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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

SUBSIDIARY BODY FOR IMPLEMENTATION

Fifteenth session

Marrakesh, 29 October - 6 November 2001

Item 5 (c) of the provisional agenda

**NATIONAL COMMUNICATIONS FROM PARTIES INCLUDED  
IN ANNEX I TO THE CONVENTION**

**THIRD NATIONAL COMMUNICATIONS:  
REVIEW AND THE ROSTER OF EXPERTS**

**Views from a Party**

**Note by the secretariat**

The Republic of Croatia has sent a letter to the Executive Secretary concerning Croatian special circumstances under Article 4.6 of the Convention, which is reproduced below.<sup>1</sup>

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<sup>1</sup> In order to make this submission available on electronic systems, including the World Wide Web, it has been electronically imported. The secretariat has made every effort to ensure the correct reproduction of the text as submitted.

**FCCC/SBI/2001/MISC.3**

GE.01-

Letter dated 11 October 2001 from the Republic of Croatia to the Executive Secretary

The Republic of Croatia became a party to the United Nations Framework Convention on Climate Change (UNFCCC) in 1996. Under Article 22 of the Convention, the Republic of Croatia has assumed the commitments outlined in Annex I as a country undergoing the process of transition to market economy.

Under the Kyoto Protocol Croatia is committed to reduce greenhouse gas emissions by 5 percent in relation to the reference year, over the commitment period from 2008 to 2012.

In view of its relatively small emission of greenhouse gases per capita, it could be considered that Croatia's historic contribution to global warming has been relatively small. Greenhouse gas emissions of the Republic of Croatia are very low, approaching the lowest values among the Annex I countries.

The implementation of the commitments under the Convention and the Kyoto Protocol will be an extremely difficult task for Croatia. Considering the very low initial level of emissions, the consequences of war and an economy in transition, the introduction of additional measures will undoubtedly have great socio-economic implications. The application of additional measures to reduce emissions of greenhouse gases would have relatively small impact on the improvement of the existing state of the environment at the local level, since Croatia has no major problems with air pollution. At the Hague Conference of COP6 Parties (The Hague, November 2000), Croatia made a statement announcing the problems it is facing in implementing the Convention and the Kyoto commitments.

As a party to the Convention, pursuant to article 12, Croatia is bound to submit to the Conference of the Parties, through the Secretariat, its National Communication regarding the implementation of the assumed commitments. Hereby the Republic of Croatia notifies that the First National Communication of the Republic of Croatia has been completed and is being laid out for print, and it will be submitted to the Secretariat in November 2001.

The National Communication has been developed owing to the financial assistance of the Global Environmental Fund (GEF), under the auspices of the project of the Government of the Republic of Croatia and UNDP/GEF. In the Communication a review of greenhouse gas emissions in the period from 1990 to 1995 is given, in line with commitments outlined in the Instructions for the development of the First National Communication. In the project which lasted over a period of three years almost a hundred experts from 20 institutions had participated, directly through the preparation of materials or through workshops. Cooperation and exchange of information was provided through eight national workshops that were held under the active participation of governmental institutions, public enterprises, the private sector, faculties, the scientific community, nongovernmental organisations and the media.

By this letter the application of the Republic of Croatia to the Conference of Parties with regard to the selection of the reference year and base emission is presented. The Republic of Croatia proposes the year 1990 as its reference year, with the emission of 39,4 Mt eq-CO<sub>2</sub>.

We point out that there are some special circumstances with regard to emission identification in Croatia, since the Republic of Croatia was part of former Yugoslavia up to 1991, when it became a sovereign state. Therefore Croatia has been confronted with some problems in

identifying greenhouse gas emissions, since reliable data are available from its becoming independent. Up to then the territory of former Yugoslavia was a single economic and energy market with activities that, in terms of territory, cannot be exactly distributed.

Croatia does not have a statistical energy balance obtained by collecting data “bottom up”; its balance is obtained from a series of various sources, whereby a large portion of data is collected directly from emission sources on a voluntary basis. The statutory obligation to report on emissions was passed in 1996 by adopting the Rule Book on the Cadastre of Emissions into Environment. Unfortunately, even today this system has not reached a sufficient level of liability yet, as to provide a basis for the national emission calculation, so that expert assessments have been used to a large extent. Aware of this fact, the Republic of Croatia has requested technical and financial assistance for establishing a high-grade system for emission monitoring, and in this regard support by UNDP/GEF and the EC is to be realised in the next future for projects by which the complete system for greenhouse gas emission calculation should be developed over the next three-year period.

Due to the problems related to emission distribution and identification, particularly in the power industry sector, which contributes the largest share of greenhouse gas emissions, the emission in the reference year has partly been determined on the basis of data available for former Yugoslavia. The procedure of emission identification is described in the enclosed Annex.

Mr. Zammit Cutajar, we kindly ask you, with regard to the above indicated, to forward the application of the Republic of Croatia for reference year acceptance to the Conference of the COP7 Parties to be held in Marrakesh. As already indicated, the Republic of Croatia proposes the year 1990 as its reference year, in which the emission was 39.4 Mt eq-CO<sub>2</sub>.

Božo Kovačević  
Minister

Encl. Annex

## A N N E X

### CROATIAN SPECIAL CIRCUMSTANCES UNDER ARTICLE 4.6 OF THE CONVENTION

#### **Special Circumstances with Regard to Basic Principles of the Convention**

We hereby highlight some of the general principles outlined in Article 3 of the Convention that are of particular relevance for Croatia:

- *the Parties should protect the climate system on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities*
- *the special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, should be given full consideration in meeting the commitments under the Convention*
- *the parties shall promote sustainable development, policies and measures, taking into account that economic development is essential for adopting measures to address climate change*

In view of its relatively low emission of greenhouse gases per capita, it could be considered that Croatia's historic contribution to global warming was not significant. Due to relatively low base emission, which under the reference ("business as usual") scenario of development would remain below emission levels recorded in developed countries and countries in transition, the possibilities of further reduction are limited and the implementation of such measures would be more expensive than in other countries.

Croatia is vulnerable to climate change, especially as regards its coast and agriculture. Significant adverse effects could be expected in hydrology, water resources and forestry. The Croatian coastline is 5,800 km long and has a total of 1,100 islands. The coastal cities even now experience problems with periodical high water and extreme weather events.

#### **Special Circumstances under Article 4.6 of the Convention (choice of a reference year)**

Croatia gained its independence in 1991. During its self-reliant development as a sovereign state, Croatia has been faced with numerous difficulties. Besides the problems associated with an economy in transition, the Croatian problems include negative war consequences, the political instability in the region, and ten years of marked political and economic isolation. All the relevant indicators confirm that the ongoing process of reconstruction and development will not advance further without an increase in energy demand. In the past several years, from 1995 to 1999, energy demand has been growing at a rate of 3.3 percent and electricity demand at a rate of 3.4 percent, while gross national product has been growing at a rate of 4 percent. Due to the increase in demand and loss of thermo-electric capacities that have become inaccessible upon dissolution of former Yugoslavia, Croatia will have to

build 1000 to 1500 MW of new electric power sources within the next ten years, which corresponds to an increase by 23-34 percent of today's capacity.

The implementation of the Convention's and the Kyoto Protocol's commitments will be an extremely difficult task for Croatia, perhaps even beyond its capacities. Considering the very low initial level of emissions, the consequences of war and an economy in transition, the introduction of additional measures will undoubtedly have great socio-economic implications. At the Hague Conference of COP6 Parties (The Hague, November 2000), Croatia made a statement announcing the problems it is facing in implementing the Convention and the Kyoto commitments. Croatia also announced that it considers the possibility of applying for the so-called "single project" facility.

In this Communication we are seeking consideration of Croatia's specific circumstances, referring to Paragraph 6, Article 4 of the Convention *that allows a certain degree of flexibility to the countries undergoing the process of transition to a market economy in the implementation of their commitments, including the choice of reference year for the emissions of greenhouse gases.*

In our appeal to consider the special Croatian circumstances, we would like to emphasize the following:

- The emissions of greenhouse gases on the territory of Croatia account for less than 0.2 percent of the Annex I countries' total emissions, i.e. the per capita emission approaches the lowest emission levels amongst these countries;
- The renewable energy sources are being rather extensively used in Croatia even now. Hydro- power plants contribute with 40 - 60 percent to electricity generation. Energy utilization of biomass meets about 5 percent of total energy demand, and biomass is the main fuel in the majority of settlements that do not have a gas supply network;
- A large part of electricity is generated in high efficiency gas fired combined heat and power plants; cogeneration accounts for 15 percent of total electricity generation;
- The nuclear power plant met 15 to 20 percent of electricity demand (until 1995);
- The share of coal in total energy demand is only 2 percent;
- 36 percent of Croatian territory is covered by forests.

During the period offered for the selection of the reference year under Article 4.6 of the Convention (until 1990), Croatia was a part of the former Yugoslavia (Croatia was recognized as an independent state by the UN in May 1992). The former Yugoslavia was composed of six Republics, totaling 23.7 million of inhabitants. At that time, Croatia had 4.8 million of inhabitants.

Croatia has been facing some problems in identifying greenhouse gas emissions, since reliable data are available only from its becoming independent, i.e., practically from 1992 on. Up to then the territory of former Yugoslavia was a single economic and energy market with activities that, in terms of territory, cannot be exactly distributed.

Croatia does not have a statistical energy balance obtained by collecting data "bottom up"; its balance is obtained from a series of various sources, whereby a large portion of data is collected directly from emission sources on a voluntary basis. The statutory obligation to report on emissions was passed in 1996 by the adoption of the Rule Book on the Cadastre of

Emissions into Environment. Unfortunately, even today this system has not reached a sufficient level of liability yet, as to provide a basis for the national emission calculation, so that expert assessments have been used to a large extent. Aware of this fact, the Republic of Croatia has requested technical and financial assistance for establishing a high quality emission inventory system, and in this regard support by UNDP/GEF and the EC is to be realised in the next future for projects by which the complete emission inventory system should be developed over the next three-year period.

Due to the problems related to collection of reliable data for emission calculation, particularly in the power industry sector, which contributes the largest share of greenhouse gas emissions, the average per capita emission in former Yugoslavia in 1990 has been used as basis for determining the emission in the reference year. The methodological procedure for determining the emission proposed in such a way is based on the internationally verified calculation done by the International Energy Agency (IEA).

In accordance with the relevant international literature (*IEA Statistics (1998): CO<sub>2</sub> Emissions from Fuel Combustion, 1971-1996*), the per capita CO<sub>2</sub> emissions in the former Yugoslavia are shown in Table 3-14.

3-14: CO<sub>2</sub> emission per capita in former Yugoslavia

	1985	1986	1987	1988	1989	1990	1991
	t/c.	t/c.	t/c.	t/c.	t/c.	t/c.	t/c.
Former Yugoslavia	5,53	5,71	5,69	5,73	5,62	5,85	5,18

The total greenhouse gases emission that includes also non-energy sources, as shown in Table 3-15, was calculated for Croatia by adding the emissions from other sources located on the territory of Croatia to the CO<sub>2</sub> emission from fuel combustion (former Yugoslavia's average). There are no relevant data on total emissions of greenhouse gases for the territory of the former Yugoslavia, and for that reason the average "energy" emissions is used as basis. The values shown in table 3-15 relate to total anthropogenic emission; removal by sinks have not been taken into account in this presentation (sequestered carbon in wooden biomass).

Table 3-15: Emissions of greenhouse gases (Mt eq-CO<sub>2</sub>)

	1990	1991
GHG emission per capita, t eq-CO <sub>2</sub> /s.	8,24	7,44
Total GHG emission, Mt eq-CO <sub>2</sub>	39,4	33,6

**In view of the above, the Republic of Croatia proposes the year 1990 as its reference year under the Convention. Total emission of greenhouse gases in 1990 was 39.4 Mt eq-CO<sub>2</sub>.**