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EXECUTIVE SUMMARY OF THE
NATIONAL COMMUNICATION OF

FRANCE

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United Nations Framework Convention on Climate Change

In accordance with decision 9/2 of the Intergovernmental Negotiating Committee of the Framework Convention on Climate Change (INC/FCCC), the interim secretariat is to make available, in the official languages of the United Nations, the executive summaries of the national communications submitted by Annex I Parties.

Note: Executive summaries of national communications issued prior to the first session of the Conference of the Parties bear the symbol A/AC.237/NC/___.

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Copies of the national communication of France
may be obtained from the following address:

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INTRODUCTION

1. Awareness of the threat to the climate owing to the rising emissions of greenhouse gases, particularly carbon dioxide (CO_2), led the French government to undertake a policy of controlling the emissions of greenhouse gases, as a precautionary measure.

2. This commitment by the French authorities was reflected in active participation in international projects, particularly the negotiation of the United Nations Framework Convention on Climate Change, which was ratified by France on 25 March 1994.

3. This commitment to adopt policies and measures aimed at limiting the emissions of CO_2 and other greenhouse gases not regulated by the Montreal Protocol, which figures in Article 4, paragraph 2 of the Convention, will be applied throughout the European Union, with the Union and its member states acting according to their respective competence. The initiatives now being taken by the community are in fact particularly important and effective in many fields such as transport, duty on fuels, miscellaneous regulations (notably as regards the environment) and the Common Agricultural Policy.

4. The energy policy operated by the French authorities since the first oil shock has already enabled them to reduce CO_2 emissions very considerably, and thus the contribution of France to the greenhouse effect. This policy has relied on the following, in particular:

- the specification of strict regulations aiming to encourage energy saving. Heating regulations for dwellings is a very significant example of this.

- the use of taxation. The high level of tax on fuels, which is above the levels practised in most developed countries, has contributed strongly in the past to limitation of carbon dioxide emissions. In addition, numerous fiscal encouragements aiming to improve energy efficiency have been put in place since 1974, especially in industry and in the home.

- a large programme of energy saving and energy efficiency, to develop and disseminate "clean and sensible" energy policies. Since 1974, France has run an Energy Saving Agency, which has dealt with energy consumption as final demand and in industrial activity, constituting a centre of skill and expertise over time.

- the development of a large nuclear power-generation pool, which has led to a reduction in CO_2 emissions not only in France but also in the neighbouring States.

5. Between 1980 and 1990, the magnitude of this policy has enabled France to reduce CO_2 emissions per inhabitant more than any other member state of the European Union (-26 per cent against a European average of -19.3 per cent). Within the Organisation for Economic Co-operation and Development (OECD), only Sweden (now a member of the European Union) has achieved a better reduction than this. In total, the emission levels due to the use of fossil-fuel energy, per inhabitant and per unit of gross domestic product (GDP), was less in 1990 by 22 per cent and 35 per cent respectively than the average of the 12 European nations, and 44 per cent and 36 per cent less than the average OECD levels.

INVENTORY OF GREENHOUSE EFFECT GAS EMISSIONS

6. The following table summarizes the emissions of all greenhouse effect gases. This inventory was drawn up from the Corinair inventory and transposed into the Intergovernmental Panel on Climate Change (IPCC) format.

	Emissions in 1990 (in Mt)	**Emissions in 1993 (in Mt)** [1]
CO_2		
Emissions in all sectors	367	365
Energy use	350	351
Industrial processes	17	14
CO_2 - Absorption by ground and forests	-32.2	-37.2
CO_2 - Total net emissions	334.8	327.8
(International carriers - for ref.)	(8.6)	(8.9)
CH_4	2.9	2.83
N_2O	0.177	0.171
NOx	1.725	1.675
COV	2.425	2.3
CO	11	10

CO_2 Emissions

7. Shown in terms of inhabitant and unit of GDP, the total net emissions of carbon dioxide in France are particularly low for an industrialized country at 5.92 tonnes per inhabitant and 0.31 tonnes per billion dollars in 1990, as indicated in the introduction.

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[1] Provisional estimate at 04/11/1994

8. Their breakdown by sector was as follows in 1990:

Emitting sector	**Gross emissions (Mt CO_2)**	**Percentage in relation to total emissions**
Energy (Production and transformation)	61	16.5 per cent
Industry	88	24 per cent
Transport	128	35 per cent
Residential/Tertiary	82	22.5 per cent
Agriculture	8	2 per cent
TOTAL	367	100 per cent

9. It should be emphasized that the winter of 1990 was mild. In average climatic conditions, the consumption of fossil-based energy (excepting electricity) for heating of buildings would have increased CO_2 emissions by 9.5 million tonnes, which is 3 per cent of the gross emissions in 1990.

10. The very slight increase of emissions due to the use of fossil-based energy seen between 1990 and 1993 resulted mainly from variations in climate, the winter of 1993 having been very close to normal. Nevertheless, two facts, independent of climatic changes, deserve to be emphasized:

- a continuous increase in CO_2 emissions in the overseas departments and territories (DOM-TOM) between 1990 and 1993 (over 20 per cent),

- the regular increase in CO_2 emissions in the transport sector over the same period (5.5 per cent).

11. The latter is an indication of an ongoing trend. From 1980 to 1993, CO_2 emissions related to the use of fossil-based energy in the various sectors in metropolitan France, after correction for climate variations, have evolved as follows:

Transport	+ 39 per cent
Residential and Tertiary	- 13 per cent
Industry and agriculture	- 37 per cent
Electric power stations	- 76 per cent
Weighted average.	- 25 per cent

Methane emissions

12. The data given for methane and nitrous oxide emissions are very imprecise, particularly when account is taken of uncertainties applicable to the techniques used to measure these emissions in the agricultural and waste dump areas.

13. Methane emissions amounted in 1990 to about 2.90 million tonnes, over 55 per cent of which came from agricultural activities, 25 per cent from waste disposal, and especially the consignment of waste to dumps, and 10 per cent from fugitive emissions in the course of fuel extraction and distribution, the remainder occurring in the course of fuel consumption.

14. Since 1970, France has reduced its emissions due to coal production and gas distribution, with the closure of many mines and investments made for the purpose of improving the gas distribution networks.

15. On the other hand, the increase in the volume of waste breaking down in dumps certainly contributed in the 1980's to a significant growth in methane emissions from dumps. The policy of eliminating dumping, adopted in 1992, has not yet had time to produce any notable effects.

Nitrous oxide emissions

16. NO_2 emissions in 1990 amounted to about 177,000 tonnes, 60 per cent of which came from industrial processes, and 35 per cent from the use of fertilizers in agriculture. Marginally, some emissions also come from energy production in flame-powered thermal power stations or from motor vehicles.

Gases with an indirect effect, tropospheric ozone precursors

17. Emissions of nitrogen oxides, volatile organic compounds, and carbon monoxide, are estimated respectively at about 1.7 million tonnes, 2.4 million tonnes and 11 million tonnes for 1990. The use of fossil-based energy is by far the main source of emission of these indirect-effect gases, with the exception of the VOC emissions, or an equally large part of emissions coming from the use of solvents.

DESCRIPTION OF THE POLICIES AND MEASURES FOR REDUCTION OF GREENHOUSE-EFFECT GAS EMISSIONS

Reduction of CO_2 emissions

Buildings

18. If account is taken of emissions due to flame-combustion power plants, which are due in essence to seasonal requirements for electric heating, the building sector represents over one third of CO_2 emissions in France. France conducted a vigorous energy conservation policy in this sector since the first oil shock, using regulatory measures governing new buildings and incentives aimed at existing buildings.

New buildings

19. From 1974 onward, France has taken the initiative, in close association with professionals in the building industry, of legislating requirements to be applied to the thermal insulation of new buildings. The fairly irreversible character of decisions made in the area of new construction encouraged France to go even further and to anticipate the progressive growth of the constraints which will be put in place to mitigate global warming.

- From 1 January 1997, thermal standards for dwellings will be strengthened by raising the requirements in proportion to the energy gain obtained by substituting slightly emissive double glazing with ordinary double-glazing. This measure will result in a reduction of 5 to 10 per cent of heating needs.

- Thermal standards of the tertiary sector, which was far behind that applicable to dwellings, will be reinforced with an objective of reducing energy consumption by 25 per cent. This will take effect before 1 July 1997 for non-air-conditioned buildings, and before 1 January 1999 for air-conditioned buildings.

20. These two measures will give a gain of 0.16 MtC in the year 2000. However, they also have a cumulative effect which makes their long-term impact far greater than the short-term effect.

Existing buildings

21. Ever since the first oil shock in 1973, France has been developing a vigorous energy conservation policy in the area of existing buildings, and substantial improvements have been achieved here. Nevertheless, viable interventions in respect of energy conservation still remain to be effected, and this policy will be pursued through measures which depend upon information to users, regulation and standardization of new equipments and incentives for investments leading to energy saving.

22. For State buildings, the Government has set itself the objective of making energy conservation investments between 1995 and 1997 which have a 6 years payback time. This should result in a reduction of 12 per cent in their energy consumption.

23. Finally with regard to the fiscal approach to prevent global warming, France has proposed to its partners in the European Union that a tax be levied on fuels used in the residential and tertiary areas.

24. In all, the measures concerning existing buildings should enable a gain of 3.4 MtC per annum to be achieved in the year 2000.

Development of the use of wood in construction

25. France has decided to develop the use of wood in construction, and this action can be divided into three components:

- the development of the promotion of wood in the construction industry;
- the removal of factors which are preventing wider use of wood in construction, through research, development, and ad hoc publicity; and
- the development of a strategy for industrial products or semi-products based on the sawmill industry.

26. The aim is to store an additional 0.35 MtC/year by the year 2010, over and above the 1990 figure.

Industry

27. Cooperation with companies in the energy intensive sectors is being conducted with a view to achieving the signature of voluntary agreements which will lead to significant savings in fossil-based carbon emissions; potential emission reductions are estimated at 5 MtC a year in this field on the basis of 1990 activity.

28. In parallel with this, the policy of public aid in the control of energy use in industry, including financial aid (support for research and development, aid for demonstration of exemplary investment, etc.) and fiscal encouragements (exceptional depreciation, exoneration or reduction of various indirect taxation thresholds, etc.), will be pursued.

Transport

29. Transport (with the exception of maritime bunkers) represent over one third of French CO_2 emissions, and constitute the sector in which emission growth is fastest. In addition to specific measures adopted to mitigate global warming, many other public measures, necessary for various reasons within the transport policy, also have the effect of reducing this contribution. It should be noted that many of these actions originate from initiatives to be taken by the European Union.

Transport of merchandise (other than commercial vehicles)

30. With the aim of establishing the best conditions for exercising the profession of road transportation of goods, various measures have been adopted in cooperation with the profession (strengthening of the conditions of access to the profession, imposition of sanctions if the regulations are not observed, etc.). These measures could achieve a reduction in emissions due to road transportation of goods of about 0.4 MtC per annum in the year 2000.

31. Moreover, France is proposing to its partners in the European Union that it should programme the progressive raising of the minimum rate of community excise on gasoil, in order to transfer to the transport industry all of the costs which they create for the general public. An increase of 10 per cent in the price of gasoil will lead to a reduction in carbon emissions of 0.15 MtC/yr.

32. It is intended to double combined road-rail traffic between 1990 and 2000, and this will result in a carbon emission reduction of 0.13 MtC/yr. As soon as 1995 onward, credits available to such combined transportation were increased by 300 MF.

33. Finally, technical actions relating to the vehicles themselves will be studied in a community context, with the objective of reducing unit consumption by 20 per cent between now and 2015.

Passenger transportation and commercial vehicles

34. In 1994, the government adopted two measures to reduce polluting emissions from the existing car pool, which will also have an impact on CO_2 emissions:

- The obligation to repair vehicles which have been declared defective in respect of pollutant emission when they are subjected to technical checks should result in a gain of 0.32 MtC per year;

- A payment of 5000 French francs for the replacement by a new vehicle of one which is over 10 years old, and due to be scrapped, should lead to a short-term reduction of tens of thousands of tonnes of carbon in French emissions.

35. Furthermore, France has the intention to promote the following:

- Reduction in the European Union of the level of specific consumption of new vehicles. This average level could be set, for example, to 5L/100 km by 2005. To this end, France is proposing that the feasibility of a system of negotiable permits should be studied at the European Union level. France has also undertaken a study at national level on a possible change in the road tax payable annually by motorists, to act as motivation;

- Development of vehicles specifically for town use;

- Development of electric vehicles and other alternative vehicle types (GPL/GNV).

36. Policies relating to urban transportation will have a considerable impact on CO_2 emissions, and should set themselves the objective of controlling the growth of motorized transportation and facilitating the use of more economical modes of transport in terms of space and energy. Though these policies are the prerogative of local authorities, these authorities will be made aware of their responsibilities in the matter. In addition to the investment capital which it allocates to local authorities for public transport, to the value of 5.5 GF per year, the State also intends to assist them in the conducting of the necessary studies and in their documentation.

37. Finally, the development of high-speed trains for inter-city travel is leading to an energy-efficient alternative to the use of cars or aircraft. It also substitutes electrical energy for fossil-fuel energy. The estimated gain in respect of CO_2 emissions is 0.13 MtC/yr by the year 2000.

Electricity generation

38. The special character of France in electricity production, related to the magnitude of the nuclear contribution to electricity generation, is considerably reducing its margin of manoeuvre in the future development of its emissions in this sector. Only reduction of the peak of electricity demand and substitution of electricity for fossil fuels for non-seasonal uses will lead to reductions in CO_2 emissions. To this end:

- EDF is proposing a new price structure which is modulated with time (the "Tempo" charging system, which includes 6 time zones with different charges throughout the year), and this should lead to a reduction in peak electricity consumption, with a consequent emission gain of 0.5 MtC/yr in 2000.

- Demand side management action started in 1993 and affecting seasonal demand and demand in "départements" not connected to the metropolitan network in particular (Corsica and DOM-TOM), should lead to additional emission reductions of 1.7 MtC per annum by the year 2010.

- EDF also will promote the penetration of electricity into the area of non-seasonal uses in industry. The use of investment with a return period of under 6 years can lead to emission reductions of up to 1.8 Mt/yr by 2000.

- Equalization of low voltage electricity prices over the whole country leads to over-consumption of electricity, both in isolated regions where electricity is frequently fossil-fuel based, or in sparsely-inhabited rural zones where it can artificially replace renewable energy sources. EDF will invest 100 MF/year in operations designed to prevent this.

Development of the carbon sinks related to forest

39. France decided to develop its policy of public support to forestry (aid toward plantation, to which was added a bonus for revenue compensation), setting itself the objective for increasing the rate of supported afforested land from 10,000 hectares per year over the decade of the 1980s, to 30,000 hectares per year from 1998 onward. This policy will enable it to maintain the rate of increase in carbon stocks in the forest by the year 2000 at its 1990 level, compensating for the natural slowing of carbon storage in the forest already existing in 1990, and which is progressively reaching maturity.

Changes in land use

40. Reform of the Common Agricultural Policy in 1992 should put a brake on the movement of grassland or woodland conversion into arable land, which was a result of the agricultural policy followed since the sixties. This will result in a reduction of carbon emissions from the soil estimated at 2 MtC per year by 2000.

Renewable energy

41. The measures adopted in this area (development of wind and hydro power; development of wood as an energy source, in particular by the launch of the "Wood Energy Plan" which was aimed at the structuring, in a certain number of pilot regions, of a veritable wood-energy chain for collective heating; development of the agricultural biomass for energy uses; use of energy generated from waste) should lead to savings of some 0.64 MtC/year by 2000.

Other greenhouse-effect gases (methane, nitrous oxide precursors of tropospheric ozone)

42. Changes in the emission of these gases will come in the main from measures adopted for a variety of reasons in the context of environmental policy (the law on waste, which forbids the dumping of normal waste, regulatory actions concerning automobile pollution, protection of waterways against pollution by nitrates, etc.) or of sectorial policies (agricultural policy in particular).

43. Special regulatory measures will nevertheless be implemented with a view to limiting CH_4 emissions from existing dumps and N_2O emissions from the main industrial emitters. Investments to be made in adipic acid, nitric acid and glyoxylic acid plants, should reduce emissions of N_2O on the industrial sector by 72 thousand tonnes between now and the year 2000. The reduction in N_2O emissions in the agricultural area is estimated to be 7.5 thousand tonnes of N_2O per year between 1990 and 2000.

GREENHOUSE-EFFECT GAS EMISSION SCENARIOS

44. Given the present programme, the emissions in metropolitan France due to energy use may increase from 104.5 million tonnes of carbon (MtC) in 1990[2], to 108.5 MtC in 2000, though this includes a range of uncertainty of some 20 MtC. This uncertainty is related to contingencies concerning growth, oil prices, the availability of nuclear power plant, and the climate.

45. Where other greenhouse-effect gases are concerned, the actions set in train should enable emissions of methane to be stabilized in the year 2000 at their 1990 levels, with nitrous oxide emissions reducing by half and those of nitrogen oxides and volatile organic gases reducing by a third.

46. By weighing the emissions of methane and of nitrous oxide by their global warming potential over 100 years, as indicated by the IPCC in 1994 (24.5 for CH_4 and 320 for N_2O), we arrive at the following figures for net emissions, expressed in millions of equivalent tonnes of carbon, in accordance with the IPCC methodology (that is not corrected for climate, and including DOM-TOMs but not carriers).

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[2] Carriers included, and after correction of the effect of climate on the heating requirements of buildings.

Mt C equivalent	1990	2000	Growth 1990/2000
CO_2	91.3	98	7 per cent
CH_4	19.4	19.4	0 per cent
N_2O	15.4	8.1	- 47 per cent
Total	126.1	125.5	0 percent

47. One should however keep in mind the considerable uncertainty affecting these emission forecasts for reasons which are independent of the national climate change mitigation programme.

INTERNATIONAL COOPERATION AND FINANCIAL MECHANISMS

Cooperation with developing countries

48. In 1992, the amount of official development assistance (ODA) from the French government was almost 44 billion francs. Its ODA rate in relation to gross domestic product (0.63 per cent in 1992) places France in the number five position in the OECD. In absolute figures, France is the third largest contributor to the Development Aid Committee of the OECD, after the United States and Japan.

49. France is also committed to increasing its ODA rate to 0.7 per cent of GDP between now and the end of the century.

Bilateral aid

50. In parallel with the re-constitution of funds for the Global Environment Facility (GEF), France has also put in place the French global environment facility, consisting of 0.44 billion francs over the period 1994-1998, in order to stimulate the French aid effort in the area of global environment, providing it with new intervention resources. France thus intends to finance exemplary projects forming part of wider programmes of sustainable development.

51. In addition, numerous projects undertaken in the context of the ODA also contribute to the mitigation of the greenhouse effect in the receiving countries.

- Of the 25 billion francs devoted to project oriented assistance during the 1992/1993 period, in the form of subsidies or loans with conditions which are more advantageous than those of the open market, about 5 per cent relate to operations favouring the mitigation of the greenhouse effect (some 1.2 billion francs). These are, inter alia, rural

development projects; sustainable management projects of forest areas; projects aiming at increasing the use of waste, renewable energy and natural gas; projects in support of better management of the electricity sector; investment projects in the rail-transport area or public transport in conurbations.

- France considers that reducing the debts of poor countries is also a measure which favours preservation of the environment in general and mitigation of the greenhouse effect in particular. The commitments of France for this purpose, between 1988 and 1993, amounted to 16.2 billion francs. In 1994, cancellation of payments to the value of 25 billion francs in respect of countries in the 'Franc Zone" was announced as a measure aimed at softening the effect for a 50 per cent devaluation of the CFA (African Financial Community) franc. Finally, in 1993 France established a "debt conversion fund for development" for the four intermediate income countries in the franc zone of sub-Saharan Africa, with the objective of converting debt to the benefit of sustained development. Projects to safeguard the environment is one of the categories into which these operations can fall.

- The contribution in the research area was 2.5 billion francs in 1992, this being devoted mainly to financing specialized research bodies, the CIRAD and the ORSTOM, which run many programmes in the agricultural and forestry areas in particular. These programmes contribute widely to the mitigation of climate change in the developing countries.

Multilateral aid

52. In order to deal with the global threats to the planet such as global warming, damage to the ozone layer, the reduction of biodiversity and the pollution of international waters, France and Germany proposed in 1989, at the annual meetings of the International Monetary Fund and the World Bank, the creation of a special financial mechanism intended to assist developing countries face this new challenge. This mechanism was created in November 1990 and the sum of 1.1 billion dollars was made available for a 3-year pilot phase. During this period, France and Germany were the leading contributors with 0.81 billion francs, or 18 per cent of the total contribution.

53. In March 1994, the resources of the GEF were reconstituted to the extent of 2 billion dollars for a further 4-year period; France continued its contribution of 0.81 billion francs. The different countries' contributions were based on a rule very similar to that of IDA-10.

54. France is of the opinion that since these contributions from the developed countries are intended to prevent global pollution, the distribution rule should evolve in the future so as to take into account both GDP and the damage done to the global environment (the level of CO_2 emissions) by the donor countries.

Cooperation with countries in transition to market economies

Safety of the nuclear industry

55. In close cooperation with Germany, France has played a leading role in the cooperation exercised by the international community for almost four years now, in favour of improving nuclear safety in the countries of central and eastern Europe, and of the former USSR. France thus agrees a financial effort of 200 MF (for 1993/94) to international funds for nuclear safety in the east, controlled by the European Bank for Reconstruction and Development (EBRD), and 150 MF for bilateral operations. To this has been added a voluntary contribution to the International Atomic Energy Agency (4 MF in 1992 and 1993) and the placing of France experts at the disposal of the agency.

56. This cooperation mainly concerns safety in control of the process, an improvement in the technical arrangements, and the strengthening of regulatory regimes for nuclear power stations.

57. The objective of these actions is to avoid any new accident with direct serious consequences, which could hinder nuclear development, even where the industry is designed and run in a reliable manner, and to preserve a means of a carbon free electricity production scheme, avoiding the emission of some 60 MtC per year in the countries concerned.

Energy saving and reduction of natural gas leaks

58. In all of the countries of Eastern Europe, it is estimated that 30 per cent of the energy used could be saved by introducing practices common in the West.

59. Actions financed by French and bilateral funding are frequently the first stage of a project which is then continued by multilateral financing (World Bank, EBRD, the Phare and Tacis Community programmes, etc.).

60. If these various actions are to be really effective, the energy users in these countries must be made aware of energy management, and as far as Russia is concerned, priority in this process is given to bringing fuel prices rapidly into line with world levels.

61. Active cooperation is also developing in the area of natural gas, under the leadership of Gaz de France, which has applied itself since 1991 to convincing its partners, through various projects (training, demonstrations, etc.), of the effectiveness of distribution techniques using polyethylene pipe networks.

RESEARCH

Global climatic changes

62. At international level, research at present is structured in the field of the physical, chemical and biological aspects for investigating changes in climate arising from human activities, with the World Climate Research Programme (WCRP) and the International Geosphere-Biosphere Programme (IGBP). French research is organized along the lines of the international model although, in order to highlight the fact that changes in the climate and the global environment are the result of interactions between all components in the earth system, it has been combined into a single programme, the French IGBP which therefore includes the national contribution to the WCRP and the IGBP.

63. Pending the introduction of effective international co-ordination of research in the field of social economics, research into the human aspects of climate change has been combined in the "Economy, society and global change" (ESCG) programme.

64. The total budget for motivational research credits came to 180 MF in 1992.

Research into the reduction of emissions

65. The purpose of the ADEME is to lead and orientate technological research into the areas of renewable energy, and energy efficiency in industry, transportation, and construction. Eight hundred million francs of credits were devoted to the budget of this agency from 1990 to 1994.

66. In addition, the National Institute for Agronomic Research provides coordination of the programme of research into the magnitude and conditions of emissions (or storage) of greenhouse gases within the rural sector, in which various public research organizations take part. Over the period from 1992 to 1994, this programme has enabled public resources to the amount of 17 million francs to be brought into play.

FUTURE PROSPECTS

67. National communications presented by the Annex 1 countries at this stage, are built on a set of policies and measures which will be implemented with the aim of returning the greenhouse gas emissions of these countries to their 1990 levels by the year 2000. This is only a first step towards the ultimate objective of the Convention.

68. The cost of the new measures to be taken in a second step will differ greatly from one country to another, mainly with respect to the efforts which have already been put in, and of the results achieved in the area of energy policy. When introducing new commitments, full account should be taken of these differences in the Parties' starting points.

69. France considers that the most effective and equitable way of sharing the effort of reducing CO_2 emissions between the developed countries was to introduce, in all these countries, all emission reductions whose cost is below a common reference level. The simplest and cheapest way of achieving this result, and the one most transparent for all concerned, in terms of administrative costs, is to institute progressive CO_2 taxation at coordinated rates in these different countries within their fiscal regimes. This approach is also the one which minimizes the cost of reducing CO_2 emissions within each country.

70. This kind of fiscal approach, established in a sufficiently wide context to take into account the competitive nature of the activities to which it applies, will be essential in reaching the ultimate objective of the Convention. In parallel with this, it is necessary to emphasize the importance which must be attached to removing all subsidies in all of these countries which encourage the consumption of fossil fuels. These subsidies may take the form of internal prices for fuels or oils which are less than world prices; it may also consist of selling electricity at prices below production cost or of subsidizing certain activities which are very large consumers of fossil-based energy.

71. The methods applied for organizing the world-wide effort should be defined with a view to preserving fair competition between firms in the framework of international trade and in that of the internal market of the European Union. One of the priorities in organizing international trade should be to ensure that the rules governing this trade do not constitute an insurmountable obstacle to the protection of the world's environment. It would be appropriate for the United Nations Framework Convention on Climate Change to be amended to include provisions similar to those of Article 4 of the Montreal Protocol on chlorofluorocarbons to ensure that non-signatory countries do not benefit unjustifiably, in international trade, from the fact that they are not involved in the joint efforts to protect the atmosphere.
