

Nuclear Power is Part of the Solution

The United Nations Framework Convention on Climate Change has focused attention on the ways in which mankind has produced potentially threatening changes in world climate. Growing concern over the dangers inherent in continually increasing emissions of carbon dioxide was addressed at Kyoto. Targets were set to reduce carbon dioxide emissions below 1990 levels by 2008 - 2012.

The table in this brochure, based on data derived from the BP Amoco Statistical Review of World Energy 2000, shows the progress of countries in working toward those targets in the energy sector.

Nuclear Science and Technology

- help meet the growing global demand for electricity
- make a significant contribution to sustainable development
- are helping reduce carbon dioxide emissions



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**Reducing
Carbon Dioxide
Emissions:
*Moving Toward
the Targets?***

1999 Performance



1999 Performance of Annex 1 Countries Against Their Kyoto Commitments

Carbon Dioxide Emissions from Energy, Relative to 1990

COUNTRIES	KYOTO TARGET %	ACTUAL %	SAVINGS FROM USING NUCLEAR %	IF NUCLEAR PLANTS WERE SHUT DOWN %
INDUSTRIALIZED ECONOMIES				
Australia	+8	16	n/a	16
Austria*	-13	11	n/a	11
Belgium & Luxembourg*	-7.5 [◇]	13	-19	32
Canada	-6	14	-9	23
Denmark*	-21	11	n/a	11
Finland*	0	2	-24	26
France*	0	5	-52	57
Germany*	-21	-13	-9	-4
Greece*	+25	17	n/a	17
Iceland	+10	42	n/a	42
Italy*	-6.5	6	n/a	6
Japan	-6	12	-15	27
Netherlands*	-6	9	-1	10
New Zealand	0	16	n/a	16
Norway	+1	19	n/a	19
Portugal*	+27	46	n/a	46
Republic of Ireland*	+13	47	n/a	47
Spain*	+15	34	-13	47
Sweden*	+4	-2	-62	60
Switzerland	-8	1	-30	31
United Kingdom*	-12.5	-8	-9	1
USA	-7	13	-8	21
European Union	-8	1	-14	15
*Countries of the European Union that have accepted the legally binding targets shown, within the overall EU "bubble" of -8%. ◇Belgium's target is -7.5%; Luxembourg's target is -28%. Currently available CO ₂ emission data groups them together.				
TRANSITION ECONOMIES				
Bulgaria	-8	-40	-11	-29
Czech Republic	-8	-36	-4	-32
Hungary	-6	-19	-11	-8
Poland	-6	-14	n/a	-14
Romania	-8	-47	-2	-45
Russian Federation	0	-34	-3	-31
Slovakia	-8	-22	-13	-9
Ukraine	0	-55	-5	-50
TOTAL WORLD		5	-6	11
of which: OECD†		10	-10	20
Developing Countries		27	-1	28
Transition Economies		-36	0	-36
Color Key:		INCREASE OF 4% OR MORE	NO NUCLEAR POWER	INCREASE OF 4% OR MORE
		INCREASE OF LESS THAN 4%	SAVING OF UP TO 4%	INCREASE OF LESS THAN 4%
		DECREASE	SAVING OF 4% OR MORE	DECREASE

†Organization for Economic Cooperation and Development; primarily industrialized countries.

Of the Industrialized Economies, only three countries are on course to meet their commitments. These all use nuclear power.

Germany has reduced CO₂ significantly because E. Germany was an inefficient user of energy before re-unification with W. Germany.

Note that all the "Transition Economies" of the former Soviet Union & Eastern Europe are meeting their Kyoto commitments. This is because their economies are in serious regression as they make the transition to market economies.

All other regions of the world are increasing their carbon dioxide emissions from the use of energy.

**If all nuclear power plants were shut down and replaced by gas plants,
none of the industrialized countries would be on course to meet their commitments.**