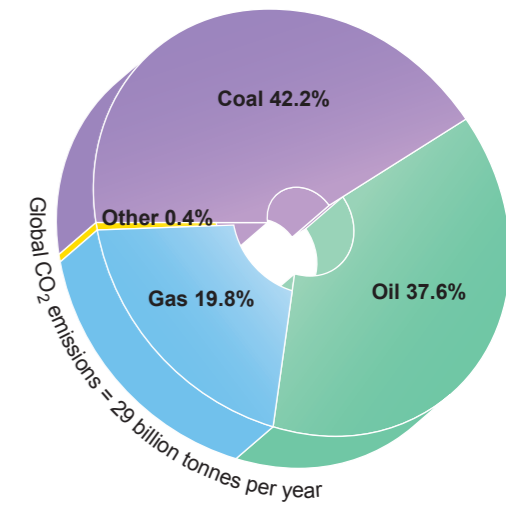
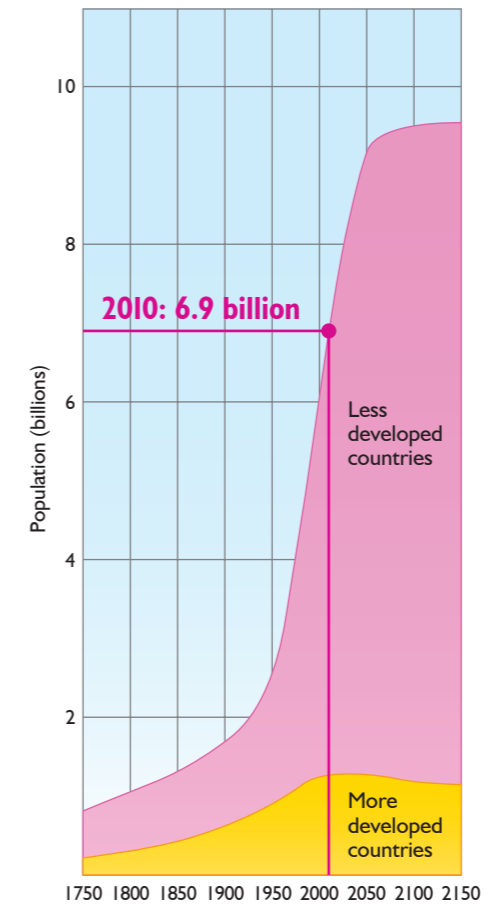




NUCLEAR POWER, ENERGY AND THE ENVIRONMENT

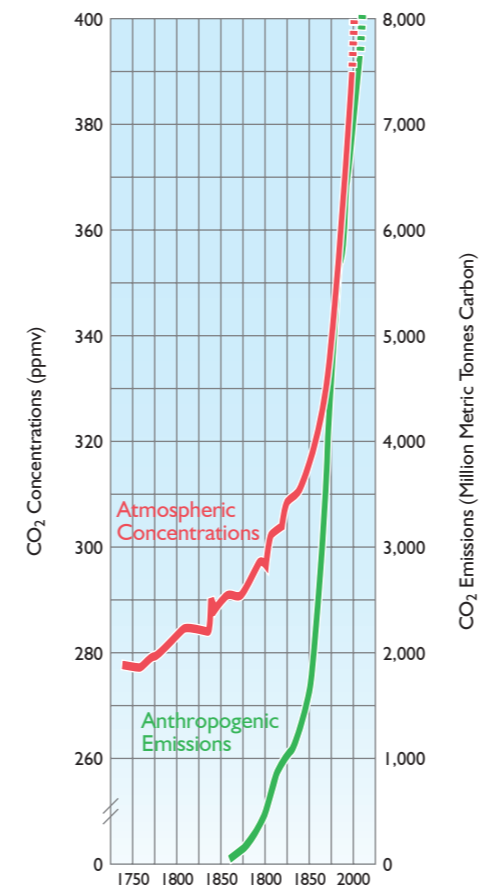


World population growth



Sources: United Nations, World Population Prospects The Population Reference Bureau

CO₂: Anthropogenic emissions and atmospheric concentrations



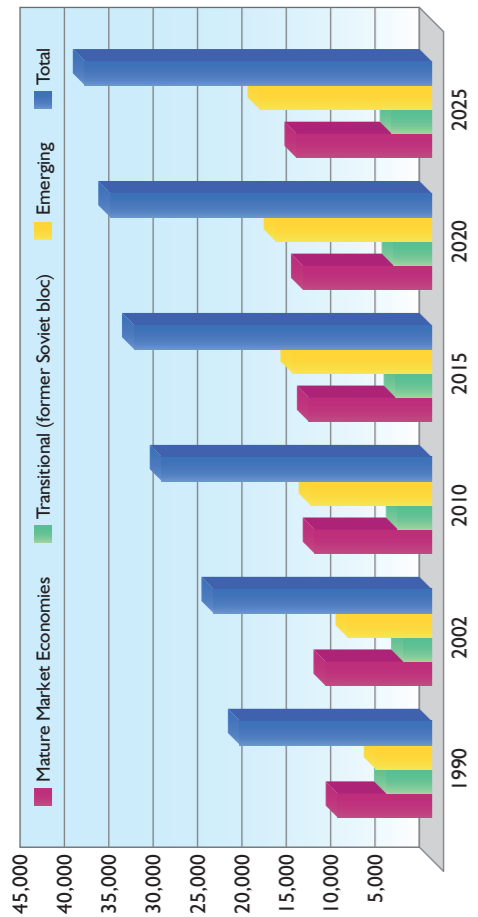
Source: Oak Ridge National Laboratory

Countries with nuclear electricity

	Nuclear capacity (MWe)	% share of electricity 2009
USA	101,119	20
France	63,236	75
Japan	47,102	29
Russia	22,811	18
Germany	20,339	26
South Korea	17,716	35
Ukraine	13,168	49
Canada	12,679	15
UK	11,035	18
Sweden	9399	35
China	8587	2
Spain	7448	18
Belgium	5943	52
India	4183	2
Czech Republic	3686	34
Switzerland	3252	40
Finland	2696	33
Bulgaria	1906	36
Brazil	1901	3
Hungary	1880	43
South Africa	1842	5
Slovakia	1760	54
Mexico	1310	5
Romania	1310	21
Argentina	935	7
Slovenia	696	38
Netherlands	485	4
Pakistan	400	3
Armenia	376	45
Total*	374,127	14

* Includes 6 reactors on Taiwan with a total of 4927 MWe. Sources: WNA, IAEA

World CO₂ emissions



Source: US Energy Information Administration

Energy and emissions, selected countries (2007)

Location	Population (million)	GDP (billion US\$)	CO ₂ emissions (million tonnes)	Energy use per capita (toe*)	CO ₂ (tonnes/toe*)
Australia	21	508	396	5.9	3.2
Austria	8	221	70	4.0	2.1
Bangladesh	159	70	40	0.2	1.6
Belgium	11	266	106	5.4	1.9
Brazil	192	809	347	1.2	1.5
Bulgaria	8	18	50	2.7	2.5
Canada	33	869	573	8.2	2.1
China	1320	2388	6028	1.5	3.1
Colombia	46	131	56	0.6	1.9
Congo (DR)	62	6	2	0.3	0.1
Croatia	4	26	22	2.1	2.4
Czech Rep	10	77	122	4.4	2.7
Denmark	5	179	50	3.6	2.6
Egypt	75	136	169	0.9	2.5
Ethiopia	79	14	6	0.3	0.3
Finland	5	151	64	6.9	1.8
France	64	1506	369	4.2	1.4
Germany	82	2065	798	4.0	2.4
Hungary	10	62	54	2.7	2.0
Iceland	0	12	2	15.7	0.5
India	1123	771	1324	0.5	2.2
Indonesia	226	233	377	0.8	2.0
Iran	71	152	466	2.6	2.5
Ireland	4	142	44	3.5	2.9
Italy	59	1184	438	3.0	2.5
Japan	128	5205	1236	4.0	2.4

Location	Population (million)	GDP (billion US\$)	CO ₂ emissions (million tonnes)	Energy use per capita (toe*)	CO ₂ (tonnes/toe*)
Lithuania	3	19	14	2.7	1.6
Mexico	106	755	438	1.7	2.4
Myanmar	49	18	12	0.3	0.8
Netherlands	16	440	182	4.9	2.3
New Zealand	4	66	35	4.0	2.1
Nigeria	148	70	51	0.7	0.5
North Korea	24	11	62	0.8	3.4
Norway	5	198	37	5.7	1.4
Pakistan	162	106	138	0.5	1.7
Philippines	88	107	72	0.5	1.8
Romania	22	56	92	1.8	2.4
Russia	142	406	1587	4.8	2.4
Saudi Arabia	24	242	358	6.2	2.4
Slovakia	5	31	37	3.3	2.1
Slovenia	2	27	16	3.6	2.2
South Africa	48	178	346	2.8	2.6
South Korea	48	706	489	4.6	2.2
Spain	45	734	345	3.2	2.4
Sweden	9	298	46	5.5	0.9
Switzerland	8	285	42	3.4	1.6
Thailand	64	173	226	1.6	2.2
Turkey	74	372	265	1.4	2.7
UK	61	1766	523	3.5	2.5
Ukraine	46	52	314	3.0	2.3
USA	302	11,468	5769	7.8	2.5
Vietnam	85	53	94	0.7	1.7
World	6609	39,493	28,962	1.8	2.4

* toe = tonnes of oil equivalent
Source: IEA

CO₂ emissions per capita (2007)

Location	tonnes	Location	tonnes	Location	tonnes
USA	19.1	Slovenia	7.9	Mexico	4.1
Australia	18.8	Norway	7.9	Turkey	3.6
Canada	17.4	Spain	7.7	Thailand	3.5
Saudi Arabia	14.8	Iceland	7.5	North Korea	2.6
Finland	12.2	Italy	7.4	Egypt	2.2
Taiwan	12.1	South Africa	7.3	Brazil	1.8
Czech Rep	11.8	Slovakia	6.8	Indonesia	1.7
Russia	11.2	Ukraine	6.8	Colombia	1.2
Netherlands	11.1	Bulgaria	6.6	India	1.2
Ireland	10.1	Iran	6.6	Vietnam	1.1
South Korea	10.1	France	5.8	Pakistan	0.9
Belgium	10.0	Switzerland	5.6	Philippines	0.8
Germany	9.7	Hungary	5.4	Nigeria	0.4
Japan	9.7	Sweden	5.1	Cote d'Ivoire	0.3
Denmark	9.2	Croatia	5.0	Bangladesh	0.3
UK	8.6	China	4.6	Myanmar	0.3
New Zealand	8.5	Lithuania	4.3	Ethiopia	0.1
Austria	8.4	Romania	4.3	D.R. of Congo	0.0
World					4.4

Source: IEA

CO₂ emissions per GDP (2007)

Location	kg/US\$	Location	kg/US\$	Location	kg/US\$
Switzerland	0.15	Finland	0.43	Hungary	0.87
Sweden	0.16	Cote d'Ivoire	0.47	Slovakia	1.18
Norway	0.19	Spain	0.47	Egypt	1.24
Iceland	0.20	USA	0.50	Pakistan	1.30
Japan	0.24	New Zealand	0.53	Thailand	1.30
France	0.25	Bangladesh	0.57	Saudi Arabia	1.48
Denmark	0.28	Mexico	0.58	Czech Rep	1.58
UK	0.30	Slovenia	0.59	Indonesia	1.62
Austria	0.31	Canada	0.66	Romania	1.64
Ireland	0.31	Taiwan	0.66	India	1.72
Italy	0.37	Myanmar	0.67	Vietnam	1.78
Germany	0.39	Philippines	0.67	South Africa	1.94
Belgium	0.40	South Korea	0.69	China	2.52
Netherlands	0.41	Turkey	0.71	Bulgaria	2.73
D.R. of Congo	0.42	Lithuania	0.74	Iran	3.07
Brazil	0.43	Nigeria	0.74	Russia	3.91
Colombia	0.43	Australia	0.78	North Korea	5.48
Ethiopia	0.43	Croatia	0.86	Ukraine	6.01
World					0.73

Source: IEA



WORLD NUCLEAR ASSOCIATION

Carlton House, 22a St. James's Square, London SW1Y 4JH, UK
Tel: +44 (0) 20 7451 1520 • Fax: +44 (0) 20 7839 1501
Website: www.world-nuclear.org • Email: wna@world-nuclear.org