

την αλλαγή του κλίματος
Klimawandel
Climate change
Changement climatique
podnebné spremembe
κλιματική αλλαγή
klimatförändringar
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změna klimatu
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zmiany klimatyczne
alterações climáticas
ΗΜΕΡΗΣΙΟΤΗΤΑ ΗΣ ΚΛΙΜΑΤΑ
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Tackling the Causes and Consequences of Climate Change

Guide to European policies and financial instruments



Preamble

Project holders usually need just a help taking the first step to successfully carry out a European project and discover all the related benefits (in terms of partnerships, methods or results).

This is why this leaflet has been written; it is destined for all actors involved in the fight against climate change – its causes as well as its consequences. Its goal is to be practical, by offering a concise presentation of the main policies carried out by the European Union in the field of climate change and the different financial instruments that support them.

For those who would like more details about the procedures for obtaining a grant from the financial instruments presented, there is a list of useful websites presented on the last page.

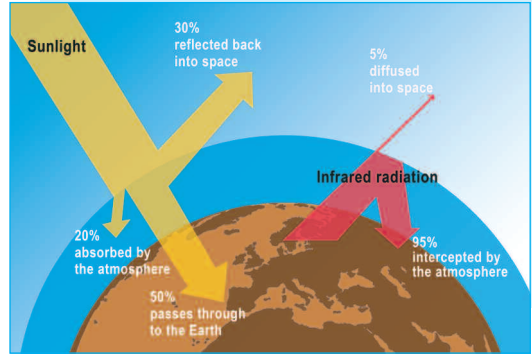
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International issues

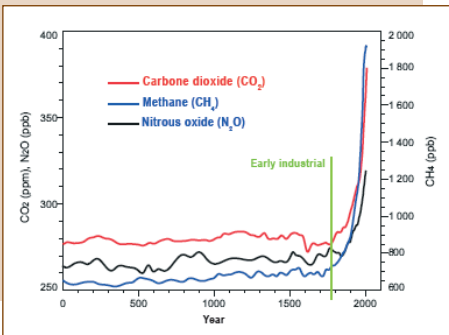
The Earth receives its energy from the sun: one part of this energy is directly reflected back into space by the atmosphere, and the other is absorbed and then partly beamed down in the form of infrared by our planet. The infrared radiation emitted by the Earth is in part intercepted by "greenhouse gases" – GHGs (these gases are carbon dioxide CO_2 , methane CH_4 , nitrous oxide N_2O , fluoride gases, water vapour H_2O , ozone O_3) present in the Earth's atmosphere, while the rest is diffused into space. The interception by the atmosphere of a part of the infrared radiation is what is known as the Greenhouse Effect.

The Greenhouse Effect is a natural phenomenon that maintains an average temperature on Earth of around $+15^\circ\text{C}$ instead of -19°C , allowing for the existence of life.



The increase in the quantity of GHGs in the atmosphere (mainly due to human activities - anthropogenic - since the beginning of the industrial age) in turn increases the fraction of radiation retained and the surface temperature of the Earth. This is the phenomenon that brings about a change in the climate whose effects and consequences (already witnessed or yet to come) can bring about imbalances that must be fought.

A **global increase of $.74^\circ\text{C}$** over the last 100 years has been observed, and experts count on an increase of 1.1°C to 6.4°C by the end of the 21st century.



Atmospheric concentrations of GHGs since the year 0

In order to limit the magnitude of these phenomena, two complementary approaches must be carried out: **adaptation** (adjustment of natural or human systems in order to limit the damages or to take advantage of the possibilities that come with climate change) and **mitigation** (reduction at the source of GHGs or increase in the storage of these gases in "carbon sinks").

Aware of the problems that climate change could pose at a global scale, the **World Meteorological Organisation (WMO)** and the **United Nations Environment Programme (UNEP)** created the **Intergovernmental Panel on Climate Change (IPCC)** in 1988.

The IPCC's 4th report, published in 2007, confirms that humans are responsible for the increase in the Earth's temperature, which in turn is behind the increase in frequency of certain types of extreme events: worsened climatic phenomena, disruptions in ecosystems causing irreversible damage to biodiversity, crises related to food resources, health risks and human displacements are foreseen.

The **United Nations Framework Convention on Climate Change (UNFCCC)** was the first international treaty on climate change. The UNFCCC was adopted at the Earth Summit in Rio de Janeiro in 1992 and entered into force in 1994 following its ratification by 188 countries as well as the European Union. It recognises the role played by humans in climate change and calls upon industrialised countries to fight this phenomenon.

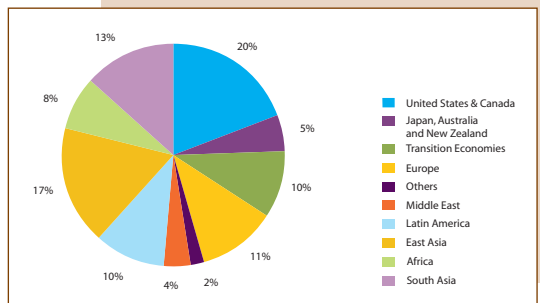
The **Kyoto Protocol** (adopted in 1997 and entered into force in 2005 after ratification by at least 55 countries representing 55% of CO₂ emissions) constitutes an essential step in the implementation of the Convention. In the framework of this Protocol, industrialised countries agreed to reduce their greenhouse gas emissions by about 5% in 2008-2012 compared to 1990 levels. To achieve these goals, these countries must implement, in priority, national policies and measures. In order to keep the cost of such measures as low as possible so as not to inhibit progress and economic growth, this Protocol foresees the creation of three **"flexible mechanisms":**

- The international emissions trading scheme, which is based on the allocation of "assigned amount units" (AAUs)
- The Clean Development Mechanism (CDM)
- Joint Implementation (JI).

Every year, the countries that have ratified the UNFCCC hold a **Conference of the Parties (COP)**. The 13th conference (COP13) was held in Bali in 2007 and resulted in a "roadmap" of the negotiations necessary to arrive at a new international agreement on fighting climate change for the years "after-Kyoto." The next conference (COP14) will be held in Poznan in December 2008 and will be the last important meeting before the final negotiation of the Post 2012 Action Plan, which will be held in Copenhagen during the COP15 in 2009.

Several hundreds of billions of dollars in investments a year from now until 2030 will be necessary to attempt to keep the increase in the Earth's temperature to within 2°C above pre-industrial levels. This goal may appear unrealistic to some, but such an investment would only represent about 1% of the world's GDP and only 1% of annual world investments. Since the groundbreaking **Stern Report** was published in 2006, several studies have been published showing that the economic damage caused by climate change would be 5 to 20 times more than the cost of the actions required to effectively fight the greenhouse effect. The goal is to reorient economic actors towards low-carbon development, through appropriate incentives. This reorientation is at the heart of the negotiations that should result in a new international agreement in Copenhagen in late 2009.

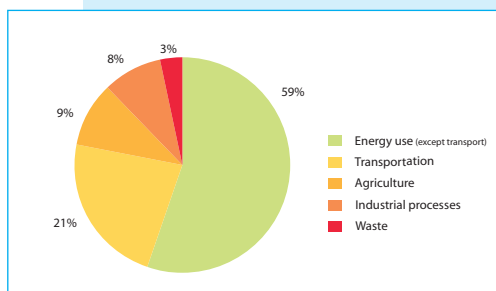
World distribution GHG emissions per capita (2004)



The position of the European Union The Climate-Energy Package

The European Union signed and ratified the Kyoto Protocol in 2002. During the European Council in Goteborg (June 2001), Heads of states and governments indicated that fighting climate change constituted one of the major priorities of the European Union's sustainable development strategy. Two "European Climate Change Programmes" (ECCPs) were launched successively in 2000 and 2005.

The contribution of different activity sectors to climate change in the EU-27 in 2005



In the spring of 2007, just after the beginning of the international negotiations concerning the post Kyoto agreement, the European Council (EU-27) made a unilateral commitment to reducing GHG emissions by 20% (or up to 30% in the case of an international agreement) compared to 1990 levels. The Heads of state committed themselves to transforming Europe into a highly energy efficient and low-carbon economy. In addition, they recognized that Europe had a particular responsibility towards developing countries; this responsibility should thus translate into support for their efforts in fighting and adapting to climate change.

The "Climate-Energy Package" (Communication "20-20 by 2020: Europe's Climate Change Opportunity") proposed by the Commission in January 2008 (and still under negotiation) is based on the following priorities (established for the year 2020):

- A 20% reduction of GHG emissions in the atmosphere: reduction at the source as well as carbon capture and storage (CCS)
- A 20% share of renewable energy sources in EU energy consumption
- A 20% improvement in energy efficiency and integration of 10% of renewable energy fuels (discussions continue on the application of this point)
- Adaptation to climate change, for which an action programme will be presented at the end of 2008
- A project for regulation concerning carbon capture and storage activities (currently in the works).

The EU will include these priorities in an international framework reflecting its solidarity, disseminating its know-how and resulting in an international agreement for the creation of global GHG emissions reduction measures.

The tools created for the implementation of this policy will combine diverse approaches:

- **Political approach** including the EU's external and international policies
- **Scientific approach:** education tools, research and development activities, pilot projects
- **Technical and technological approach:** action plans for technologies, support for technological exchanges
- **Regulatory approach:** establishment of emissions limits (automobiles, buildings, industries)
- **Economic approach:** market-based instruments, GHG emissions allowance trading schemes, compensation systems, taxation systems, green procurement
- **Social approach:** information and awareness raising among the greater public and stakeholders
- **Financial approach:** financial support instruments for innovation; venture capital.

This combination of approaches and actions also relies on the integration of climate change considerations into all EU policies and those of Member States:

- Policies and actions for the environment and energy
- Major European policies: Agriculture, Cohesion, Research and Development, Transport, Industry, External Policy, etc.
- The Lisbon and the European sustainable development strategies

A key element of European policy in terms of limiting GHG emissions is the development of a **Greenhouse gas Emissions allowance Trading Scheme (ETS)**, affecting the main sectors emitting CO₂: energy production, cement industries, refineries, steel industries, for example. This system was established in 2005 and is based on the attribution of national emissions quotas.

Starting in 2012, it is planned to be coordinated at the European level and extended to other industrial sectors, diffused emissions sectors (agriculture, for example) and other GHGs. The assignment of free quotas could gradually be eliminated (Communication "Building a Global Carbon Market," November 2006).

The implementation of European policy relies on the participation of Member States, but also on all the actors involved in this field. Several European networks are particularly active in the fight against climate change. Among these are the FEDARENE (European Federation of Regional Energy and Environment Agencies), Energie cités, Climate Action Network Europe, ICLEI – Local Governments for Sustainability and the Network of Regional Governments for Sustainable Development (NRG4SRD).

Regarding climate change, the European Commission also intends to involve the population and launched a public consultation in early August 2008 on which approach to adopt in the European Union in the framework of the international agreement to follow Kyoto. Stakeholders and the greater public were invited to express their opinion on a certain number of essential questions, such as the objective of assigning emissions reductions to developing countries, measures to take to reduce emissions in developing countries, adaptation to climate change, technological cooperation and funding matters. The results of the study (not yet published) will be used to define the EU's position vis-à-vis the international agreement for post-2012.

The French Situation

In January 2000, France adopted a national programme for fighting climate change.

In July 2004, the Climate Plan France 2004-2012 strengthens these measures so that France will be able to respect its Kyoto commitments. It goes even further in setting the objective of cutting greenhouse emissions by four by 2050 compared to 1990 levels.

The creation of the ONERC (National Observatory of Global Warming Effects) in 2001 resulted in the development of a national strategy for adaptation to climate change in 2007. Two national plans for allocating CO₂ emissions quotas (PNAQ in French) successively covered the period 2005-2007 (with annual quotas amounting to 156,51 MtCO₂) and 2008-2012 (with annual quotas amounting to 132,8 MtCO₂).

Local Climate-Energy Plans have been developed at all administrative levels: cities, towns, departments and regions. The adoption of the Kyoto objectives at all these different levels illustrates the necessity of the participation of a broad range of actors in the fight against climate change.



Which instruments for which policy?

European policies are managed by thematic **Directorate Generals (DGs)** of the European Commission. Each policy is implemented through a corresponding programme (or financial instrument), equipped with **guidelines and a specific budget**.

The programmes and budgets are planned by periods; the current period is from 2007-2013 (a mid-term evaluation will take place starting 2010). They are implemented according to multi-annual operational programmes or annual calls for proposals.

Climate change (and the environment more broadly) is a **transversal subject** that must be integrated into every European policy (research, energy, transport, enterprises, agriculture and forests, cohesion, external policy, etc.) as well as into the other themes of European environmental policy. As such, it would be a heavy task to attempt to identify every programme that addresses climate change in some way or another.

The following pages briefly present how climate change is included in these various policies and which are most likely to provide funding for projects in this field.

Two tables at the end summarize and complete the presentation of these European policies and financial instruments. They aim to guide project holders in their search for the most appropriate European funding mechanism for their projects.

Climate Change & Environment Policy

Fighting climate change constitutes one of the four major priorities of European environment policy, presented in the 6th Environmental Action Programme (EAP) 2002-2012. The fight against emissions and the preparation for climate change in Europe and in the world are among the priorities for action. The 6th EAP explains that these priorities must be integrated into the other priorities of European environment policy such as waste, biodiversity, natural resources, health and air quality. Strategic programmes and sector-based action plans give greater detail about these priorities.

In addition, other approaches have been developed:

- Regulatory, to limit the emissions of certain industrial sectors (Integrated Pollution Prevention and Control Directive – IPPC)
- Economic, with the Green Paper on the use of market-based instruments to support environment and energy-related policy purposes (2007) and the Communication on green purchasing (2008)
- Technological, with the Environmental Technologies Action Plan (ETAP) in 2004



LIFE + (Regulation (EC) No 614/2007)

LIFE+ is the financial instrument for European environment policy. It is divided into three components: Nature and Biodiversity, Policy and Governance and Information and Communication. It has a total budget of about €2.14 billion for the period 2007-2013.

Projects to tackle Climate change can appear in the three axes of the Financial instrument LIFE+:

- In the biodiversity theme: projects may be funded that aim to halt the loss of biodiversity while mitigating the effects of climate change.
- In the Policy and Governance theme: climate change is one of the main objectives, whose priorities include stabilising the concentration of GHGs to a level that allows global warming to stay within a 2°C rise, and projects aiming to help the economy and society, nature and biodiversity, resources and human health adapted to climate change impacts. Climate change is a priority for 2009.
- In the Information and Communication theme: awareness raising, mobilisation and information projects regarding climate change.

To benefit from LIFE +

LIFE+ operates by annual calls for proposals. Applicants must submit their proposals to the relevant national authority (in France, the Ministry of Ecology, Energy, Sustainable of Development and Spatial Planning – MEEDDAT), usually in November. Member States have indicative national budgets and may submit a list of national priorities each year.

LIFE+ funds demonstration and innovation projects that bring measurable environmental progress and European added value. These projects generally last about 3 years. There is no obligation of transnationality. Maximum co-funding rates are 50%, with an average European contribution of €1 million.

LIFE+ mainly targets public actors, though it is also open to other private bodies, actors and institutions registered in the European Union.

- Heating from plant-based bio-fuels for the reduction of greenhouse gases (Policy and Governance theme), Association initiatives locales pour l'énergie et l'environnement – AILE (France), European contribution: €646,648 (2007).
- CCCRP: Climate Change Community Response Portal (Information and Communication theme), Limatieten Laitos (Finland), European contribution: €990,317 (2007).

Climate Change & Research and Development Policy

The European Union's research policy is based on its Lisbon strategy to become "the most dynamic competitive knowledge-based economy in the world by 2010." It is implemented through the Seventh Framework Programme for Research and Development, or FP7.

The European Research and Development Policy priorities for fighting climate change are the following:

- Pressures on the environment and climate,
- Environment and health,
- Natural hazards,
- Environmental technologies such as hydrogen technology,
- Carbon capture and storage,
- Renewable fuel and electricity sources,
- Energy networks.



FP7 (Decision No 1982/2006/EC)

The FP7 has a budget of €54 billion to cover the main components of European research. It is organised into four main programmes:

- Cooperation (supports transnational research activities)
- Ideas (funds "frontier research")
- People (encourages the mobility of researchers)
- Capacities (aims to enhance research and innovation capacities throughout Europe)

FP7 also supports scientific and technical non nuclear research, carried out by the Joint Research Centre – JRC.

The Cooperation programme identifies 10 priority themes

1. Health
2. Food, Agriculture, Fisheries, Biotechnology
3. Information and communication technologies
4. Nanosciences, Nanotechnologies, Materials and New Production Technologies
5. Energy
6. Environment (including climate change)
7. Transport (including aeronautics)
8. Socio-economic sciences and the Humanities
9. Space
10. Security

Projects focusing on fighting climate change are primarily covered by the Environment theme. However, the Energy and Food, Agriculture, Fisheries and Biotechnology can also be important depending on the project's approach.

To benefit from FP7

Annual calls for proposals are published for each of the themes listed above, accompanied by work programmes that specify the subjects to be funded under each of the European Commission's priority themes. Funding is generally up to 50% of the total cost of the project (this rate can be up to 75% for some types of organisations such as SMEs and non-profit research centres).

- PROJECTS**
- CECILIA: Central and Eastern Europe Climate Change Impact and Vulnerability Assessment, Charles University (Czech Republic), European contribution €1.73 million (2006).
 - DEHEMS: Digital Environmental Home Energy Management System, Manchester City Council (United-Kingdom), European contribution: €2.9 million (2007).

Climate Change & Energy Policy

In January 2007, the European Commission presented an *Energy Action Plan* (Communication, "An Energy Policy for Europe") accompanied by a series of individual plans such as the roadmap for renewable energy sources and Action Plans for certain types of energy (biomass, biofuels, nuclear energy, etc.). To accompany these political orientations, a *European Strategic plan for Energy Technologies* was established in 2007.

The major priorities of European Energy Policy can be found in the *Action Plan for Energy Efficiency*, which established 10 priority actions that need to be taken to bring about a 20% savings in energy by 2020 and develop renewable energy sources on a local, national, Community and planetary scale.

Several European initiatives have been launched for wind energy, solar energy, bioenergy, carbon capture and storage, energy networks and sustainable nuclear fission.



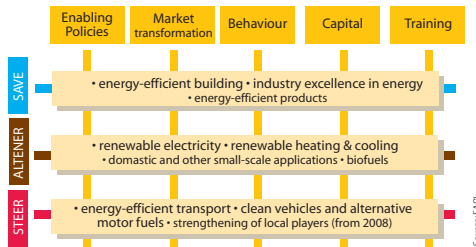
INTELLIGENT ENERGY EUROPE (Decision No 1639/2006/EC)

The Intelligent Energy Europe programme is the 3rd component of the Competitiveness and Innovation Framework Programme (CIP). It has a budget of €730 million for 2007 – 2013.

This programme funds projects and local and regional energy agencies; it also includes integrated initiatives. It is composed of three themes:

- **SAVE:** energy efficiency, rational use of energy, in particular in construction and industry
- **ALTENER:** new and renewable sources of energy for centralised and decentralised production of electricity and heat
- **STEER:** energy aspects of transport, diversification of fuels.

For each of these themes, there are five operational objectives that define the kinds of activities expected:



The programme is **not technological**; it seeks to overcome barriers that still exist in favouring market penetration of renewable energy sources and the rational use of energy on a large scale. Focused on studies, awareness raising, information, the analysis of policies, and training, the programme also funds pilot actions.

Nonetheless, a new initiative announced for 2009 called "Market replication projects" will fund market replication of innovative techniques, processes, products or practices, which have been already demonstrated with success, to promote their broader utilisation and facilitate their market up-take.

To benefit from IEE

IEE operates by annual calls for proposals and is managed by the Executive Agency for Competitiveness and Innovation (EACI). Co-financing rates can be as high as 75% of eligible costs. To apply, at least three partners from three Member States are necessary; projects must not last longer than three years.

- "Bet to win!:" The climate competition between municipalities and their citizens, B.&S.U (Germany), European contribution: €600,000 (2007).
- SErENADE: Sharing Expertise in Energy Advice across Europe, SWEA (United Kingdom), European contribution: €350,000 (2006).

The White paper on European Transport Policy for 2010, adopted in 2001, set ambitious objectives in terms of cleaner transportation in order to reduce its impacts on climate change. The components of this objective include better management of the shipping of merchandise in Europe and the use of available technological tools.

In addition, the European Commission also wants to have less polluting land and air transportation routes (limit GHG emissions, implement traffic management measures and local measures, etc.) all the while continuing to promote rail transport, transportation by navigable waterways (NAIADES Action Programme) and intermodality (a combination of different methods of transport).

On July 8th 2008, the Commission presented a Communication "the Greening Transport Package", which includes a strategy for the internalisation of external costs (environmental costs) in transports, a proposal to review the European Directive "Eurovignette" as well as a communication on reducing rail noise in transporting merchandise.



MARCO POLO II (Regulation (EC) No 1692/2006)

The European Commission's work to develop alternative methods of transport other than land transport began in 1997 with the Programme for pilot projects to promote the combined transport of goods (Intermodal transport, or PACT programme). The Marco Polo I programme continued where PACT left off for the 2003-2006 period.

Encouraged by the results of this programme, the European Commission wanted to continue its work on improving the environmental performances in transporting merchandise for the 2007-2013 period. The Marco Polo II programme is inspired by the previous programme and has the same objective of reducing the saturation of roads and sustainably shifting freight transport from the road to sea, rail and inland waterways. It has a budget of €430 million for the 2007-2013 period.

Activities funded are like those under Marco Polo I:

- **Modal shift actions** (shifting from road to short sea shipping, rail and inland waterways).
- **Catalyst actions** (overcome structural market barriers in European freight transport through a highly innovative concept).
- **Common learning actions** (improvement of cooperation and sharing of know-how in the freight logistics sector). Due to the feedback of the first programme, two new actions have been created:
- **Motorways of the sea actions** (achieving a door-to-door service, which shifts freight from long road distances to a combination of short-sea shipping and other modes of transportation).
- **Traffic avoidance actions** (reducing freight transport demand by road with a direct impact on emissions).

Another new aspect is that the programme will henceforth open its doors to third countries near the European Union, in addition to its Member States (in particular those whose proximity naturally involves them in transport projects).

To benefit from Marco Polo II

The DG Transport and Energy launches a call for proposals every year.

In general, a minimum of 2 partners from 2 different Member States is required. Exceptionally, there may be projects with only one participant.

Co-financing rates can represent between 35-50% of eligible costs.

Note: Purely infrastructural projects, R&D projects and studies are not eligible.

The Marco Polo II programme is managed by the Executive Agency of Competitiveness and Innovation (EACI).

- PROJECTS**
- **TRIANGLE:** Creation of a triangle of rail links between the Iberian peninsula, Western Europe and Poland, Kombiverkehr KG (Germany); European contribution: €2 million (2006).
 - **ITS-IT:** Intermodal Transport Services-Information Tools, AFT-IFTIM (France), European contribution: €335,660 (2006).

Climate Change & Industrial Policy

Industry is a sector that contributes a significant amount of GHG emissions. The Lisbon Strategy for employment and innovation had to take this into account in the action plans it implemented to support enterprises. The Action Plan for sustainable consumption, production and industry (SIP-SCP) was the subject of a public consultation and resulted in a package of proposals on July 16th 2008 concerning four priorities: favouring the production and promotion of energy and resource-efficient products, favouring the development of a market for these products, especially for green procurement, developing eco-friendly and leaner production (ecodesign and environmental management) and finally, extending and integrating these initiatives on the international scale.

In addition, Action Plans for eco-technologies and energy technologies will support the development of technological innovation and of markets (including exportation) in eco-enterprises. From a regulatory point of view, the Directive on Integrated Pollution Prevention and Control (IPPC Directive 2008/1) sets binding norms and incentives for industrial pollution emissions.

Finally, most of the mitigation and adaptation policies' main targets are industrial or collective innovation and the behaviour of different industrial actors.

THE COMPETITIVENESS AND INNOVATION FRAMEWORK PROGRAMME (Decision No 1639/2006/EC)



The Competitiveness and Innovation Framework Programme (CIP) was in part created by the reorganisation of other financial instruments (e-TEN, Intelligent Energy Europe, "clean technologies" theme of LIFE Environment, multiannual programme for enterprises, etc.).

It is made up of three sub-programmes: the **Entrepreneurship and Innovation Programme (EIP)**, the **Information Communication Technologies Policy Support Programme (ICT-PSP)** and finally, the **Intelligent Energy Europe Programme (IEE** – see page 8).

Entrepreneurship and Innovation Programme (€2.17 billion for 2007–2013)

With this programme, the European Commission intends to support innovation and SMEs in the European Union. The first call for proposals "Eco-innovation" was launched in 2008 and is managed by the **Executive Agency for Competitiveness and Innovation (EACI)**.

The programme is interested in first application and further market uptake for innovation and eco-innovation and is built around four priority fields: **Recycling, Sustainable buildings, Food and drink industrial processes and Green Business and Smart Purchasing**. It concerns first application and further market uptake of eco-innovative techniques, products, processes or practices that have already been proven but need further incentives to penetrate the market.

Co-financing rates vary between 40–60% depending on the size of the enterprises concerned.

This programme also supports the European Network "Enterprise Europe Network," whose goal is to serve as an information relay from the Commission to enterprises in order to help them in their European procedures.

Information Communication Technologies Policy Support Programme – ICT PSP (€730 million for 2007–2013)

This programme targets three kinds of projects: pilot projects, thematic networks and best-practice networks. One of the themes from the 2008 call for proposals concerned the **use of ICT** for Energy Efficiency and Sustainability in urban areas (energy efficiency in building and spaces including public lighting, adaptive urban transport management infrastructure and services). The 2009 call for proposals will address the use of ICT for better energy efficiency (essentially in social housing) and for prevention, alerts and rescues in order to minimise the impacts of climate change.

This programme only concerns projects involved in the use of ICT for better energy efficiency; the theme of energy efficiency more broadly speaking is funded by programmes such as Intelligent Energy Europe.

There are two types of pilot projects (A and B) with specific rules about the type, number and nature of partners and partnerships. Community co-financing rates are set at 50% of eligible costs.

The thematic network projects have also clearly written rules concerning partnerships and co-financing, which is not defined in terms of predetermined percentages.

For more details, consult the programme's website.

Climate Change & Economic and Social Cohesion Policy

The main objective of the Regional and Cohesion Policy is to reduce the gap in the different regions' and populations' levels of development, in order to strengthen economic and social cohesion.

The financial instruments of the Cohesion Policy focus on the Lisbon (growth and employment) and the European sustainable development strategies.

To carry out these general objectives, the Regional and Cohesion Policies are implemented through three operational objectives:

- *Convergence for the least developed regions*
- *Regional competitiveness and employment for the other regions (including France)*
- *European territorial cooperation: more commonly called INTERREG and which includes three themes: A (cross-border cooperation), B (transnational cooperation) and C (interregional cooperation)*

The European Commission has written Community strategic guidelines, according to which Member States design their own national strategic reference frameworks. Based on these documents, countries and regions then write operational programmes that establish priorities, axes and actions that explain the procedures for supporting projects.



STRUCTURAL FUNDS (Regulation (EC) No 1083/2006)

In order to ensure the funding of these objectives, three financial instruments (called structural funds) have been created with a combined budget of €347 billion:

- The European Regional Development Fund (ERDF), dedicated to supporting productive investments, creating equipment and activities in support of development projects
- The European Social Fund (ESF), dedicated to training, qualification and human resources
- The Cohesion Fund, which contributes to funding investment projects for trans-European networks and the environment. This Fund does not concern France.

During the 2000-2006 period, spending on sustainable energy represented 1% of the Structural Funds. For the 2007-2013 period, the ERDF has allocated about €15.2 billion to investments in sustainable energy, energy efficiency and clean transports – five times more (in the convergence objective) and seven times more (in the competitiveness objective) than the previous programming period.

To benefit from ERDF

The co-financing rate for projects may be between 50% (for competitiveness regions) to 85% (for convergence regions and cooperation proposals). Some regions function by calls for proposals; others receive proposals on a year-round basis.

The majority of these programmes are managed at the regional level, with priorities established for each region (written in the operational programmes). More information about regional operational programmes can be found at **national or regional authorities** for the Convergence and competitiveness objectives or at the **managing authorities** (who are generally one of the regions of the zone in question) for the Cooperation objective.

- **ENERGIVIE**: Set of innovative actions to strengthen the use of renewable energies in Alsace, Regional Council of Alsace (France), ERDF support 2000-2006: €2.7 million and ERDF support 2007-2013: €9 million.
- **ASTRA (INTEREG IIIB Baltic sea region)**: Developing Policies and Adaptation Strategies to Climate Change in the Baltic Sea Region, Geological Survey of Finland (Finland), ERDF support: €1.5 million (2005).

Climate Change & Rural Development Policy

More than 90% of the territory of the European Union is made up of rural zones (and more than 56% of the EU population lives in these zones). As such, having an effective and coherent rural development policy is indispensable. Agriculture and forestry are essential components to developing EU territory and managing natural resources in rural zones.

European rural development policy for 2007-2013 is organised into four axes (three thematic and one methodological):

- *Axe 1: Improving the competitiveness of the agricultural and forestry sector*
- *Axe 2: Improving the environment and countryside*
- *Axe 3: Improving the quality of life in rural areas and encouraging diversification of the rural economy*
- *Axe 4: the "LEADER" approach, which allows local actors to design rural development strategies along these three axes but adapt them to their territory.*

If agriculture is considered to be the main source of nitrous oxide (N_2O) and methane (CH_4) in the atmosphere, soil and agricultural and forest production are also the main carbon storage sites. These two fields are therefore favoured for carrying out actions to fight climate change, insofar as better management of soil and its use (a Directive on Soils is in the works) can contribute to reducing GHG emissions resulting from human activities. The reduction and the better use of nitrogen fertilizers and manure (Nitrates Directive) and the decrease in the number of animals used in husbandry are also areas where GHG emissions can be limited.

European agriculture is also highly affected by climate change: water scarcity, unforeseeable meteorological conditions, development of harmful organisms, impacts on harvests, effects on forests, etc.



EAFRD (Regulation No 1698/2005/EC)

The **European Agricultural Fund for Rural Development (EAFRD)** contributes to the promotion of sustainable rural development throughout the European Community, complementing the market and income support policies in the framework of the Common agricultural policy, the Cohesion Policy and the Common Fisheries Policy.

Using the **Community strategic orientations**, each Member State has produced a **National Strategic Plan** that constitutes a reference document for programming the EAFRD. Its implementation is carried out through **Rural Development Programmes (RDP)**, which are then adapted to national and regional levels (regional rural development programmes).

For the 2007-2013 period, rural zones will benefit from a budget of €77.66 billion from the EAFRD, supplemented by national contributions.

The Community strategic orientations indicate that Axe 2 can finance projects whose aim is to mitigate the effects of climate change (including by reducing GHG emissions), by both working on specific ways of managing land and also developing and improving forest resources by forestation of agricultural and non agricultural lands.

To benefit from EAFRD

For more information about the content of these programmes, contact the regional managing authorities. Co-financing rates vary depending on the axes and the regions involved.

- **Leader Axe of the territory Haute Provence – Luberon "High quality of Life:"** one of the identified priorities is the creation of a sustainable mobility culture. This priority will benefit from a budget of: €497,970 for the 2007-2013 period.

Climate change is one of several problems of a global scale for which the European Union must not limit its action to its own territory.

To complete its internal policies, the EU also has a number of external policy programmes, most of which target developing and emerging countries.

Climate change has global repercussions and the fight can also pass through aid programmes for the most vulnerable regions and populations. In September 2007, the Global Climate Change Alliance was launched between the EU and the low-income countries who are the most severely affected by climate change. It established five priorities: implementing concrete adaptation measures; reducing emissions from deforestation; helping poor countries take advantage of the global carbon market; helping poor countries be better prepared for natural disasters, and integrating climate change into development cooperation and poverty reduction strategies.

FINANCIAL INSTRUMENTS

- **Instrument for Pre-Accession Assistance (IPA)** for Turkey, Croatia, FYROM, Albania, Serbia, Montenegro and Bosnia-Herzegovina)
- **European Neighbourhood and Partnership Instrument (ENPI)** for 17 Mediterranean countries and Newly Independent States (NIS)
- **European Development Fund (EDF)** based on the Cotonou agreement, which provides the basis of EU co-operation with African, Caribbean and Pacific countries, the EDF supports assistance to the Union's 78 ACP partner countries and the overseas countries and territories of Member States.
- **Development Cooperation Instrument (DCI)** provides assistance to South Africa and 47 developing countries in Latin America, Asia and Central Asia, and the Middle East (countries not covered by the ENPI or the EDF)
- **Financial instrument for cooperation with industrialised countries.**
- **Disaster Preparedness ECHO (DIPECHO)** to reduce the vulnerability of populations living in areas of the world that are most exposed to disasters (the Caribbean, Central America, South America, Central Asia, South and Southeast Asia).

Any of the aforementioned instruments may potentially fund projects for the fight against climate change. Some of these actions may fall under the scope of the transversal programme (meaning it is not limited to a particular group of countries) of the DCI known as the ENRTP, or "**Environment and Sustainable Management of Natural Resources including Energy Thematic Programme.**" This programme has a budget of €804 million and funds projects for environmental problems that hit the poor the hardest. **The priorities of the Climate Change Alliance** are covered under this programme.

In parallel to these instruments, the European Investment Bank has established several funds that are managed by the European Investment Fund.

There is also the **Global Energy Efficiency and Renewable Energy Fund (GEEREF)** for least-developed countries and regions (ACP countries, European Neighbourhood countries, Asian and Latin American countries), a **Multilateral Carbon Credit Fund (MCCF)** as well as a financial mechanism called the **Global Forest Carbon Mechanism** whose goal is to halve the rate of degradation and deforestation in tropical countries by 2020.

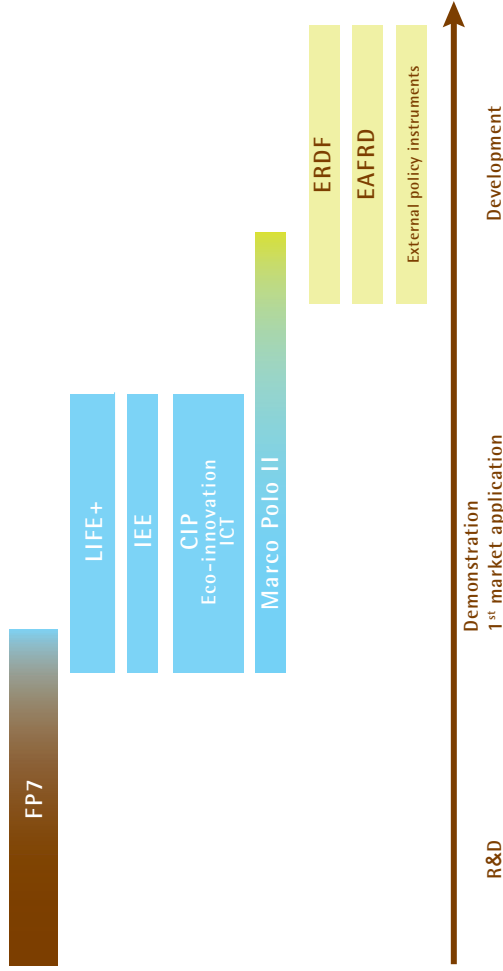
To benefit from these funds

Procedures vary by instrument. Most of them function by calls for proposals, published on the **EuropeAid** website. For others, countries write **Operational Programmes** (potentially including the fight against climate change) in cooperation with the EU and establish **managing authorities** in charge of allocating the funds at the national or regional levels.

- PROJECTS**
- **LifeCroCHP:** Sustainable development of Croatian capacities in Combined heat and power sector, Center for Technology Transfer (Croatia), European contribution: €337,000 (2002).
 - **ENER-C:** Energy saving buildings in China, Technical University Delft (Netherlands), European contribution: €382,599 (2003).

The funding of my project according to the development phase of my project

This table presents the different financial instruments available depending on the development phase of the project (research, demonstration, development)



Caveat: These tables aim to give a concise view of the fields of action of the different financial instruments. Certain allocations will have to be confirmed according to the nature and content of the proposal. In addition, as far as the ERDF and operational programmes are concerned, their content can change considerably from one kind of application to another, so it is a good idea to check each one for proposals' eligibility, according to the different priorities of the programme.

Other sources of funding

Besides the institutions of the European Union, there are other potential sources of funding for projects focused on fighting climate change. The following list, while not exhaustive, offers project holders some further options to think about.

European Investment Bank and European Investment Fund

The long-term funding of investments destined for the fight against climate change is one of the priorities of the EIB and the EIF. In 2007, €8 billion in loans were allocated to this effect, of which €2 billion were for renewable energy sources. The goals are to ensure that there is a sustainable supply and use of energy in the long term, increase energy efficiency and adapt energy networks to accommodate diversifying energy sources.

French National Research Agency (ANR in French)

The National Research Agency's goal is to increase the number of research projects from the whole of the scientific community, and to provide funding based on calls for proposals and peer review selection processes. The ANR is aimed at both public research establishments as well as enterprises with a double mission: **gain new knowledge** and **favour interactions** between state laboratories or company laboratories while developing partnerships.

For the year 2008, the ANR had a total budget of €955 million for research projects having a maximum duration of four years. Calls for proposals are launched throughout the year. For 2009, projects focusing on fighting climate change can find their place in the **"Ecosystems and Sustainable Development"** theme (SYSTERRA programmes: systems, territories, living resources and agriculture), or in the **"Sustainable Energy and Sustainable Development"** (H-PAC programmes: hydrogen and fuel cells, Stock-E: innovate energy storage, EESI: Energy Efficiency and Reduction of CO₂ emissions in Industrial Systems, CEP: Planetary Environmental Changes).

We can also cite the Prospective Reflection Workshop "Adaptation of agriculture and anthropized ecosystems to climate change" launched at the end of 2008.

MEEDDAT

The MEEDDAT oversees the **integration of sustainable development objectives into the development and implementation of public policies**, namely in terms of land and natural resource management and spatial planning. It prepares and implements public policies regarding ecological matters and coordinates environmental action.

The Ministry carries out research programmes such as the **GICC** (management and impact of climate change) and **DIVA** (public action, agriculture and biodiversity).

Private Actors and Funding

Numerous foundations now integrate the fight against climate change into their funding priorities.

What's more, a new generation of venture capital, more specialized in sustainable development, has arisen in the past years. The French funds DEMETER and EMERTEC 3E belong to this category.

Finally, numerous structures have become specialized in voluntary compensation, which is founded on the fact that any GHG emission in one place may be compensated by an action in another place. Voluntary compensation is a funding mechanism by which an entity (administration, enterprise, individual) substitutes, wholly or partially, a reduction at the source of its own GHG emissions for an equivalent quantity of "carbon credits" which are purchased from a third party.

For more information, visit the ADEME's website on compensation: www.compensationco2.fr

LINKS AND REFERENCES

UNITED NATIONS

- United Nations Environment Programme: <http://www.unep.org/>
- United Nations Framework Convention on Climate Change (UNFCCC): <http://unfccc.int/>
- Conference of the Parties 14 in Poznan: <http://www.cop14.gov.pl/>
- Intergovernmental Panel on Climate Change (IPCC): <http://www.ipcc.ch>

EUROPEAN UNION

- **DG Environment:** http://ec.europa.eu/environment/climat/home_en.htm
Climate Action – Energy for a Changing World: http://ec.europa.eu/climateaction/index_en.htm
LIFE + (Guidelines and application forms): <http://ec.europa.eu/environment/life/funding/lifeplus.htm>
European Environment Agency: <http://www.eea.europa.eu/themes/climate> (see particularly the Impacts of Europe's changing climate report)
- **DG Research:** <http://ec.europa.eu/research/index.html>
FP7: http://cordis.europa.eu/fp7/home_en.html
Institute for Prospective Technological Studies (IPTS) – Energy, Transport and Climate Change Group: <http://energyjrc.ec.europa.eu/>
- **DG Energy and DG Transport:** http://ec.europa.eu/energy/index_en.html and http://ec.europa.eu/transport/index_en.html
Climate action, Energy for a changing world: http://ec.europa.eu/climateaction/index_fr.htm
Intelligent Energy – Europe: <http://ec.europa.eu/energy/intelligent/>
Marco Polo II: http://ec.europa.eu/transport/marcopolo/home/home_en.htm
- **DG Enterprise:** http://ec.europa.eu/enterprise/enterprise_policy/index_en.htm
Eco-innovation programme: http://ec.europa.eu/environment/etap/ecoinnovation/index_en.htm
- **DG Rural development:** http://ec.europa.eu/regional_policy/index_en.htm and http://ec.europa.eu/agriculture/rurdev/index_en.htm
- **DG External Relations:** http://ec.europa.eu/external_relations/index_en.htm
EuropeAid : http://ec.europa.eu/europeaid/index_fr.htm
European Investment Bank (IEB): <http://www.eib.org>
GEEREF : www.eif.org/market/activity/geeref.htm

FRANCE

- MEEDDAT: <http://www.developpement-durable.gouv.fr/index.php3>
- ADEME: <http://www.ademe.fr/particuliers/fiches/climat/> and www.compensationco2.fr
- National Research Agency (ANR): <http://www.agence-nationale-recherche.fr/Accueil>
- CDC Mission climat: www.caissedesdepots.fr/missionclimat and www.sagacarbon.com
- National Observatory of Global Warming effect: <http://www.onerc.org/>

OTHER LINKS

- Johannesburg Renewable Energy Coalition: http://ec.europa.eu/environment/jrec/index_en.htm
- World Bank – Carbon Finance Unit: www.carbonfinance.org
- Climate Action Network (CAN): <http://www.climateactionnetwork.org>
- Climate Action Network Europe: <http://www.climnet.org>
- Réseau Action Climat – France (RAC-F): <http://www.rac-f.org>
- FEDARENE: European Federation of Regional Energy and Environment Agencies: <http://www.fedarene.org/>
- Énergie Cités: <http://www.energie-cites.org>
- ICLEI-Local Governments for Sustainability: <http://www.iclei.org>
- Network of regional governments for sustainable development (NRG4SD): www.nrg4sd.net

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změna klímy

klima palitan

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