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SUBSIDIARY BODY FOR IMPLEMENTATION

Twenty-fourth session

Bonn, 18–26 May 2006

Item 14 (a) of the provisional agenda

Other matters

Level of emissions for the base year of Croatia

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Submission from a Party

1. The UNFCCC secretariat received a letter dated 14 April 2006 from the State Secretary of Croatia, together with a position paper from the Government of Croatia, requesting the secretariat to forward the submission to the Subsidiary Body for Implementation for consideration at its twenty-fourth session.
2. In accordance with the procedure for miscellaneous documents, this submission is attached and reproduced* in the language in which it was received without formal editing.

* This submission has been electronically imported in order to make it available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the text as submitted.

**REPUBLIC OF CROATIA
MINISTRY OF ENVIRONMENTAL PROTECTION,
PHYSICAL PLANNING AND CONSTRUCTION
Zagreb, April 2006**

POSITION PAPER

on Agenda Item at the 24th session of the SBI of the UNFCCC, Bonn, 18-26 May 2006 - Level of emissions for the base year of Croatia under Article 4, paragraph 6 of the UNFCCC

Chronological Background

In 2001, at the Seventh Conference of Parties in Marrakesh, Croatia submitted its request for increase of the emission level for its reference year, with reference to Article 4.6. of the UNFCCC which allows countries with economies in transition a certain degree of flexibility in the implementation of their commitments. During 2002, 2003, 2004 and 2005, negotiations on the Croatian request have taken place at sessions of the Convention's subsidiary bodies, as well as through bilateral meetings.

At the Eleventh Conference of Parties to the UNFCCC, Montreal, 28 November to 9 December 2005, a decision was adopted with regard to the request of the Republic of Croatia for taking into consideration the specificities in determining the emission level in the base year. Pursuant to Article 4, paragraph 6 of the Convention, Croatia was allowed a certain degree of flexibility in determining its reference level of greenhouse gas emissions in relation to its historic level. In the Decision the Parties are invited to discuss the nature and level of flexibility at their next session of Subsidiary Body for Implementation.

During the entire period of negotiations since 2001, Croatia has met the decisions of the Convention by preparing a number of technical documents and clarifications. Croatia has also been active and open for discussions at bilateral and multilateral meetings.

Utilisation of Article 4.6 of the UNFCCC by other Parties

Base years differing from 1990, pursuant to Article 4.6, were adopted by Decision 9/CP.2 for several countries with economies in transition. By this Decision, in items 6 and 7, the Conference of the Parties requests the Convention's Subsidiary Body for Implementation (SBI) to consider any additional requests of Parties on the basis of Article 4.6. of the Convention, to take decisions as appropriate on its behalf, and to report thereon to the Conference of the Parties. It also requests that the Annex I Parties with economies in transition invoking Article 4.6 of the Convention in the implementation of their commitments should do so by explicitly indicating the nature of this flexibility and should state clearly the special consideration they are seeking and provide an adequate explanation of their circumstances.

In the period 1885 to 1990 Croatia's emissions were at the emission level of 1990, so that Croatia, contrary to other EIT Parties, could not select as its base year a year before 1990. Croatia's problem is specific, as its emissions in 1990, as well as in any year before 1990, do not effectively reflect the actual state of economic activities, particularly in the energy sector.

Particular specificities of the Republic of Croatia

In adapting to market economy Croatia had a specific and difficult path which included problems related to splitting of the economy of former Yugoslavia, followed by the war, market isolation and long lasting instability in the region. At the beginning of the war in 1991, due to decline in economic activities, the general standard and closing down of some major industrial sources (coke plants, steel works, light metal works), there was an abrupt emission decrease. The first signs of re-emerging economy in 1995 were followed by positive emission trends. In the period from 1995 to 2003 emissions grew at an annual rate of 3%, this corresponding to the average GDP increase. The emission change curve in the period 1995 to 2003 reflects specificities as compared to other EIT Parties. In other states a constant emission decrease after 1990 can be observed due to transition processes and economy restructuring, and recently also due to the implementation of emission reduction policies and measures (Fig. 1)¹. In Croatia, emissions are increasing due to the recovery of post-war economy, and due to the fact that the initial emission in 1990 does not reflect the effective state which could be a starting basis for the base year.

Level of greenhouse gas emission in 1990, prepared according to IPCC Guidelines for National Greenhouse Gas Inventories as well as the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention, amounted to 31.7 MtCO₂-eq, accounting for some 0.21 per cent of emissions of Annex I Parties and being among the lowest per capita emissions as compared to Annex I Parties (Croatia 6.6 tCO₂-eq/per capita, EIT 13.7 tCO₂-eq/per capita²). Emissions in 2003 reached 94 per cent of the emissions of 1990, whereby in recent years emissions in the electric power generation sector have increased by 31 to 47 per cent as compared to the emission in 1990.

Croatia's particular specificity in 1990 is linked to the energy sector:

- low energy intensity of energy consumption (total final energy demand 60 GJ/per capita, final electricity demand 2776 kWh/per capita)
- low share of coal in total energy consumption (8.3 per cent) and in electricity generation (6.3 per cent)
- **high share of renewable energy sources** in electricity generation (43 per cent of Croatia's own electricity generation in 1990)
- **high import of electricity (45 per cent)**
- significant share of co-generation in electricity generation (13.6 per cent)
- significant share of biomass in meeting the heating demand (17.4 per cent of general consumption)

Particular specificities relating to the electricity generation sector. In 1990, 55 per cent of the total electricity demand was covered by power generated in Croatia's own power plants, whereof only 31 per cent was generated by fossil fuel power plants (Table 1). These 31 per cent correspond to 4.9 TWh of generated electric power and this should be taken as a reference value for the future ³. With the planned increase in electric power consumption, i.e., anticipated consumption at the level of 28 TWh in 2020, the electric power generation

¹ UNFCCC, 2005: Key GHG Data (pages 64-84)

² UNFCCC, 2005: Key GHG Data (page 16)

³ In 1990 the specific emission per kWh of electric power supplied in the public network amounted to 0.250 kgCO₂-eq/kWh.

sector should generate 82 of electric power from renewable energy sources and/or nuclear energy.

The base year emission, as defined on the basis of Croatia's own electric power generation in 1990, is not an appropriate basis since this quantity was far from sufficient for the normal functioning of economy and life in the Republic of Croatia in that year of 1990. Such consumption corresponds to the state of development of the Republic of Croatia in the early 1970's. By such loss in 1990, Croatia was put back for thirty years in terms of available electric-power capacities (fixing Croatia on electric capacities of the year 1974, **Fig. 2**). Non-acceptance of the proposed flexibility would mean for Croatia, in terms of energy, constant lagging behind for thirty years and thus slowed down economic growth. This would not be in the spirit of the Convention, and particularly not for EIT Parties, for which under Article 4.6 of the Convention the possibility of a „certain degree of flexibility“ is provided due to their adaptation to market economy.

The increase rate of electricity consumption amounted to 3.1 per cent over the last ten years, whereas in the last year it amounted to 4.8 per cent (2003/2004). Current per capita electricity consumption is among the lowest in Europe (52 per cent of the EU average). By 2020, additional capacities of 1200-1500 MW will be needed, whereas in 2020, when most of the current sources will be put out of operation, some 15 TWh of electricity will be lacking, what is almost equal today's electricity supply. New sources have mostly to be coal-fired, as hydro potentials have already been utilised. In terms of environmental and economic feasibility, construction of new hydro potentials is acceptable only for 250 MW of new power.

Croatia is currently importing 25-30 per cent of electricity, which is almost equivalent to the production from its own fossil fuel power plants. Additional capacities for the import of electricity are limited by the capacities of the transmission network with regard to the state of the electricity market: transmission through neighbouring countries is reserved for their own demands and development, part of the capacities needs to be ensured for exchange within the EU market, and there are also commitments within the common electricity market in South East Europe. If construction of new energy sources is not initiated, the safety of supply to consumers will be seriously threatened.

There are limitations in the long-term supply of natural gas. In Croatia 40 per cent of natural gas is imported. The existing capacities are not sufficient and consumption has to be restricted each year by cutting off major industrial consumers.

It is pointed out that Croatia plays an active role in the process of the Energy Community Treaty for South East Europe, signed on 25 October 2005. The Treaty's objective is to establish in the countries of South East Europe a stable and regulated market framework to attract investments into energy infrastructure in order to provide for stable and continuous supply of gas and electricity

By the reconstruction and construction of two power-transformer stations of international significance and of a high-voltage power-transmission network in 2004, Croatia enabled re-connection of two parts of Europe into a technically unique electric-power system, enabling thereby the establishment of a unique European electricity market.

Policy and measures

Croatia plans to ratify Kyoto Protocol in the first quarter of 2007, and takes therefore measures, also prior to Protocol ratification, in line with its Environmental Protection Strategy and National

Environmental Action Plan, towards fulfilment of commitments under Annex B to Kyoto Protocol.

We indicate some specific measures that have been taken recently:

- In 2003 the Environmental Protection and Energy Efficiency Fund started its operation with revenues from air emission charges, charges from environment users, motor vehicle charges and waste charges. The Fund's budget for subsidising energy efficiency and renewable energy sources projects in 2004 amounted to 10.3 million EUR, and in the period 2005-2006 a total budget of 77 million EUR is planned;
- In 2006 application of the charge for greenhouse gas emissions to energy plants is starting;
- The first wind power plants of 6 MW were put into operation, contracts for the construction of 22 MW have been concluded, and also projects for the new wind power plants of 400 MW, have been prepared;
- In 2003 a new Gas Combined Cycle Cogeneration Power Plant (GCCCPP) of 200 MW was put into operation, and the construction of a new 100 MW GCCCPP to substitute the old capacities powered by heavy fuel oil is under preparation. Revitalisation of several hydro-power plants was carried out increasing thereby their production, and accumulators for major district heating systems (in Zagreb and Osijek) were built;
- Implementation of a number of small projects of energy efficiency and application of renewable energy sources in industry, the public sector and agriculture has begun;
- Implementation of two huge projects has begun, co-financed by GEF, through the World Bank and UNDP: 1) Croatian Energy Efficiency Project, and 2) Removing Barriers for Implementation of Energy Efficiency in the Service and Household Sector. The total budget for these projects is 43.5 million USD. The Croatian Renewable Energy project is in its final stage of preparation and with a budget of 13.4 million USD it shall stimulate the utilisation of biomass, wind energy and small hydro-power plants;
- Under the European Commission's LIFE-Third Country Programme co-financing of the project Building Capacities for Implementation of UNFCCC and Kyoto Protocol was granted, covering development of a climate change strategy, action plan, implementation regulations, emission registry, capacities for implementation of mechanisms under Kyoto Protocol and implementation of education and public promotion programmes.
- With regard to emissions from transport, the Regulation on biofuel quality was adopted, laying down the national target of 5.75% of biofuel share in the total quantity of fuels in 2010; measures are implemented to increase the volume and attractiveness of railway transport – increase in the capacity of commuter railway transport; construction of a RoLa terminal in Spacva for loading trucks on low-floor carriages to relieve the pressure on road communications; electrification of Croatian sections of Pan-European transport corridors (X, Vc and Vb); subsidising of tickets for pupils and students; adaptation of time tables to departure and arrival times of car ferries;

The unsolved issue regarding the Croatian request for consideration of flexibility has become a major obstacle to economy planning, preparation and decision-making on new investments and foreign investments in Croatia, and to the preparation of an allocation plan relating to the establishment of an emission trading scheme in Croatia and its connection with the EU emission trading scheme. Croatia is in the process of integration into the EU, and within this process special significance is given to the implementation of the UNFCCC and Kyoto Protocol. By the end of 2006, the adoption of a new Strategy and Action Plan for UNFCCC and Kyoto Protocol implementation is envisaged, and in this context it is crucial to complete in 2006 the negotiations on the Croatian issue.

Conclusion

We suggest that at the next Conference of the Parties to be held in Nairobi, November 2006, the request of the Republic of Croatia be supported for application of flexibility under Article 4.6 of the UN Framework Convention on Climate Change, and for increase of greenhouse gas emissions in its base year by 4.46 GgCO₂-eq, corresponding to 14.6 per cent. This is a minimal increase bringing the Republic of Croatia into an equal starting position with other Annex I parties of the UNFCCC.

By adopting the decision on the Croatian request, positive impacts on the public opinion will be created, since due to the base year issue the advantages of the Kyoto Protocol are not sufficiently recognised by the public. Thereby formal initiation of the Kyoto Protocol ratification procedure will be finally enabled, with Croatia's envisaged becoming a party to the Kyoto Protocol in 2007.

Figure 1 - GHG Emission in Croatia

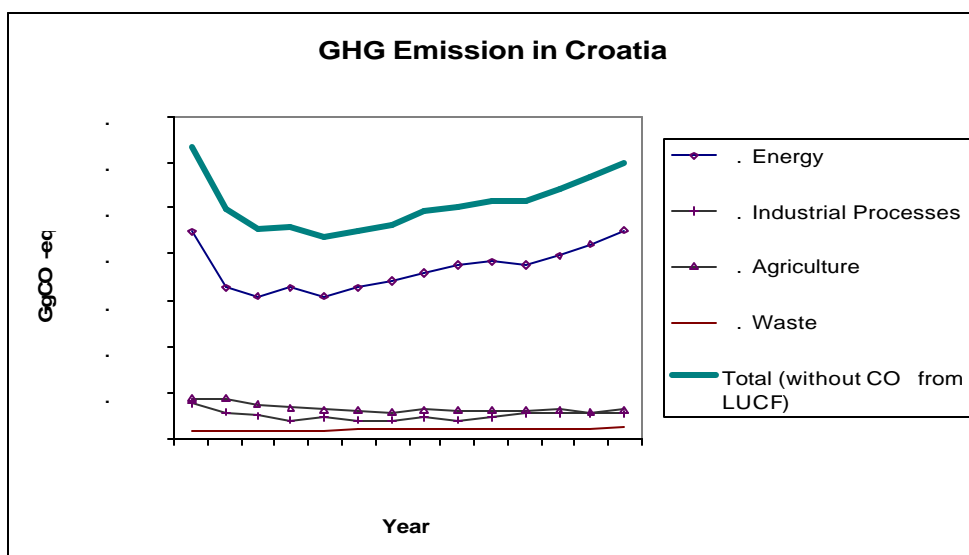
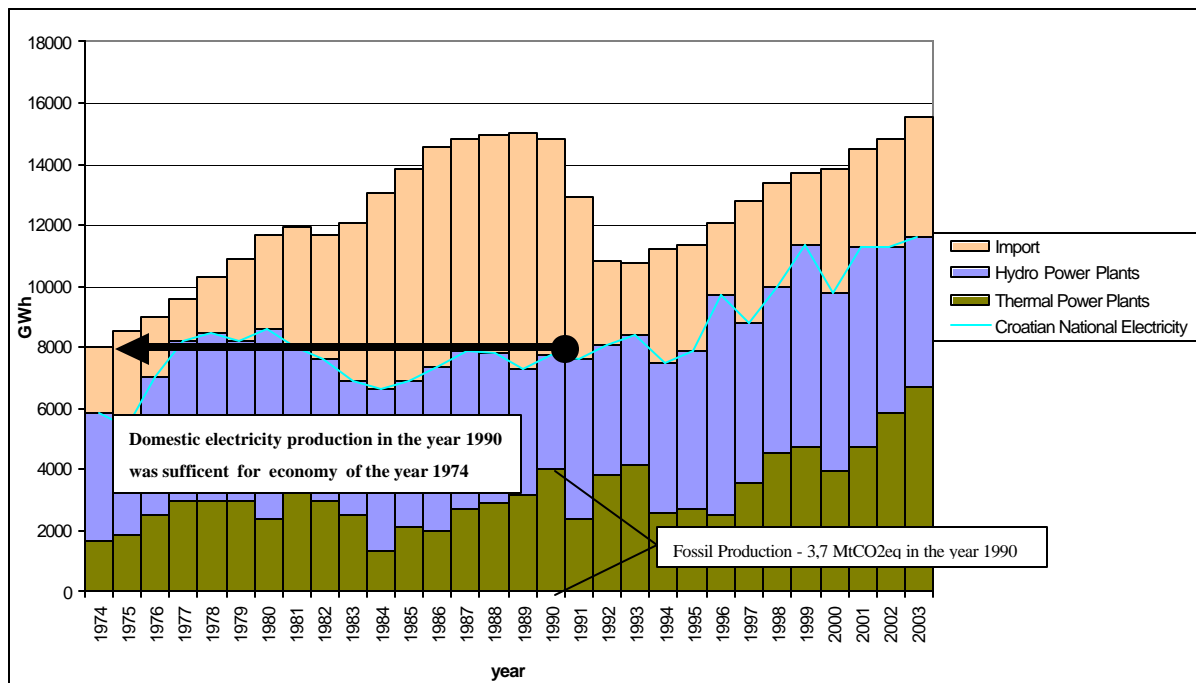


Table 1 - Electricity Supply in Croatia

	1990		2003	
	GWh	%	GWh	%
Domestic production	8693	55,2	12669	76,5
Hydro power plants	3748	23,8	4936	29,8
Thermal power plants	3760	23,9	5130	31,0
Public cogeneration plants	556	3,5	2022	12,2
Industrial cogeneration plants	629	4,0	582	3,5
Import	7061	44,8	3897	23,5
Import from Slovenia	2191	13,9	1623	9,8
Import from Serbia and BiH	3313	21,0	0	0,0
Import from countries outside of former Yugoslavia	1557	9,9	2274	13,7
Total electricity supplied	15754	100	16566	100

Fig. 2
Electricity Supply in Croatia in period 1974-2003



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