowledge of sustainable development and the "green economy". These have involved new and existing bodies and aim to make it easier for a much wider public to take this knowledge on board.

• The Economic and Social Council was reformed by France's Constitutional Act No. 2008-724 on the modernisation of the institutions of the Fifth Republic of 23 July 2008. It has now become the Economic, Social and Environmental Council (CESE): the scope of its responsibilities has been extended to include environmental issues and its composition will change to ensure that environmental aspects are better represented. It has responded to two Government referrals, one regarding the Environment Round Table in general and the other regarding sustainable development and ecological footprint indicators.

In May 2008, the CESE issued its opinion on the draft Framework Act relative to implementation of the Environment Round Table commitments⁴. Its overall opinion and its detailed opinions regarding each of the Round Table themes, together with its opinions of the groups, demonstrate the interest it has in the initiative and the proposals put forward by the Environment Round Table. The CESE approved the Environment Round Table and made a number of suggestions on how the developments it has led to could be consolidated and how to give it a sound foundation shared across society, mainly through a presentation and examination of the National Sustainable Development Strategy (SNDD) to the CESE and to Parliament. It also makes recommendations on improving and consolidating implementation

⁴ http://www.conseil-economique-et-social.fr/rapport/doclon/08050216.pdf

of actions planned by the Environment Round Table, notably, to specify aspects on which financial investment should be directed, draw up an inventory of energy efficiency in the different sectors of business/industry and household activity, indicate the financial contribution to be made by all the different economic parties (public administrations, business, households), develop leverage such as the carbon pricing signal, ecological taxes, bonus-malus schemes, and complete implementation of EU directives that have yet to be implemented.

In May 2009, the CESE also issued its opinion on the sustainable development and ecological footprinting indicators⁵, in response to a request from the Prime Minister. The report examines the value of the existing indicators in terms of their relevance, reliability and transparency. It makes the following recommendations: to step up data production, involve citizens in the choice of indicators and their assessment, give preference to a set of indicators rather than a single indicator, and develop international cooperation to harmonise statistical tools. According to the Economic, Social and Environmental Council, the ecological footprint has several advantages, including the fact that there is much to be learned from the way in which the result is formulated, it is easy to understand and intuitively informative. Nonetheless, it has certain methodological reservations regarding the calculation methods used and the sensitivity of the results to the scenarios defined, which may make the interpretation of trends uncertain. Pending further examination of these points, and given that CO₂ emissions account for a large proportion of the footprint, the CESE believes that CO₂ emissions or the carbon balance could be used as the benchmark indicator for the environmental aspect, while hoping that it will be the subject of an international standard.

• The Environment Round Table has confirmed France's commitment to fight climate change. All public projects must now be developed and assessed in light of their cost for the climate. In this context, France's Prime Minister, at the beginning of 2008, wanted to define a new carbon price to use in assessing the environmental aspects of public policy. The report published in June 2008 by the **Centre d'Analyse Stratégique (CAS)** on the "*La valeur tutélaire du carbone*" (Reference cost of carbon), was produced in response to this request⁶.

⁵ http://www.conseil-economique-et-social.fr/rapport/doclon/09060215.pdf

⁶ http://www.strategie.gouv.fr/IMG/pdf/Valeur tutelaire du carbone-rapport final-6juin2008.pdf

The Commission chaired by Alain Quinet, which included business, labour and management and environmental partners as well as experts from a broad range of disciplines, proposed an initial carbon price and a price trajectory that would make it possible to stay on target in meeting the EU objectives set for 2020-2050. Based on modelling and expert analysis, the members of the Commission set the reference value of $\[mathbb{e}\]$ 100 per tonne of $\[mathbb{CO}_2\]$ 2030. The initial value in 2010 was set at $\[mathbb{e}\]$ 32 to be consistent with the conclusions of the previous Boiteux Report⁷.

The further into the future we forecast these price estimates, the greater the uncertainty that surrounds them. Nonetheless, this sends a clear signal to public and private sector players to integrate *a priori* the forecast carbon cost into all decisions made that have medium- and long-term consequences. It has also served as a baseline for more recent studies, within the framework of projects regarding carbon tax (known as the "contribution climat énergie" in France).

Developing biodiversity has been another major theme tackled by the Environment Round Table. As for climate change, the stakeholders in the Round Table wanted all public policy decisions to be taken after factoring in the cost of their impact on biodiversity. To this end, the Strategic Analysis Centre (CAS, the *Centre d'Analyse Stratégique*) was called upon by the Prime Minister at the beginning of 2008 to provide information regarding the monetary value of biodiversity and of services rendered by ecosystems. The study was carried out by a group of experts led by Bernard Chevassus-au-Louis⁸.

The report, published in April 2009, reviews knowledge on the subject, highlights the complexity of the concepts involved and the difficulties encountered in assessment. It validates the method of assessing biodiversity and ecosystems on the basis of the services that they render to society, in other words, support services, provisioning services, regulating services and cultural services, according to the classification defined by the Millennium Ecosystem Assessment. It distinguishes between remarkable biodiversity and ordinary biodiversity. It defines the notion of reference values for biodiversity and ecosystems in

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⁷ Transports : choix des investissements et coût des nuisances (transportation: investment choices and the cost of pollution), BOITEUX, Marcel, BAUMSTARK, Jean-Louis, Commissariat Général du Plan (French Prime Minister's Economic Advisory Committee), June 2001.http://lesrapports.ladocumentationfrancaise.fr/BRP/014000434/0000.pdf

⁸ Approche économique de la biodiversité et des services liés aux écosystèmes – contribution à la décision publique (An economic approach to biodiversity and services related to ecosystems - contribution to public decision-making), CHEVASSUS-AU-LOUIS, Bernard, SALLES, Jean-Michel, PUJOL, Jean-Luc, Centre d'Analyse Stratégique, April 2009. http://lesrapports.ladocumentationfrancaise.fr/BRP/094000203/0000.pdf

France as well as a method for defining these values. It does not give reference values for remarkable biodiversity, only for the use value of ecosystem services related to ordinary biodiversity. The estimates given are therefore minimum values. Thus, the average reference value of forest services is around €970/ha/year, within a range between €500 and €2,000.

Lastly, at the beginning of 2008, on the initiative of the French President, the Commission on the Measurement of Economic Performance and Social Progress (*Commission sur la mesure de la performance économique et du progrès social*) was set up to respond to questions raised regarding the relevance of the indicators usually employed to measure economic performance, especially those based on gross domestic product (GDP) figures, and, more generally, the measurement of social well-being and sustainable economic, ecological and social development. The Commission was chaired by Joseph Stiglitz, with Amartya Sen acting as Advisor and Jean-Paul Fitoussi as Coordinator.

The Commission drew up an inventory of current knowledge on the subject and published a report divided into three sections. The first section examines indicators used in addition to GDP figures, the second deals with the measurement of well-being and the third discusses sustainable development and factoring in environmental concerns. The report makes the following recommendations:

- place greater emphasis on income and consumption rather than on production and consider performance from the perspective of the household.
- assess national assets, not just physical assets but human, social and natural assets too,
- place greater emphasis on the distribution of income, consumption and wealth
- include non-market activities in assessing income,
- expand the statistical system to include measurements of subjective aspects of the quality of life, health, education, individual activities, political representation, social relations, environmental conditions and insecurity,
- provide an evaluation of inequality,
- develop a set of performance indicators to measure sustainability, where these indicators must be understood as variations in "stocks" of economic, human, social and natural assets factored into the determination of well-being,
- monitor the environmental aspects of sustainability using physical indicators.

The Commission submitted its final report⁹ to the French President on 14 September 2009 and presented it on the same day in the form of a conference at the Sorbonne. In his response, the French President thanked the Commission members and announced France's undertaking to open up debate on the report's conclusions, to change statistical and account data systems used within international organisations and adapt France's statistics system accordingly.

1.3 - Economic and financial aspects

1.3.1 - Ex-ante assessments carried out in accordance with the three mainstays of sustainable development

In an innovative and exemplary approach, the "Environment Round Table" bills were subject to an *ex-ante* assessment in 2008, focused on the three mainstays of sustainable development: i.e. economic, environmental and social aspects.

The "Grenelle I" Framework Act (*Loi Programme*) sets out the guiding principles and objectives of sustainable development without going into precise or operational details of the means whereby these should be attained. To assess the costs and benefits of implementing this Act, it was therefore necessary to develop theoretical scenarios for achieving the objectives set. On this basis, the study on the impact of the "Grenelle 1" Act proposes an initial methodological framework for assessment and provides orders of magnitude relative to the costs and benefits of the sixty most expensive Environment commitments contained in the Act. Although it remains incomplete, due to a lack of consensual knowledge in certain areas, the study provides quantified and well-argued data for public debate and for use by policy decision-makers. Within the framework of a continuous improvement and assessment approach, the first revision has just been completed and published online. The key improvements involve economic assessment of the policy on waste and wetlands.

The report, together with more detailed information, is available, in French and English, on the website of the Commission on the Measurement of Economic Performance and Social Progress: http://www.stiglitz-sen-fitoussi.fr/fr/index.htm

In addition, a full assessment of the National Environment Commitment Act, known as the "Grenelle 2" Act, which defines the legal instruments for implementing the Environment Round Table commitments, was carried out according to the "classic" methodology used for an impact study prior to drafting any Bill. The "Grenelle 2" impact study completes the "Grenelle 1" impact study with the addition of detailed legal, administrative and economic analysis of these instruments.

These analyses show that the ambitious objectives enshrined in the Environment Round Table Acts require substantial financial resources, to be provided by all the different economic stakeholders, while also leading to substantial economic, environmental and social benefits in the short and the long term. In concrete terms, the Environment investments should serve as drivers for "greener" growth.

In the short term, these investments will generate growth in highly labour-intensive sectors that cannot easily be relocated. The major Environment projects (buildings, transportation, energy and waste) will account for nearly €440 billion worth of investments by 2020¹⁰, which could generate around €15 billion of added value a year (0.8 of a GDP point) and affect nearly 500,000 jobs by 2020. This has been confirmed by the study by the Boston Consulting Group which estimates the value of activity generated over a twelve-year period by the fifteen major Environment programmes at €450 billion, with 600,000 jobs created over the period 2009-2020.

In the medium-term, investments within the framework of the Environment Round Table Acts will help to boost growth potential. This involved structuring investments (in infrastructure, research, developing industrial sectors of the future, etc.) that will make France more attractive to investment. Throughout their operating life, they will be partly offset (or self-financing), thanks to energy savings or revenue from tolls, for example. Thus, in the building sector, renovation works undertaken between now and 2020, at an estimated cost of €205 billion, will generate total energy savings over the operating life of the equipment installed of nearly €145 billion, with the barrel price of oil at €55 and even higher if energy prices

¹⁰ Graph 1 shows the breakdown of these investments per major sector and Chapter C on Local Authorities gives details of the different levels of public authority intervention.

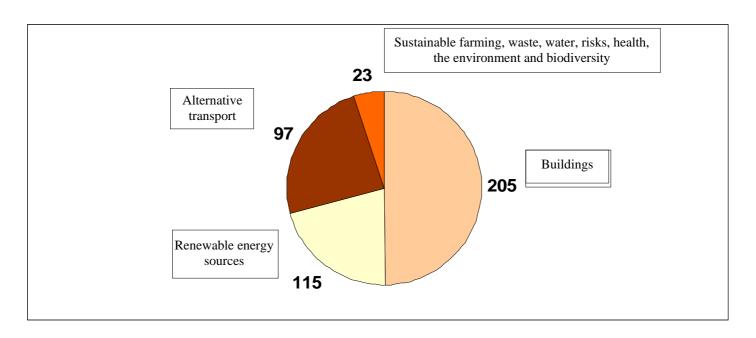
increase. In the shorter term, by 2013, investment should total around €70 billion, entailing savings of around €50 billion over the duration of these investments.

The Environment Round Table measures will stimulate technological innovation and depend on supporting research.

In addition to saving money, the measures set out in the "Grenelle 1" Program Act will have major environmental benefits. In particular, they will considerably help reduce greenhouse gas emissions. They should result in reducing emissions by 35 to 40 million tonnes of CO₂ equivalent within the next five years. The Program Law should have other significant effects in environmental terms, mainly relative to protecting ecosystems, natural resources and health. These benefits for health and the environment will generate economic savings (by avoiding treatment and repair costs, and reducing public health costs, etc.).

Lastly, these measures will have a positive social impact. This is the case of the low-cost social housing renovation programme and, more generally, energy-efficiency improvements in existing housing. Many low-income households live in housing with mediocre or even negative energy efficiency.

Graph 1 – breakdown of investments for each major area dealt with by the Environment Round Table over the period 2009-2020, in billions of euros



Building sector: all the measures dealing with renovation (including local authority-owned buildings) and new development should prevent emissions of nearly 12 million tonnes of CO_2 per year by 2013 (i.e. a 10% reduction compared with current emissions) and an environmental gain that may be worth as much as €400 million a year; and nearly 42 million tonnes of CO_2 per year in 2020 for an environmental gain worth €2.4 billion¹¹. Investment will be focused on energy-efficiency renovation work on existing buildings. Even assuming that the barrel price of oil is low (at around €55¹²), energy savings related to this type of equipment throughout its operating life will offset a substantial percentage of the investment. The investment will be totally offset should the barrel price of oil rise to €100. Depending on the operation, the cost per tonne of CO_2 emissions avoided varies from €0 to €200. Regarding social benefits, these measures should have a positive effect on household spending on energy, especially for low-income households.

Transportation (urban public transport, high-speed rail lines, freight): the environmental and social gains will largely exceed gains related to greenhouse gases. In reality, projects will be

¹¹ Assuming the tonne of CO₂ to be valued at €56 in 2020.

¹² At the time of drawing up these scenarios, the barrel price of oil at €55 was equivalent to a barrel price of \$70 at an exchange rate of 1.3.

examined on an individual basis and will only be undertaken if the social and economic profitability rate - factoring in all the market, environmental and social consequences of a given project - is higher than the baseline discount rate for public works programmes (4%). Emissions of around 2 million tonnes of CO₂ a year may be avoided by 2013, and 4 million tonnes of CO₂ by 2020, currently representing an annual environmental gain worth €60 million a year. To compare, other social gains will be worth €320 million a year in the case of local pollution, €220 million a year in the case of safety and €110 million a year for congestion. Incentive schemes will be introduced to infrastructure projects such as these: eco-tax on heavy goods vehicles and bonus/malus scheme for the purchase of new cars.

Renewable energy sources: the planned investment programme should make it possible to achieve France's European commitments in 2020. As well as reducing energy dependency and diversifying the sources of electricity generation, this programme should make it possible to reduce greenhouse gas emissions by 19 MtCO2/year by 2013, and more than twice that figure by 2020. Depending on the technology used, the cost per tonne of CO2 emissions avoided may vary considerable, from 0 to 1,380 euros.

- In the case of renewable energy sources of electricity, a substantial part of the investment will come from the consumer, mainly by means of the tax contribution to the public service charges for electricity (*Contribution au service public de l'électricité*, or CSPE).
- In so far as regards <u>renewable energy sources for heat</u>, the Renewable Heat Fund, managed by the ADEME, should enable substantial development of renewable heat production in the tertiary sector, industry and agriculture, and improve and diversify sources of heat in collective housing.

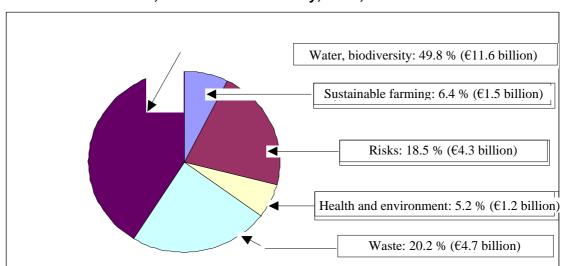
In time, the production costs of these production processes (electricity or heat production) should fall and become competitive with the cost of conventional production methods.

Other sectors (cf. Graph 2)

The total cost of the commitments relative to the sectors of health and the environment, biodiversity, water management, sustainable farming and waste management accounts for around 5% of the cost of the 60 commitments assessed in the "Grenelle 1" impact study, i.e.

around €23 billion. The commitments related to water and waste management account for the highest percentage of this cost, €11 and €4.7 billion respectively.

- Managing water resources: Financing the investments required for eliminating leaks in drinking water networks, estimated to be worth €1.5 billion a year, seems to be taken care of if current investment levels are maintained. Modernisation of water treatment plants, required in application of Directive 91/271/EEC concerning urban waste-water treatment of 21 May 1991, at a total cost of €8 billion according to 2007 estimates, will be undertaken according to a schedule aligned to meet the objectives set under the "Grenelle 1" Act. By the end of 2009, around 50% of the works required will already have been completed or in progress.



Graph 2 - Breakdown of costs for the period 2009-2015¹³ relative to the themes of health and the environment, water and biodiversity, risks, waste and sustainable farming.

- Waste management: the General Tax on Polluting Activities (TGAP) regarding incineration, plus the increased TGAP for landfill of waste will enable the French State to provide substantial support for preventive action (€500 million over the period 2009-2015) and to subsidise development of recycling and composting to the tune of €800 million over the same period. The market and non-market gains for the environment, discounted over 50 years, have been evaluated at between €6 and €12 billion¹⁴: these gains alone justify the investment asked of the different economic players.
- *Sustainable farming:* achieving the objectives set out in the Environment Round Table Act will generate revenue discounted over 50 years of around €10 billion¹⁵ for an investment cost currently estimated to be worth €1.5 billion. This cost is attributable to agri-environment measures, training for people involved in the pesticides sector (distributors, advisors and users) and the use of organic products in public sector collective catering. The average cost of converting to organic farming is around €150 per hectare. This indication of the conversion cost should nonetheless be developed further to represent the economic cost, for all those involved, of switching to organic faming more accurately. Lastly, the cost incurred by commitments to reduce nonpoint source pollution caused by farming and to reduce the use of pesticides by 50% has been evaluated at around €220 million for the period 2009-2013. The

¹³ Covering the period 2009-2013 with regard to certain commitments

¹⁴ Environmental gains were re-assessed in summer 2009. If we include the economic gains related to reduced waste management costs thanks to prevention, the total gains are between €11 and €20 billion.

¹⁵ Environmental gains re-assessed in summer 2009.

environmental gains come from savings on expenditure for further treatment of drinking water, substituting bottled water with tap water, reducing healthcare costs and rehabilitating aquatic environments (and the related leisure activities).

The results of the ex-ante assessments performed therefore show, with regard to the commitments for which it has been possible to assess the monetary value of the environmental impact, that the returns expected over the long term are generally higher than the costs, confirming the idea that it is worthwhile for society to invest in ambitious environmental policies.

1.3.2 - A tax system geared to sustainable development regarding fixed automatic tax deductions

To achieve the objectives set out in the Environment Round Table Act, around forty tax measures relative to the environment and energy were adopted within the framework of the 2009 Budget Act No.2008-1425 of 27 December 2008 and the 2008 Budget Amendment Act No.2008-1443 of 30 December 2008. The measures adopted cover all the Environment Round Table action programmes organised as follows: building (7), renewable energy sources (5), transportation (6), waste (6), agriculture (7), risk prevention (2), biodiversity (4), other (5). These measures are designed to change the behaviour of households and businesses:

- either by providing incentives to more virtuous behaviour by creating new subsidies, such as the extension of the assessment basis for the "sustainable development" tax credit, zero interest rate eco-loans, or tax exemptions for private individuals that install photovoltaic solar panels;
- *or by applying the "polluter pays" principle*, such as the eco-tax on heavy goods vehicles and the bonus-malus scheme for new cars or the introduction of the TGAP for incineration and the TGAP increase for landfilling.

Other proposals are included in the draft Budget for 2010, such as the draft text aimed at introducing a carbon tax (the CCE, or "contribution climat énergie") on energy from fossil fuels. This tax, described in detail under Point C in this section, is based on CO_2 emissions that will be fully offset for household and business consumers. It will serve to encourage household consumption and company procurement of low-carbon products, and also provide them with an incentive to make substantial energy savings. The carbon tax will be introduced progressively: to begin with, it will be $\[mathbb{e}\]$ 17 per tonne of CO_2 , aligned to the average value of a tonne of CO_2 on the French emissions quotas market since it was set up, rising to $\[mathbb{e}\]$ 100 per tonne of CO_2 by 2030.

For the period 2009-2011, all these reforms will be worth €2.7 billion in additional revenue offset by new forms of tax relief, such that the impact on automatic deductions will, in principle, remain neutral.

1.3.3 - "Grenelle 3": the Budget Acts

1.3.3.a - Major funding in terms of volume, from a variety of sources

For the period 2009-2011, total funding for "Environment Round Table" actions is €18.7 billion in terms of commitment authorisations and €7 billion in terms of payment appropriations. The Environment Round Table includes a series of tax and budgetary measures, and is supported by the State administration departments and operators such as the French Environment and Energy Management Agency (ADEME), the Transport Infrastructure Funding Agency (AFITF) and the National Agency for Housing Renovation (ANAH) for its implementation, together with economic players who are called upon to change their behaviour thanks to the tax incentives introduced.

General non-budget funding will make up the most part of the funding since the resources allocated to operators, contributions from the French Deposit and Consignment Office (Caisse des Dépôts et Consignations, CDC) and tax relief alone come to a total €17 billion in

terms of commitment authorisations and €5 billion in terms of payment appropriations. The operators mentioned above play a major role in implementing the Environment Round Table commitments given the resources they are expected to mobilise to implement the commitments:

- The *AFITF* will provide funds worth €1.7 billion (payment appropriations) for infrastructure projects between 2009 and 2011. Projects include major rail development projects, especially for high-speed lines (€1.05 billion), major waterways projects, including the flagship Seine-Nord-Europe Canal project (€80 million), the development of motorways of the sea (€65 million) and rolling motorways (€55 million), together with port development (€85 million) and urban public transport systems (€190 million).
- The *ADEME* will be allocated the revenue from the TGAP, the scope of which has been extended: this totals €740 million from 2009 to 2011, including €121 million for running the ADEME. It is devoted to financing the Renewable Heat development fund (€320 million), cleanup of contaminated sites and land (€55 million), eliminating noise black spots (€120 million), campaigns on saving energy (€78 million) and the waste prevention and recycling support plan.
- The *ANAH* funds a programme to combat sub-standard housing and ensure the energy-efficiency renovation of private housing, with a budget of €200 million in terms of payment appropriations over two years (2009-2010) from the recovery package. Of this total budget, €100 million is allocated for grants to 50,000 low-income homeowners to improve the energy efficiency of their homes, €50 million for grants to assist co-owners in difficulty (25,000 homes) and €50 million for improving 5,000 homes that are unfit to live in, as part of planned home improvement operations (OPAH).

The budget appropriations illustrate new policy decisions that reflect the government's will and rallying to follow the path of green growth. While France's Ministry of Ecology, Energy, Sustainable Development and the Sea¹⁶ (MEEDDM) is the principal contributor, the Ministries of the Economy, Industry and Employment (MEIE), of Higher Education and Research (MESR) and the Prime Minister's services ¹⁷ also contribute to financing the Environment

¹⁶ The MEEDDM finances programmes relative to "transport infrastructure and services" (P203), "urban planning and transport services" (P113), "risk prevention" (P181), "energy and management of former mine sites" (P174), and "managing and coordinating policy on ecology, energy, sustainable development and town and country planning" (P217)

¹⁷ The budget for the "risk prevention" programme (P181) is transferred to the "State intervention in the regions" programme (P162)

commitments for a total sum of €1.407 billion in commitment authorisations and €1.253 billion in payment appropriations.

1.3.3.b - The Economic Recovery Package: consolidating the availability of funds allocated to the Environment

The 2009 Budget Amendment Act No.2009-122 of 4 February 2009 provided for a recovery package worth €26 billion over two years, including €10.5 billion of public investment (State, local authorities and public enterprise). The majority of these appropriations are set out in Programme 315 of the "Economic Recovery Package", known as the "exceptional public investment programme".

Of these €10.5 billion of public investments shared between the State (€4 billion), public enterprise (€4 billion) and local authorities (€2.5 billion), €1.1 billion in 2009 and 2010, i.e. 11%, are for speeding up implementation of the Environment Round Table through the following actions: alternatives to road transport (€470 million), energy efficiency renovation of public buildings (€200 million), overseas investment (€50 million), decontaminating industrial wasteland (€20 million), scrapping premium (€220 million), subsidies to the National Agency for Housing Renovation (ANAH) and for energy system renovation in private homes (€100 million)¹⁸.

In addition to the Environment, sustainable development is a priority in the recovery package: of the package's €14.5 billion for 2009 and 2010, excluding measures in support of company cashflow, €4.96 billion are for investment within the sectors covered by the MEEDDM, i.e. nearly 35% of the total. The French Government thus confirms that is sees the development of green growth as a priority that will boost business and create greater balance between the regions.

1.3.3.c - Provisional financing occasionally increased depending on initial forecasts

¹⁸ The last two measures do not come under the exceptional public investment programme, but Programme 316 "exceptional support for economic activity and jobs", and Programme 317 "exceptional investment for housing and social welfare" respectively.

The draft Budget for 2010 (PLF 2010) is in accordance with planning defined for 2009, 2010 and 2011, or even revised slightly upwards compared with initial funding plans. To give some examples:

- *Transportation* Funding for actions related especially to combined transport is maintained at a sustained and consistent level of €13 million a year for three years.
- *Urban planning:* This budget item sees a net increase of €2 million, with Environment Round Table allocations for Programme 113 "Urban planning, landscaping, water and biodiversity" increased to €61 million in the draft Budget for 2010 instead of the planned €59 million. This increase is financed through redeployment and is intended to fund the development of "eco-cities", for which the call for projects has been very successful, together with the first measures entailed in the Oceans Round Table.
- *Biodiversity*: Funding for actions within this area has also been significantly increased: from €26 million (commitment authorisations=payment appropriations) in 2009 to €45 million in 2010, in other words, an additional €1 million compared to forecasts for 2010, and to €62 million in 2011.
- *Water:* A similar increase can be seen in this area. Thus, funding for actions in the area of water increases from €6 million in 2009, to €9 million in 2010 and to €14 million in 2011.
- *Environmental health:* Funding for action undertaken within the framework of the National Environmental Health Plan also increase from €19 million (commitment authorisations) in 2009, to €40.5 million in 2010 and €38.5 million in 2011.

1.3.3.d - Measures that embrace every aspect of sustainable development

The measures naturally cover a broad range of sectors. For the period 2009-2011, funding per sector is as follows:

buildings (€8.091 billion in commitment authorisations, €4.122 billion in payment appropriations), waste (€411 million in commitment authorisations, €289 million in payment appropriations), transportation (€8.532 billion in commitment authorisations, €1.861 billion in payment appropriations), biodiversity (€132 million, commitment authorisations=payment appropriations),

energy (€1.081 billion in commitment authorisations, €440 million in payment appropriations), water (€30 million, commitment authorisations=payment appropriations), research (€663 million in commitment authorisations, €514 million in payment appropriations), sustainable development in the regions (€17 million, commitment authorisations=payment appropriations), risks (€601 million in commitment authorisation, €489 million in payment appropriations), Union for the Mediterranean (€10 million, commitment authorisations=payment appropriations) agriculture (€114 million in commitment authorisations and payment appropriations) the "Model State" initiative (€200 million, commitment authorisations=payment appropriations).

1.3.3.e - Assessing economic impact

Tax schemes are an economic tool that helps to achieve the objectives set by the Environment Round Table. Their economic impact was assessed ex-ante within the framework of the Environment Round Table as a whole¹⁹.

The economic impact of tax measures introduced as a result of Budget Acts will be subject to specific *ex-post* assessment as of 2010, when data from the first year of implementation will be available. That said, the data available already can be used to assess the following:

- *in the building sector*, 15,000 zero interest rate eco-loans had already been granted by the end of July 2009 for an average €18,000 per beneficiary. By the end of September 2009, the zero interest rate eco-loan had financed 35,000 energy efficiency renovation projects undertaken by private individuals. In practical terms, all the banking networks have set up this loan scheme. The existing home improvement sector has developed insofar as regards energy efficiency, especially in the context of an economic slowdown;

- *in the area of waste*, the introduction of the TGAP for incineration and the increased TGAP for landfilling should impact on households through an increase in the tax on the removal of household refuse (TEOM) and the fee for the removal of household refuse (REOM) in 2009, an increase of around €2 per resident per year. This impact should nevertheless soon be offset by the reduction at source of the production of household and similar waste, mainly thanks to funding local waste prevention schemes and programmes. Companies will be

¹⁹ This aspect is developed in more detail under Point III.A. of the report

responsible for a third of the cost of implementing the measure, but waste management costs account for only a small percentage of their turnover. As for jobs, the effect will, in theory, be positive, since the selective collection, sorting and recycling of household waste are labour-intensive activities. Waste storage creates one job per 10,000 tonnes of waste, incineration creates four jobs and sorting household waste creates twenty-one jobs. Developing recycling will therefore have a very positive effect in terms of job creation²⁰;

- in the transport sector, of the 1,131,314 new private cars registered during the first six months of 2009, 614,049 emit at most 130 gCO₂/km and are therefore eligible for the bonus. There were 115,292 cars registered that emit over 160 gCO₂/km, now making them subject to the malus. Lastly, 401,973 registered vehicles emit between 131 and 160 gCO₂/km, making them carbon neutral. Thus, 55% of new car sales are eligible for the ecological bonus and sales of cars that emit less than 100 gCO₂/km quadrupled between the first six months of 2008 and the first six months of 2009. 85% of the vehicles eligible for the bonus come within a CO₂ emission range of 101 g/km to 120 g/km. The bonus corresponding to sales for the first six months of 2009 should cost €388.2 million. Bearing in mind the time difference for payment and the effective application rate, the National Services and Payments Agency (ASP, the Agence de Services et de Paiement) paid out €311 million under the bonus scheme during the first six months of 2009. To offset this, the malus should bring in €102.2 million for the same first six months. In addition, from 2010, the annual tax of €160 applicable to vehicles that emit more than 250 gCO2/km will be collected and the limits applicable to eligibility for the bonus will be lowered by 5 gCO₂/km. As in 2008, the scheme will still be in deficit. The deficit for 2008 was approximately €235 million, and that for 2009 is likely to be between €400 and €500 million.

Furthermore, the scrapping premium was increased, from €300 in 2008 to €1,000 following adoption of the Economic Recovery Plan. On 25 August 2009, 324,841 applications for the scrapping premium led to payments totalling €324.8 million.

²⁰ Report by the body in charge of assessing public service policy on household and related waste, DUFEIGNEUX, Jean-Louis, TETU, Alain, Commissariat Général au Plan (French Prime Minister's Economic Advisory Committee), March 2004. http://lesrapports.ladocumentationfrancaise.fr/BRP/044000148/0000.pdf

The combination of these schemes, which are based on the principle of a financial incentive to purchase and produce energy-efficient vehicles, has had a significant effect in changing the structure of private car sales in France since 2008, compared with figures observed prior to 2008. Consumers and manufacturers have responded beyond expectations to the price signal. According to the survey carried out by the Department of the Commissioner-General for Sustainable Development [(CGDD) within the framework of the National Transport Accounts Committee (Commission des comptes des transports de la nation), the scheme will help to avoid the emission of 1.8 MtCO₂ over the lifetime of the vehicles sold in 2008. Nonetheless, the social and economic result of the scheme showed a slight deficit of €17 million in 2008. It nonetheless seems to have helped consolidate the French manufacturers' market share, bolstering the efforts made in the past to provide more energy-saving vehicles. Furthermore, while the effect on jobs in the automotive industry in France is still hard to assess precisely, a review carried out by the CGDD estimates, as an initial approximation, that the bonus-malus scheme has made it possible to maintain around 5,000 jobs in the automotive industry. As a result, while the bonus/malus scheme for car purchases is running at a deficit in terms of budget, it has still led to an increase in household spending power and helped to sustain the French automotive industry during a period of economic slowdown.

1.3.4 - The carbon tax

The carbon tax (known in France as the "contribution climat-énergie") is a tax based on CO₂ emissions designed to influence household consumption and company procurement to favour low-carbon products, especially in the transportation sector and the building trade, and to provide an incentive to save substantial amounts of energy. In light of this, the tax also strengthens France's energy independence. It thus helps pave the way to the "post-oil era". Article 2 of the Program Law relative to implementation of the Environment Round Table commitments, states that the State "will examine the introduction of a carbon tax with a view to encouraging low-carbon and energy-saving behaviour. This tax will aim to include the effects of greenhouse gas emissions in pricing systems through taxation of fossil fuel energy.

A conference of experts was held on 2 and 3 July 2009, divided into two workshops, one dealing with the general interest of the instrument and the other dealing with the implementation and impact of such a carbon tax.

The conclusions drawn at the conference of experts were discussed at a high-level round table, made up of experts and qualified public figures, from the political scene and civil society, chaired by Michel Rocard. The report on these discussions was submitted to the French President on 28 July 2009²¹. It highlights the need for "an unprecedented change in our fossil energy production and consumption behaviour", with a view to upholding France's commitments to cut her greenhouse gas emissions by 50% by 2050. It recommends deploying "the most effective instruments: to develop sources of tax credit in order of merit in terms of the cost per tonne of carbon emissions avoided; to stimulate innovation, and give French industry an edge in the sector of ecotechnology; and to ensure security of supplies of products on which Europe, and France in particular, are highly dependent.

This has led to a consensual agreement in principle regarding the advantage of setting a carbon price signal, by means of a supplementary duty, levied upstream in addition to existing excise taxes on fossil fuels. This carbon tax, known in France as the "Contribution Climat Énergie" (CCE), will apply to all agents not included in the European CO2 permit market Such an instrument seems essential to reduce nonpoint source emissions, and thus uphold our "factor 4" commitments under effective economic performance conditions. The report recommends an initial tax of €32 per tonne of CO₂ (estimate contained in the Quinet Report) gradually increasing to €100 per tonne of CO₂ by 2030

The report also recommends a redistribution of the revenue, at fixed rates as far as possible, to avoid weakening the impact of the price signal aimed for in terms of an incentive. Lastly, it recommends setting up a body to develop guidelines and assess implementation, which will monitor the impact of the tax in terms of economic and environmental trends and, in particular, will tackle the issue of how CO2 is factored into regulated retail tariffs for electricity.

Following submission of this report, the government set out its proposal for implementation within the framework of the draft Budget Act for 2010. As recommended in the Rocard Report, this tax will apply to fossil fuel energy sources based on the "polluter pays" principle,

²¹ http://www.developpement-durable.gouv.fr/IMG/pdf/Rapport Rocard cle59dbc3.pdf

electricity will not be subject to the tax, given the low carbon content of electricity generation in France. The carbon tax will be introduced progressively: to begin with, set at €17 per tonne of CO₂, in reference to the average value of a tonne of CO₂ on the French emissions quota market since it was set up. The reasons given for introducing this tax in the draft Budget Act for 2010 confirm the of €100 target carbon tax per tonne bγ 2030. The carbon tax will be fully offset by reductions to other taxes. Households will be entitled to deductions depending on the size of the family and the place of residence. It will reduce the amount of income tax paid if the household is subject to income tax, or will be paid in the form of a "green" cheque to households not subject to income tax. In the case of companies, local business tax (taxe professionnelle) on investment is to be abolished from next year. In line with the recommendations contained in the Rocard Report, an independent commission will monitor the compensation system in total transparency.

1.3.5 - Impact on local authority finances and tax income

Implementing the Environment Round Table commitments and achieving its ambitious objectives implies that everyone in civil society, at all levels, must be involved. The local authorities will play a determining role in implementation in a number of areas. They will also directly and indirectly benefit from the effects of the Environment Round Table thanks to the sustainable economic growth it is expected to generate, job creation, improved quality of water and natural environments and the concomitant reduction in the costs of repairing damage, better risk management and sustainable resource management, etc., that it will establish.

Local versions of the Environment Round Table impact study have been carried out, especially aimed at assessing its impact on local authority finances. At this stage, these studies have been restricted to a relatively aggregate level, in an attempt to define the scale of investment for which the different local, regional, departmental and municipal authorities will be responsible. The basis of apportionment between these different public players may vary widely from one sector to another, and from one project to another. More detailed

studies must therefore be initiated to provide more precise estimates. The assessments given below should therefore be taken as scales for each major sector.

| Environment theme | Gross cost (Billions of €) | State contribution (billions of €) | Local Authority contribution (billions of €) | Type of LA in charge of the cost and the nature of the cost borne | Expected gains for the local authorities |
|--|----------------------------------|--|---|---|--|
| | T | T | T | 2009-2020 | I |
| High-speed rail line | €56 bn | €16 bn | €16 bn | Mainly the Regional Authority | 2 MtCO ₂ avoided/year by 2013 Substantial gains in terms of safety, congestion and local pollution. |
| Urban public transport | €18 bn | €2.5 bn | €14.4 bn | Mainly municipal and urban agglomeration authorities | |
| Buildings renovation | €26 bn | 0 | €26 bn, approx. €500 M/year | Except accessibility and using PPP partnerships | Reduce energy consumption and CO2 emission by 40% (€12 bn/30 years) |
| Renovation of 800,000 social housing units | €14.4 bn | €2.4 bn low- interest rate loan from the CDC | €1.2 bn to €1.44 bn (€100 to €120 M/year) | Add TFPB tax relief of €40 M (€33 M/year) | Less pressure on CCAS and FSL social welfare and housing funds (€20 M/year) |
| Renewable heat | | Renewable Heat Fund: €960 M (commitment authorisation s): €320 M (payment appropriation s) over 2009- 2011 | Not obligatory | Depends on the Local Authority's policy on the subject | Development of Renewable Energy Sources |
| | | | | 2009-2015 | |
| Waste | 4.7 | 1.3 | 1.5 | Primarily the municipal authorities via inter-municipality structures for waste collection and treatment | 7% reduction by 2015 in the quantity of household and similar waste collected and treated per inhabitant. Savings of between €220 M and €350 M a year related to avoided collection and treatment costs* €1bn avoided cost of investment in incineration plants €70 M revenue from sale of additional materials Increased support for approved companies (Market and non-market) gains for the Environment of €250 M − €500 M a year |
| Water and sanitation | 11 | 2 | 9 | municipal authorities, redeploying their current investments in drinking water supplies, water boards and the CDC (urban waste water treatment directive) | Water: gain of €200 M a year (reduced drinking water production and distribution costs) |
| Organic farming** | 1.5 | 0.5 | 0.14*** | Municipal authorities regarding the commitment to protect water catchment areas | Approximately €350 M a year mainly thanks to improving water quality, including €200 M due to avoided water treatment costs alone |
| Risks | 4.3 | 1.4 | 2.4 | French Overseas local authorities (Under the <i>Plan</i> <i>Séismel</i> Earthquake Plan) and municipal authorities | €90 M – €140 M a year saved due to avoided damage to facilities and healthcare related to the commitments regarding noise pollution and earthquake plans. For the commitment on "flood black spots", minimum 0 gains since PAPI**** plans are not implemented unless the gains outweigh the costs emographic growth in France (+2.8 million |

^{*} the aim to reduce household and similar waste will make it possible to curb the increase in waste due to demographic growth in France (+2.8 million inhabitants during the period 2009-2015) and the related waste collection and treatment costs (between €142 and €220 excl. VAT for 80% of local authorities)

^{**} Including the cost of the commitment relative to protecting water catchment areas

^{***} Possibly more depending on local policy (grants to sustain organic farming, structure of the sector, subsidies for use of organic products in collective catering, etc.)

^{****} Programme d'Actions de Prévention des Inondations - flood prevention programme

1.3.5.a - Transportation: High-speed railway lines and reserved lane public transport networks outside the lle-de-France region

- High-speed railway lines: The Environment Round Table committed to develop 2,000 kilometres of new, high-speed railway lines, for which works will begin between now and 2020. The gross investment for the programme to build the first 2,000 kilometres will be around €53 billion. Various aspects of the high-speed railway line programme will be subject to negotiations with local authorities, especially with the regional councils: priorities, routes, alternatives to high-speed, funding sources, etc. The Program Law specifies that the State will contribute €16 billion to the investment programme

Funding sources will vary from one project to the next, mainly depending on whether or not they will draw on public/private sector partnerships (PPP). To begin with, the self-financing share (tolls), for the Réseau Ferré de France (RFF) or the contract holder, will be fluctuate widely depending on the project, ranging, for example, from 50% for the Tours-Bordeaux line to 35% for the Brittany-Pays-de-la-Loire line, but will most likely be less for other projects. Initial estimates put the share at around 20%. The remainder, from public funding, is generally shared between the State and the local authorities. The funding guidelines defined to date are: for passenger high-speed railway lines: 50% State/50% local authority, and for mixed use high-speed railway lines: 65% State/35% local authorities. Apart from certain rare exceptions (Nîmes-Montpellier, Bordeaux-Spain and certain access points on the Lyon-Turin line), the Environment Round Table projects are passenger lines.

At sub-regional level, there are no predefined rules regarding funding sources and share of funding.

If the 50/50 split between the State and local authorities applies to the entire programme, the local authorities' share (mainly meaning the regional councils) will come to around €16 billion²².

²² The contribution by the State and the local authorities of €16 billion each only covers 60% of the investment required for the entire programme, thus presupposing that it will be 40% self-funding. This difference may be explained by the fact that the subsidies in question cover the period 2009-2020 whereas the programme is planned over a much longer period.

- Reserved lane public transport networks: Under the Environment Round Table measures, the length of reserved lane public transport networks will increase from 329 to 1,800 kilometres within the next fifteen years. This programme will be the subject of negotiations with French transport organisation authorities and, more generally, with all the local authorities concerned: definition of the programme, means of State funding and the scope of the organisation authorities' remit (freight, parking, etc.). Investment in infrastructures will cost an estimated 18 billion euros outside the Ile-de-France region²³. State funding will be €2.5 billion for the period up to 2020. The first call for proposals launched in 2008 specifies that subsidies will be limited to between 15% and 25% depending on the nature of the investment required.

As an example, in return for State funding of 20%, local authorities (mainly municipal and agglomeration authorities) will be expected to fund the remaining investment requirement, i.e. around €14.4 billion²⁴. This estimate may be adjusted once applications from the project sponsors have been submitted and financial packages have been defined.

1.3.5.b - Building sector: renovation of the public buildings owned by local authorities and of social housing

- Renovation of the public buildings owned by local authorities: The "Grenelle 2" Bill requires works to improve energy efficiency in buildings used by the tertiary sector to be completed within 8 years as of 1 January 2012. While the means and the scope of these works have yet to be defined, by Decree, we can nevertheless attempt to assess the cost on the basis of assessments carried out for State-owned buildings (the "model State" within the framework of the "Grenelle 1" Bill).

The existing local authority buildings mainly affected by the Environment Round Table measures - i.e. local authority administrative buildings, schools, cultural and social buildings and various other premises, which are permanently or regularly heated - have an estimated

²³ In the Ile-de-France, the question is extremely complex. It is not really dealt with by the "Grenelle 1" Act. As things stand, the matter is too complicated to examine here.

²⁴ The same applies to the high-speed railway line programme insofar as regards the State subsidy, the difference between the two figures can mainly be explained by the fact that the periods considered are not the same.

surface area of 130 million square metres. Pending in-depth assessment to specify and complete these estimates more precisely, these buildings are thought to be divided into two more or less equal shares between the municipalities on the one hand and the *Département* and regional councils and Public establishments for cooperation between local authorities (EPCI), on the other hand. It is assumed that the average unit cost of renovation for the State will be €200/m². Renovating all these buildings will thus cost €26 billion, spread over the period 2012-2020²⁵. The resulting discounted savings come to an estimated €12 billion for energy (based on an assumed 40% reduction in energy consumption and oil price of €55/barrel²6) and €1 billion for additional expenses. The net balance to be met by the local authorities will then come to €13 billion spread out over a little under ten years, from 2012 to 2020. In the case that public/private sector partnerships (PPP) are developed and energy efficiency contracts (CPE) are used, spreading the costs will make it possible to reduce net annual expenditure, albeit over a longer repayment period extending beyond 2020, and thus incurring higher financial costs. Each local authority will be responsible for the financial decisions.

Excluding disabled access but in the case of relying heavily on public/private sector partnerships, the need for additional payment appropriations as a direct result of the Environment Round Table will vary between €150 to €500 million from 2010 to 2020, before levelling off at €300 million per year after 2020 depending on the rate at which works progress and on objectives in terms of absolute efficiency.

- Renovating social housing with the highest energy consumption: The programme to renovate social housing concerns 800,000 homes by 2020, i.e. one-fifth of the social housing properties in France, progressively stepping up renovation programmes to reach an average rate of 70,000 renovations a year between 2012 and 2020. The total investment in the energy-efficiency renovation will be around €12 billion. The works will cost an average €18,000 per home, including €15,000 for works directly related to reducing energy consumption. The funding scenarios considered include own funds (around 10%), low-

²⁵ These calculations do not factor in the estimated cost of compliance with disabled access regulations, currently estimated to cost €9 billion (€70/m²). These regulations are not a result of the Environment Round Table, although, when renovation work is undertaken, disabled access must be included in a single operation

²⁶ With the price of oil at €100/barrel, renovation works would be almost fully offset by the energy savings made over the lifetime of the buildings.

interest rate loans from the CDC of €12,000 on average, deployment of energy savings certificates (around €250), a contribution paid by the tenants by a direct levy on their rent payments (provided that a national collective agreement is reached), TFPB (property tax on existing buildings) tax relief in application of the Framework Act setting out energy policy (POPE) No.2005-781 of 13 July 2005 (around €500) and a contribution by the local authorities to complete the operations (around 8%, i.e. €1,500 to €1,800 per home).

Under this average scenario, the local authorities will be required to provide funds worth €1.2 to €1.44 billion over twelve years, i.e. €100 to €120 million/year. TFPB (property tax on existing buildings) tax relief will amount to €400 million over 12 years (€33 million/year).

Householders will benefit from a significant reduction in their energy consumption for heating and hot water, between 25% and 70% depending on the case. In theory, energy consumption across all social housing property will be reduced by 21%. These reductions should make it possible to offset part of the investment and, ultimately, will benefit the tenants of low-cost housing. Lastly, controlling charges will ease pressure on social funds managed by the municipal authorities (municipal social welfare centres, (CCAS)) and *département* authorities (housing funds for people in need (FSL) and energy funds). Based on a sum of €200 million/year, savings of 10%, or €20 million/year, should be possible.

1.3.5.c - Energy: developing renewable energy sources

Developing renewable energy sources will mainly be paid for by the consumer through the tax contribution to the public service charges for electricity (*Contribution au service public de l'électricité*, or CSPE), and the State (the Renewable Heat Fund and tax credits). While some local authorities, especially the regional councils, also subsidise the installation of certain renewable energy facilities, the Environment Round Table dose not place any further obligation on them in this area.

1.3.5.d - Waste: prevention, recovery and recycling

The gradual increase of the TGAP (General Tax on Polluting Activities) for landfilling and the gradual introduction of the TGAP for incineration may result in increased costs for local authorities of €600 to €700 million over the period 2009-2015, i.e. an average €100 million/year. This total impact accounts for 2% of the annual sum of the tax on the removal of household refuse (TEOM) which finances around 80% of the public waste removal service²⁷. For the period 2009-2015, forecast tax revenue related to the Environment Round Table's Commitment 245²⁸, revenue that will come from the local community and business, should provide around €1 billion to fund prevention and recycling initiatives implemented by local authorities and other economic players. Regarding new investment (sorting centres, composting facilities, etc.), local authorities will be required to invest around €1.5 billion (compared with €1.9 billion for companies). The objective of a 7% reduction in household and similar refuse will serve to curb an increase in the amount of household and similar waste caused by population growth in France, as well as the related costs of collection and treatment. As of 2015, the gains in terms of avoided costs will come to over €200 million a year.

Achieving all the objectives regarding waste prevention and recycling will, by 2015, make it possible to divert 10 million tonnes of waste (produced by households or companies) from going to landfills or being incinerated, reduce the production of 2 million tonnes of household and similar waste that would have been collected and treated by local authorities (effect of prevention), and deal with the remaining 8 million tonnes²⁹ through recycling and composting. Such developments will naturally impact on investment in storage and incineration facilities (new or replacement capacity). The investment thus avoided for incineration alone is estimated to be worth €1 billion. In addition to investment savings, implementation of the Environment Round Table "Waste" commitments will generate additional industrial revenue. Independently of increased resale of electricity and heat³⁰ directly related to improved energy efficiency at facilities, which will mainly benefit the operators, the new revenue from the

²⁷ In 2007, the main source of funding for managing the public refuse removal service (the TEOM) was worth €5.2 billion

²⁸ Commitment 245: Increase the tax on landfilling – introduce a tax on incineration based on environmental gains and energy efficiency.

²⁹ The quantitative impact of recycling household waste was assessed on the basis of the definition of recycling rates contained in the European Waste Statistics Regulation

³⁰ In Autumn 2008, this rise was estimated by the Boston Consulting Group at over €250 million a year by 2015

resale of recycled materials could total around €70 million a year³¹. Local authorities will also get additional support through the increased rate charged for managing packaging, the development of the selective recovery systems recently set up (textiles, electrical and electronic appliance waste, newspapers and magazines, etc.) and the development of new sectors in the coming years

1.3.5.e - Water/biodiversity: managing water resources and developing the green and blue belt network

The investments resulting from the measure relative to eliminating leaks in the networks, generally compatible with the self-funding capacity of local authorities, will be funded by redeploying sums currently invested in new drinking water supply lines (around €1 billion/year). Reducing network losses will reduce the costs of water treatment and transport before distribution, hence reducing operating expenses charged to the service users, estimated to be worth 200 million euros a year (€1.2 billion over 5 years). Local authorities will also save 200 million euros currently spent on treating drinking water, thanks to the implementation of the sustainable farming objectives.

Regarding implementation of the biodiversity commitments, at the present time it is difficult to accurately assess their cost to the local authorities. There is very little baseline data available to refer to regarding the cost of developing the green and blue belt network. The only assessments currently available concern the cost of the studies required to develop the green belt scheme: these will cost around €600,000 for a regional council and €200,000 for a general "départmement" council.

1.3.6 - The impact on the farming sector

In the farming sector, the measures expected to have the most significant economic impact are the following:

³¹ The assessments were based on the average price of recovering materials in the previous three years (2006.2007.2008).

- reduction in the use of plant protection products, together with the development of professional training,
- development of organic farming products,
- development of an environmental certification procedure for farms,
- development of research in the field of sustainable farming,
- increased energy-generation autonomy for farms, through the development of renewable energy sources.

It is too soon to be able to estimate the economic impact in the sector. The themes of organic farming and reducing the use of plant protection products are inseparably linked to the objectives regarding water quality and the more complex objectives of enhanced biodiversity and also health. In the first and second Environment Round Table impact studies carried out by the MEEDDM, the costs of developing organic farming (€79 million/year), with a target of 6% of the useable agricultural area by 2012, are largely offset by the gains related to water quality, reducing the harmful effects on health, reducing the use of nitrogen and rehabilitating aquatic environments (€61 to €65 million/year).

For the agriculture sector, the impact on sales, due to the development of organic farming, is estimated to be neutral: the higher price for farm products is offset by reduced yield and therefore an overall drop in turnover. It should be mentioned that France is a net-importing country of organic farm produce.

Regarding the impact of reducing the use of plant protection products, analysis of TFI (treatment frequency index) reduction scenarios on large-scale farms carried out within the framework of the Ecophyto R&D programme (INRA), shows that for practically zero cost to the State (tax on the use of products and subsidies for improved efficiency techniques) the TFI will fall by 45%, with the producer maintaining a gross margin. A cost transfer may be operated within the sector: agro-suppliers' losses in terms of sales mean savings for farmers. With an annual cost of purchasing plant protection products of €1.7 billion a year paid by the users, a 10% reduction in their use implies savings of €170 million for the users. In practice, the savings made by farmers on their consumption of plant protection products should be redirected to other farming techniques related to greater diversity of production and redeployed to the agricultural machinery and creating new jobs. The agro-supplies sector is made up of companies that cover a range of different areas, making them likely to offset a

drop in sales in one area (of plant protection products) by developing growth in another area or areas (agronomic consulting services, agricultural machinery, diversity of productions, etc.).

The impact on foreign trade may prove positive, especially in light of the drop in imports of fertilizers and plant protection products. Consolidating French farm production geared to products that meet high environmental standards and developing a certification procedure with the same objectives are factors conducive to improving the market share of French enterprise.

As for jobs, the various aspects of the Environment Round Table related to agriculture will entail higher levels of qualification for operators, both at the level of farm work and in the upstream and downstream sectors.

Regarding the volume of jobs, these factors will play a varying role but are likely to result in an overall rise in the number of jobs in agricultural sectors:

- fewer jobs in the plant protection products sector,
- stable or higher number of jobs in research and development in areas related to agroecology, in developing new sectors fostered by the diversification of production, and in the agricultural machinery sector, etc.
- growth in training professions, from agricultural consulting to agro-supplies,
- increased demand for farm labour, in place of chemical inputs.
- development of activities related to renewable energy generation on farms;

At this stage, it has not yet been possible to assess these composite effects in terms of figures. However, the French Ministry of Food, Agriculture and Fisheries has estimated that a million people need to be trained. The cost of these training measures for everyone involved in the distribution, consulting and use of plant protection products is an estimated €200 million over the period 2008-2011.

More widespread and long-term effects may be expected: for instance, the reduction in the use of plant protection products is expected to impact on the environment and also on the health of professionals in the sector and consumers alike.

| Department of the Commissioner-General for Sustainable Development | | | | | | | | |
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2 - Fields of Action

2.1 - Fighting climate change

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2.1.1 - Building and Urban Planning

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2.1.1.a - Building Sector

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A/ Objectives

Buildings, which consume more than 40% of final energy and produce more than a quarter of national greenhouse gas emissions, offer the main opportunity for energy savings in the short term. A large-scale plan to overhaul energy and heating in buildings will reduce energy expenses over the long term, improve household buying power and help reduce carbon dioxide emissions. This improvement entails the development and application of new technologies in future construction and implementation of a programme to accelerate renovation of existing buildings. This renovation programme, beside its anticipated environmental benefits, may also lead to the creation of a significant number of jobs, which is important during a period of slowing economic growth.

France's "Environment Round Table" set very ambitious objectives for reducing energy consumption and greenhouse gas emissions for new and existing buildings:

- strengthen energy-efficiency regulations for new construction to achieve an average maximum consumption of 50 kWh/m²/year (for "low-consumption buildings") by 2012 and compliance with the "positive energy" concept by 2020;

- reduce energy consumption in existing buildings at least 38% by 2020. To achieve this, the "Grenelle 2" Act requires the service sector, private as well as public, to renovate its buildings. Incentives, including a combination of tax credits and zero percent interest rate loans, are the primary means of encouraging individuals to renovate;
- reduce energy consumption of government buildings by 40% and greenhouse gas emissions by 50% within eight years. To accomplish this, all public and government buildings will undergo an audit by the end of 2010 and renovation work will begin by 2012;
- renovate all public housing. The 800,000 social housing units that consume the most energy will be renovated by 2020.

B/ Texts

- The Program Law of 3 August 2009 for implementing the Environment Round Table sets down the objectives previously mentioned in Articles 3 through 6.
- The Prime Minister's circulars of 16 January 2009 relating to the State's real estate policy to ministers and prefects that set down the results of work conducted by the "Model State" group concerning implementation of the energy renovation plan for buildings belonging to the State and its operators. These building must undergo a technical audit by the end of 2010 and the work must begin by 2012, with the least efficient spaces dealt with by this date.
- Modification of the order of 26 December 2005 to increase the minimum quantity of wood in new construction is in progress. Early in October a prepared draft text was referred to the Council of State after discussions with professional groups.

C/ Achievements through to mid-2009

- Introduction of an ecological loan at zero per cent in early April 2009. By the end of July 2009, 15,000 cases were open, with an average loan between 15,000 to 18,000 euros;
- **Training construction professionals**: begun in early 2008, the training programme in energy saving for construction firms and craftsmen (FEEBAT) has already trained 12,000 craftsmen and entrepreneurs to recognise overall building energy performance and energy-efficient techniques;

- Renovation plan for government buildings:

- o implement new organisation for government real estate management;
- o structure decentralised services of the French Ministry for Ecology (MEEDDM) to respond to new responsibilities: establish regional steering teams for renovating government buildings;
- o 200 million euros for a recovery plan to renovate government buildings became available in early 2009: start of audit (50 million euros) and work (150 million euros) phases.
- Launch of approximately ten working groups to **prepare energy efficiency regulation RT2012.**

D/ Action from late 2009 through 2010

- Publication in summer 2010 of energy-efficiency regulation RT2012 for new construction,
- Passage by the Council of State of the draft decree on splitting the cost of energy renovation work between the landlord and the tenant,
- Continuation in 2009 and finalising by the end of 2010 of energy and accessibility audits for government buildings, followed by defining strategies for national heritage sites (loan arrangements for renovations, work specifications, etc.),
- Continuing and extending FEEBAT training to building professionals and engineering departments.

2.1.1.b - Urban Planning – Sustainable City Plan

A/ Objectives

The Environment Round Table favours urban planning that carefully manages financial and energy resources, is better coordinated with residential, commercial development and transportation policies and improves the quality of life for city residents. This assumes an

overhaul of urban planning to accommodate new objectives for sustainable development, simplifying the bureaucracy of urban planning, clarifying the relationship between urban planning documents and strengthening the intercommunal step, in addition to encouraging model efforts at sustainable regional development.

This general aim can be broken down into more specific objectives:

- fight the loss of agricultural and natural areas and urban sprawl;
- create a relationship between population density and availability of mass transit options;
- advance plans for developing ecological neighbourhoods and modifying urban planning so that urban laws favour efforts to improve building energy efficiency;
- prepare a plan to restore nature to the city with the goal of preserving biodiversity and adapting the city to climate change;
- harmonise policy and planning documents, especially those for metropolitan areas.

B/ Texts

The Program Law of 3 August 2009 on implementation of the Environment Round Table commitments sets down the objectives previously mentioned in Articles 7 through 9. It strengthens the urban planning code as a tool for sustainable regional development. It supplements the measures in urban planning documents by including environment and planning objectives (fight against urban sprawl and climate change, reducing greenhouse gas emissions, etc.) and provides for creating ecological neighbourhoods as well as large projects in energy, architectural and social innovation.

C/ Achievements through to mid-2009

The Environment Round Table is being implemented in two major urban planning efforts:

- assistance in preparing model urban planning documents (e.g., SCoTs, regional and local coherent development plans) by taking into account issues in sustainable development, especially on the scale of large regional projects: the "SCoT-Grenelle" initiative for accompanying 12 regional and local coherent development plan laboratories was launched on 18 March 2009. On 30 September 2009, a day-long seminar was held on how to control and measure the consumption of space in the SCoT regional and local coherent development plans [partners: French Mayors Association (AMF), Assembly of French Communities (ADCF), French Network of Urban Planning Public Agencies (FNAU), SCoT contractor club and the Business, Regions and Development Organisation (ETD)];
- **Sustainable City plan**, which has the role of enhancing model development operations that have already been initiated and encouraging local government and all city stakeholders to create truly sustainable cities.

The Sustainable City plan was launched on 22 October 2008 by the Minister of State with the support of other ministers: This process includes several requests for proposals and aims to examine the issues and practices found in sustainable development in an urban context at various levels.

oCall for proposals on the Ecological Neighbourhood project: it falls under the objective of creating and leading a national group to identify and spread good practices as well as enhance model sustainable development projects. 160 candidacies were registered in 2009, with at least one per region. The winners will be announced in autumn 2009;

oEcoCities approach: aims to identify and implement innovative urban development strategies as well as model practices in sustainable development in large urban areas. There were 19 candidates for its first competition. Most of the large metropolitan areas (Bordeaux, Marseille, Nantes, Rennes, Montpellier, Strasbourg, etc.) proposed a project. After selection of the communities, to be completed by autumn 2009, a one-year dialog phase between the State, communities and groups of experts will begin as part of an intensive effort on the projects proposed by the communities as well as the creation of shared content. It will conclude with a contract between the State and participating communities.

D/ Action from late 2009 through 2010

- Start up of working Ecological Neighbourhood club and launch of second competition;
- Another round of EcoCities dialog followed by a contract jointly signed by the State and communities whose projects were selected;
- Close monitoring of the 12 "Environment Round Table regional and local coherent development plans (SCoT)";
- Publication of plan to restore and enhance the role of nature in cities.

2.1.2 - Transportation

A/ Objectives

The Environment Round Table's transportation policy aims to respond to society's need for mobility while reducing global warming and dependence on hydrocarbons and still preserving biodiversity and a healthy environment.

As part of its transportation policy, the Environment Round Table has a goal of **reducing greenhouse gas emissions by 20%** in this sector **by 2020**. It also aims to reduce pollution and noise of transporting passengers and merchandise by encouraging the most environmentally-friendly means of transportation. More specifically:

- for freight, the goal is to increase by one quarter the share of non-road and non-air freight by 2012. To achieve this, priority will be given to investment in rail, waterways and

ports. A new infrastructure scheme will be implemented using the national transportation infrastructure plan which aims to define new operations to be carried out as well as to renovate the methods for maintaining, operating and modernising existing networks.

Motorways of the sea and rolling motorways will be developed to provide an alternative to the road traffic transiting through France. Funds to renovate the rail network will be increased by an additional 400 million euros per year. A body for regulating rail commerce will be created to ensure that the gradual opening of this sector to competition complies with European and French law, especially for non-discriminatory access to the national system, to encourage increased rail development. The competitiveness of major French ports will improve because of reforms that aim to improve their governance and encourage development with additional investment. The river network will be modernised and extended with the construction of the Seine-Nord-Europe Canal which will provide a wide gauge connection between northern European waterways and the Seine Basin. Finally, in order to take better into account the highway transportation costs for the community and to redirect production networks, an ecotax on heavy goods vehicles will be introduced in 2011 on the non-concessionary national highway system and on secondary routes that may undergo an increase in traffic.

- for passenger transportation, 2,000 km of high-speed lines will be introduced by 2020 and an additional 2,500 km will be studied for construction after this date. Nearly 1,500 km of bus lanes will be built over the next 15 years by local governments for a final total at the end of this period of 1,800 km of dedicated mass transit lanes (outside of Ile-de-France) on an initial base of 329 km.

B/ Texts

The Environment Round Table's commitments are set down primarily in the Program Law of 3 August 2009 on implementation of the Environment Round Table commitments, Articles 10 to 17. Articles 15, 16 and 17 change the law governing domestic transportation that set general principles for transportation policy.

The implementation of these commitments (in legal measures) is included in:

- the 2009 Budget Act, which introduces an eco-tax for heavy goods vehicles and provides for its implementation with a partnership agreement covering design, financing, construction and collection;
- the draft law pertaining to the organisation and regulation of rail commerce and including various measures for transportation aims primarily to create an authority that will ensure non-discriminatory access to the national rail network;
- finally, legislation has led to the application of regulatory measures that were already approved. In particular, this includes Order 2008-148 of 18 February 2008 that allows public corporations providing freight transportation service on the national rail network, including port authorities at STIF (Île-de-France Public Transport Executive) as well as public corporations providing passenger services on the national rail network to request rail slots directly beginning on 14 December 2008. The introduction of an ecological tax mentioned in Article 153 of the Budget Act requires the publication of approximately twenty regulatory texts that are currently being drafted.

C/ Achievements through to mid-2009

The Act provides for a number of transportation projects:

- *freight transportation:* measures supporting the fleet and intermodal transport were put in place by the State and received the green light from the EU in mid-2008. By order, many stakeholders, including the ports and regions, can reserve slots directly. Significant progress has been made both in rolling motorway projects (Franco-Italian declaration on the transalpine rolling motorway, increased service on the Bettembourg-Perpignan line and start of procedures for the Atlantic rolling motorway) and motorways of the sea (international agreement and financing for Franco-Spanish projects and Franco-Portuguese request for proposals). The request for proposals for the partnership agreement for the Seine-Nord-Europe Canal has also been made. Reforming ports has also begun in earnest and all of the new large ports have adopted a strategic plan. Finally, in May 2009 five private companies registered as candidates for providing a system for collecting the eco-tax on heavy goods vehicles.

On 16 September 2009, the government presented the national commitment to rail freight which aims to create conditions for revitalising the rail freight sector with the objective of achieving the modal shift that is part of the Environment Round Table commitments. This plan has eight development pillars: construction of a network of rolling motorways, doubling intermodal transport traffic, setting up local and port rail operators, development of high-speed rail freight, building a freight-oriented network with increased robustness, eliminating bottlenecks (especially in Nimes-Montpellier and Lyon) and improving services to ports and rail businesses. It represents an investment of seven thousand million euros.

- passenger transportation: a request for proposals for mass transportation was made in October 2008 and a State subsidy of 800 million euros was approved at the end of April to speed up more than 50 projects. High-speed train projects have undergone a historic acceleration that is seen in the signing of financing agreements and launch of devolution procedures for partnership agreements for the Nimes and Montpellier bypasses and the Brittany-Loire Valley high-speed line. The preparatory work on the national transportation infrastructure plan is underway with the goal of approval by the end of the year after Parliament and the environmental authority have issued their opinions. Finally, on 29 April 2009, the French President presented the projects for greater Paris which will facilitate examining transportation in the capital region.

D/ Action from late 2009 through 2010

Besides the anticipated examination of the law relating to rail regulation and the implementation of the new authority, the end of 2009 will be marked by progress on large infrastructure projects, including high-speed lines with the granting of the Tours-Bordeaux concession and the signing of contracts for building the second phase of the LGV Est. The contract for the future connection between the centre of Paris and the Roissy Charles de Gaulle Airport (CDG Express) will also be signed. Finally, the committee of concerned parties interested in questions about the opening of the regional passenger transportation market will submit its conclusions by summer 2010.

2.1.3 - Energy

A/ Objectives

In regard to energy efficiency, the Framework Act of 13 July 2005 setting the direction of energy policy introduced a goal of improving final energy intensity: achieve an annual 2% reduction in energy intensity beginning in 2015 and an annual 2.5% reduction beginning immediately and continuing through 2030.

The Draft Program Law of 3 August 2009 for implementing the Environment Round Table proposes to bring the share of renewable energy to at least 23% of total final energy consumption in 2020, double that of 2005. This target assumes increasing the annual production of renewable energy by 20 million tonnes of oil equivalent (TOE) 2020 by raising it to 37 million TOE. It anticipates a far-reaching transformation: doubling the production of renewable energy in 12 years, multiplying production by two for wood-energy, by six for geothermal, by twelve for urban heating networks and a major transformation for photovoltaics with production multiplied by 400.

B/ Texts

- Program Law of 13 July 2005 setting out guidelines relative to energy policy;
- 2009 Budget Act;
- Draft Program Law of 3 August 2009 for implementing the Environment Round Table, Articles 18 through 21;
- European directive 2003/87/EC establishing an exchange market for emissions permits within the European Union (SCEQE directive);

- European Parliament and Council Directive 2005/32/EC of 6 July 2005 establishes a framework for setting requirements for environmental design of energy-consuming products.

C/ Achievements through to mid-2009

Energy Saving Certificates. The scheme to create energy certificates was introduced by Framework Act 2005-781 of 13 July 2005, which creates a programme to set energy policy. This scheme aims to save energy in the residential and service sectors and relies on energy providers to encourage their clients to be more energy efficient. It requires sellers of electricity, gas, domestic heating oil, liquefied petroleum gas and heating and cooling networks to reduce energy consumption. The objectives set for the first reduction, which ended in June 2009, were achieved and even surpassed³².

Energy Consumption Guide. Equipment is classed from A to G according to energy performance and is already in use for household appliances and electric light bulbs. It is a very effective tool for guiding consumers in their choice and encourages manufacturers to build high-performance products³³.

Greenhouse gas emissions ceiling and trading scheme. European directive 2003/87/CE, which established a trading system for emissions permits within the European Union (SCEQE directive), introduced on 1 January 2005 a "cap and trade" scheme for greenhouse gas emissions from major industrial and energy activity in the European Union. Every year, each enterprise is required to submit a total quota equal to its verified emissions. If it does not have the quota, it can purchase them on the market.

Multi-year investment programme for electricity and heat production and indicative multi-year indicative plan for gas sector investment. The law provides for these programmes, which set objectives for distributing production capacity by source of primary

³² After adoption of the "Grenelle 2" Act, regulatory changes in the energy saving certificate scheme must be anticipated. Revision of the following texts: Order 2006-600 of 23 May 2006 relating the energy saving requirements within the framework of the energy saving certificate scheme, Order 2006-603 of 23 May 2006 relating to energy saving certificates, Order of 30 May 2006 relating to the methods for applying the energy saving certificate scheme, Order of 19 June 2006 setting the list for document file for a request for an energy saving certificate. Adoption of an Order applying article 27.II.4") of "Grenelle 2" Act.

³³ The directive is being rewritten with the form of the label the main point of contention. As soon as it is adopted, the products will be subject to direct application of the regulation and not to directives, which was previously the case. No text will be necessary.

energy for electricity and objectives by renewable energy product chain used for producing heat and verify the adequacy of gas infrastructures for anticipated demand³⁴.

CO₂ Capture and Storage (CCS). The Environment Round Table highlighted the need to explore technologies to capture and store CO₂ on the industrial level. At the end of 2008, ADEME launched a call for expressions of interest. Its conclusions are expected by the end of October for pilot CCS research projects in the framework of its demonstration fund. Article 28 of the draft "Grenelle 2" Law defines a regulatory framework for a pilot program for CO₂ storage. The "Grenelle 1" Act requires that all new coal-fired power plants can be equipped with a CCS device and that it be part of a complete system for CO₂ capture, transport and storage.

With the adoption of the energy-climate package, the role of the French Presidency of the European Union was key for implementing a directive regulating geological storage of CO₂ as well as for creating a fund of 300 million emission quotas (or 9 thousand million euros for a quota at 30 euros per tonne of CO₂) intended to help finance innovative industrial-size demonstration projects in CCS and renewable energy³⁵

Developing renewable energy sources. The European directive on renewable energy (2009-28-CS) was adopted in December 2008 during the French presidency. It sets binding development objectives for renewable energy until 2020. France's target for renewable energy making up 23% of total final energy consumption was confirmed in the Framework Act on implementing the Environment Round Table. France expects to produce an additional 20 million TOE in renewable energy per year by 2020³⁶.

Biomass invitation to tender. A third invitation to tender was made in January 2009 to build power plants totalling 250 MW of installed power, with special attention paid to geographic zones with priority for regional development.

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³⁴ The directive is being rewritten with the form of the label being the main point of disagreement. As soon as it is adopted, the products will be subject to direct application of the regulation and not to directives, which was previously the case. No text will be necessary.

³⁵ The measures of the "Grenelle 2" Act must be implemented by at least a Council of State order, subject to a modification of Article 28 by governmental amendment.

³⁶ See orders for multi-year investment programme in heat and electricity production given above, among others. For energy efficiency, for example, RT2012 currently under study will include measures encouraging renewable energy in buildings; the details (means requirements or results based on percentages or equipment) are still being studied. This energy efficiency regulation will likely be published for application on 31/12/2010, rather than 31/12/2012, the absolute deadline, to the extent that it applies two years in advance for service sector and public buildings.

Solar invitation to tender. An invitation to tender was made in April 2009 for building at least one solar power plant in each region of France by 2011 for a cumulative total power of 300 MW with special attention paid to environmental quality and the speed of project construction as well as to research and development in solar photovoltaics.

Demonstration funding. In 2008 ADEME created a 400 million euro fund to underwrite demonstration industrial research projects over four years. Requests for proposals took place for second generation biofuels, clean vehicles and carbon dioxide capture and storage. Requests for proposals in the field of renewable energy were made for marine energies and intelligent networks.

D/ Action from the end of 2009 through 2010

"Environment Round Table: successful energy transition - 50 measures to develop renewable energy with high environmental quality". Presented at the end of 2008, it includes 50 measures covering all kinds of energy: bioenergy, wind, geothermal, hydroelectric, solar, energy from the sea, etc. Implementation of this plan to encourage renewable energy has already lead to numerous achievements and will lead to further significant efforts in 2009 and 2010.

For example, a building permit can no longer refuse the installation of systems to produce renewable energy on buildings, except in the perimeters requiring protection. Exceeding rules relating to building density, coverage, envelope and height will be permitted within a limit of 30% for buildings having such equipment.

All local governments can henceforth benefit from special rates, previously reserved only for municipalities, for the purchase of energy produced from renewable sources. Rate conditions will be improved for solar, biomass and geothermal. A global reform of the scheme for

supporting biomethanisation is under consideration. Several measures for solar and wind energy are being considered to improve planning and administrative orders for projects³⁷.

Heat funding. The goal of the renewable Heat Fund is to finance projects in collective housing, service sector and industry above 5.5 million TOE or more than a quarter of the goal set by the Environment Round Table (additional 20 million TOE by 2020). The fields concerned are biomass, thermal solar, deep geothermal (on aquifer or cracked rock), "intermediate" geothermal (aquifers or subsoil) that require the use of heat pumps to raise the temperature level, free heat, such as the product of domestic waste incineration plants, and biogas injected into the natural gas system if technical feasibility is confirmed. The end of 2009 marks the fund's first year of operation, and included both the validation of projects that were proposed in the request for proposals for biomass heat in industry and agriculture launched at the end of 2008 and the cases on the regional level investigated by ADEME. A second request for proposals is planned for the end of the year.

Implementation of a directive pertaining to ecological design of energy-consuming products. This has resulted in the removal of incandescent bulbs from the market; limiting device standby mode to 1 W (all devices in standby mode must consume less than 1 W in 2010 and less than 0.5 W in 2012); limiting consumption of simple digital decoders; reduction in street and office lighting and improvement in charger performance. Other products will be subjected to regulation in the near future.

"Sustainable Development" Tax Credit. It subsidises the purchase of renewable energy equipment by individuals: solar water heater, heat pump, photovoltaic panels, etc. It has been extended to 2012. Powerful new incentives to support building energy efficiency, including ecological loan at zero percent interest rate available from banks, exemptions from property taxes, etc. will also promote the use of renewable energy³⁸.

³⁷ The photovoltaic tariff order is in preparation for probable publication by the end of 2009. For methanisation, two orders are being prepared to authorise two headings in the reference for facilities classified for environmental protection (ICPE 2781 for facilities producing biogas, for which DGPR has responsibility, signed by the State Minister and currently at Matignon; and 2910-C for biogas combustion, for which the DGEC/bureau for air quality has responsibility, with signature anticipated in early 2010); standard orders are anticipated for these two headings in the ICPE. No text is technically necessary for injection of biogas into gas systems as long as this injection is done in the framework of a contract between producer and transporter that sets the gas characteristics and technical conditions for injection. As an economic incentive, texts should be included to arbitrate between an obligation to buy and to use. This question is under review. Whether wind energy will be subject to ICPE is also under review with DGPR in charge of the text.

³⁸ The Decree of 13 November 2007 will probably be revised to update tax credit qualifying conditions: the tax legislation office is responsible for this text and the drafting of this order will be done in parallel with the review of the draft 2010 Budget Act, to the extent that the evaluation of credits that will be voted within this framework and the specifications that will be adopted in the order will be closely related.

Implementation of regional plans for climate, air and energy as well as regional plans for connecting to renewable energy network. In compliance with the measures of the law on national commitment to the environment ("Grenelle 2" Act), currently under consideration in Parliament, regional plans will be jointly prepared by the regions and the State, in coordination with departments and groups of communes, to define the quantitative and qualitative objectives for each geographic area for 2020. At the same time, the law provides for the preparation by electrical network operators of regional plans for connecting to the renewable energy network in order to anticipate the needs of the power transmission network for electricity from renewable energy and to share connection costs among producers³⁹.

Implementing the renewable energy directive. This will be reflected primarily in a reform of the system of origin guaranties that trace the renewable origin of the energy consumed by our fellow citizens.

Continuation of demonstration fund efforts. Plans are being drawn up for solar photovoltaics and thermodynamics, energy storage and positive energy buildings. Calls for expressions of interest for these fields will be launched early in 2010.

³⁹ In its current state, Article 25 of the "Grenelle 2" Act will require two orders for the network connection plan: Article 14 of the Act of 2000: an order to provide the conditions for validating plans for offshore wind turbines (on land the prefect of the region has jurisdiction); Article 23-1 of the Act of 2000: another order to specify the method for determination of the perimeter for sharing costs and infrastructures between producers of electricity from renewable energy that benefit from reserve power. The latter decree requires the active participation of RTE, the transmission grid operator, because of its highly technical nature. A Council of State decree (already written) is needed for the regional plan for climate, air and energy.

2.2 - Biodiversity, Ecosystems and Natural Environments

A/ Objectives

If the biodiversity crisis is less well-known than the climate crisis, the damage is not less serious nor more reversible. Living organisms, ecosystem function, species diversity and the interactions on which they rely are essential for sustainable development. The economic and cultural importance of biodiversity appears increasingly clear to everyone, with the same importance as preserving a minimum climate stability. Biological diversity and living natural resources produced by ecosystems contribute directly to more than 40% of the world economy. Nevertheless, the destruction of ecosystems, overexploitation of wild species, lack of knowledge of the consequences of pollution on life, attacks by invasive species transported by trade and climate change are ruining the health of ecosystems. Species and ecosystems are suffering from this cumulative pressure, as is the service that they provide in water quality, soil fertility, cleaning and air renewal, food and health. The goal of the Environment Round Table in the field of biodiversity and natural resources is to ensure significant advances in eliminating the major pressure affecting species, ecosystems and natural resources by mobilising all stakeholders in partnerships as well as to strengthen the effectiveness of conservation efforts, sustained management of ecosystems and technical innovations.

To this end, the Environment Round Table has adopted the following objectives:

- *Water*: first, to achieve or to preserve, by 2015, the sound ecological or the good ecological potential for all bodies of water, whether inland or offshore, by bringing purification stations up to standard, reducing the presence of dangerous priority substances in aquatic environments and strengthening monitoring, and second, and to implement protective boundaries for drinking water catchment areas and reduce water loss in drinking water distribution networks to guarantee a reliable supply of good quality water to supply the basic needs of citizens.

- *Biodiversity*: to stop the loss of wild and domestic biodiversity by creating green- and bluebelt networks to link the main regional conurbations by 2012, to strengthen the national biodiversity strategy, to create new protected areas, to implement conservation or restoration plans in five years to protect the 131 plant and animal species in imminent danger of extinction, to impose appropriate taxation measures, etc.
- Agriculture: to initiate and accelerate the transformation of agriculture to spread sustainable agriculture, to reconcile the demands of mass production and economic efficiency with those of robustness to climate change and ecological realism to have sufficient production while protecting the function of soil and living systems. This will result from reducing the use of plant protection products (pesticides) and the withdrawal of the 40 most dangerous substances in these products by 2010, development of organic agriculture to reach 6% of useful agricultural surface area in 2012 and 20% in 2020, the rapid expansion of environmental certification of farms, etc.
- *Genetically Modified Organisms*: to strengthen scientific research and evaluation, implement a triple economic, ethical and social assessment and improve transparency and public information. An independent administrative authority must be created to have independent scientific expertise and opinions that take into account all scientific, economic and social factors in a multidisciplinary, civil approach.
- Seas: to promote integrated management of the seas and coastline.

B/ Texts

- Draft Program Law of 3 August 2009 for implementing the Environment Round Table, Articles 23 through 35;
- **National biodiversity strategy (updated in 2009)** including its ten area action plans: tourism, natural heritage, agriculture, ground transportation infrastructure, urbanism, seas, forests, international, research, overseas⁴⁰; publication of 2008 annual report on 22 May on the occasion of World Biodiversity Day;

⁴⁰ The overseas action plan includes both a national plan and local action plans for each overseas département and municipality.

- 2018 Ecophyto Plan launched on 22 April 2009 and publication in the *Journal officiel* on 28 March 2008 of an opinion to withdraw the first of the most dangerous substances found in phytosanitary products.

Texts relating to GMOs:

- Act 2008-595 of 25 June 2008. It has three elements: expertise reform (Article 2 creates a higher council on biotechnology), establishment of a system of reformed responsibility and informing the public through the creation of a register that indicates the location of cultivated land:
- Order 2008-1273 of 5 December 2008 on the composition and operation of the Higher Council on Biotechnology (HCB);
- Order 2008-1282 of 8 December 2008 creating the national biological monitoring committee (CSBT);
- Order of 30 April 2009 nominating the members of the Higher Council for Biotechnology.

C/ Achievements through to mid-2009

Water:

- Signature of two loan agreements for 1.5 thousand million euros with the public financial institution *Caisse des Dépôts* on 20 February 2009 to assist communities in bringing purification stations into compliance with standards;
- Adoption by basin committees of additions to drafts of water development and management master plans defining, for each large drainage basin, objectives for water conditions for 2015, taking into account Environment Round Table commitments and responding to observations and opinions gathered during public meetings on draft plans;
- **Wetlands:** creation of a national group on 6 April 2009;
- **Identification of 500 drinking water catchment areas** on 30 June 2009 whose supply areas must be protected by 2012.

Biodiversity:

- National biodiversity strategy;
- Updating action plans before May 2009, including Environment Round Table commitments and creating a "tourism" action plan; publication of 2008 annual report on 22 May 2009 on the occasion of World Biodiversity Day;

- Pursued implementation of information system on nature and landscapes (creating of various monitoring committees, catalogue of natural inventory, information tools to manage data and make it available); distribution of the methodology for defining natural areas of ecological, animal and plant interest in the sea;
- **Rehabilitating nature in the city**: inaugural conference on 29 June 2009, followed by workshops in the second half leading to a plan early in 2010;
- Increased importance of **national action plans supporting endangered species**: 55 plans are being implemented or drafted in 2009 out of 131 anticipated;
- Launch of a **national strategy for prevention and fight against invasive exotic species** in mainland France and the French Overseas *Départements* and Territories, including implementation of a monitoring and alarm system, strengthen regulations, national plans and efforts to make the public aware.

Sea:

- Launch of the Oceans Round Table on 25 February 2009.

Agriculture:

- **Installation of the Higher Council for Biotechnology** (**HCB**) on 22 April 2009 by the minister of state and the secretary of state for ecology. It is headed by Catherine Bréchignac, President of the CNRS and composed of 33 members divided into a scientific committee and an ethical and social committee.

D/ Action from late 2009 through 2010

Water:

- **adoption of water development and management master plans** defining the objectives for water conditions for 2015 and drafting nine water agency programmes to facilitate implementation of these objectives.

Biodiversity:

- submission of final report of the working committee on green- and blue-belts by end of December 2009:
- **preparation of a national strategy for protected areas**, with a first phase by the end of 2009:
- preparation of plan to preserve wild pollinators by the end of 2009;
- strengthening the role of strategy for stopping biodiversity loss for implementation beginning in 2011:
- integration of issues coming out of various action plans (climate change, assessment of services provided by ecosystems, etc.);
- preparation, including overseas departments and regions, of coherent regional and local strategies while respecting regional government jurisdiction and in cooperation with all concerned stakeholders; for overseas departments (DOM), first meeting of the national committee in plenary session for the overseas action plan on national biodiversity strategy.
- **creation of the national biodiversity observatory** based on the information system on nature and landscapes;
- **2010 "International Biodiversity Year"** to increase public awareness and education. *Agriculture:*
- completion of a graduated reference for voluntary environmental certification for farms, up to high environmental value, by the end of 2010;
- publication, after the Higher Council on Biodiversity (HCB) has issued its opinion, of two decrees and an implementing decree for 2008-595 of 25 June 2008, pertaining to:
 - -use of genetically modified organisms (GMO) in a confined space;
 - -threshold qualification of "without GMOs";
 - -technical conditions for cultivating, harvesting, storing and transporting GMOs (coexistence measures).

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2.3 - Risks, Health, the Environment and Waste Prevention

A/ Objectives

Since the degradation of the environment can have health consequences, acting to reduce environmental damage contributes to improving public health. Implementing this policy is based on principles of precaution, substitution, prevention and the "paying polluter" concept. At the same time, restraint in the consumption of raw materials and the development of innovative techniques will be the basis for a new competitiveness for businesses on the cutting edge in these fields.

The five priorities:

- (1) strengthen knowledge, control and reduce use of toxic substances;
- (2) improve the quality of outside air as well as air inside buildings;
- (3) fight excessive noise;
- (4) anticipate emerging risks related to new technologies, especially nanomaterials and electromagnetic waves;
- (5) pursue a voluntary policy of waste prevention and recycling. In the framework provided by the European Commission directive 2009/98/EC, national policy is based on a waste processing hierarchy: prevention (=reduction), reuse, recycling, recovery of materials and energy and elimination (especially landfill). Quantitative objectives have been set for reducing the production of household waste (-7% per person over the next five years) and for increasing the recycling rate of household and related waste (35% in 2012 and 45% in 2015 versus 24% in 2004).

B/ Texts

- Draft Program Law of 3 August 2009 for implementing the Environment Round Table, Articles 36 through 47;

- Ordinance 2009-229 of 26 February 2009 applying Commission REACH regulation⁴¹ to chemical products;
- Budget Act of 2009 creating a general tax on polluting activities (TGAP) for incinerators, increasing the TGAP on landfill sites, creating new channels for waste collection and processing (extended producer responsibility channels): infectious medical waste; furniture;
- 2009 national action circular pertaining to inspection of facilities classified for environmental protection implements certain Environment Round Table priorities, whether technical or informational and organisational;
- interministerial circular DGPR/DGS/DGT/DGCCRF/DGDDI of 8 January 2009 relating to substance control and chemical products.

C/ Achievements through to mid-2009

(1) National Health and Environment Action Plan (PNSE)

Prepared beginning in February 2008, it was adopted by the Council of Ministers on <u>24 June</u> <u>2009</u>. It is based on two main efforts:

- implement measures that aim to reduce exposure that can cause harmful health effects.
- take into account the combination of environmental inequalities with those related to age, state of health, socio-economic situation and region.

The plan is broken down into 58 concrete measures, each of which has a leader, partners and monitoring indicators.

It consists of twelve leading measures, including a 30% reduction in concentrations of fine particles less than 2.5 microns in the air by 2015, a reduction of 30% of air and water

⁴¹ Regulation 1907/2006/EC of 18 December 2006 (REACH), which went into effect on 1 June 2007 and concerns the registration, evaluation and approval of chemical substances, as well as restrictions applicable to these substances, creates a European agency for chemical products and modifies Directive 1999/45/EC and abrogates Council Regulation 793/93/EEC and Commission Regulation 1488/94/EC as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/2/EC.

emissions of six toxic substances (mercury, arsenic, PAH, benzene, perchlorethylene and PCBs) by 2013, labelling of building products and products that emit substances into the air indoors, monitoring air quality in 300 day care centres and schools, monitoring of schools built on polluted soil, protection of 500 priority water catchment basins, battle against unfit housing and management of environmental problem sites.

(2) Waste Management Plan

In combination with all partners (the State, communities, economic stakeholders, recycling and processing professionals, environmental associations and consumers) in multiple working groups, it specifies the actions to be taken between 2009 and 2012 to implement the decisions of the Environment Round Table. It was finalised and formalised in July 2009 and was presented on 9 September 2009 by Chantal Jouanno when she set up the new National Waste Council (CND), which is responsible for monitoring its implementation.

(3) Pollution Prevention

In accordance with the Environment Round Table commitments, emphasis will be placed on strengthening inspections, with the adoption in June 2008 of the 2008-2012 strategic programme for inspecting facilities classified for environmental protection (ICPE). This programme increases the number of inspection employees to the equivalent of 200 full-time employees. The 2009 national action circular regarding inspection of facilities classified for environmental protection implements certain Environment Round Table priorities, whether technical or informational and organisational

Inspections have been increased for chemical products, both for facilities classified for environmental protection (ICPE), and in the framework of an interministerial effort (circular defining the joint action priorities of General Directorate for Risk Prevention (DGPR), General Directorate for Competition Policy, Consumer Affairs and Fraud Control (DGCCRF), General Directorate for Health (DGS), General Directorate for Labour (DGT) and the General Directorate for Customs and Indirect Taxes (DGDDI).

Health and Environment Action

- public debate on the use of nanoparticles (before the end of 2009);
- working committee produced by the radiofrequency, health and environment round table responsible for monitoring exposure modelling and experimentation, especially for base stations. Begun in July 2009, this committee will launch a call for candidates among communes to participate in experiments. The first results should be publicly available in April 2010;
- campaign to monitor air quality in day care centres and schools (2009 2011);
- campaign to identify and manage schools located on possible pollution sites (2010-2011);
- inventory of polluted sites by the end of 2010;
- noise: implementation of a soundproofing plan funded with 120 million euros for 2009-2011 and entrusted to ADEME to eliminate problem sites.

Waste

- introduction of incentive to encourage reduction in the quantity of waste produced (TEOM-REOM);
- implementation of new extended producer responsibility (EPR) channels, improvement of existing channel operation (2009 and 2010);
- recovery of organic waste (2009 and 2010);
- integration of building and public works sector in waste recycling policy (2010);
- extensive communication campaign to reduce waste (late 2009).

2.4 - Research

A/ Objectives

Research plays a central role in the analysis of environmental processes and is the basis for technological innovations that are indispensable for preserving the environment. Commitment

to sustainable development assumes, among other things, a systematic analysis of acceptable technological risks to sustain economic development and improve living conditions, and energetic action to prevent and adapt to the natural risks resulting from widespread planet changes. The work performed to specify research priorities from the Environment Round Table conclusions have structured objectives in four points:

- analyse and understand interactions between human activities and the environment;
- find innovative solutions to encourage ecological development with two main challenges, the fight against global warming and preserving biodiversity;
- adapt to global changes, especial climate change;
- strengthen the relationship between science and society.

It also made two commitments to research:

- raising an additional thousand million euros over four years to achieve these objectives,
- raising the research budget for new energy technology to match that of nuclear energy research.

B/ Texts

Draft Program Law of 3 August 2009 for implementing the Environment Round Table, Article 22

C/ Achievements through to mid-2009

A fund managed by ADEME to support research in new energy technologies was established in mid-2008 with a budget of 325 million euros. Four requests for proposals have already been launched: one on second generation biofuels, another on CO_2 capture and storage and two on road vehicles with low greenhouse gas emissions. The projects selected for the first two are currently in the notification process at the European Commission. For "clean vehicles", 11 projects are being considered with overall assistance totalling 57 million euros.

The French National Research Agency (ANR) has taken into account the priorities of the Environment Round Table in preparing its 2009 programming with three new efforts: enlarging the biodiversity ERA-Net to a larger programme entitled "Sixth Extinction", a programme on "Global Change" to increase French research in this very international area, and a programme on energy efficiency in industrial systems. It is also reorienting existing programmes, as with green agriculture in the Systema programme.

A request for research proposals on ecological technologies was made by the General Directorate for Competitiveness, Industry and Services (DGCIS) of the Ministry of the Economy, Industry and Employment (MEIE). The projects selected were announced in late July 2009.

Research institutions were asked to revise their research objectives in light of these priorities, and to take them into account in preparing their upcoming multi-year objective and performance contracts. The first contracts to be renewed were those of ADEME, the French Institute on Research in Earth Sciences (BRGM), the Research Institute for Agricultural and Environmental Engineering (CEMAGREF), the National Centre for Scientific Research (CNRS) and the French Research Institute for the Exploitation of the Sea (IFREMER).

Finally, through the 2009 Budget Act, specific budget supplements totalling 10.5 million euros were given to certain institutions for specific research efforts:

- creation of a national toxicology and ecotoxicology centre at the National Institute for Industrial Environments and Risks (INERIS);
- validation of innovations for positive energy building at the Scientific and Technical Centre for Building (CSTB);
- integration of innovative building technologies at CSTB and the French National Solar Energy Institute (INES);
- development of an integrated software program for building modelling at CSTB and the French Atomic Energy Commission (CEA);
- innovative technology for traffic management at the French National Institute for Transport and Safety Research (INRETS).

ADEME's next requests for proposals in the framework of research funding will concern integrating renewable energy in energy networks and intelligent networks, as well as energy from the sea.

In 2010, the Directorate of Research and Innovation (DRI) of the Ministry of Ecology, Energy, Sustainable Development & the Seas (MEEDDM) will augment or implement new incentive programmes, notably in sustainable management of soil, adapting to climate change, environmental impact of products using biotechnology, as well as the participation of non-governmental organisations in research programmes.

New multi-year contracts for post Environment Round Table objectives will be finalised for research institutions: CEA, CSTB, Research Institute for Development (IRD), French National Institute for Agricultural Research (INRA), French National Institute for Transport and Safety Research (INRETS) and the Central Civil Engineering Laboratory (LCPC).

In addition, the concerns produced by the Environment Round Table, which have been integrated into the national strategy for research and innovation (SNRI), are part of the plan for French positions concerning the end of the seventh research and development framework programme (PCRD) of the European Union and "joint programming" proposals.

2.5 - Consumption and Governance

2.5.1 - Consumption

A/ Objectives

The Environment Round Table highlights the importance of influencing purchasing choices and consumption to reduce the effect on the environment, whether it be households, businesses or public authorities. The goal is to redirect consumption so that it that better associates respect for the environment, social progress and economic performance. Sustainable consumption is also key for current and future business competitiveness so that

they can satisfy and increase the expectations of individual consumers and business purchasers.

B/ Texts

In addition to texts specific to buildings (ecological loan, energy performance assessment, tax credit, etc.):

- Draft Program Law 2009-967 of 3 August 2009 for implementing the Environment Round Table. In Article 54, it states the right of consumers to accurate, objective and complete environmental information covering all aspects of the product and its packaging and to be offered environmentally-friendly products at an attractive price;
- 2007 Remedial Finance Act creating a bonus-malus for automobiles;
- Prime Minister's Circular of 3 December 2008 relating to the State serving a model for sustainable development in operating its services and its public institutions;
- Instructions signed by four ministers on 4 March 2009 regarding the recovery plan model State section;
- Circular of 2 May 2008 on the share of organic agricultural products used in public cafeterias.

C/ Achievements through to mid-2009

The achievements have both improved supply and developed demand, especially in regard to visibility, credibility and accessibility of the most environmentally-friendly products. They have affected many sectors, including the adoption of an Act on biotechnology and GMOs, the implementation of a bonus-malus on vehicles and instructions given to government purchasers to make acquisitions more environmentally friendly. Numerous other measures, such as the development of the market for organic produce (with an objective of 15% of orders by 2010 in public cafeterias) or draft regulations for lowering electromagnetic emissions of mobile phones, are leading to advances in consumption.

It is appropriate to highlight that beyond legislative and regulatory texts, the dynamism of the Environment Round Table has led to the signing of a dozen agreements on commitments by business groups within the context of the Environment Round Table. The following can be cited:

- the reform of the former Office of Advertising Verification (BVP), which has become the French Advertising Self-Regulatory Organization (ARPP), has led to a greater involvement of stakeholders and the implementation of a strict control of ecological arguments used in advertising;
- · improvement of product offering through several commitment agreements with key business and industry leaders reduction of packaging waste, increase in offering of products with ecolabels or produced by organic farming, speeding up the withdrawal of incandescent bulbs from the market, etc.

The following initial efforts were presented and advanced on the European level during the French Presidency of the European Union (late 2008): increasing consumer awareness and education, implementing economic and fiscal incentives, making available information that takes into account product life-cycle, etc.

D/ Action from late 2009 through 2010

Labelling CO₂ **content and other environmental impact information on mainstream products** is a signature measure of the Environment Round Table for sustainable consumption: making environmental information available to consumers so that they can make their own fully-informed choice. Concretely, carbon content as well as other possible indicators of environmental impact specific to each product category will be stated on all products. The structure set up in mid-2008 (ADEME/AFNOR platform to share costs, data and calculation methodologies) should produce initial results, while at the same time voluntary business initiatives should increase as the act comes into effect (January 2011). For business purchases, specific support (specifications, training, etc.) must be implemented

by ADEME to integrate environmental considerations more systematically in business to business purchases.

The model State will be furthered by the implementation in the 2010 Budget Act of a **fund corresponding to a "bonus-malus" scheme between departments** (the most ecologically responsible departments will benefit from an additional amount partially taken from the budgets of less ecologically responsible departments), which should speed up adoption of 2008 recommendations for **model purchasing**.

At the same time, public information campaigns to encourage more ecologically-friendly purchases will increase in 2010 as new forms of bonus-malus are implemented.

2.5.2 - Governance

A/ Objectives

The Environment Round Table has highlighted the importance of implementing new forms of governance favouring the mobilisation of key players in preparing policies and projects as seen in the following examples:

- representative **environmental associations** will participate in national, regional and local advisory boards with the authority to treat environmental policy directly or indirectly;
- **labour organisations** representing employees and businesses will participate in commissions such as the National Commission for Public Debate (CNDP) where they have not been included;
- the **public** can mobilise more easily on environmental issues due to an increased effort to make public data available and to strengthen exchange before projects have been submitted for public examination;
- **local communities** will examine a sustainable development report before voting on their budget while being encouraged to implement Agenda 21 programmes;
- **businesses** will gradually be encouraged to provide social and environmental data in the same manner as they provide financial data while works councils and company committees for health, safety and work conditions (CHSCT) may express an opinion on the environmental or public heath effects of their company's activities.

The Environment Round Table has also stressed the importance of education and training in sustainable development at all levels (initial training, advanced study, life-long professional training, providing information to the general public and making it more aware) for understanding the issues and to speed up the spread of knowledge, abilities and skills required to adapt to changes in the world and society.

B/ Texts

- Constitutional Act 2008-724 of 23 July 2008 modernising the institutions of the Fifth Republic modifies in particular Title XI of the Constitution relating to the Economic, Social and Environmental Council (CESE);

- Draft Program Law 2009-967 of 3 August 2009 for implementing the Environment Round Table, (Title V, Articles 49 to 55);
- Order 2009-496 of 30 April 2009 relating to the State's administrative jurisdiction in environmental matters is provided in Articles L. 122-1 and L. 122-7 of the Environment Code;
- Circular of 23 March 2009 relating to regionalisation for implementing the Environment Round Table.

C/ Achievements through to mid-2009

- Constitutional revision for inclusion of the environment in the Economic, Social and Environmental Council (CESE);

- Consultation with the stakeholders and public on the application of the Act on new economic regulations (Art. 116) and submission to Parliament of the corresponding public report in application of Article 53 of the "Grenelle 1" Act;
- Creation of an internet gateway for public environmental information⁴² which went live on 18 July 2009. A joint effort by the Ministry (Commissioner-General for Sustainable Development, CGDD), BRGM, Ademe, AFSSET and INERIS, its goal is to bring together all the government's environmental information available on existing sites and gateways in one

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place for the internet user. The work is being carried out by a strategic steering committee that met on 20 May 2009: it is composed of five stakeholders in the Environment Round Table and headed by the Commissioner-General for Sustainable Development. On this occasion, the associations of local elected officials confirmed their interest and desire to participate actively in the process;

- Inclusion of sustainable development issues in the required teaching curriculum for primary and secondary levels and extending sustainable development to educational institutions:
- Inclusion of required modules on environmental impact and sustainable development issues in certification requirements for agricultural studies programs.

- Title VI "Governance" of the draft law on national commitment to the environment, including:
 - · Chapters II and III on reforms from impact studies and public surveys: impact studies may be required on the basis of environmental sensibility criteria and will no longer be based exclusively on automatic thresholds while the types of public hearings will be greatly reduced from 180 to 2;
 - · Chapter IV concerning measures for information and coordination: broadening the possibilities for referral to the National Commission for Public Debate (CNDP) and modification of its composition to include representatives of trade unions and representatives of economic players; development of public participation and "governance by five" prior to public hearings; framework for representative criteria for environmental stakeholders; change in the selection of regional economic and social councils (CESR) to encourage the participation of environmental stakeholders in these bodies.
- Draft constitutional bylaw relating to the economic, social and environmental council (CESE), with the intention to redefine the makeup of the council, presented to the Council of Ministers on 25 August 2009;

- Designation of the representative associations on the basis of criteria previously defined using working committee report no. 24 presided by deputy Bertrand Pancher. These players are included in economic, social and environmental councils (CESE), regional economic and social councils (CESR), departmental councils on the environment and health and technology risks (CODERST), etc.
- Order perpetuating the Environment Round Table Monitoring Committee as the "National Committee for Sustained Development and Environment Round Table Monitoring";
- Order setting the content of the sustainable development report required of businesses and including environmental and social information in particular;
- Preparation of a Green plan for institutions of higher learning in compliance with Article 55 of the "Grenelle 1" Act;
- Organisation of national congress on training about the environment and sustainable development in Caen.

2.6 - Specific Measures for French Overseas Departments, Regions and Municipalities

A/ Objectives

The overseas territories make a significant contribution to France's privileged position in the international arena in regard to environmental issues. This wealth of land and sea resources enables France to participate in nearly all international bodies on environmental conservation and to let its voice be heard. However, this wealth is fragile because several overseas territories are exposed to significant man-made hazards related to high population density and the ensuing competition for space.

The objectives that apply to France are also generally valid for the overseas territories, while others are specific to them. Eight strategic domains have been adopted for the overseas territories with the following objectives:

- Energy: develop model programmes for Guadeloupe, French Guiana, Martinique and Réunion, specific to each one, with the ultimate goal of energy autonomy by 2030; achieve a goal of 30% renewable energy in final energy consumption in Mayotte by 2020, and at least 50% in the other territories; and adopt energy efficiency regulations adapted to local conditions;
- Transportation: undertake a study for a regional road network programme using dedicated mass transit lanes with the goals of opening up regions, preservation of natural spaces and sustainable development;
- Waste: achieve model integrated management combining prevention, recycling and recovery by 2020;
- Biodiversity and natural resources: implement measures for recognising, integrated managing and protecting the habitats of wild marine and land species;
- Hazards and health:

o water: cleaning up water bodies by 2015, assuring supply of drinking water and treating urban wastewater;

o natural hazards: implementing without fail an earthquake plan for the French West Indies and defining and implementing a prevention policy for natural hazards, especially those caused by climate change, in all overseas territories by 2015;

- o technological hazards: immediate implementation of a programme to remedy soil pollution from dangerous substances.
- Mining operations: in cooperation with local governments in French Guiana, prepare a departmental mining plan (SDOM) for adoption in 2010 that guarantees the development of sustainable mining, respects the environment and structures the economy.

B/ Texts

- Draft Program Law 2009-967 of 3 August 2009 for implementing the Environment Round Table, (Title VI relating to Overseas Territories, Articles 56 and 57);
- Energy Efficiency Regulations for new housing units in overseas departments (DOM):
 - o Order 2009-424 of 17 April 2009 dealing with specific measures for energy-efficiency, acoustical and ventilation characteristics of housing units in the departments of Guadeloupe, Martinique, French Guiana and Réunion;
 - o Order of 17 April 2009 relating to acoustical characteristics of new housing units in the departments of Guadeloupe, Martinique, French Guiana and Réunion;
 - o Order of 17 April 2009 defining energy efficiency characteristics of new housing units in the departments of Guadeloupe, Martinique, French Guiana and Réunion:
 - o Order of 17 April 2009 relating to ventilation of new housing units in the departments of Guadeloupe, Martinique, French Guiana and Réunion.
- 2008 Budget Amendment Act: **Imposition of a special tax in Guiana on quantities of gold ore**; the proceeds of this tax will go to Guiana and its ecological conservation;

- Act 2009-594 of 27 May 2009 for the economic development of overseas departments and regions (Articles 59 and 60):
 - ·illegal gold washing: crimes will be punished more severely. investigators will have recourse to investigation techniques provided in the code of criminal procedure and intended to fight organised crime;
 - ·implementation of departmental mining plan (SDOM).
- **National biodiversity strategy (updated in 2009)**: one of ten sector action plans is dedicated to overseas departments and regions. There are also local action plans for each overseas local government;
- National Health and Environment Action Plan (PNSE) 2: Action 35 of the PNSE provides for the cleanup of polluted areas, especially overseas, and concerns management of soil and plant contamination in the French West Indies in the framework of the kepone (chlordecone) plan, as well as strengthening prevention of hazards related to mercury in French Guiana by relying on health agency expertise.

C/ Achievements through to mid-2009

- Signing in Réunion of the first agreement applying the Environment Round Table in the French Overseas Territories. Official launch of the Grenelle Environment in Réunion for Innovation, or "GERRI", programme on 8 July 2008. Signing of two agreements during its official launch on 10 July 2008:
 - -agreement between the State and Réunion regional council regarding implementation of a project to recover thermal energy from the sea;
 - -agreement between the State and Réunion regional council regarding implementation of the CETO project.
- **Mining in French Guiana**: submission of report by prefect Yves Mansillon on the departmental mining plan (SDOM) on 16 June 2009:
- Publication in April 2009 of energy efficiency regulations for new housing units in overseas departments;
- Progress in implementing the **French West Indies Earthquake Plan**: the diagnosis phases are well underway and will lead to speeding up programmes to reinforce existing buildings, which is a high priority. Due to the augmentation in available prevention funds for

major natural hazards, the Ministry (MEEDDM) was able to increase its support for this plan from approximately 10 million euros per year to at least 35-45 million euros per year. The plan also benefited from the recovery plan (allocation of 23 million euros in the first phase). The first phase of the plan (2007-2013) is estimated to cost 547 million euros⁴³, of which 106 million euros will be paid by local governments (regions, 60 million euros; departments, 25 million euros and communes, 21 million euros). From the State's share of 332 million euros, 160 million euros are subsidies to regional governments.

- Procedures for adoption of the departmental mining plan (SDOM) in French Guiana (environmental assessment, local and national hearings, preliminary order of the Council of State);
- Completion by 2010 of the overseas biodiversity inventory, as well as a summary of existing knowledge in order to identify and locate priorities;
- Public hearings began in Mayotte in early October 2009 for a natural marine park for the exclusive economic zone (ZEE) with the goal of preserving local fishing;
- For the French West Indies earthquake plan, on the basis of a site inventory and regional analysis, new policies for natural hazard prevention may be defined in 2010. For this new policy, it was decided to ask prefects to proceed to an initial phase of site inventory of issues and policies, with the direction emanating from the regional level while the Ministry will ensure coherence and putting all resources (not only financial) into perspective.

⁴³ This first phase does not include all earthquake plan projects, including those of regional governments. An inventory is currently being performed that will provide an exhaustive list of investments that have been completed or planned. The environmental benefit over 50 years of the earthquake plan commitment is between 600 and 800 million euros. The investment can be considered cost effective even if the value of a human life is sensitive data in such calculations.

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3 - Conclusion: Towards Sustainable Growth

Two years after the adoption of the Environment Round Table commitments, it is clear that significant work has been done, well beyond the extensive legislative work that has been the focus of public opinion. On the working level, however, it is taxation in the larger sense that has been at the fore with emblematic measures such as the ecological bonus-malus for vehicles and the zero per cent loan for private energy-efficiency renovations.

The implementation of all these commitments will lead to sustainable modes of production and consumption that will be at the heart of a **new growth model**, on condition that all of the following are achieved:

- change mentalities: the very profound changes ahead of us are first moral and cultural, then technological. The media have a significant role to play in this evolution;
- change our way of measuring wealth: this is a necessary condition for changing mentalities. For years, statistics have presented ever-increasing economic growth as the unique objective of our societies. Today we realise that it may destroy more than it creates. As the Stiglitz report states, "One of the reasons that most people may perceive themselves as being worse-off even though average GDP is increasing is because they are indeed worse-off";
- implement vigorous and coordinated public policies, that include supply (investment in research, industrial policies, new infrastructure development) as well as demand to support new green channels for creating new businesses and jobs;
- invest in production capacity: this is the job of the industrialists, but public institutions will participate in these projects;
- manage professional transitions: many employees will see their jobs change and others will have careers that do not exist today. For these workers, this will require a major effort to

adapt as well as initial and ongoing training. The needs are being defined in the framework of the mobilisation plan for green jobs, launched following the Council of Ministers' memo on 9 September 2009;

- guarantee social cohesion, which is the purpose of the recently announced Ecological Solidarity Pact. The goal is to make sustainable development a value shared by all by making it socially accepted and accessible.

Action taken in 2010 and beyond will demonstrate that is not necessary to choose between growth and protecting the environment, or between unemployment and the environment. The objective is to move towards green, sustainable growth, i.e., growth that relies on new, simpler and more just modes of consumption and production.

