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SUMMARY

of the

REPORT OF THE IN-DEPTH REVIEW OF THE NATIONAL COMMUNICATION

of

SWITZERLAND

(The full text of the report (in English only) is contained in document FCCC/IDR.1/CHE)

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Summary[1]

1. The in-depth review of the first national communication of Switzerland was carried out between August 1995 and January 1996 and included a country visit by the team from 11 to 14 September 1995. The team included experts from France and Mexico.

2. In Switzerland, political powers are shared between the federal Government and the 26 cantons comprising the Confederation, with responsibilities for the promulgation of laws for each level of government defined in the Constitution. The process of formulation of legislation is lengthy, with final decisions frequently taken by national referenda. There is thus an inherent uncertainty with regard to how fast policies can be implemented.

3. Approximately 85 per cent of Switzerland's primary energy supply is met through imports. About 60 per cent of the domestic production of electricity is generated through hydroelectric plants and about 40 per cent through nuclear plants. If the current moratorium on the construction of new nuclear plants in Switzerland is extended beyond 2000, part of the electricity demand would eventually have to be met through imports or by the combustion of fossil fuels, with major implications for carbon dioxide (CO_2) emissions. In 1990, per capita emissions of CO_2 were approximately 6.7 t, compared to an average of about 12 t in countries of the Organisation for Economic Co-operation and Development (OECD). In 1994, Switzerland had the 10th highest energy prices and the lowest CO_2 intensity of the 23 countries participating in the International Energy Agency (IEA).

4. The greenhouse gas inventory covered the three main greenhouse gases as well as the precursors. A mixture of IPCC and CORINAIR methodologies was used. Only aggregate emission factors were provided, rendering it difficult to reconstruct the inventory data. Total gross CO_2 emissions were 45,700 Gg in 1990. In estimating CO_2 emissions, the data from the "agriculture" and "residential/commercial" sectors were not separated. CO_2 emissions from biomass energy were not calculated. The inventory included sequestration by sinks, which amounted to 5,200 Gg of CO_2. In 1990, 274 Gg of methane (CH_4) were emitted, mostly in the agricultural sector, and partly from landfills. In per capita terms, these emissions are about half the OECD average. Up to 1995, the data for CH_4 emissions from energy combustion and industrial processes were not available separated from non-methane volatile organic compound (NMVOC) emissions, except for transport. 15.2 Gg of nitrous oxide (N_2O) were emitted in 1990, mainly from agriculture. Estimates were approximate except for those for the transport sector. Estimates of the precursors are based on a study carried out in 1987 in the context of the Clean Air Ordinance.

5. When signing the United Nations Framework Convention on Climate Change, Switzerland announced a self-imposed national target of stabilizing CO_2 emissions by the year

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[1] In accordance with decision 2/CP.1 (see FCCC/CP/1995/7/Add.1), the full draft of this report was communicated to the Swiss Government, which had no further comments.

2000 at 1990 levels, and reducing them thereafter. The Strategy to Combat Air Pollution of 1986 establishes, *inter alia*, targets to return to 1960 emission levels for carbon monoxide (CO), nitrogen oxides (NO_x) and NMVOCs.

6. To a large extent, greenhouse gases are targeted by sectoral policies and measures, which have been introduced to implement several articles of the Constitution and federal and cantonal laws on energy, environmental protection, hazardous substances and forestry. General information was provided on the status of implementation of policies and measures. For example, the yearly evaluation of the programme Energy 2000 suggested that, after four years of the 10-year programme, approximately one third of the expected gains of renewable energy use and the stabilization of CO_2 emissions had been achieved, with studies indicating that policies and measures to improve energy efficiency were being broadly implemented, although with some variance as regards the coverage among cantons and energy consumption sectors. Switzerland expects that the programme's targets for the year 2000 will be met.

7. A number of important developments have occurred since submission of the first communication. Debate has progressed on the energy law that is expected to replace the Decree on Energy Use after 1998. Simultaneously, a proposal for a CO_2 reduction law is being elaborated, which would entitle a CO_2 tax to be introduced in the event that other measures fail to achieve specified targets. The approved "Alp Initiative" aims at shifting all trans-Alpine road freight to rail over the next 10 years; proposals are being discussed for an increase in tax on fuel and a revised tax system on road freight transport to help generate revenue for the construction of the planned New Alpine Rail Axis (NEAT). A tax on NMVOCs has been approved, and is expected to come into effect in 1997.

8. The national communication does not provide enough information to allow a third party to gain a full understanding of the projections analysis although some clarification was provided during the country visit. Projected emissions of CO_2, CH_4, N_2O, NO_x, CO and NMVOCs were provided for 2000.

9. The inventory figure for CO_2 used in the projections analysis was corrected for climate variability. Gross CO_2 emissions are projected to decrease by 2.5 per cent in 2000 compared to 1990 levels, but to increase by 1.3 per cent if the climate correction is not applied. Projections for 2030 are also provided for energy-related CO_2 assuming a continuation of the already agreed policy (in particular the Decree on Energy Use). These emissions decrease by 3.3 per cent in 2000 but show an increase of 5 per cent in 2030, compared to climate-corrected 1990 levels.

10. A decrease of 7 per cent in CH_4 emissions is projected for the year 2000, compared to 1990 levels. Data from the 1993 livestock inventory are used to derive a best guess for agricultural emissions in 2000, in the absence of a proper projection estimate. N_2O emissions - which include only data from the transport sector - are projected to increase sharply by 75 per cent because of the introduction of the catalytic converter.

11. The brief description of research on vulnerability assessment and on the expected impacts of climate change contained in the national communication was further developed during the country visit. No adaptation measures have been taken yet, but there is awareness of the possible need for such measures. A workshop on "Climate change impacts and adaptation options" was held in June 1995 and a paper on specific research needs is under preparation at the Federal Office of Environment, Forests and Landscape. In addition, Switzerland submitted a paper to the IPCC suggesting that a workshop be held to update the IPCC Technical Guidelines for the Assessment of Impacts and Adaptation Options.

12. Swiss official development assistance (ODA) amounted to 0.34 per cent of GDP in 1994. A decision was taken in 1991 to create a special fund for international cooperation with developing countries in the global environmental area, in the amount of Sw F 300 million over five years. This "new and additional" funding was partly utilized for the Swiss contribution to the Global Environmental Facility (GEF) and partly for bilateral cooperation activities. As the special funding decided in 1991 is fully committed, funding from regular sources will be provided to continue bilateral activities, possibly at current levels. As to the GEF, a new frame-credit may be proposed in order to continue the Swiss contribution. The potential for the Swiss private sector to engage in activities implemented jointly (AIJ) was viewed as limited, as the bulk of Swiss emissions comes from the transport and residential sectors, which are characterized by small decentralized sources, rather than from utilities and industry. The in depth-review team also noted that Switzerland has provided financial support to the UNFCCC secretariat in the past, and continues to do so.

13. The information campaigns carried out by the government and by non-governmental organizations were described in greater detail during the in-depth review. Switzerland also supports UNEP’s Information Unit on Conventions.

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