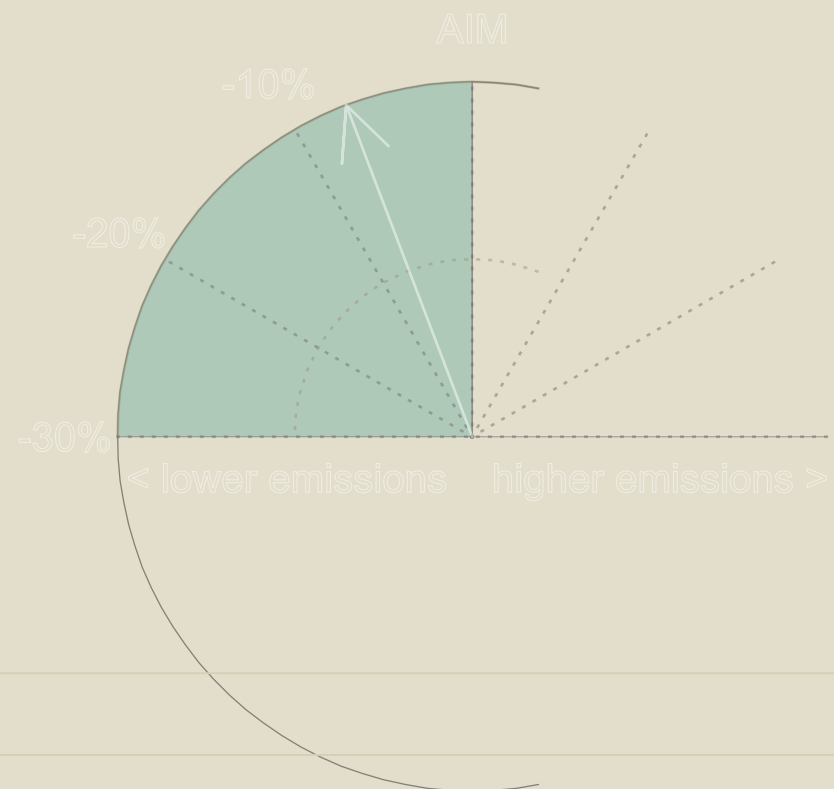


Malte Meinshausen



Annex I Fact Sheets

Emissions, Targets and Projections for Annex I Parties

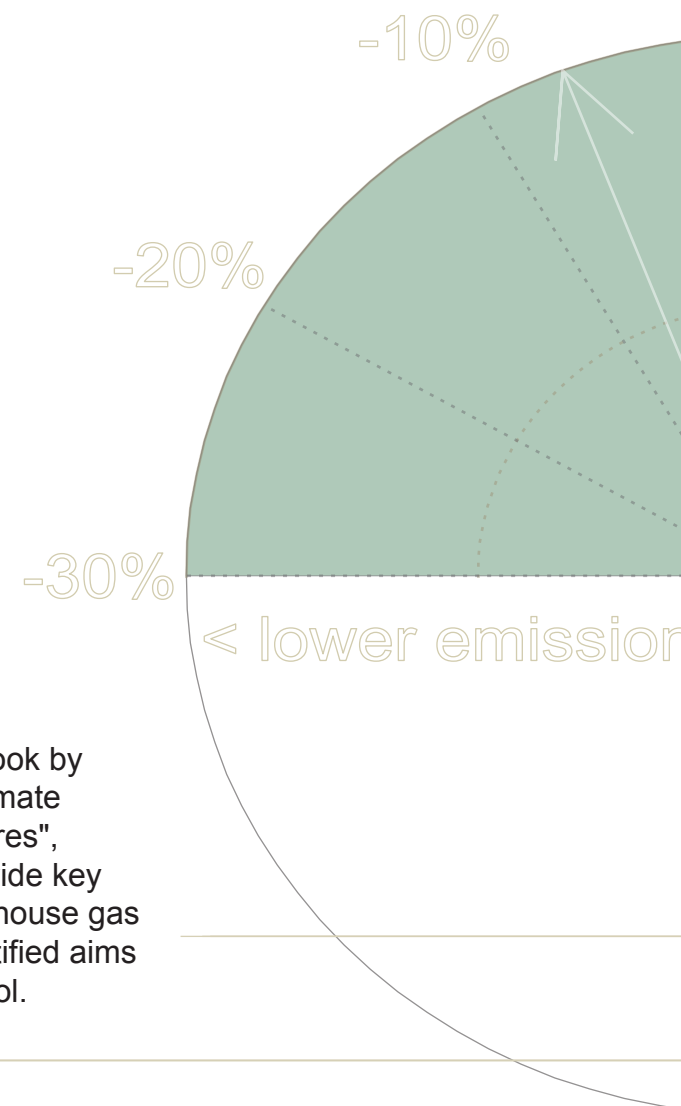
Annex I Fact Sheets

Emissions, Targets and Projections for Annex I Parties

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Acknowledgements: I'm particularly thankful to Bill Hare for joint work on an earlier database, Jeroen Peters and Jos Olivier for providing the EDGAR data, James Grabert for his help with the UNFCCC data and Fiona Koza for editing support. Any remaining errors remain, of course, with the author. This data compendium might be referenced as Meinshausen, M. (2004). "Emissions, Targets and Projections for Annex I Parties" in The International Climate Change Regime: A Guide to Rules, Institutions and Procedures. F. Yamin and J. Depledge. Cambridge, Cambridge University Press.

This data compendium is an excerpt from the forthcoming book by Farhana Yamin and Joanna Depledge "The International Climate Change Regime: A Guide to Rules, Institutions and Procedures", Cambridge University Press. The presented fact sheets provide key information for all Annex I Parties with respect to their greenhouse gas emissions. Countries' emissions are compared to their quantified aims and commitments under the UNFCCC and the Kyoto Protocol.



Background information

Aggregated Fact Sheets

Annex I
Annex II
Economies in Transition (EIT)
European Union EU-15
European Union EU-25
JUSSCANNZ
Annex I without USA & Australia
Annex I without USA, Australia & Russia

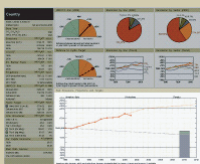
Country Fact Sheets

Australia	Greece	Norway
Austria	Hungary	Poland
Belarus	Iceland	Portugal
Belgium	Ireland	Romania
Bulgaria	Italy	Russian Federation
Canada	Japan	Slovakia
Croatia	Kazakhstan	Slovenia
Czech Republic	LatviaLiechtenstein	Spain
Denmark	Lithuania	Sweden
Estonia	Luxembourg	Switzerland
Finland	Monaco	Turkey
France	Netherlands	Ukraine
Germany	New Zealand	United Kingdom
		USA

Background information on the data presented in the fact sheets.

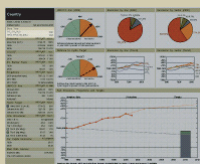
For more background information, please consult the forthcoming book by Farhana Yamin and Joanna Depledge "The International Climate Change Regime: A Guide to Rules, Institutions and Procedures", Cambridge University Press.

Past Emissions, Projections and Targets



Key data in relation to the Kyoto Protocol targets is compiled in this graph. Available inventory data of Annex A emissions is given from 1990 until the latest inventory year as percentage of base year emissions. Projections, if available, are displayed from 2000 to 2010 ('with measures' (orange dotted line); 'with additional measures' (orange dashed line)). Note that the projection base in the year 2000 might be inconsistent with year 2000 inventory data. Furthermore, the 'allowed emissions' are displayed for the period 2008-2012 as well as any categories of "Sink Allowances" and the "Single Project Exemption", if applicable. A linear interpolation between base year emissions (assumed in 1990) and 'Kyoto targets' (thin blue dotted line) puts the current emission trends into perspective and indicates whether countries' emissions are 'on track' to meet the Kyoto Protocol targets. The colour code of the bar chart is given in the table on the left. Since any net emissions from afforestation and deforestation activities (denoted by '-' in table on the left) can be fully compensated by removals related to forest management (see 'For.Mng.II'), both sink categories are consequently not displayed in the case of net emissions under Art. 3.3.

Base Year

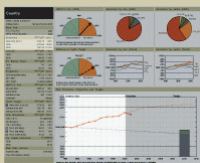


Base years for emissions under the Kyoto Protocol for carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and fluorinated gases (HFCs, PFCs and SF₆).

a) CO₂, CH₄, N₂O: The base year is 1990 with the following exceptions: Bulgaria (1988), Hungary (1985-1987), Poland (1988), Romania (1989) and Slovenia (1986).

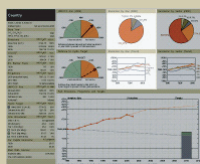
b) HFCs, PFCs, SF₆: 1990 (with the same exceptions as for CO₂, CH₄, N₂O), or 1995 if a Party prefers (KP Article 3.8). In these fact sheets, it is assumed that 1995 is chosen, if (a) the GWP-weighted sum of fluorinated gas emissions was higher in 1995, or (b) no fluorinated gas emissions were reported for 1990. Parties must make their choice by 1 January 2007 (Decision 9/CP.2 and 11/CP.4).

Explanatory Notes



Emissions

Greenhouse gas emissions from gases and sources as in Annex A of the Kyoto Protocol. Not included in Annex A are emissions or removals from LULUCF activities (except some agricultural sources) and emissions from international marine transport and aviation (bunker fuels). Units: Million tonnes of carbon dioxide equivalent per year (MtCO₂e/yr), using Global Warming Potentials in accordance with Decision 2/CP.3 ("1995 IPCC GWP values"). Emissions are also given as a percentage of base year (B.Yr.) emissions.



Emissions by Gas

The pie charts display the relative share of CO₂, CH₄, N₂O and fluorinated gases (sum of HFCs, PFCs, and SF₆ weighted by Global Warming Potentials) of Annex A emissions in the year 2000. In the trend chart, emissions of Annex A gases from 1990 until the latest inventory year are displayed as a percentage of their respective base year emissions.



Emissions by Sector

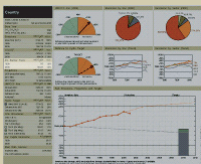
The pie charts display the relative share of total Annex A emissions in the year 2000, broken down by sector.. The sectors are energy (without transport) (ENE), transport (TRA), industrial processes (IND), solvents and other product use (SOL), agriculture (AGR) and waste (WAS), according to the Revised 1996 IPCC Reporting Guidelines. In the trend chart, emissions by Annex A sectors from 1990 until the latest inventory year are displayed as a percentage of their respective base year emissions.



LULUCF

Net removals by Land Use, Land-Use Change and Forestry (LULUCF) for years 1990 and 2000. LULUCF emissions comprise the following emission categories: 'Changes in Forest and Other Woody Biomass Stocks', 'Forest and Grassland Conversion', 'Abandonment of Managed Lands' and CO₂ Emissions and Removals from Soil', as defined in the Revised 1996 IPCC Good Practice Guidelines. Note that these LULUCF categories overlap, but are not congruent with the categories that can or must be accounted for compliance purposes under the Kyoto Protocol (cp. 'Sink Allowances' below). Units: The net LULUCF emissions (+) or removals (-) for the years 1990 and 2000 are given in MtCO₂e/yr and as a percentage of the respective years' Annex A emissions (% Yr.).

Explanatory Notes



Int. Bunker Fuels

Emissions by international transport (aviation and marine) for years 1990 and 2000. Units: MtCO₂e/yr and as percentage of 1990 or 2000 Annex A emissions (% Yr.).

Projections



Projections of Annex A emissions until 2010 under the assumptions "with measures" and "with additional measures".

a) 2000 (projection base): Emissions for 2000 in the projections section of the 3rd National Communications are sometimes not fully consistent with the reported emissions for 2000 in the inventory submissions. This is generally due to different underlying assumptions (e.g. projections relying on older inventory data), or different coverage of sectors and gases.

b) 2010 "with measures": Projections that are classified 'with measures (WM)' incorporate the effects of policies and measures that are implemented or committed to in the national communication. 30 of the 32 3rd National Communications analyzed in FCCC/SB/2003/7/Add.3 provided "with measures" scenarios (orange dotted line).

c) 2010 "with additional measures": Projections 'with additional measures (WAM)' include the effects of additional measures under consideration and as specified by the Party. 21 of the 32 3rd National Communications analyzed in FCCC/SB/2003/7/Add.3 provided "with additional measures" scenarios (orange dashed line).

For detailed notes on the projection data, consult the document FCCC/SB/2003/7/Add.3 or the Parties' 3rd National Communications, available on <http://unfccc.int/>.

UNFCCC aim



Progress toward the UNFCCC objective to return to 1990 emission levels by 2000. Each individual country's performance under the UNFCCC objective (Art. 4.2 FCCC (a) and (b)) is indicated by the difference between its actual emissions in year 2000 ('Actual') and its 1990 emissions ('Allowed'). The emissions counted are those indicated under the section 'Emissions' (see above) plus bunker fuel emissions, if available. In cases where a country's emissions in 2000 were below 1990 levels, the indicator arrow points to the left (lower emissions; '-'). Units: MtCO₂e/yr and percentage of 1990 emissions (% 1990).



Kyoto Target

Emission targets under the Kyoto Protocol for 2008-2012.

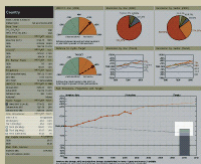
a) Allowed 2008-2012 (An.B)/(EU): The 'Allowed Emissions' are defined here as a country's base year emissions times the percentage listed in Annex B of the Kyoto Protocol (with the exception for the EU15 member countries, where the EU Burden Sharing Agreement serves as the basis for calculating the targets). Thus, the 'Allowed Emissions' as defined here are identical to the 'assigned amounts' as defined in the Marrakech Accords (paragraph 5 of Annex to -/CMP.1, Decision 19/CP.7, FCCC/CP/2001/13/Add.2, page 57/58) with the exception of those countries that account for deforestation in their baseline pursuant to KP Article 3.7 (see 'Sink Allowances' below).

b) Distance from year X: Necessary emission reductions below latest inventory data (e.g. 2001) in order to reach the 'Allowed Emissions' level. A positive (negative) value means that further emission reductions are (not) necessary in order to reach target.

c) Distance from WM: Necessary emission reductions below projected levels under the "with measures" scenario for 2010 (where WM projections are available).

d) Distance from WAM: Necessary emission reductions below projected levels under the "with additional measures" scenario for 2010 (where WAM projections are available).

Units: MtCO₂e/yr and percentage of base year Annex A emissions (% B.Yr.). Sources: Annex B of the Kyoto Protocol, available at FCCC/CP/1997/7/Add.1, page 30; For the EU Burden Sharing Agreement, see conclusions of 2106th Council meeting ENVIRONMENT Luxembourg, 16-17 June 1998, available online at <http://www.eel.nl/council/2106.htm>.



Sink Allowances

Potential credits and debits for the first commitment period related to the accounting of LULUCF activities. This section attempts to quantify the magnitude of LULUCF-related credits that each Party could potentially claim. These LULUCF categories comprise those in the Kyoto Protocol (Art. 3.3) and additional categories or caps provided for in the Marrakech Accords (Art. 3.4). Units: MtCO₂e/yr and percentage of base year emissions.

a) CDM sinks: Eligible LULUCF activities under the Clean Development Mechanism are afforestation and reforestation activities. The acquisition (addition to assigned amount) of these CDM sink credits is limited to 1% of a country's base year emissions (see paragraph 14, in Decision 11/CP.7, page 61 of FCCC/CP/2001/13/Add.1). For countries for which KP Art. 3.7 applies (deforestation in the base year - see above), the calculation of allowed CDM sink credits takes into account this change in the base year emissions.

b) For. Mng. I (AppZ): A country is allowed to account for forest management up to the country-specific limit given here (Appendix to Decision 11CP.7 and Decision 12/CP.7, FCCC/CP/2001/13/Add.1, page 55).

c) Agr. Mng.: This category comprises credits due to cropland management, grazing land management and revegetation. No caps apply to this category of credits, and estimates are uncertain due to incomplete and uncertain removal projections up to 2010.

c.1) Cropland Management: In order to derive a rough estimate of cropland management credits, the following assumptions have been made. A country's cropland area has been assumed to be equal to the 'arable land and permanent cropland' area as estimated by the FAO for the year 2001. The carbon uptake factor for cropland management activities was chosen to be 0.32 tC/ha/yr in accordance with an average estimate for Annex I countries (IPCC SP LULUCF). Furthermore, it has been assumed that 20% of the total cropland area might be carbon-managed in addition to 1990 management practices ('implementation factor'). Multiplication of the area, the implementation factor and the carbon uptake factor lead to the rough estimates presented here. Note that no emissions or removals from non-CO₂ gases have been taken into account in this estimate, although N₂O emissions can be assumed to increase and partially offset CO₂ sequestration (see Table 4-4, IPCC Special Report on LULUCF, page 199). Source: FAO database available at <http://apps.fao.org/page/collections>; Carbon uptake factors taken from Table 4.1, page 184 in IPCC Special Report on LULUCF, available online at http://www.grida.no/climate/ipcc/land_use/158.htm

(continued on next page)



Sink Allowances (continued)

c.2) Grazing land Management: For cropland management, grazing land area has been assumed equal to the 'permanent pasture' area based on FAO estimates for 2001. The carbon uptake factor for grazing land management activities was chosen to be 0.53 tC/ha/yr in accordance with an average estimate for Annex I countries (see Table 4.1, IPCC Special Report on LULUCF, page 184). Furthermore, it has been assumed that 10% of the total cropland area might be carbon-managed ('implementation factor'). The implementation factor is assumed to be lower than for cropland management due to the less beneficial side effects of carbon management on grazing lands, such as acidification, erosion, increased energy use, and reduced biodiversity (see Table 4.4, IPCC Special Report on LULUCF, page 199). Note that, as for cropland management, no emissions from non-CO₂ gases have been taken into account.

c.3) Revegetation: Credits for 'revegetation' were only assumed for Australia (+0.59 MtCO₂e/yr) and Iceland (+0.014 MtCO₂e/yr), the only two countries that presented estimates in their 1st August 2001 submissions (see FCCC/SBSTA/2000/9/Add.1 and FCCC/SBSTA/2000/MISC.6(Add.1)). For other countries, there are no official estimates for the 'revegetation' potential, partially due to a vague definition of 'revegetation' (see definition in Decision 11/CP.7, page 58 of FCCC/CP/2001/13/Add.1).

d) Aff & Def (est.): The estimates for Afforestation and Deforestation-related emissions (KP Art. 3.3) are from countries' own projections as provided in their submissions on 1st August 2001 under IPCC definitions (FCCC/SBSTA/2000/9/Add.1). Updated estimates that were subsequently provided by some countries (Austria, Netherlands, Portugal, Spain and United Kingdom) have been taken into account (European Environmental Agency, 2003 "Greenhouse gas emission trends and projections in Europe 2003", Environmental Issue Report No 36).

e) For.Mng. II: Beyond the credits under 'For.Mng I (AppZ)', a country is allowed to account for forest management in order to offset any potential debits under Art. 3.3. A country's forest management potential is assumed to be sufficiently high to compensate any Art. 3.3. 'debts' beyond the allowances under 'For.Mng I (AppZ)'.

f) Defo in B.Yr.: The second part of Art. 3.7 (KP) requests Parties to include emissions and removals from deforestation activities in their base year emissions if all LULUCF activities (according to the revised 1996 IPCC Guidelines) were a net source in the base year. This provision is only applicable to a limited number of countries - with Australia's base year emissions likely to be the most affected (see country specific notes).

Single Projects



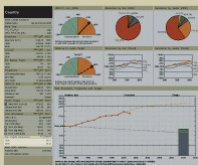
The possible exemption of certain single project emissions is presented for Iceland and Monaco, which are the only two countries eligible to exclude up to 1.6 MtCO₂e/yr. Units: MtCO₂e/yr and percentage of base year emissions. Source: 3rd National Communication of Iceland, page 20-22, and Decision 14/CP.7

Per Capita Emissions



As one simple indicator to compare emissions across countries, the per capita emissions are given for 1990 and 2000 (or the latest available year). Per capita emissions are given in tCO₂e per capita per year (tCO₂e/per/yr) comprising 'Annex A' and bunker fuel emissions. Source: Population data from FAO, available on: <http://apps.fao.org/page/collections>.

Main Data Sources



If not stated otherwise, the data is drawn from the country's official inventory submissions to the UNFCCC.

a) "CRF 2003": The country's 2003 submission in the Common Reporting Format (CRF) was used, as available at <http://unfccc.int/program/mis/ghg/submis2003.html>

b) "ghg.unfccc.int": Since no 'CRF 2003' submission was available, data was drawn from the GHG online database as of 2002, available at ghg.unfccc.int.

c) EDGAR: Where no UNFCCC data was available, the EDGAR database has been used (see <http://arch.rivm.nl/env/int/coredata/edgar/>). Where indicated by an asterisk in the table, remaining data gaps for international bunker fuels were filled by using the nearest datapoints in the EDGAR database from 1985 to 1995. (Olivier, J.G.J. and J.J.M. Berdowski (2001a) Global emissions sources and sinks. In: Berdowski, J., Guicherit, R. and B.J. Heij (eds.) "The Climate System", pp. 33-78. A.A. Balkema Publishers/Swets & Zeitlinger Publishers, Lisse, The Netherlands and Olivier, J.G.J. (2002) Part III: Greenhouse gas emissions: 1. Shares and trends in greenhouse gas emissions; 2. Sources and Methods; Greenhouse gas emissions for 1990 and 1995. In: "CO₂ emissions from fuel combustion 1971-2000", 2002 Edition, pp. III.1-III.31. International Energy Agency (IEA), Paris. ISBN 92-64-09794-5).

Country specific notes

- a) Australia: There is some uncertainty as to whether Australia qualifies for an inclusion of its deforestation emissions in the baseyear ('Defo in B.Yr.'). The 1990 net emissions due to LULUCF are uncertain, especially the contribution from "vegetation thickening", and could be negative. In this case, Australia's effective commitments would be about 30% lower.
- b) Iceland: Note that special projections for Iceland "with add. measures I" (WAM I) and "with add. measures II" (WAM II) are displayed instead of WM and WAM. The scenarios are taken from Iceland's 3rd National Communication (pages 20-22) including emissions fulfilling 14/CP.7 (single projects).
- c) Turkey: Due to a lack of UNFCCC data, Turkey's fact sheet is solely based on the EDGAR database.
- d) Slovakia: Int. bunker fuel data for 2000 has been assumed equal to the latest available estimate in the EDGAR database (1995).
- e) Netherlands: Int. bunker fuel data includes CO2 emissions only.
- f) Ukraine, Russia, and Belarus: Transport related emissions were not reported separately and are therefore presented as part of the energy related emissions. This affects as well the relevant aggregated fact sheets - indicated by bracketed Transport emissions in the sectoral pie plot).
- g) Russia: Russia inventory submission data has been updated by the information provided in its 3rd National Communications up to 1999. Projections SCEN II and SCEN III are based on Russia's own CO2 projections '2' and '3', as reported in Table V.4 of the 3rd National Communications, and the assumption that an equal growth rate applies for the non-CO2 gases.

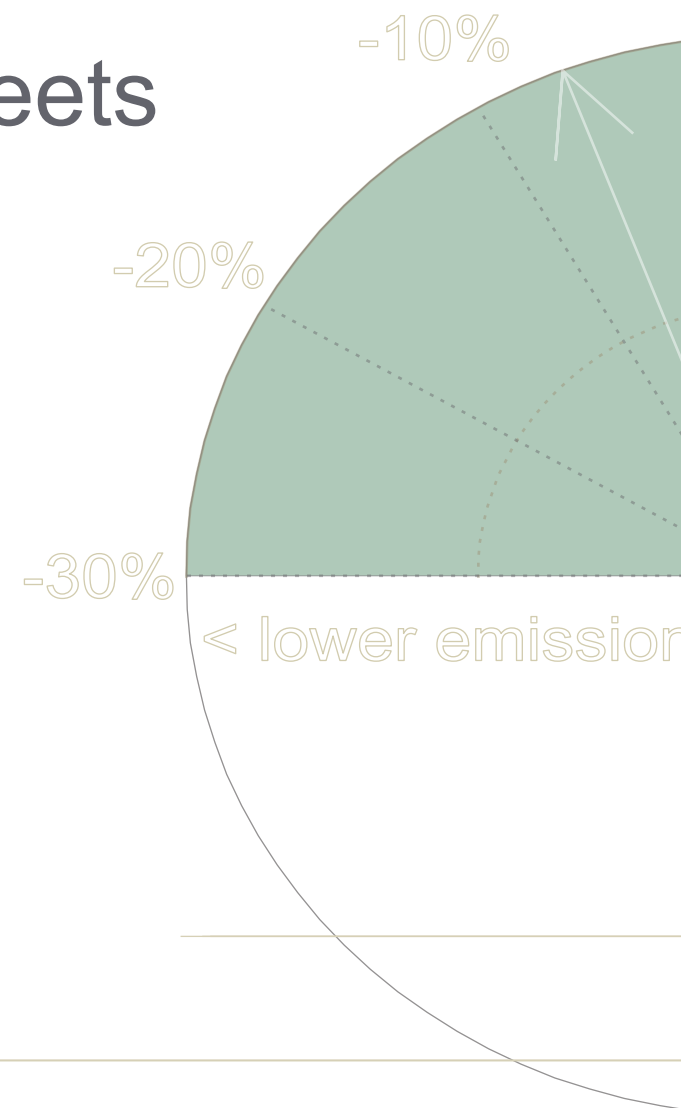
Aggregated fact sheets

Individual country data has been aggregated for different groupings, namely Annex I, Annex II, EIT, EU-15, EU-25 and JUSSCANNZ. Some assumption had to be made in order to aggregate the official UNFCCC data. For those countries, categories and years, where UNFCCC data was missing, linear interpolation between the reported data points has been performed in order to fill data gaps. For the countries which did not report up until 2001, constant emissions have been assumed from the latest available data point onwards, except for Russia, where the CO2 energy growth rate according to the IEA statistics (IEA, 2003) has been assumed for all gases and sources after the most recent reported data, 1996.

- a) Annex I: Aggregated data for all Annex I countries less Turkey, Belarus, Kazakhstan
- b) Annex II: Aggregated data for all countries inscribed in Annex II of the UNFCCC. Turkey is excluded.
- c) EIT: Aggregated data for countries with economies in transition (EIT), namely Russia, other Annex I states of the former Soviet Union and Eastern Europe. Belarus and Kazakhstan are not included. Note that Russia and Ukraine did not separately report transport related emissions. Thus, the presented transport emissions are only a subset of the overall transport emission in EIT countries.
- d) EU-15: Aggregated data for European Union's 15 member states as given in EU's CRF submission 2003. Sink allowances represent net aggregates over all member country estimates which leads to net positive emission for the 'Defo in B.Yr.', 'Aff&Def' as well as the 'For.Mng. II' category.
- e) EU-25: Aggregated data European Union's 25 member states as of 2004.
- f) JUSSCANNZ: Aggregated data for non EU developed countries, namely Japan, USA, Switzerland, Canada, Australia, and New Zealand.

Aggregated Fact Sheets

Annex I
Annex II
Economies in Transition (EIT)
European Union EU-15
European Union EU-25
JUSSCANNZ
Annex I w/o USA, AUS
Annex I w/o USA, AUS, RUS



Annex I

Countries listed in Annex I of UNFCCC
(except Turkey, Belarus, Kazakhstan)

Base Year

CO₂, CH₄, N₂O: varied
HFCs, PFCs, SF₆ (est.): varied

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	18253.99	100%
1990:	18042.71	98.8%
2000:	17237.58	94.4%
LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-1949.52	-10.8%
2000:	-2032.96	-11.8%
Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	402.3	2.2%
2000:	425.86	2.5%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	18445.01	100%
Actual 2000:	17663.44	95.8%
Distance to aim:	-781.57	-4.2%
Achieved?:	Achieved	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12:	17302.75	94.8%
Distance from 2001	-160.42	-0.9%

Single Project	MtCO ₂ e/yr	%B.Yr.
Allowance 2008-2012:	3.2	0%

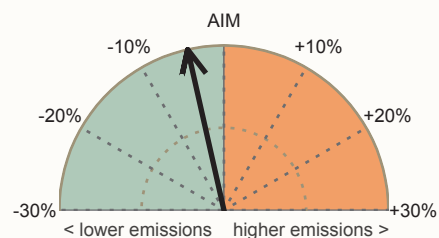
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	183.88	1%
Agr.Mng.(est.):	309.22	1.7%
For.Mng. I (AppZ):	358.86	2%
Aff&Def.:	-64.59	-0.4%
For.Mng. II:	106.95	0.6%
Defo in B.Yr.(est.):	133.99	0.7%
Sink Allowances Total:	1028.31	5.6%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	16.56
2000:	15.27

Main Data Sources

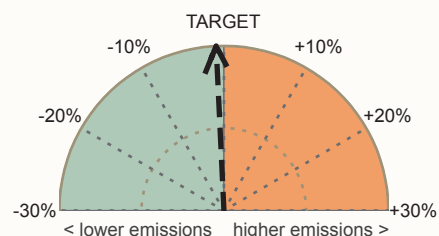
Inventory data: CRF 2003; ghg.unfccc.int

UNFCCC Aim (2000)



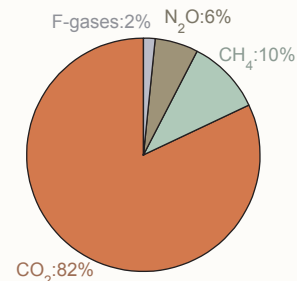
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

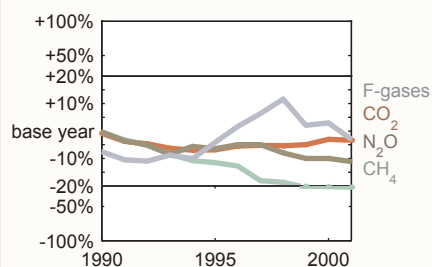


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

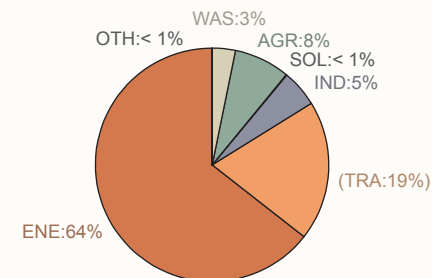
Emissions by Gas (2000)



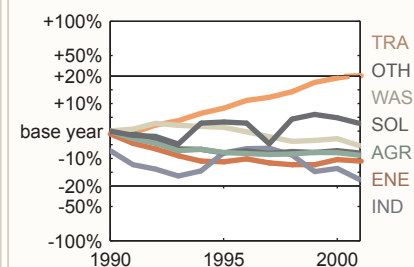
Emissions by Gas (Trend)



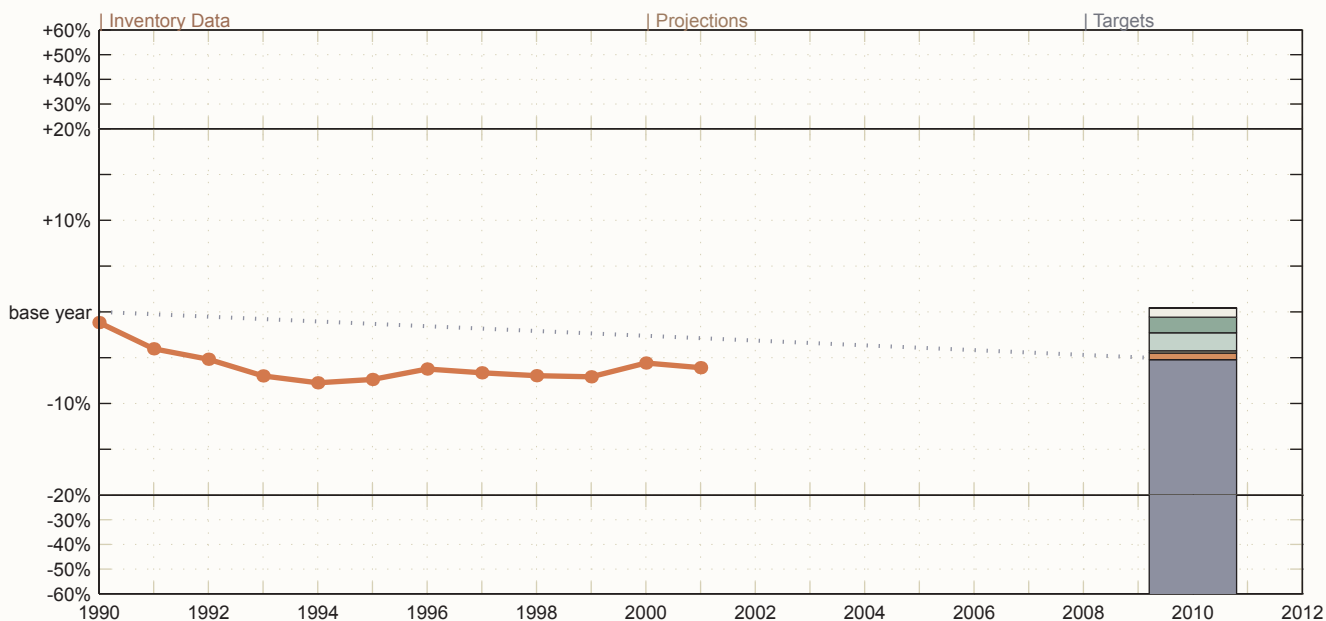
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Annex II

Countries listed in Annex II of UNFCCC

Base Year

CO ₂ , CH ₄ , N ₂ O:	1990
HFCs, PFCs, SF ₆ (est.):	1990 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
-----------	------------------------	--------

Base Year (B.Yr.):	12806.68	100%
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1990:	12737.92	99.5%
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2000:	13879.52	108.4%
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LULUCF	MtCO ₂ e/yr	%Yr.
--------	------------------------	------

1990:	-1404.66	-11%
-------	----------	------

2000:	-1096.01	-7.9%
-------	----------	-------

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
-------------------	------------------------	------

1990:	332.32	2.6%
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2000:	399.43	2.9%
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UNFCCC Aim	MtCO ₂ e/yr	% 1990
------------	------------------------	--------

Allowed 2000:	13070.24	100%
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Actual 2000:	14278.95	109.2%
--------------	----------	--------

Distance to aim:	1208.71	9.2%
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Achieved?:	Missed
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Kyoto Target	MtCO ₂ e/yr	%B.Yr.
--------------	------------------------	--------

Allwd 2008-12:	11959.58	93.4%
----------------	----------	-------

Distance from 2001	1817.47	14.2%
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Single Project	MtCO ₂ e/yr	%B.Yr.
----------------	------------------------	--------

Allowance 2008-2012:	1.6	0%
----------------------	-----	----

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
-----------------	------------------------	--------

CDM sinks:	129.41	1%
------------	--------	----

Agr.Mng.(est.):	238.59	1.9%
-----------------	--------	------

For.Mng. I (AppZ):	217.32	1.7%
--------------------	--------	------

Aff&Def.:	-34.6	-0.3%
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For.Mng. II:	76.96	0.6%
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Defo in B.Yr.(est.):	133.99	1%
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Sink Allowances Total:	761.67	5.9%
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Per Capita Emissions	tCO ₂ e/per/yr
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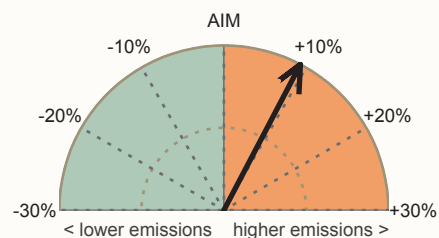
1990:	16.28
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2000:	16.75
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Main Data Sources

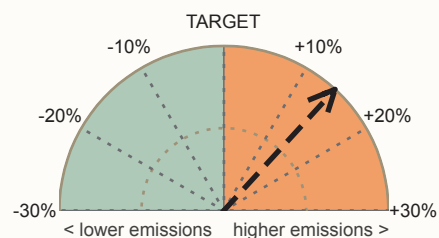
Inventory data:	;CRF 2003;ghg.unfccc.int
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UNFCCC Aim (2000)



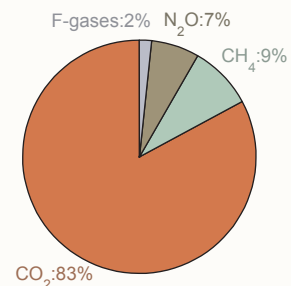
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

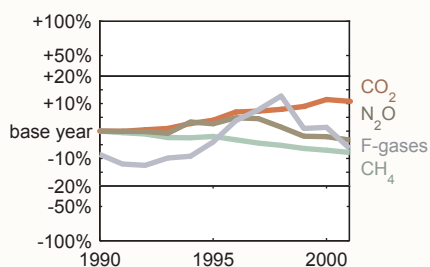


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

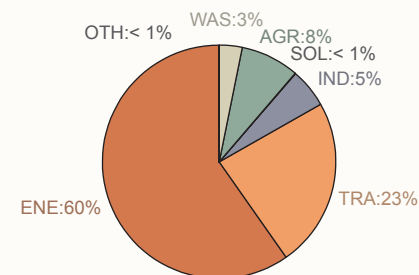
Emissions by Gas (2000)



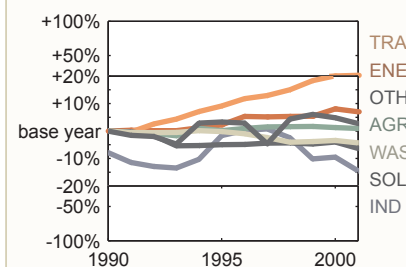
Emissions by Gas (Trend)



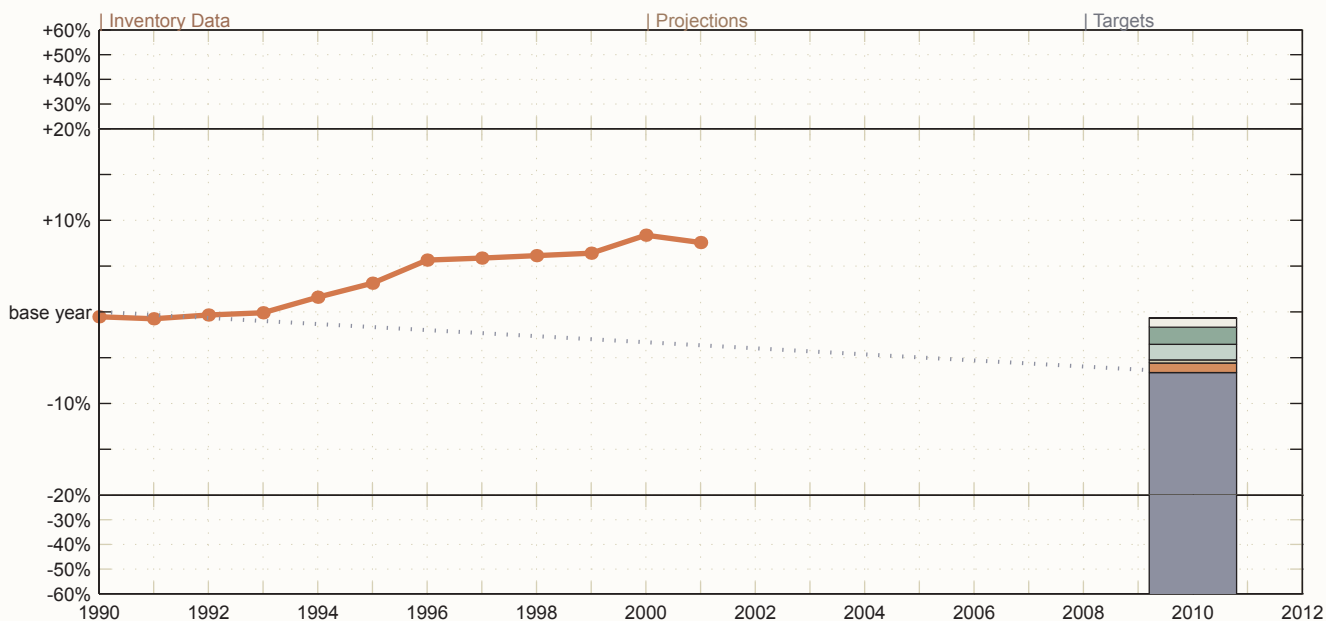
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

EIT

Countries with economies in transition
(Former Soviet Union and Eastern Europe)

Base Year

CO₂, CH₄, N₂O: varied

HFCs, PFCs, SF₆ (est.): varied

Emissions MtCO₂e/yr %B.Yr.

Base Year (B.Yr.): 5446.99 100%

1990: 5304.47 97.4%

2000: 3357.7 61.6%

LULUCF MtCO₂e/yr %Yr.

1990: -544.86 -10.3%

2000: -936.95 -27.9%

Int. Bunker Fuels MtCO₂e/yr %Yr.

1990: 69.98 1.3%

2000: 26.43 0.8%

UNFCCC Aim MtCO₂e/yr % 1990

Allowed 2000: 5374.45 100%

Actual 2000: 3384.14 63%

Distance to aim: -1990.31 -37%

Achieved?: Achieved

Kyoto Target MtCO₂e/yr %B.Yr.

Allwd 2008-12: 5342.88 98.1%

Distance from 2001 -1977.95 -36.3%

Sink Allowances MtCO₂e/yr %B.Yr.

CDM sinks: 54.47 1%

Agr.Mng.(est.): 70.63 1.3%

For.Mng. I (AppZ): 141.5 2.6%

Aff&Def.: -29.99 -0.6%

For.Mng. II: 29.99 0.6%

Defo in B.Yr.: not applicable

Sink Allowances Total: 266.6 4.9%

Per Capita Emissions tCO₂e/per/yr

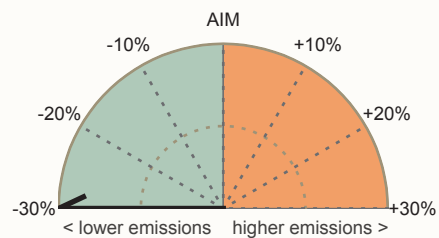
1990: 17.27

2000: 11.14

Main Data Sources

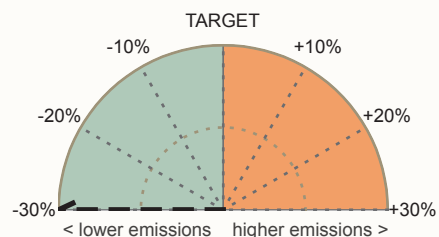
Inventory data: CRF 2003; ghg.unfccc.int

UNFCCC Aim (2000)



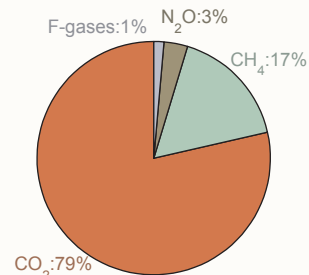
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

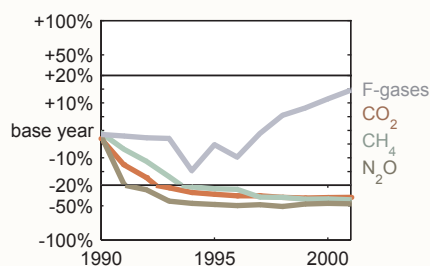


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

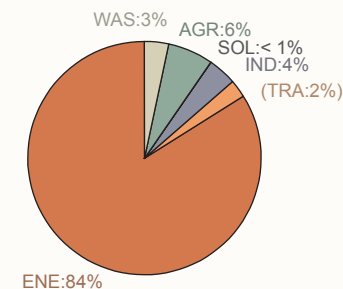
Emissions by Gas (2000)



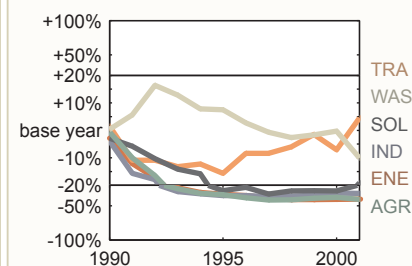
Emissions by Gas (Trend)



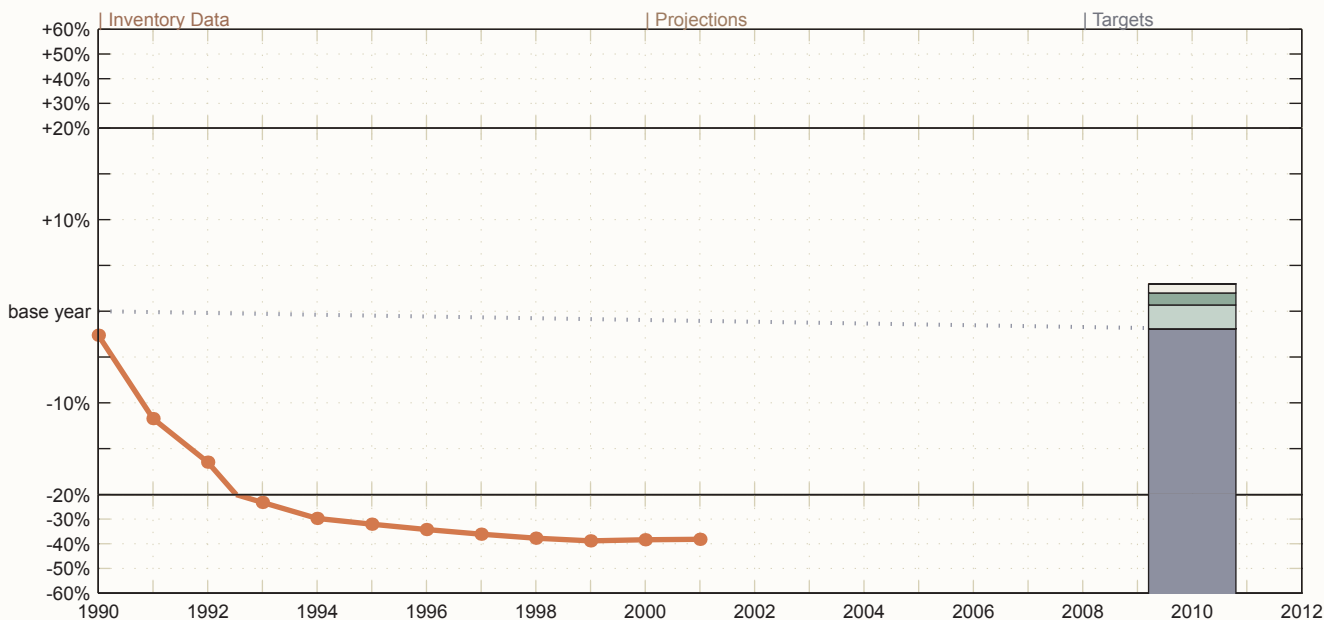
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

European Union EU-15

Annex I; Annex B; Annex II

Ratification date Kyoto: 31/05/02 (Ap)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	4203.99	100%
1990:	4191.73	99.7%
2000:	4066.66	96.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-184.06	-4.4%
2000:	-172.39	-4.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	156.94	3.7%
2000:	224.19	5.5%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	4067.77	96.8%
2010 WM:	4189	99.6%
2010 WAM:	3950	94%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	4348.67	100%
Actual 2000:	4290.84	98.7%
Distance to aim:	-57.83	-1.3%

Achieved?:	Achieved
Kyoto Target	

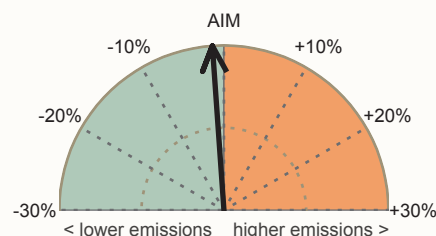
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	3867.67	92%
Distance from 2001:	240.58	5.7%
Distance from WM:	321.33	7.6%
Distance from WAM:	82.33	2%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	42.08	1%
Agr.Mng.(est.):	30.67	0.7%
For.Mng. I (AppZ):	18.96	0.5%
Aff&Def.:	6.84	0.2%
For.Mng. II:	7.08	0.2%
Defo in B.Yr.(est.):	3.99	0.1%
Sink Allowances Total:	109.61	2.6%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	11.91
2000:	11.39

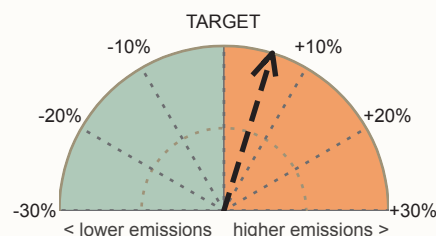
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



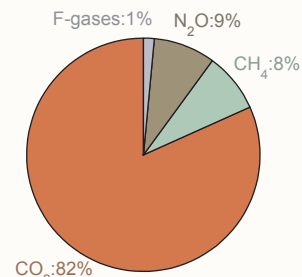
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

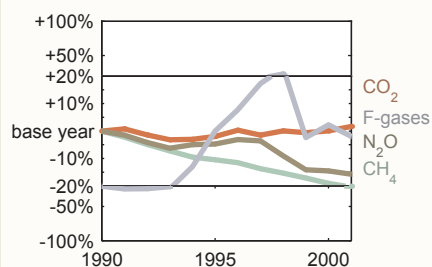


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

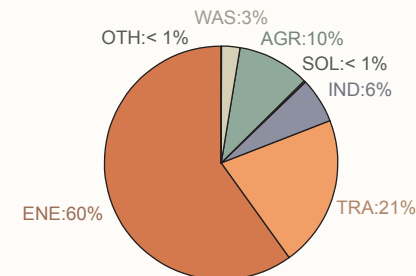
Emissions by Gas (2000)



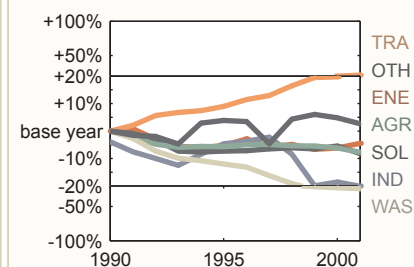
Emissions by Gas (Trend)



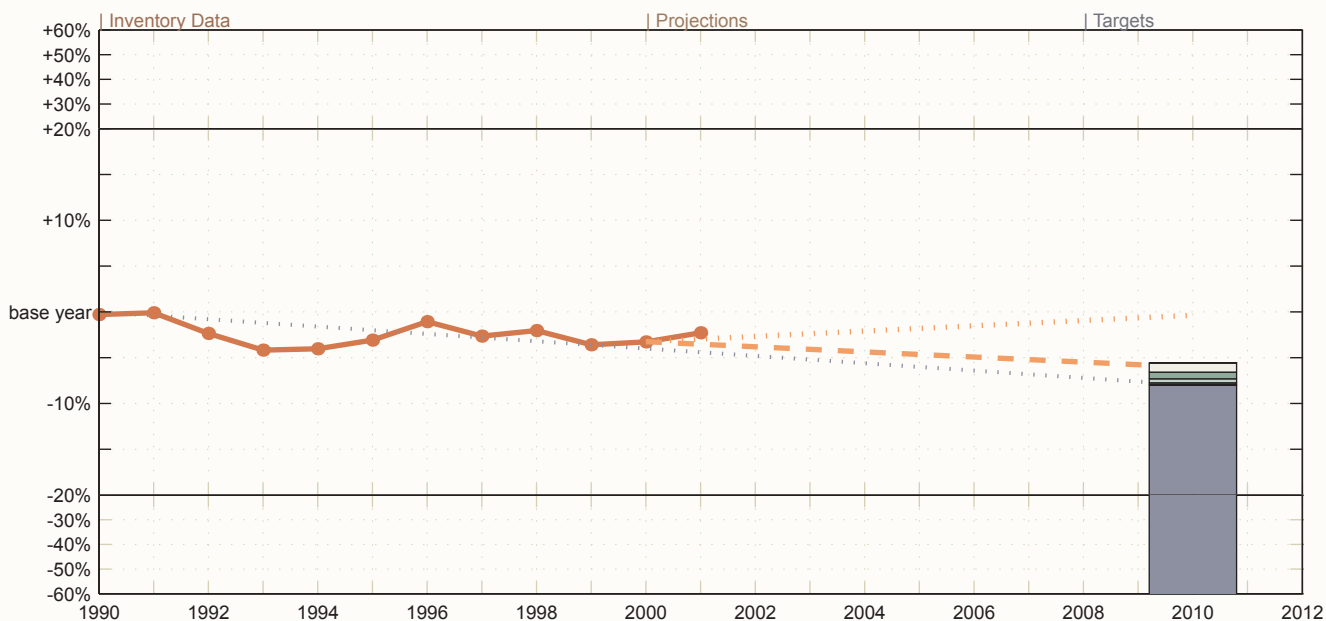
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

European Union EU-25

Enlarged European Union with 25 members

Base Year

CO₂, CH₄, N₂O: varied
HFCs, PFCs, SF₆ (est.): varied

Emissions MtCO₂e/yr %B.Yr.

Base Year (B.Yr.): 5293.53 100%

1990: 5155.93 97.4%

2000: 4808.46 90.8%

LULUCF MtCO₂e/yr %Yr.

1990: -283.74 -5.5%

2000: -263.96 -5.5%

Int. Bunker Fuels MtCO₂e/yr %Yr.

1990: 168.07 3.3%

2000: 240.12 5%

UNFCCC Aim MtCO₂e/yr % 1990

Allowed 2000: 5324.01 100%

Actual 2000: 5048.58 94.8%

Distance to aim: -275.43 -5.2%

Achieved?: Achieved

Kyoto Target MtCO₂e/yr %B.Yr.

Allwd 2008-12: 4883.49 92.3%

Distance from 2001 -34.4 -0.6%

Sink Allowances MtCO₂e/yr %B.Yr.

CDM sinks: 52.98 1%

Agr.Mng.(est.): 39.32 0.7%

For.Mng. I (AppZ): 29.99 0.6%

Aff&Def.: 6.84 0.1%

For.Mng. II: 7.08 0.1%

Defo in B.Yr.(est.): 3.99 0.1%

Sink Allowances Total: 140.2 2.6%

Per Capita Emissions tCO₂e/per/yr

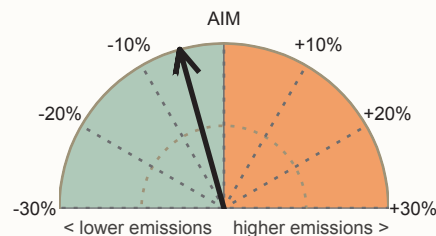
1990: 12.12

2000: 11.21

Main Data Sources

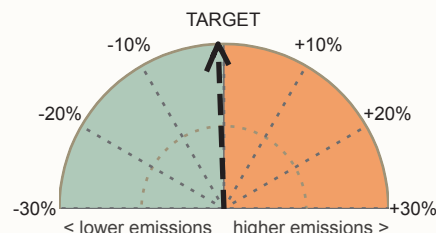
Inventory data: CRF 2003; ghg.unfccc.int

UNFCCC Aim (2000)



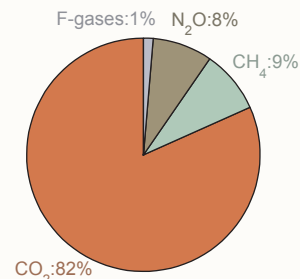
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

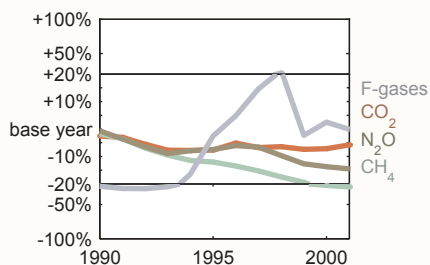


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

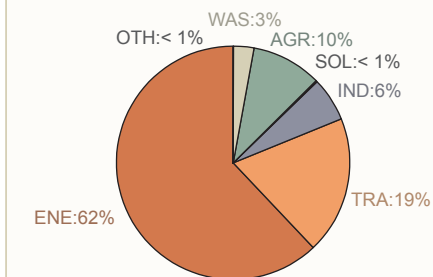
Emissions by Gas (2000)



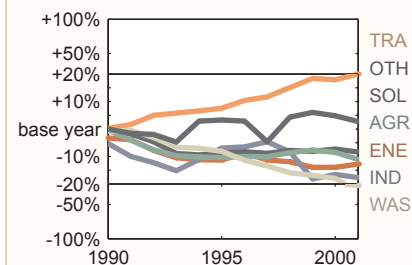
Emissions by Gas (Trend)



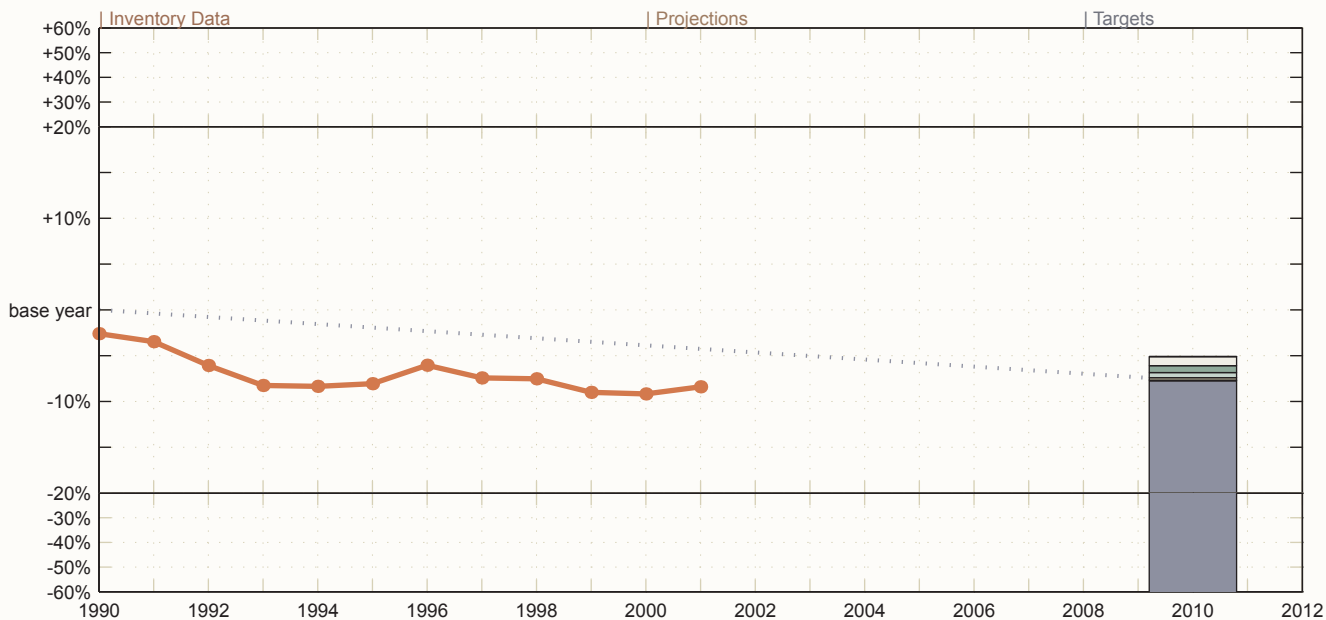
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

JUSSCANNZ

Japan, USA, Switzerland, Canada, Australia,
Norway, and New Zealand

Base Year

CO₂, CH₄, N₂O: 1990
HFCs, PFCs, SF₆ (est.): 1990 or 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

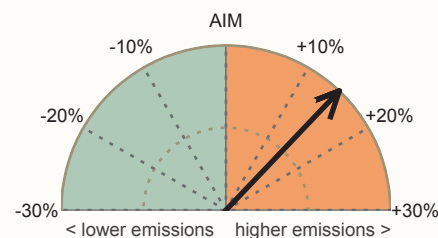
Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

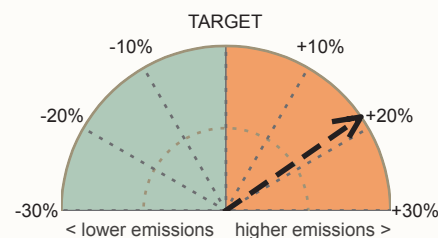
Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8584.99	100%
1990:	8531.61	99.4%
2000:	9800.6	114.2%

UNFCCC Aim (2000)



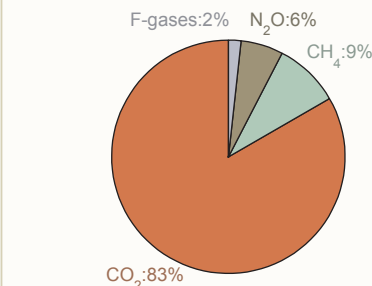
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

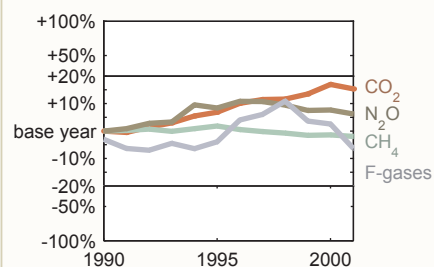


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

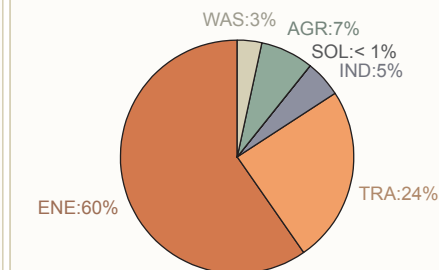
Emissions by Gas (2000)



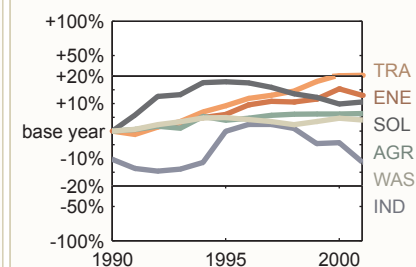
Emissions by Gas (Trend)



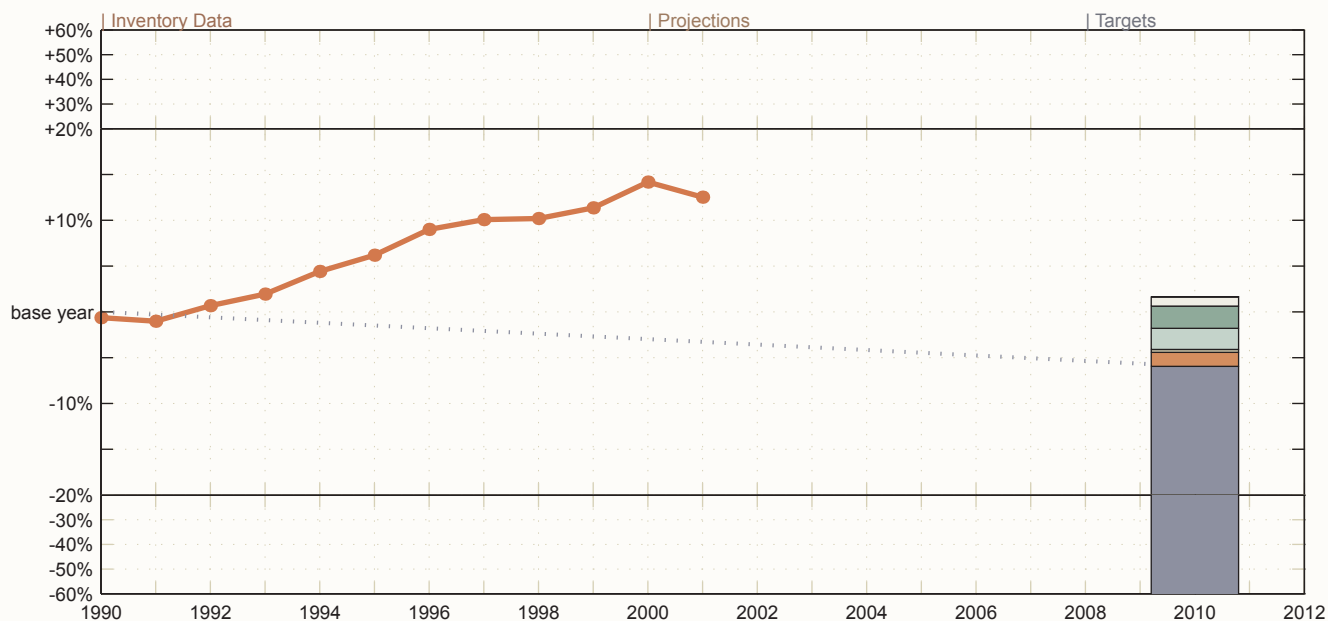
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Annex I w/o US, AUS

Annex I countries without United States, Australia

Base Year

CO₂, CH₄, N₂O: varied
HFCs, PFCs, SF₆ (est.): varied

Emissions MtCO₂e/yr %B.Yr.

Base Year (B.Yr.): 11678.79 100%

1990: 11472.62 98.2%

2000: 9678.01 82.9%

LULUCF MtCO₂e/yr %Yr.

1990: -962.09 -8.4%

2000: -1214.86 -12.6%

Int. Bunker Fuels MtCO₂e/yr %Yr.

1990: 280.84 2.4%

2000: 315.4 3.3%

UNFCCC Aim MtCO₂e/yr % 1990

Allowed 2000: 11753.46 100%

Actual 2000: 9993.4 85%

Distance to aim: -1760.06 -15%

Achieved?: Achieved

Kyoto Target MtCO₂e/yr %B.Yr.

Allwd 2008-12: 11123.24 95.2%

Distance from 2001 -1437.9 -12.3%

Single Project MtCO₂e/yr %B.Yr.

Allowance 2008-2012: 3.2 0%

Sink Allowances MtCO₂e/yr %B.Yr.

CDM sinks: 116.83 1%

Agr.Mng.(est.): 123.59 1.1%

For.Mng. I (AppZ): 256.19 2.2%

Aff&Def.: -13.26 -0.1%

For.Mng. II: 55.62 0.5%

Defo in B.Yr.(est.): 3.99 0%

Sink Allowances Total: 542.96 4.6%

Per Capita Emissions tCO₂e/per/yr

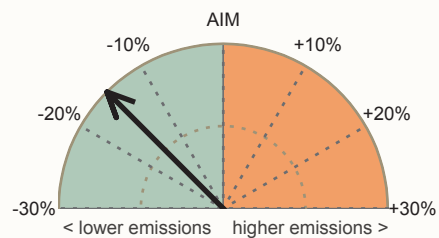
1990: 13.95

2000: 11.7

Main Data Sources

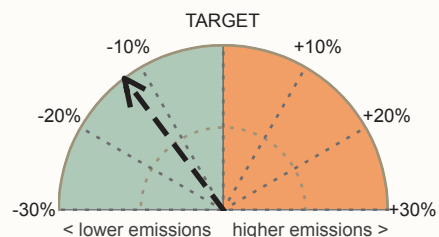
Inventory data: CRF 2003; ghg.unfccc.int

UNFCCC Aim (2000)



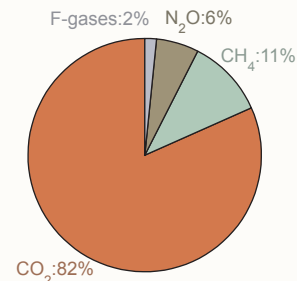
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

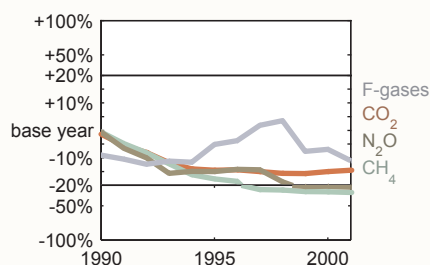


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

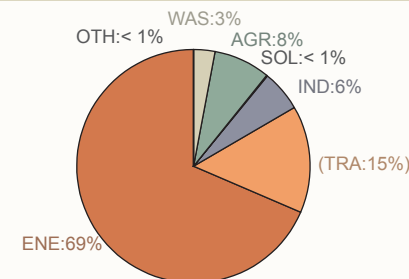
Emissions by Gas (2000)



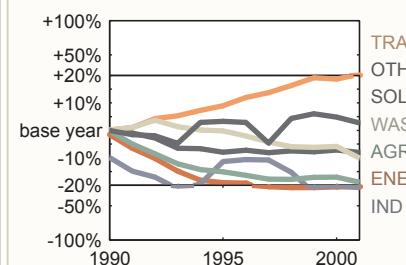
Emissions by Gas (Trend)



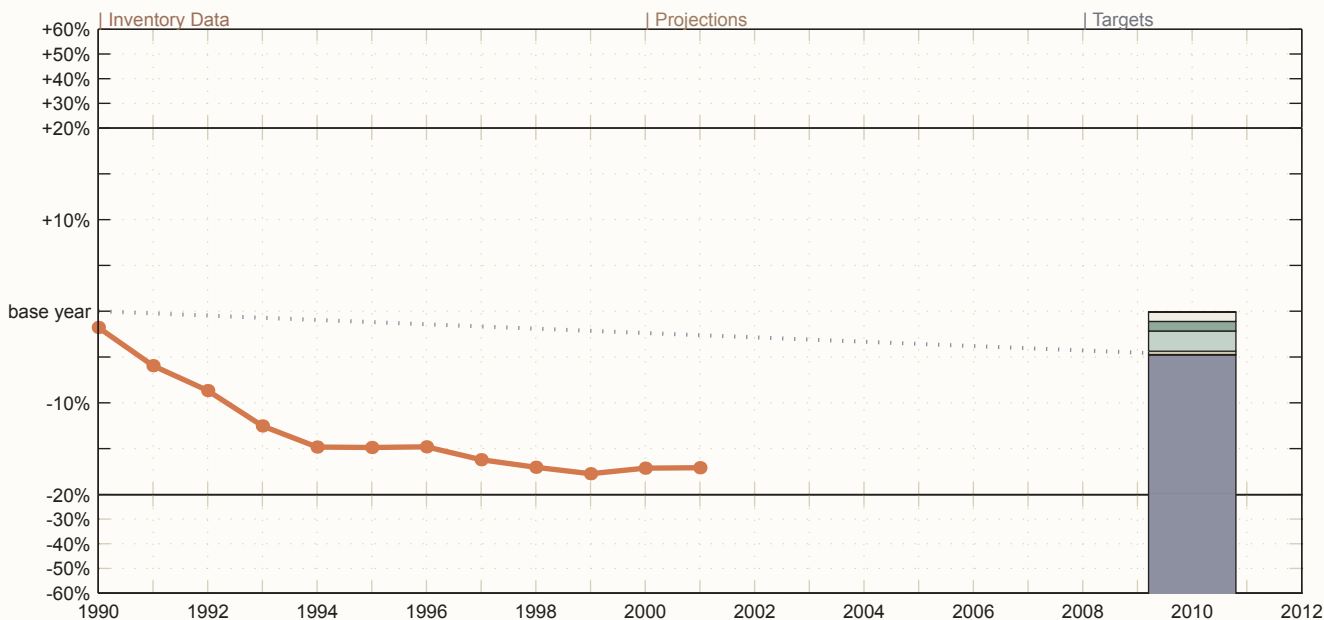
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Annex I w/o US,AUS,RUS

Annex I without United States, Australia & Russia

Base Year

CO ₂ , CH ₄ , N ₂ O:	varied
HFCs, PFCs, SF ₆ (est.):	varied

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	8630.79	100%
1990:	8424.62	97.6%
2000:	7753.97	89.8%
LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-579.42	-6.9%
2000:	-455.63	-5.9%
Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	224.17	2.7%
2000:	304.53	3.9%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	8648.79	100%
Actual 2000:	8058.5	93.2%
Distance to aim:	-590.29	-6.8%
Achieved?:	Achieved	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12:	8075.24	93.6%
Distance from 2001	-325.66	-3.8%

Single Project	MtCO ₂ e/yr	%B.Yr.
Allowance 2008-2012:	3.2	0%
Sink Allowances	MtCO ₂ e/yr	%B.Yr.

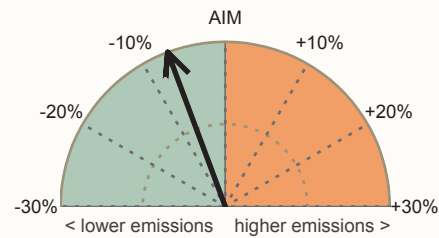
CDM sinks:	86.35	1%
Agr.Mng.(est.):	76.38	0.9%
For.Mng. I (AppZ):	135.19	1.6%
Aff&Def.:	16.74	0.2%
For.Mng. II:	25.62	0.3%
Defo in B.Yr.(est.):	3.99	0%
Sink Allowances Total:	344.27	4%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	12.47
2000:	11.37

Main Data Sources

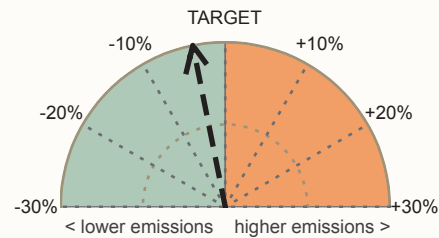
Inventory data: ;CRF 2003;ghg.unfccc.int

UNFCCC Aim (2000)



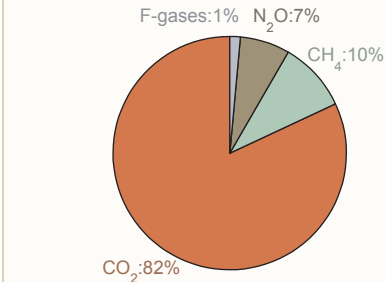
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

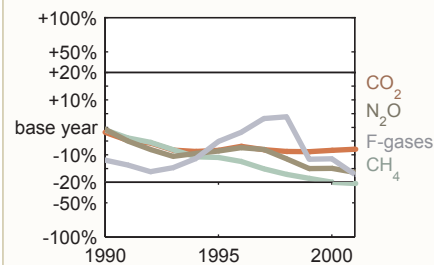


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

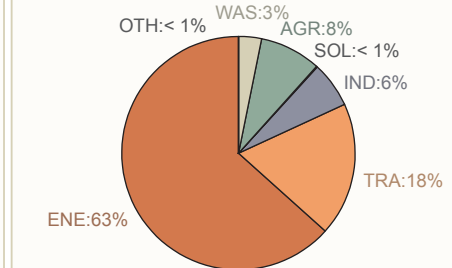
Emissions by Gas (2000)



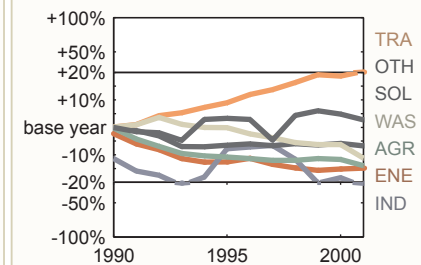
Emissions by Gas (Trend)



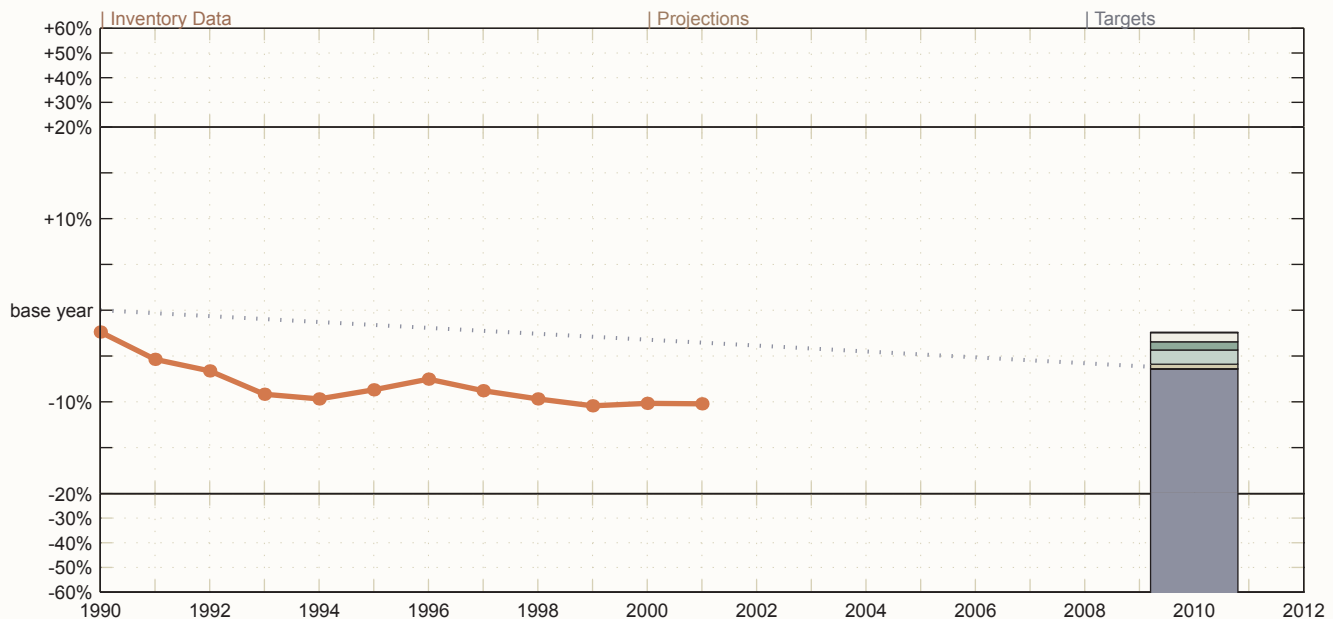
Emissions by Sector (2000)



Emissions by Sector (Trend)



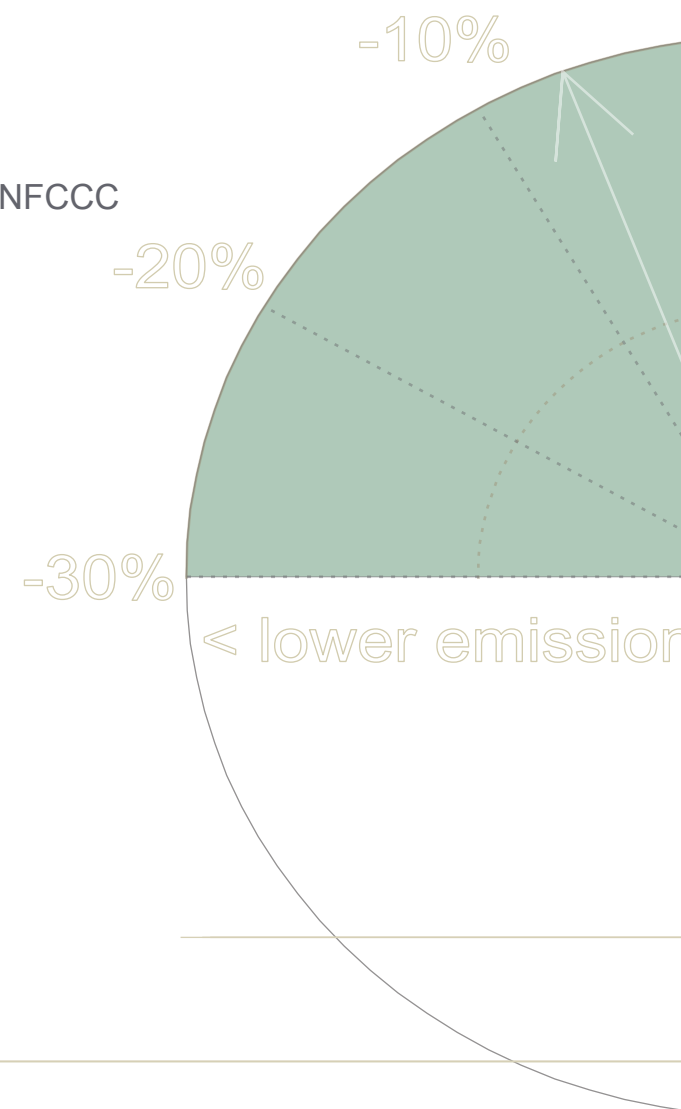
Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Country Fact Sheets

Emission data for all countries listed in Annex I of the UNFCCC



Australia

Annex I; Annex B; Annex II

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	430.45	100%
1990:	430.45	100%
2000:	512.21	119%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	85.37	19.8%
2000:	16.54	3.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	6.46	1.5%
2000:	10.19	2%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	507.3	117.9%
2010 WM:	540.7	125.6%
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	436.91	100%
Actual 2000:	522.4	119.6%
Distance to aim:	85.49	19.6%
Achieved?:	Missed	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	464.89	108%
Distance from 2001:	55.89	13%
Distance from WM:	75.81	17.6%

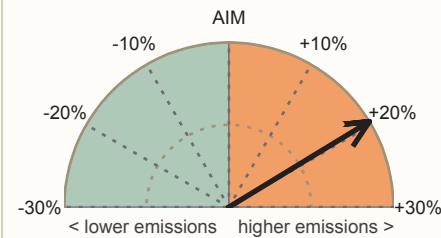
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	5.6	1.3%
Agr.Mng.(est.):	98.56	22.9%
For.Mng. I (AppZ):	0	0%
Aff&Def.:	-24.93	-5.8%
For.Mng. II:	24.93	5.8%
Defo in B.Yr.(est.):	130	30.2%
Sink Allowances Total:	234.16	54.4%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	25.87
2000:	27.3

Main Data Sources

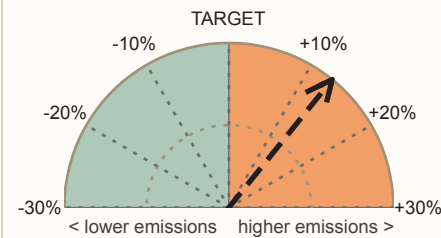
Inventory data: CRF 2003

UNFCCC Aim (2000)



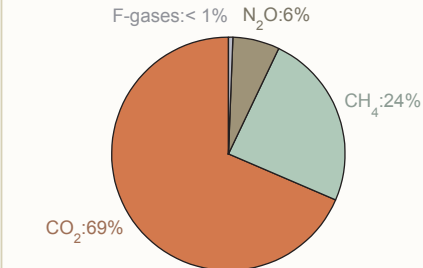
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

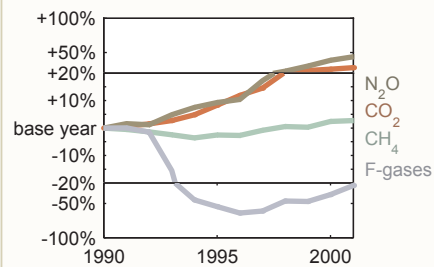


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

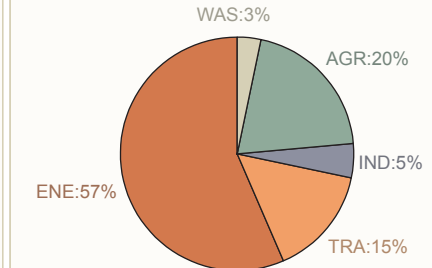
Emissions by Gas (2000)



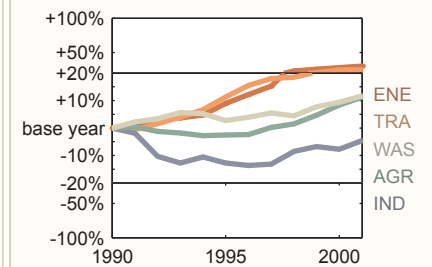
Emissions by Gas (Trend)



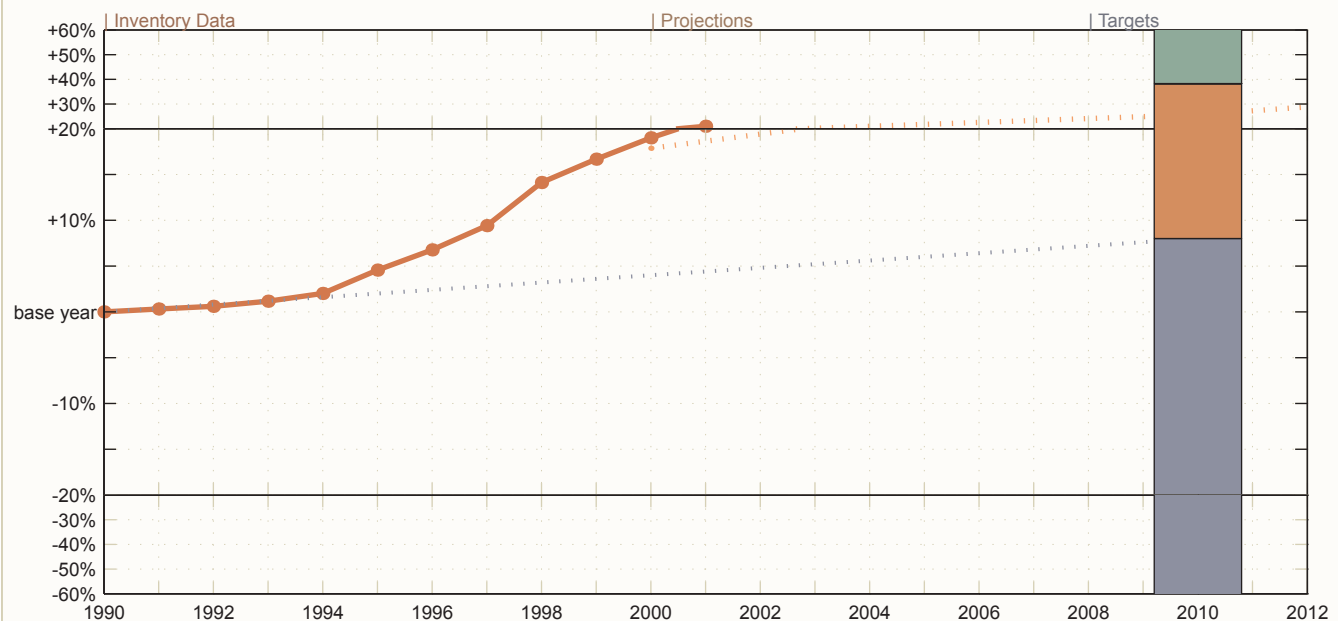
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Austria

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	78.32	100%
1990:	78.07	99.7%
2000:	81.95	104.6%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-9.21	-11.8%
2000:	-7.63	-9.3%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0.9	1.1%
2000:	1.69	2.1%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	79.76	101.8%
2010 WM:	86.05	109.9%
2010 WAM:	71.6	91.4%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	78.97	100%
Actual 2000:	83.64	105.9%
Distance to aim:	4.68	5.9%

Achieved?:	Missed
Kyoto Target	

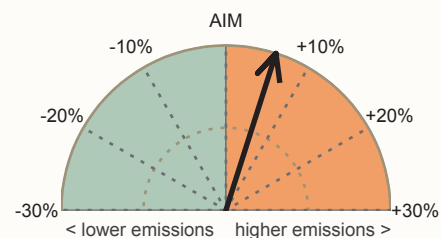
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	68.14	87%
Distance from 2001	17.74	22.6%
Distance from WM:	17.91	22.9%
Distance from WAM:	3.46	4.4%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.78	1%
Agr.Mng.(est.):	0.72	0.9%
For.Mng. I (AppZ):	2.31	2.9%
Aff&Def.:	-0.73	-0.9%
For.Mng. II:	0.73	0.9%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	3.81	4.9%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	10.22
2000:	10.35

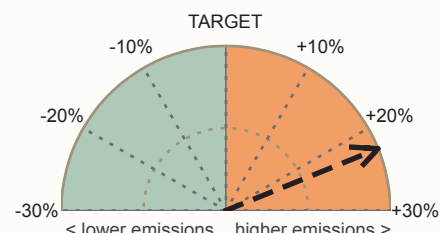
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



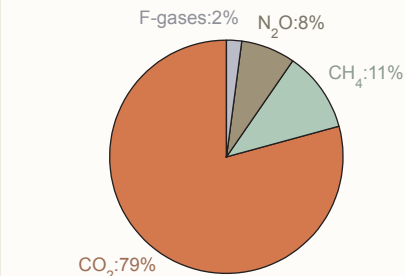
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

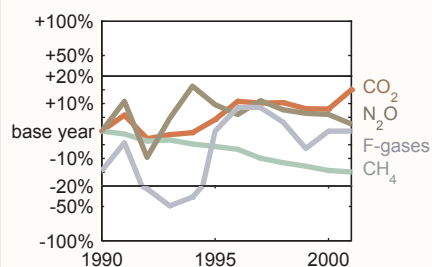


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

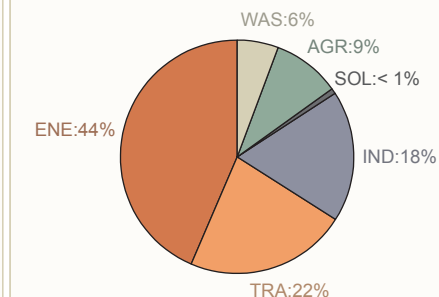
Emissions by Gas (2000)



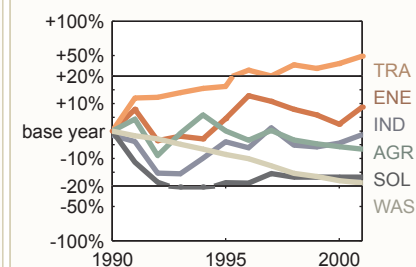
Emissions by Gas (Trend)



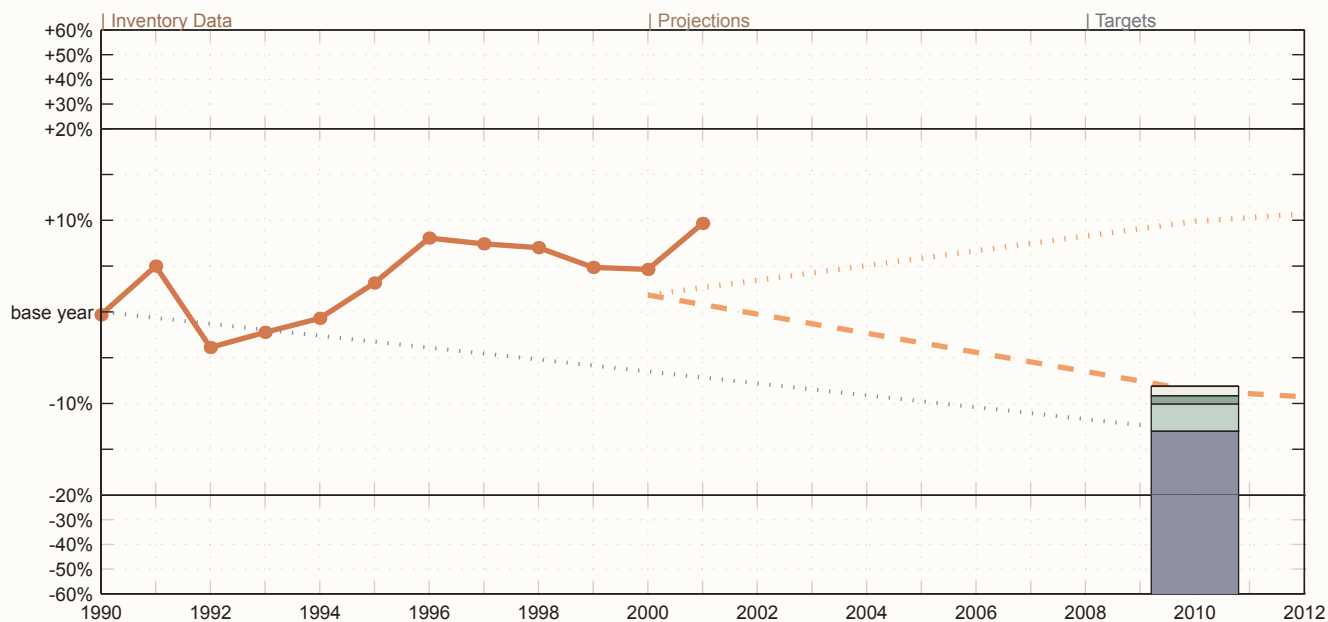
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Belarus

Annex I (no Kyoto target); EIT

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	126.57	100%
1990:	126.57	100%
2000:	68.64	54.2%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-12.72	-10%
2000:	-18.98	-27.7%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0	0%
2000:	0	0%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	126.57	100%
Actual 2000:	68.64	54.2%
Distance to aim:	-57.93	-45.8%

Achieved?:	Achieved
Kyoto Target	MtCO ₂ e/yr %B.Yr.

Allwd 2008-12 (An.B):	Distance from 2001
Sink Allowances	data unavailable

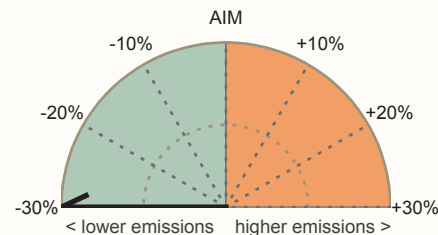
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
□ CDM sinks:	1.27	1%
■ Agr.Mng.(est.):	2.05	1.6%

For.Mng. I (AppZ):	not yet determined
Aff&Def.:	data unavailable
For.Mng. II:	data unavailable
Defo in B.Yr.:	not applicable
Sink Allowances Total:	3.32 2.6%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	12.27
2000:	6.74

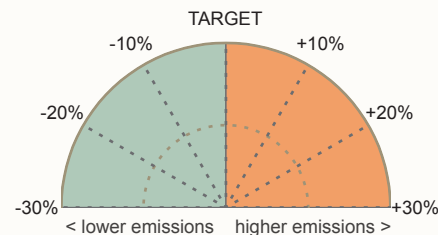
Main Data Sources	Inventory data:
	CRF 2003

UNFCCC Aim (2000)



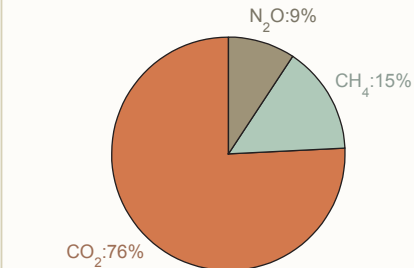
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

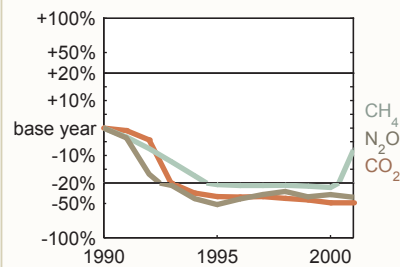


As by COP9, 2003, no Kyoto-target had been determined for Belarus.

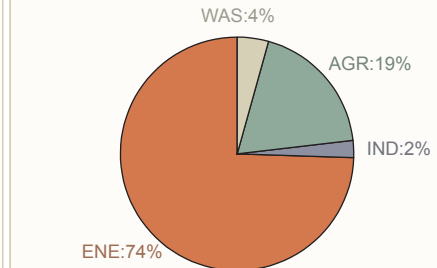
Emissions by Gas (2000)



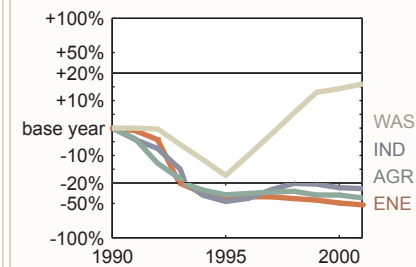
Emissions by Gas (Trend)



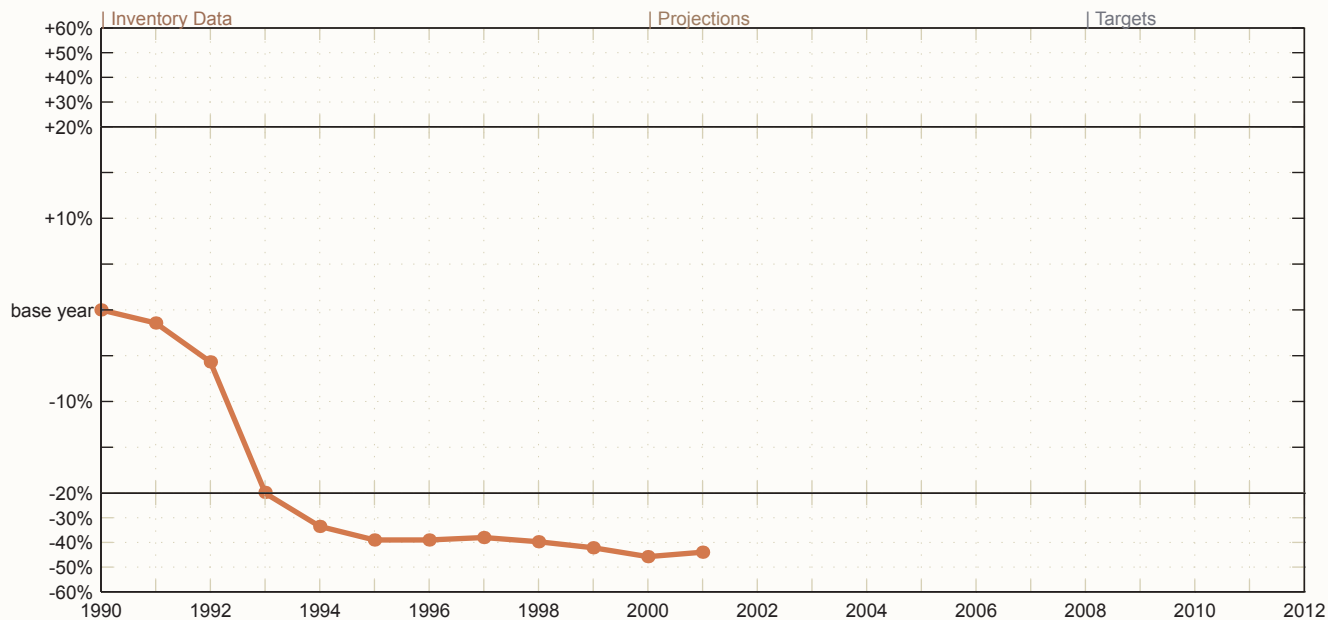
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Belgium

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	141.57	100%
1990:	141.13	99.7%
2000:	150.29	106.2%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-1.6	-1.1%
2000:	-1.82	-1.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	16.4	11.6%
2000:	19.95	13.3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	157.88	111.5%
2010 WM:	171.18	120.9%
2010 WAM:	153.58	108.5%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	157.52	100%
Actual 2000:	170.24	108.1%
Distance to aim:	12.72	8.1%

Achieved?:	Missed
Kyoto Target	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	130.95	92.5%
Distance from 2001:	19.57	13.8%
Distance from WM:	40.23	28.4%
Distance from WAM:	22.63	16%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	1.42	1%
Agr.Mng.(est.):	0.33	0.2%
For.Mng. I (AppZ):	0.11	0.1%

Aff&Def.: data unavailable

For.Mng. II: data unavailable

Defo in B.Yr.: not applicable

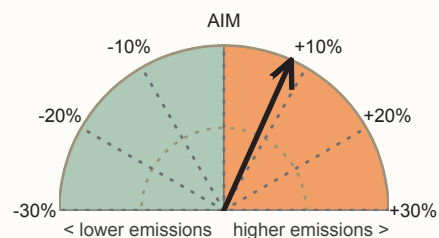
Sink Allowances Total: 1.86 1.3%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	15.8
2000:	16.61

Main Data Sources

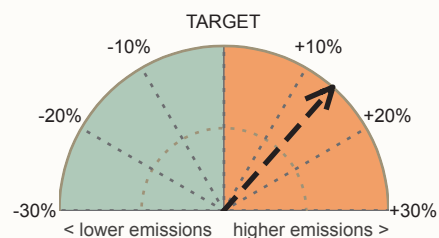
Inventory data: CRF 2003

UNFCCC Aim (2000)



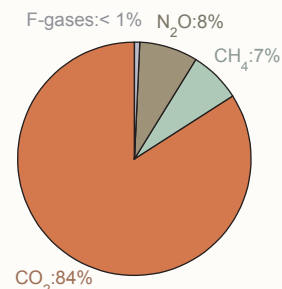
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

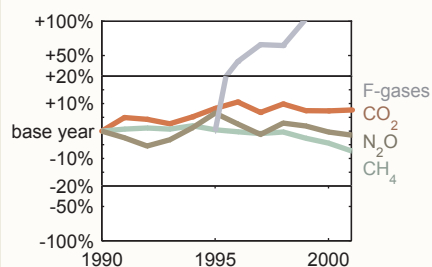


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

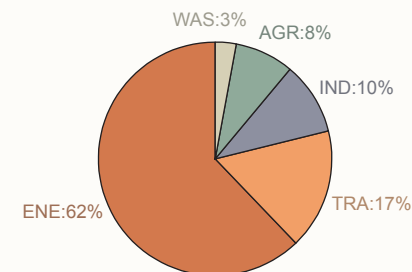
Emissions by Gas (2000)



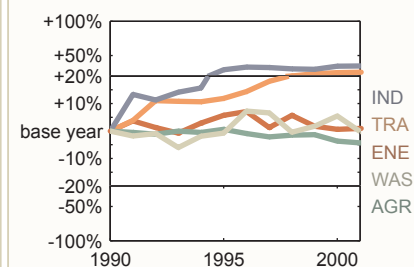
Emissions by Gas (Trend)



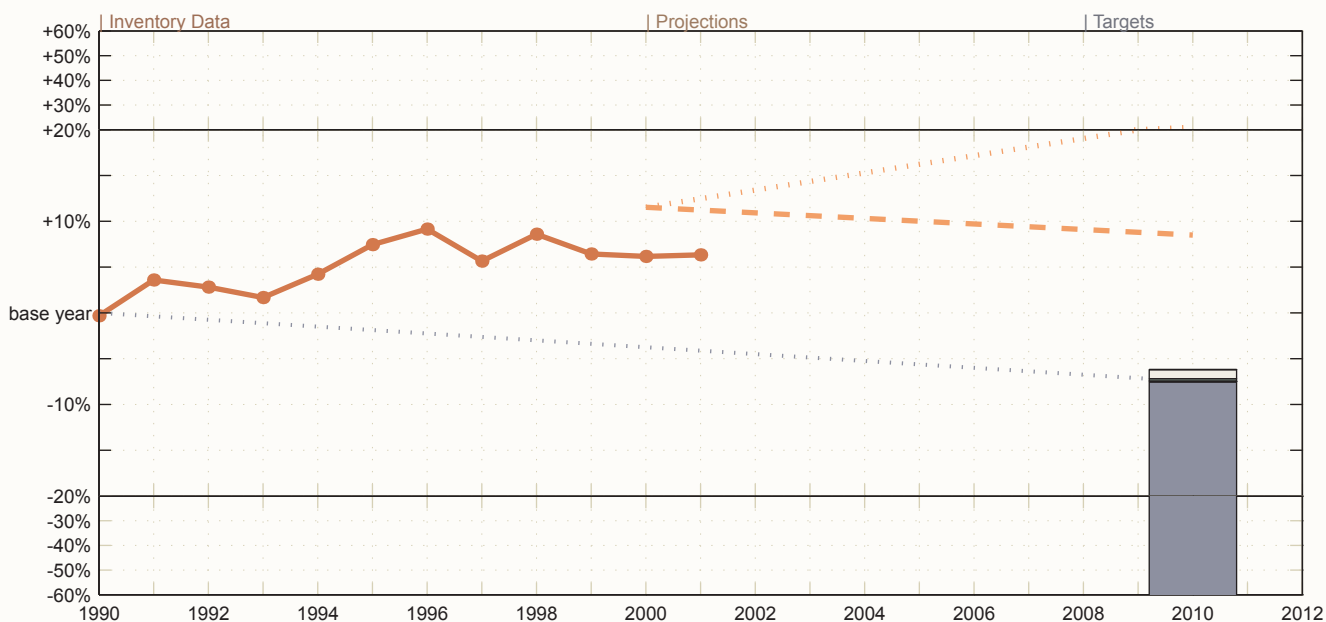
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Bulgaria

Annex I; Annex B; EIT

Ratification date Kyoto: 15/08/02 (R)

Base Year

CO₂, CH₄, N₂O : 1988

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	144.45	100%
1990:	124.67	86.3%
2000:	64.5	44.6%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-5.8	-4.7%
2000:	-8.98	-13.9%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	1.77	1.4%
2000:	0.48	0.7%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	77.49	53.6%
2010 WM:	133.81	92.6%
2010 WAM:	125.45	86.8%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	126.44	100%
Actual 2000:	64.98	51.4%
Distance to aim:	-61.46	-48.6%

Achieved?:	Achieved
Kyoto Target	

	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	132.89	92%
Distance from 2001	-67.1	-46.5%
Distance from WM:	0.92	0.6%
Distance from WAM:	-7.44	-5.2%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	1.44	1%
Agr.Mng.(est.):	1.4	1%
For.Mng. I (AppZ):	1.36	0.9%

Aff&Def.: data unavailable

For.Mng. II: data unavailable

Defo in B.Yr.: not applicable

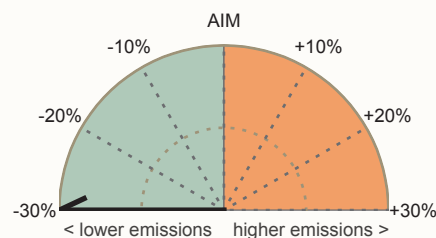
Sink Allowances Total:	4.2	2.9%
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Per Capita Emissions	tCO ₂ e/per/yr
1990:	14.5
2000:	8.17

Main Data Sources

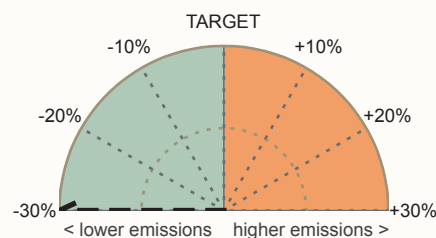
Inventory data: CRF 2003

UNFCCC Aim (2000)



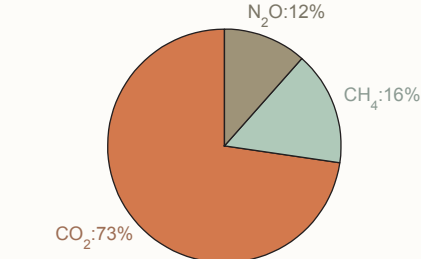
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

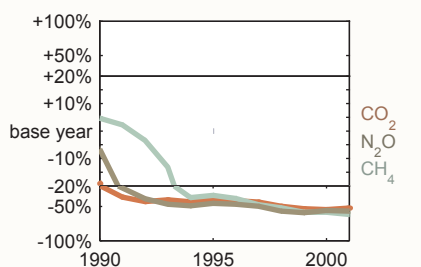


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

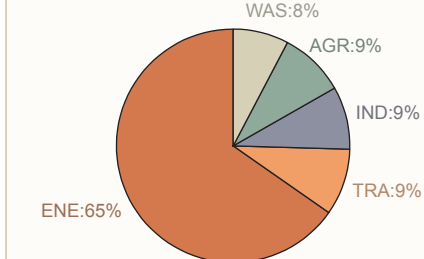
Emissions by Gas (2000)



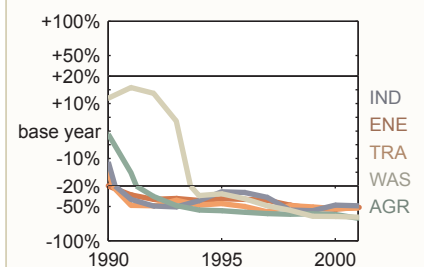
Emissions by Gas (Trend)



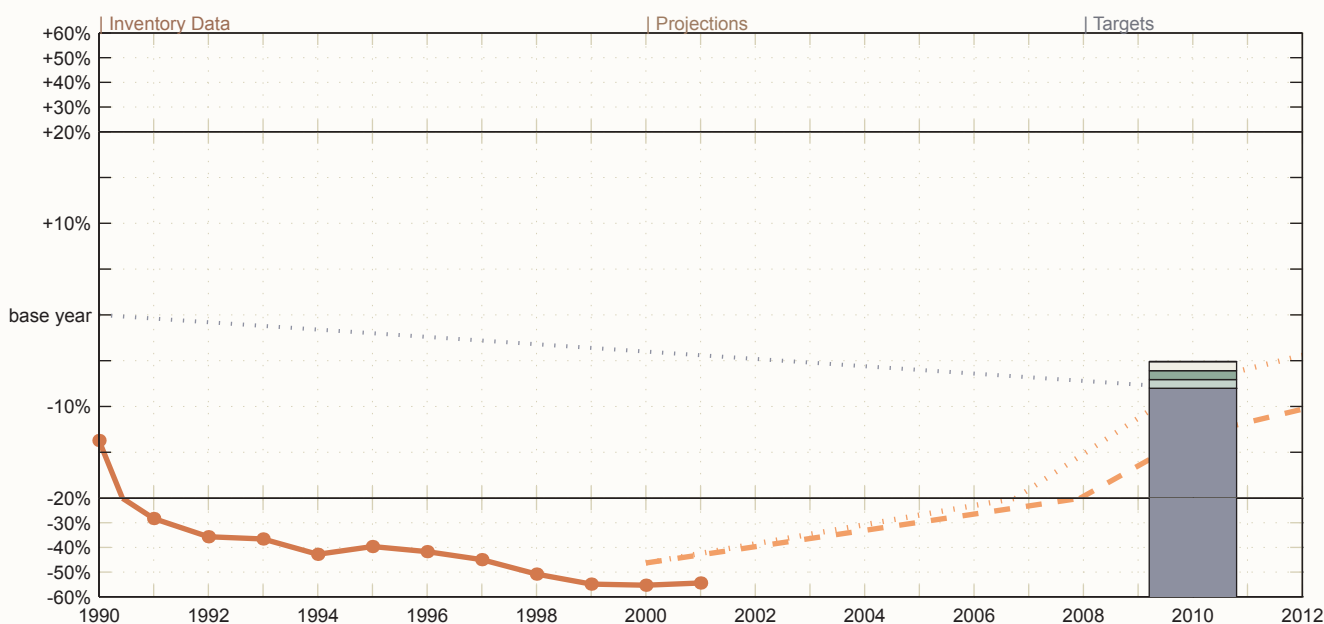
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Canada

Annex I; Annex B; Annex II

Ratification date Kyoto: 17/12/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	607.59	100%
1990:	607.59	100%
2000:	729.66	120.1%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-106.99	-17.6%
2000:	-53.34	-7.3%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	5.91	1%
2000:	6.66	0.9%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	726.25	119.5%
2010 WM:	769.7	126.7%
2010 WAM:	704.7	116%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	613.5	100%
Actual 2000:	736.33	120%
Distance to aim:	122.82	20%

Achieved?:	Missed
Kyoto Target	

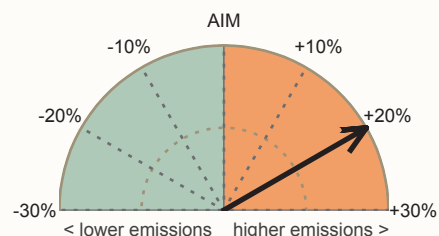
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	571.13	94%
Distance from 2001	149	24.5%
Distance from WM:	198.57	32.7%
Distance from WAM:	133.57	22%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	6.08	1%
Agr.Mng.(est.):	16.4	2.7%
For.Mng. I (AppZ):	44	7.2%
Aff&Def.:	-15.77	-2.6%
For.Mng. II:	15.77	2.6%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	66.48	10.9%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	22.15
2000:	23.94

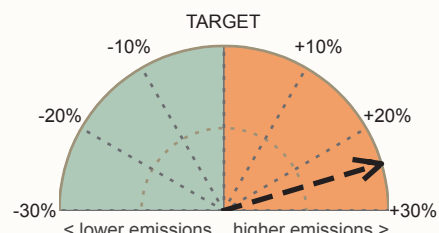
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



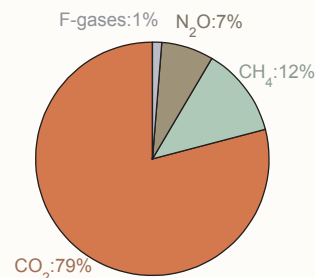
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

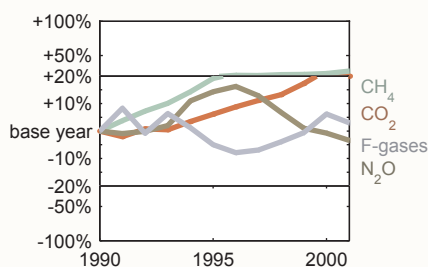


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

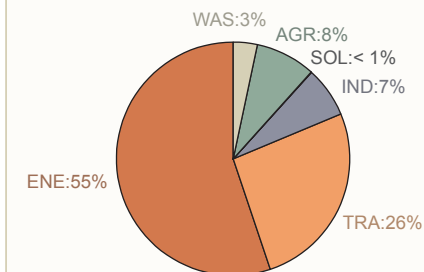
Emissions by Gas (2000)



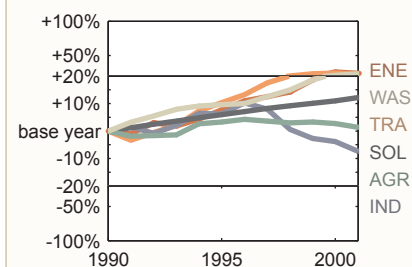
Emissions by Gas (Trend)



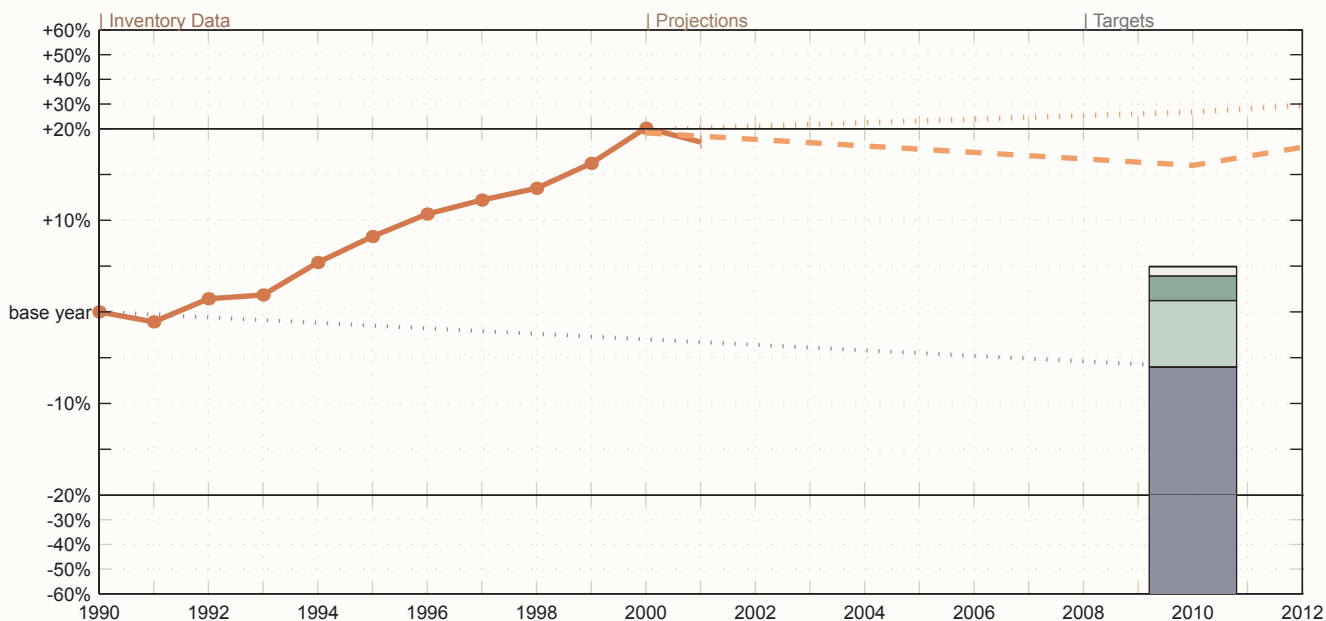
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Croatia

Annex I; Annex B; EIT

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	31.61	100%
1990:	31.61	100%
2000:	26.1	82.6%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-6.51	-20.6%
2000:	-8.07	-30.9%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0.31	1%
2000:	0.17	0.7%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	28.9	91.4%
2010 WM:	38	120.2%
2010 WAM:	31.7	100.3%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	31.92	100%
Actual 2000:	26.27	82.3%
Distance to aim:	-5.65	-17.7%

Achieved?:	Achieved
Kyoto Target	

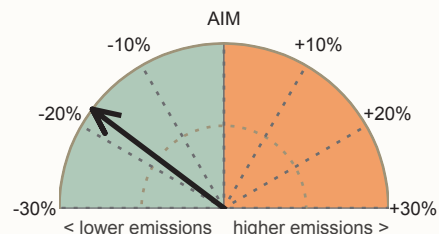
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	30.03	95%
Distance from 2001:	-3.17	-10%
Distance from WM:	7.97	25.2%
Distance from WAM:	1.67	5.3%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.32	1%
Agr.Mng.(est.):	0.68	2.1%
For.Mng. I (AppZ):	not yet determined	
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	0.99	3.1%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	7
2000:	5.64

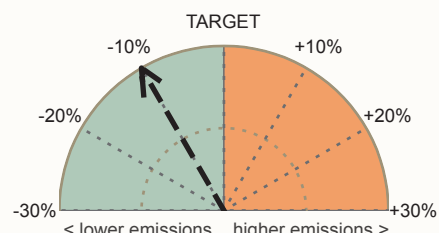
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



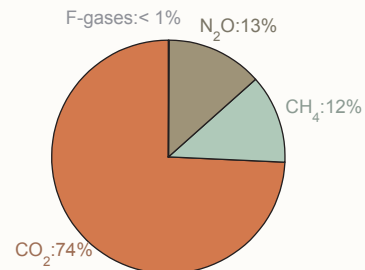
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

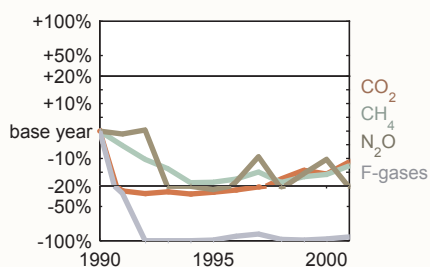


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

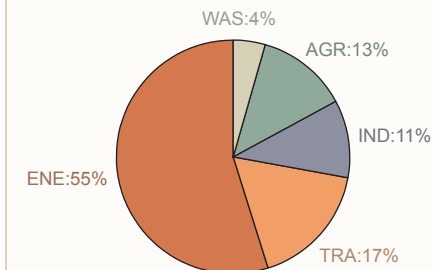
Emissions by Gas (2000)



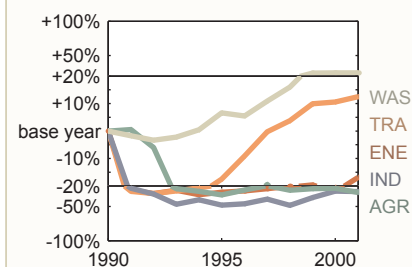
Emissions by Gas (Trend)



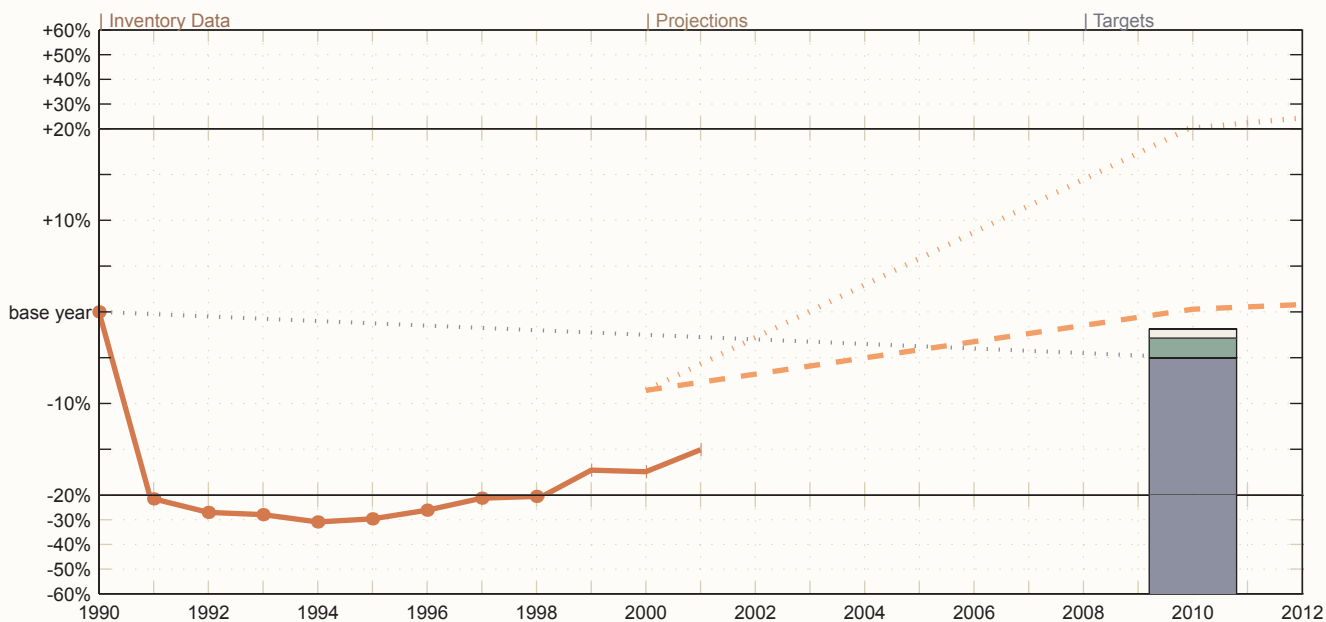
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Czech Republic

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 15/11/01 (Ap)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	192.19	100%
1990:	192.02	99.9%
2000:	147.68	76.8%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-2.13	-1.1%
2000:	-4.02	-2.7%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	0.79	0.4%
2000:	0.35	0.2%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	147.68	76.8%
2010 WM:	128.29	66.8%
2010 WAM:	121.87	63.4%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	192.81	100%
Actual 2000:	148.03	76.8%
Distance to aim:	-44.78	-23.2%

Achieved?:	Achieved
Kyoto Target	MtCO ₂ e/yr %B.Yr.

Allwd 2008-12 (An.B):	176.81	92%
Distance from 2001	-28.76	-15%
Distance from WM:	-48.52	-25.2%
Distance from WAM:	-54.94	-28.6%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	1.92	1%
Agr.Mng.(est.):	0.96	0.5%
For.Mng. I (AppZ):	1.17	0.6%

Aff&Def.: data unavailable

For.Mng. II: data unavailable

Defo in B.Yr.: not applicable

Sink Allowances Total: 4.06 2.1%

Per Capita Emissions tCO₂e/per/yr

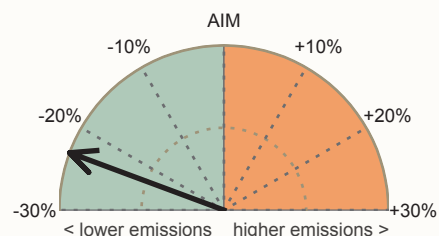
1990: 18.67

2000: 14.41

Main Data Sources

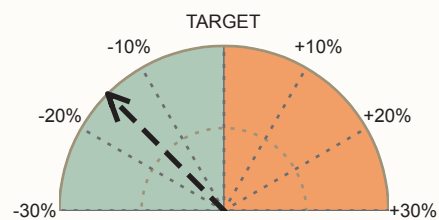
Inventory data: CRF 2003; *EDGAR

UNFCCC Aim (2000)



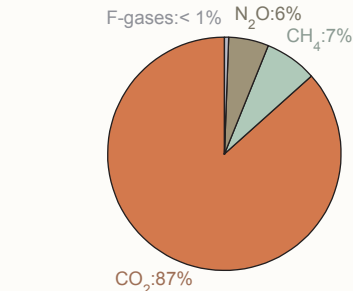
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

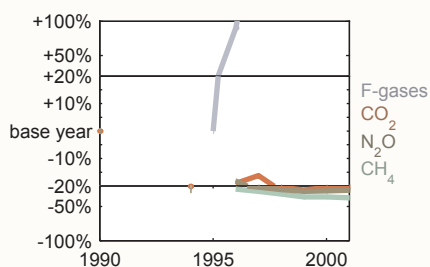


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

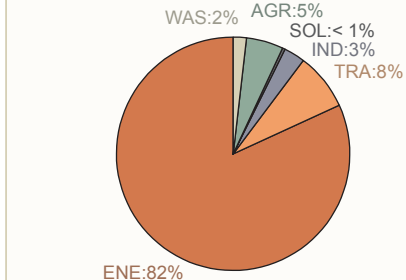
Emissions by Gas (2000)



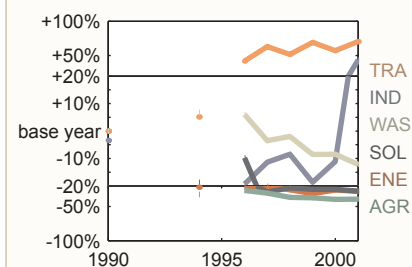
Emissions by Gas (Trend)



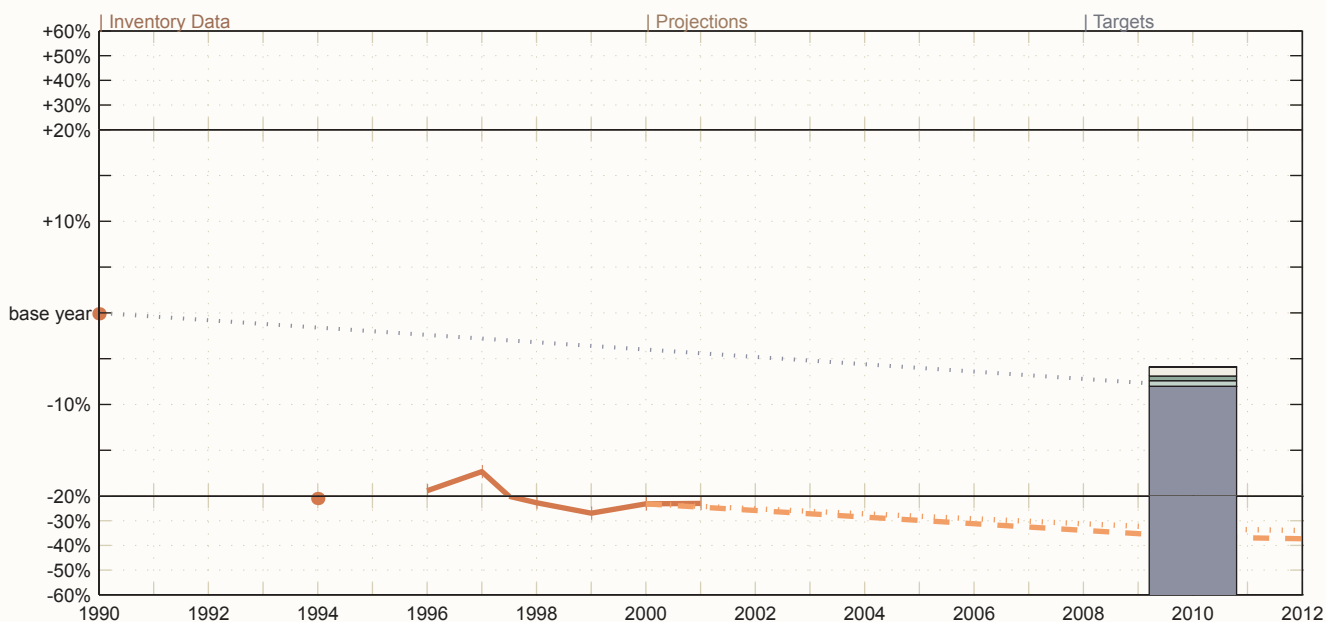
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Denmark

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	69.52	100%
1990:	69.22	99.6%
2000:	68.18	98.1%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-3.12	-4.5%
2000:	-3.52	-5.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	4.94	7.1%
2000:	6.74	9.9%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	74.15	100%
Actual 2000:	74.92	101%
Distance to aim:	0.77	1%

Achieved?:	Missed

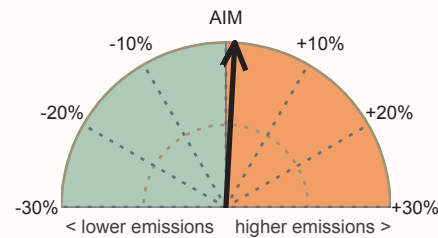
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	54.92	79%
Distance from 2001	14.49	20.8%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.7	1%
Agr.Mng.(est.):	0.61	0.9%
For.Mng. I (AppZ):	0.18	0.3%
Aff&Def.:	0.35	0.5%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	1.84	2.6%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	14.43
2000:	14.08

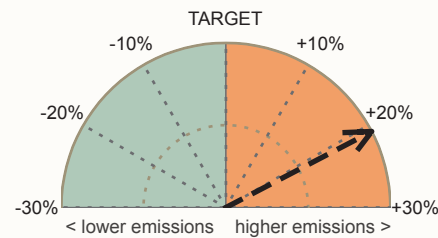
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



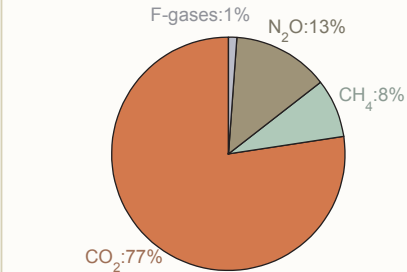
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

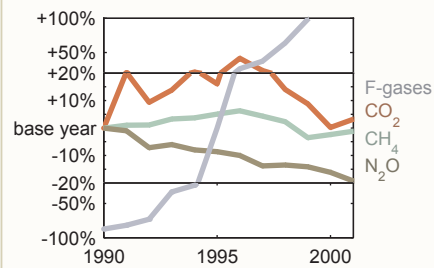


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

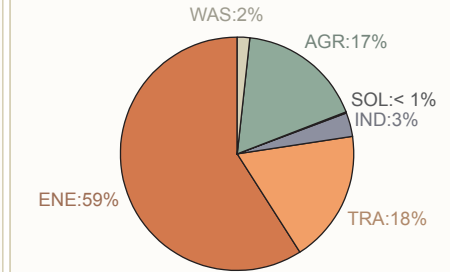
Emissions by Gas (2000)



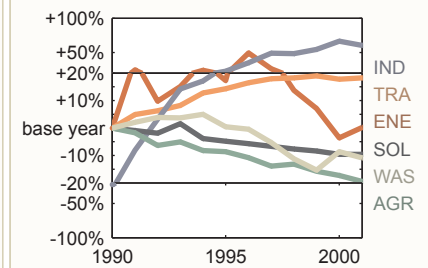
Emissions by Gas (Trend)



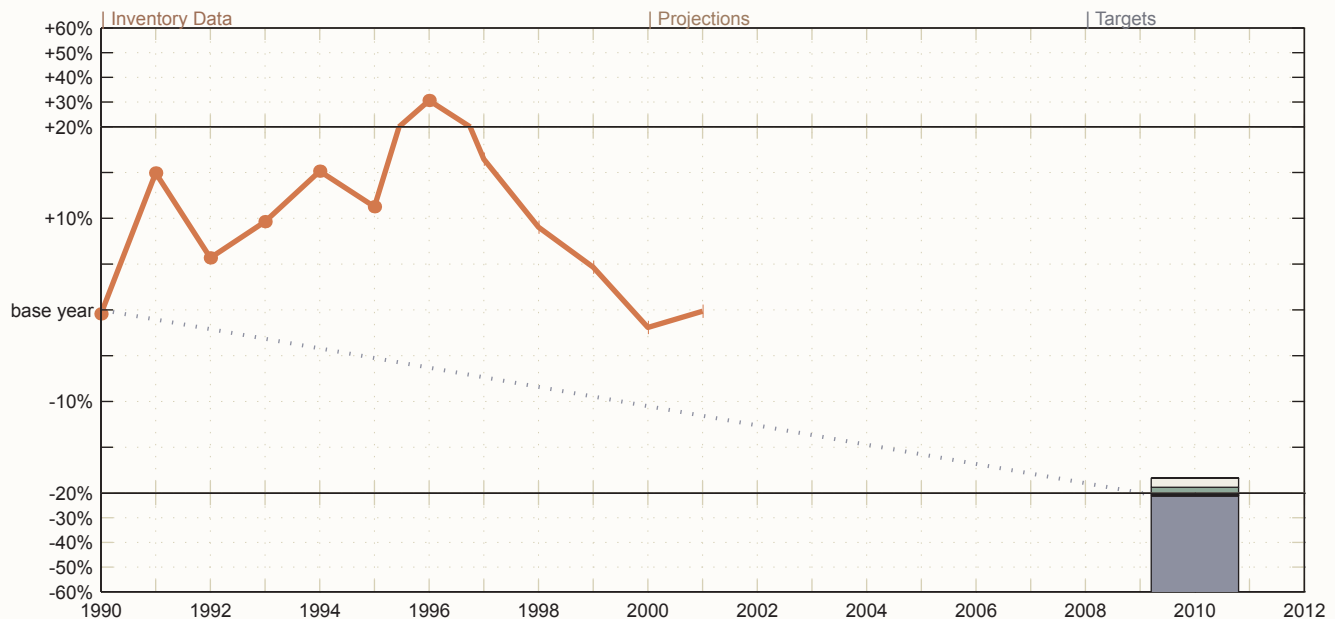
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Estonia

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 14/10/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	43.49	100%
1990:	43.49	100%
2000:	19.75	45.4%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-6.32	-14.5%
2000:	-8.37	-42.4%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0	0%
2000:	0.33	1.7%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	19.74	45.4%
2010 WM:	18.86	43.4%
2010 WAM:	17.43	40.1%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	43.49	100%
Actual 2000:	20.07	46.2%
Distance to aim:	-23.42	-53.8%

Achieved?:	Achieved
Kyoto Target	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	40.01	92%
Distance from 2001:	-20.6	-47.4%
Distance from WM:	-21.15	-48.6%
Distance from WAM:	-22.58	-51.9%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.43	1%
Agr.Mng.(est.):	0.2	0.5%
For.Mng. I (AppZ):	0.37	0.8%

Aff&Def.: data unavailable

For.Mng. II: data unavailable

Defo in B.Yr.: not applicable

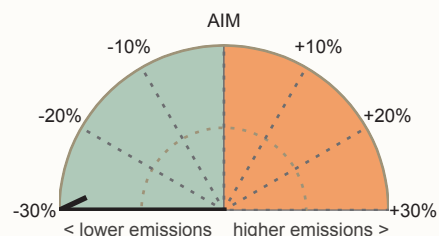
Sink Allowances Total:	1	2.3%
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Per Capita Emissions	tCO ₂ e/per/yr
1990:	28.1
2000:	14.41

Main Data Sources

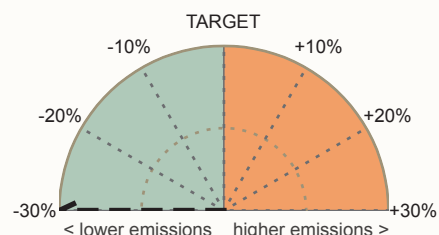
Inventory data: CRF 2003

UNFCCC Aim (2000)



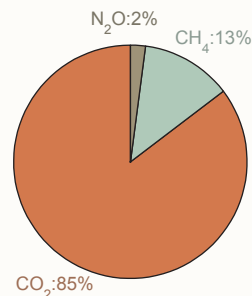
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

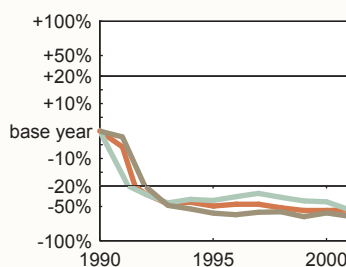


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

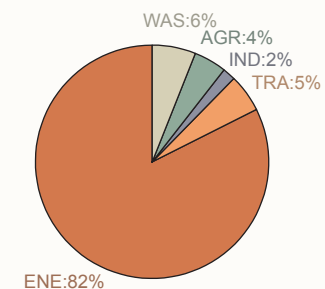
Emissions by Gas (2000)



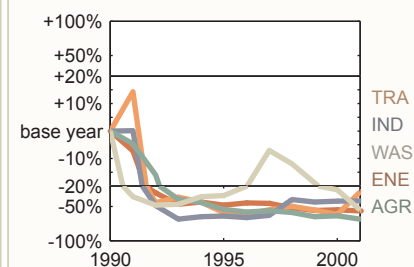
Emissions by Gas (Trend)



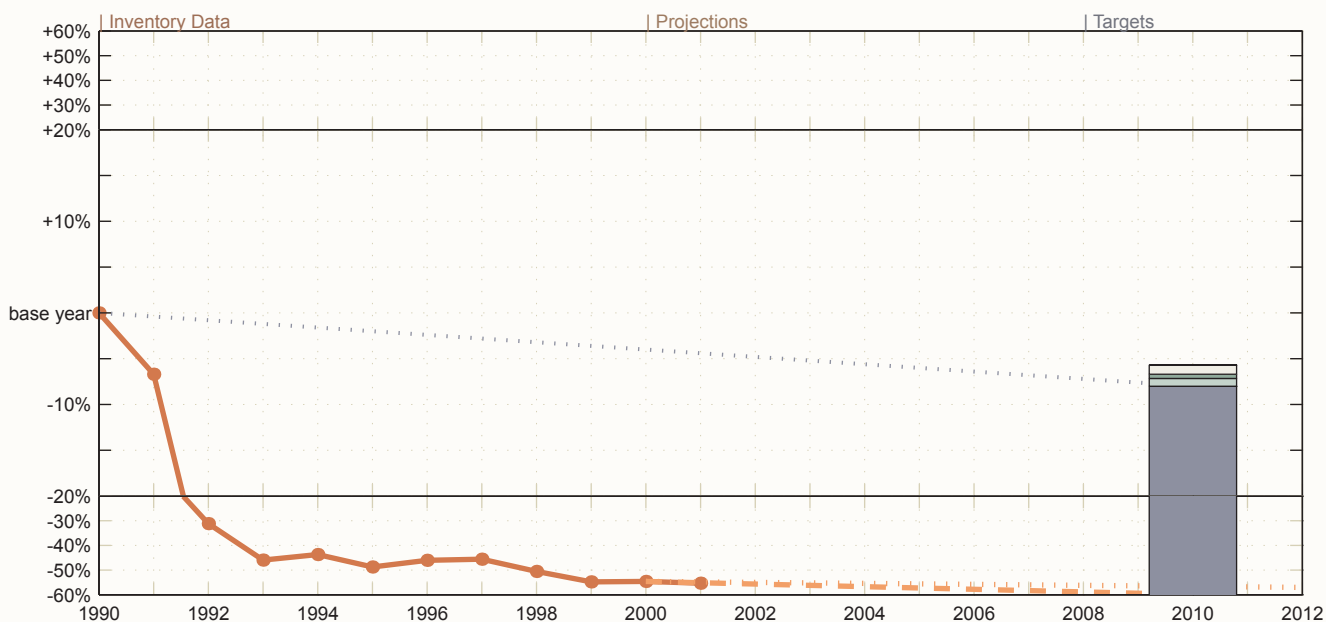
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Finland

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	77.23	100%
1990:	77.23	100%
2000:	75.39	97.6%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-23.8	-30.8%
2000:	-11.95	-15.9%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	3.17	4.1%
2000:	3.15	4.2%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	73.96	95.8%
2010 WM:	89.9	116.4%
2010 WAM:	75.8	98.1%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	80.4	100%
Actual 2000:	78.54	97.7%
Distance to aim:	-1.86	-2.3%

Achieved?:	Achieved
Kyoto Target	Achieved

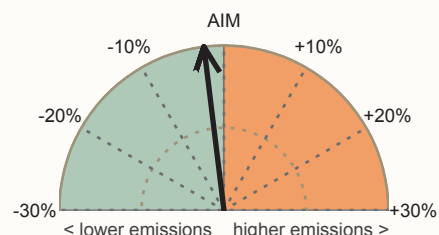
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	77.23	100%
Distance from 2001	3.66	4.7%
Distance from WM:	12.67	16.4%
Distance from WAM:	-1.43	-1.9%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.77	1%
Agr.Mng.(est.):	0.52	0.7%
For.Mng. I (AppZ):	0.59	0.8%
Aff&Def.:	-1.02	-1.3%
For.Mng. II:	1.02	1.3%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	1.88	2.4%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	16.12
2000:	15.19

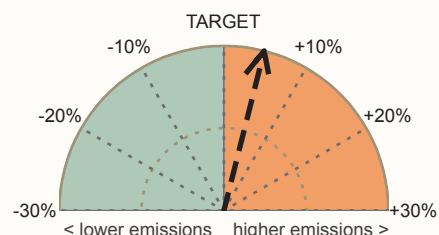
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



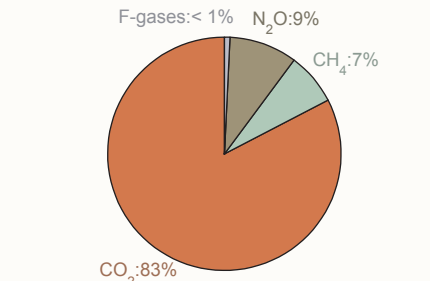
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

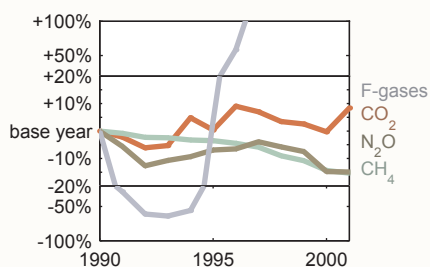


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

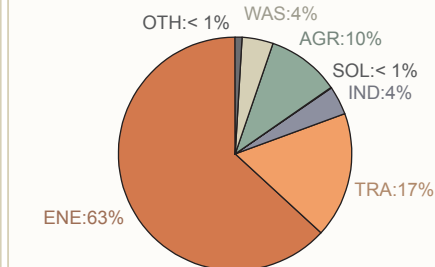
Emissions by Gas (2000)



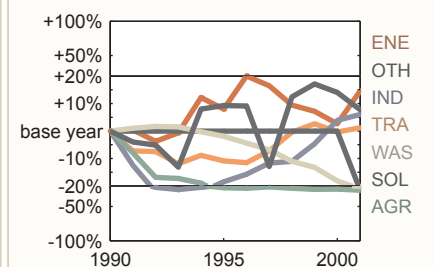
Emissions by Gas (Trend)



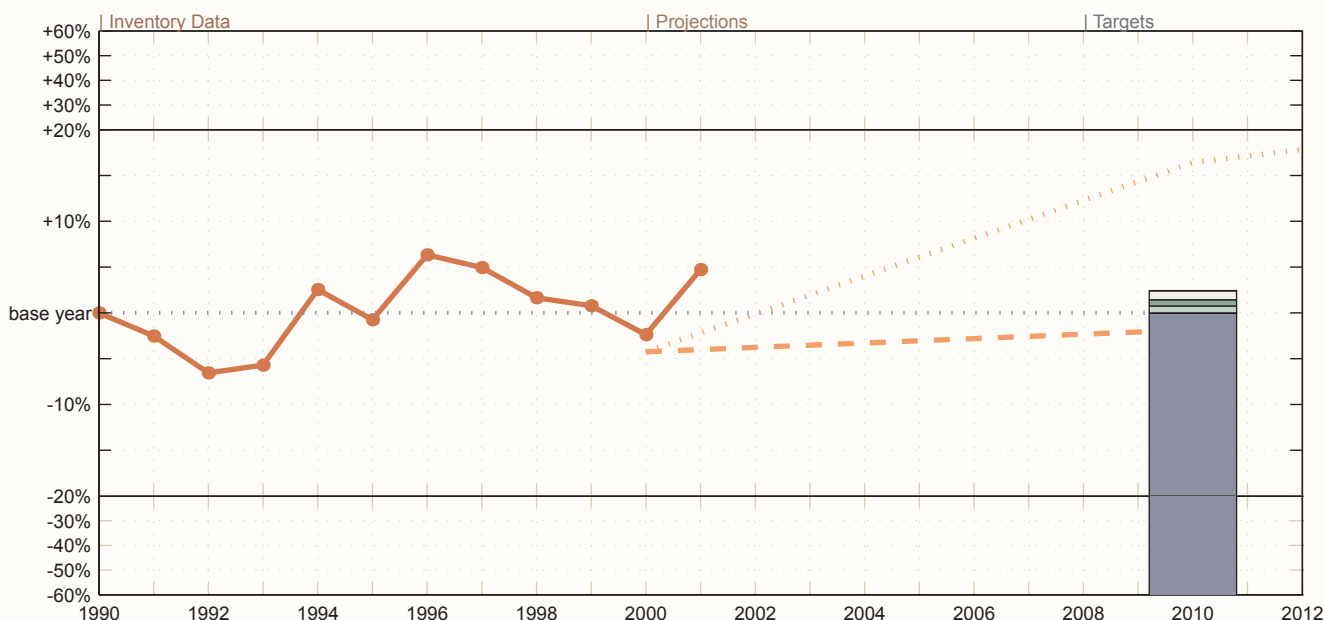
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

France

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (Ap)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	568.15	100%
1990:	568.15	100%
2000:	565.31	99.5%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-55.7	-9.8%
2000:	-63.1	-11.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	16.84	3%
2000:	24.08	4.3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	537.03	94.5%
2010 WM:	582.5	102.5%
2010 WAM:	524	92.2%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	584.99	100%
Actual 2000:	589.39	100.8%
Distance to aim:	4.41	0.8%
Achieved?:	Missed	

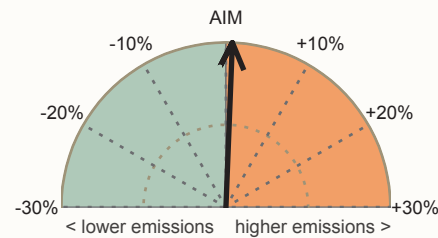
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	568.15	100%
Distance from 2001	0.01	0%
Distance from WM:	14.35	2.5%
Distance from WAM:	-44.15	-7.8%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	5.68	1%
Agr.Mng.(est.):	6.55	1.2%
For.Mng. I (AppZ):	3.23	0.6%
Aff&Def.:	-2.28	-0.4%
For.Mng. II:	2.28	0.4%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	15.46	2.7%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	10.31
2000:	9.95

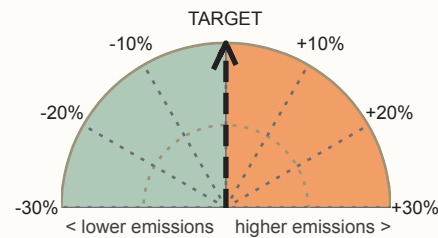
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



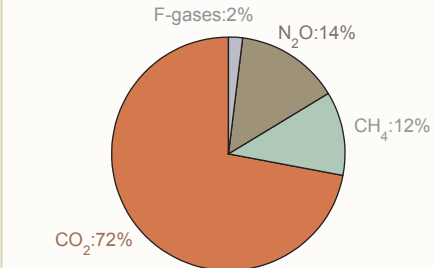
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

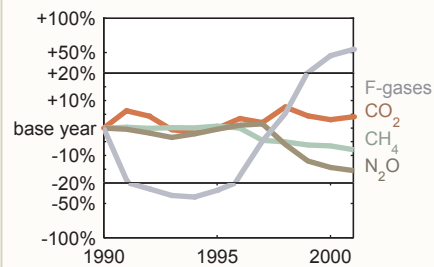


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

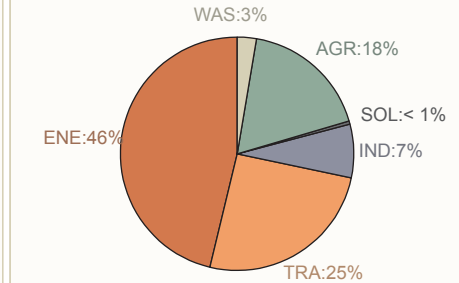
Emissions by Gas (2000)



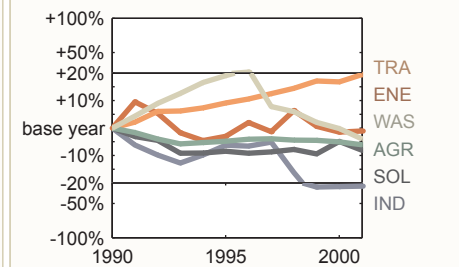
Emissions by Gas (Trend)



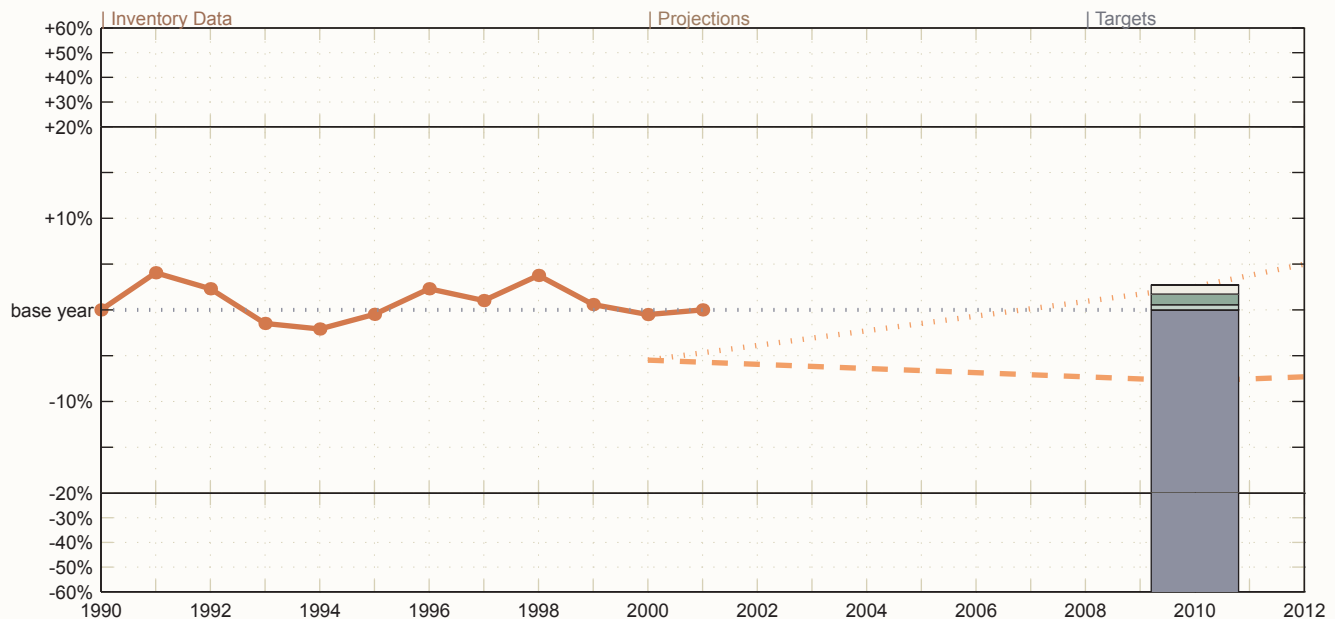
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Germany

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	1218.17	100%
1990:	1213.52	99.6%
2000:	983.3	80.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-33.69	-2.8%
2000:	-23.69	-2.4%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	19.76	1.6%
2000:	24.48	2.5%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	991.42	81.4%
2010 WM:	812.08	66.7%
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	1233.28	100%
Actual 2000:	1007.78	81.7%
Distance to aim:	-225.5	-18.3%

Achieved?:	Achieved
Kyoto Target	

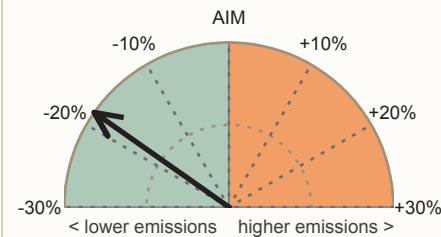
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	962.35	79%
Distance from 2001	32.98	2.7%
Distance from WM:	-150.27	-12.3%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	12.18	1%
Agr.Mng.(est.):	3.79	0.3%
For.Mng. I (AppZ):	4.55	0.4%
Aff&Def.:	-0.51	0%
For.Mng. II:	0.51	0%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	20.52	1.7%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	15.53
2000:	12.29

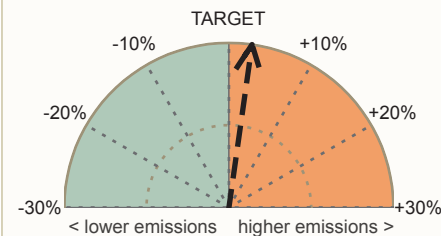
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



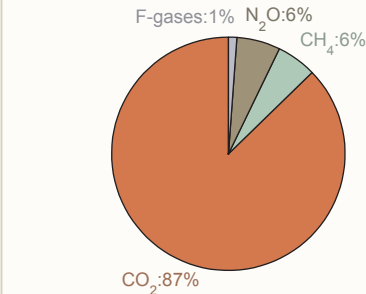
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

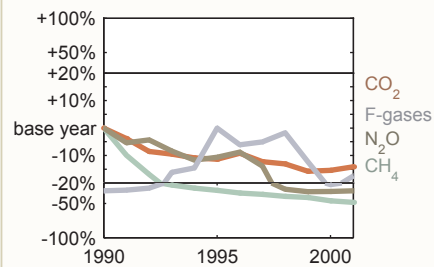


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

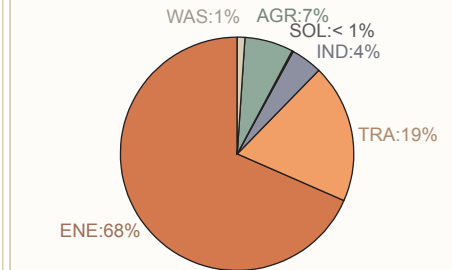
Emissions by Gas (2000)



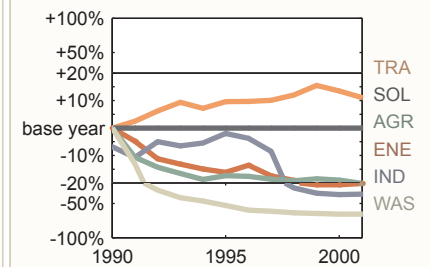
Emissions by Gas (Trend)



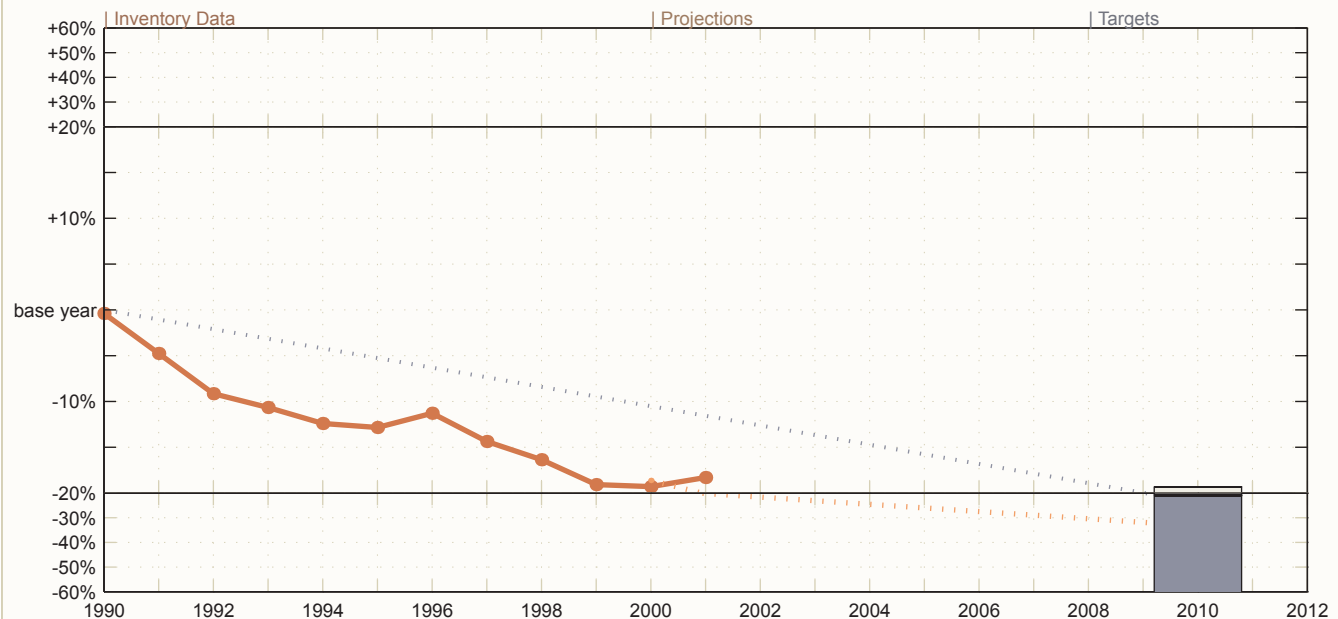
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Greece

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	107.15	100%
1990:	104.89	97.9%
2000:	130.05	121.4%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	1.58	1.5%
2000:	4.24	3.3%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	10.97	10.5%
2000:	14.64	11.3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	130.04	121.4%
2010 WM:	147.21	137.4%
2010 WAM:	132.91	124%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	115.86	100%
Actual 2000:	144.69	124.9%
Distance to aim:	28.83	24.9%
Achieved?:	Missed	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	133.94	125%
Distance from 2000	-3.89	-3.6%
Distance from WM:	13.27	12.4%
Distance from WAM:	-1.03	-1%

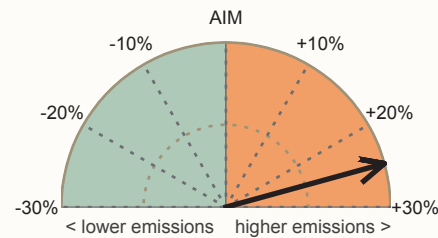
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	1.11	1%
Agr.Mng.(est.):	1.81	1.7%
For.Mng. I (AppZ):	0.33	0.3%
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.(est.):	3.99	3.7%
Sink Allowances Total:	7.24	6.8%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	11.4
2000:	13.64

Main Data Sources

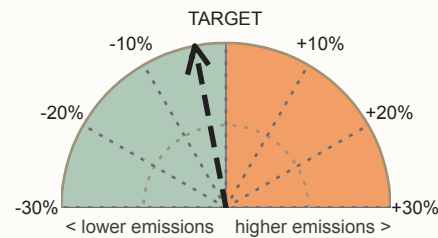
Inventory data: ghg.unfccc.int

UNFCCC Aim (2000)



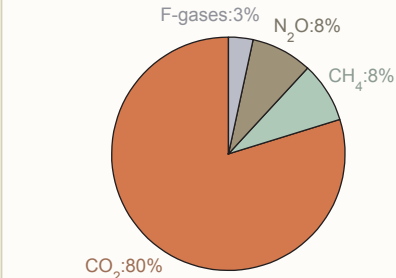
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

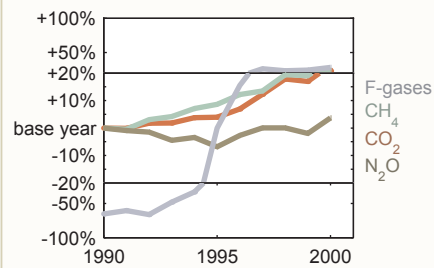


Distance from latest inventory data (2000) to Kyoto targets in percent of base year emissions.

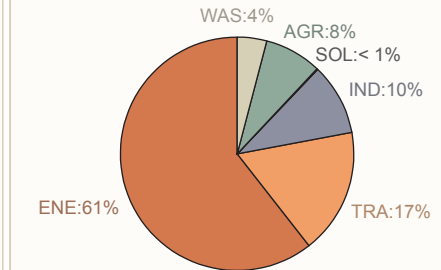
Emissions by Gas (2000)



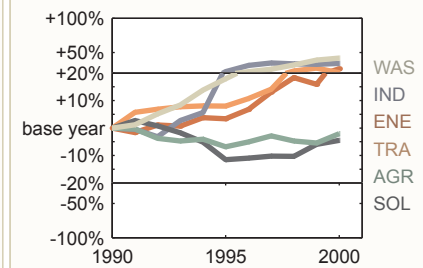
Emissions by Gas (Trend)



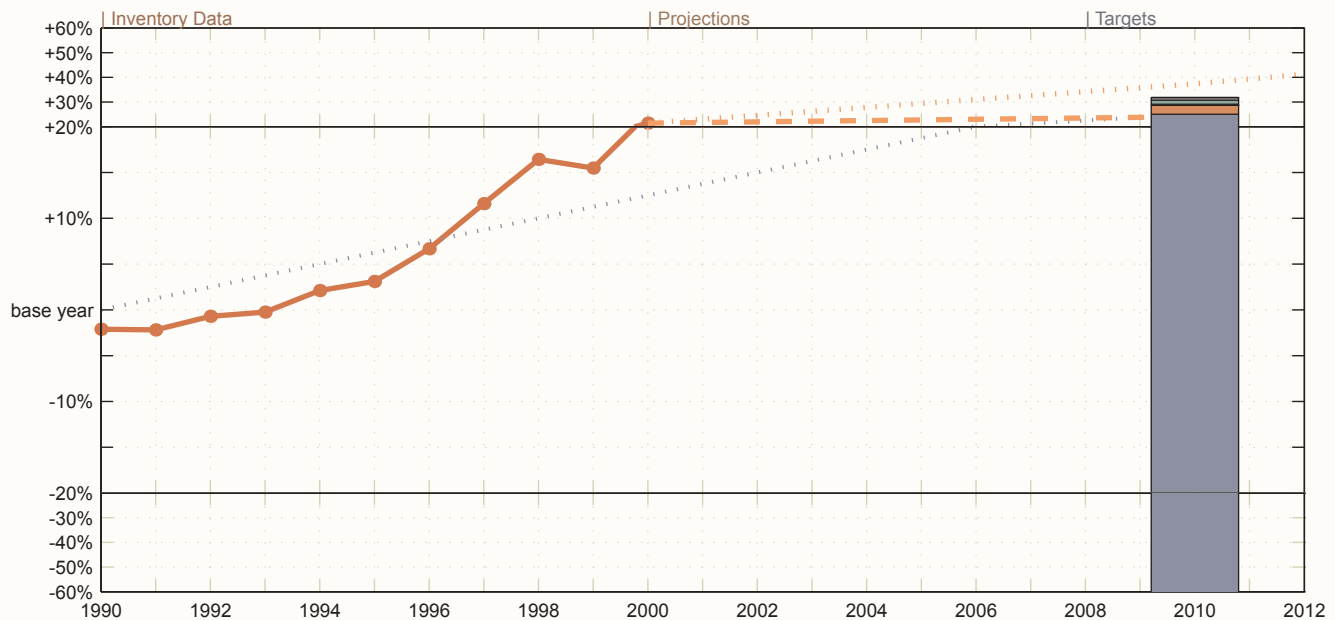
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Hungary

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 21/08/02 (Ac)

Base Year

CO₂, CH₄, N₂O 1985-1987

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
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Base Year (B.Yr.):	101.63	100%
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1990:	86.63	85.2%
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2000:	77.22	76%
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LULUCF	MtCO ₂ e/yr	%Yr.
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1990:	-4.47	-5.2%
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2000:	-4.38	-5.7%
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Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
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1990:	0	0%
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2000:	0.63	0.8%
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Projections	MtCO ₂ e/yr	%B.Yr.
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2000 (projection base):	59.48	58.5%
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2010 WM:	65.91	64.9%
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2010 WAM:	data unavailable	
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UNFCCC Aim	MtCO ₂ e/yr	% 1990
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Allowed 2000:	86.63	100%
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Actual 2000:	77.85	89.9%
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Distance to aim:	-8.78	-10.1%
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Achieved?:	Achieved	
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Kyoto Target	MtCO ₂ e/yr	%B.Yr.
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Allwd 2008-12 (An.B):	95.53	94%
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Distance from 2001	-17.84	-17.6%
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Distance from WM:	-29.62	-29.1%
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Sink Allowances	MtCO ₂ e/yr	%B.Yr.
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CDM sinks:	1.02	1%
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Agr.Mng.(est.):	1.33	1.3%
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For.Mng. I (AppZ):	1.06	1%
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Aff&Def.:	data unavailable	
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For.Mng. II:	data unavailable	
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Defo in B.Yr.:	not applicable	
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Sink Allowances Total:	3.41	3.4%
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Per Capita Emissions	tCO ₂ e/per/yr
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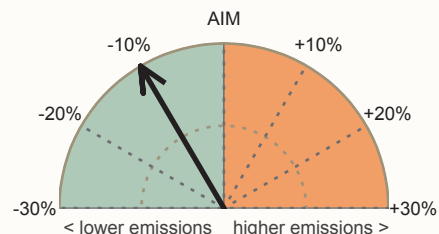
1990:	8.36
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2000:	7.81
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Main Data Sources

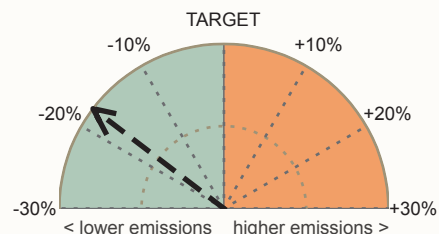
Inventory data:	CRF 2003
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UNFCCC Aim (2000)



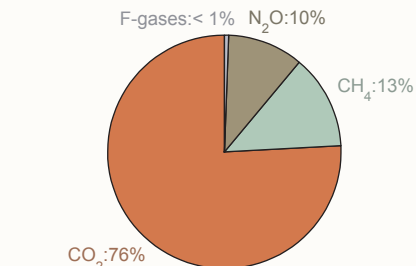
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

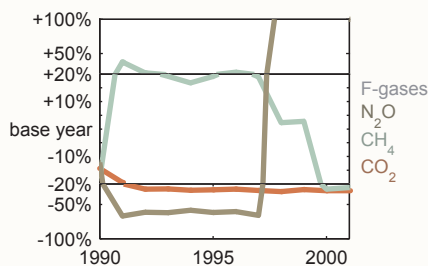


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

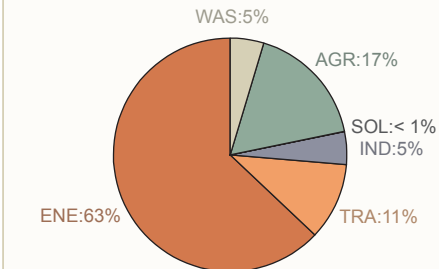
Emissions by Gas (2000)



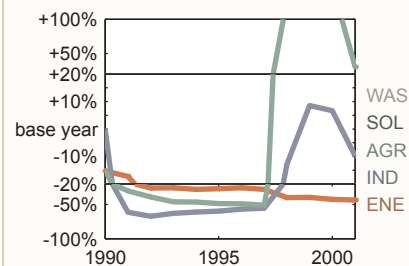
Emissions by Gas (Trend)



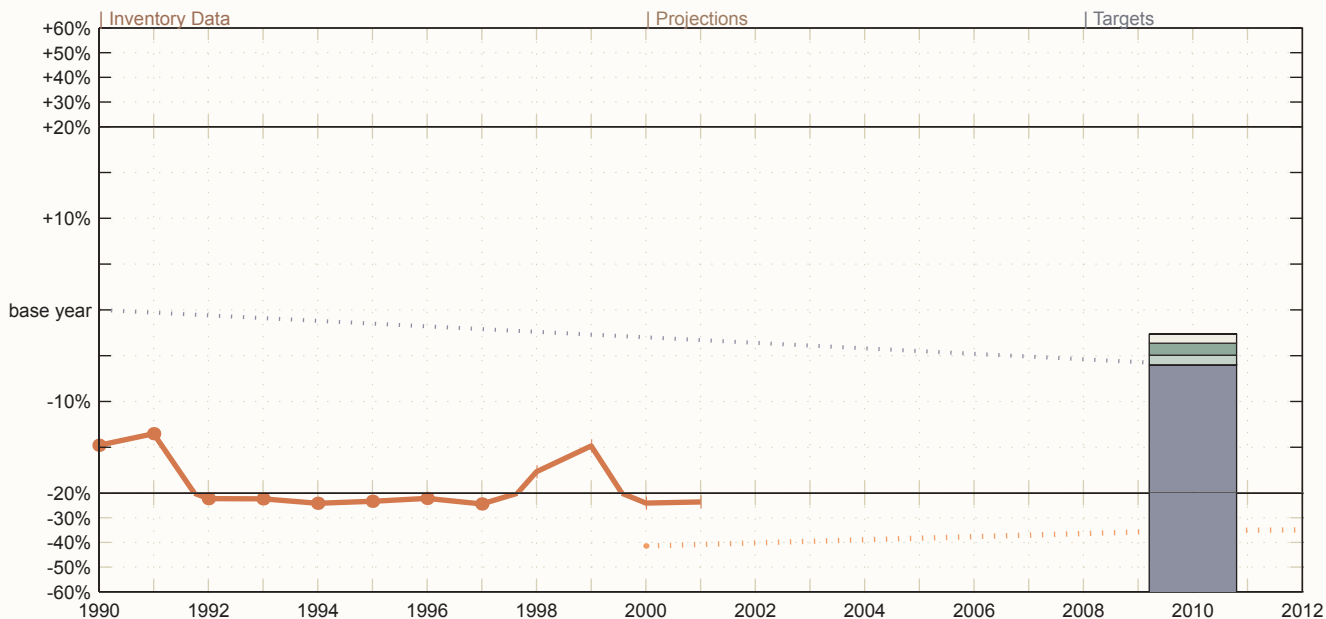
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Iceland

Annex I; Annex B; Annex II

Ratification date Kyoto: 23/05/02 (Ac)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	2.84	100%
1990:	2.84	100%
2000:	2.86	100.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-0.01	-0.2%
2000:	-0.13	-4.6%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0.32	11.3%
2000:	0.63	22.1%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	3.14	110.6%
2010 WAM II:	4.59	161.6%
2010 WAM I:	3.19	112.4%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	3.16	100%
Actual 2000:	3.49	110.5%
Distance to aim:	0.33	10.5%

Achieved?: Missed

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	3.12	110%
Distance from 2001	-0.4	-14.1%
Distance from WAM II:	1.47	51.7%
Distance from WAM I:	0.07	2.4%

Single Project	MtCO ₂ e/yr	%B.Yr.
Allowance 2008-2012:	1.6	56.4%

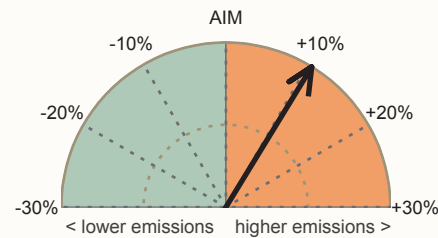
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.03	1%
Agr.Mng.(est.):	0.64	22.4%
For.Mng. I (AppZ):	0	0%
Aff&Def.:	0.09	3.1%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	0.75	26.5%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	12.39
2000:	12.52

Main Data Sources

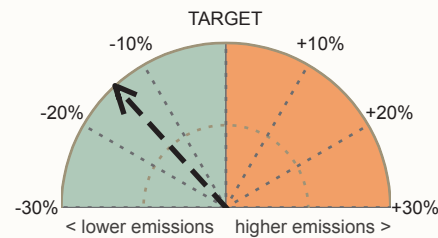
Inventory data: CRF 2003

UNFCCC Aim (2000)



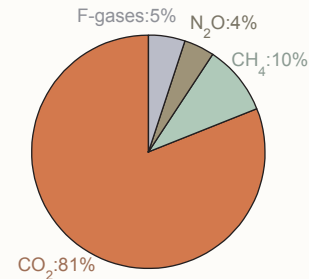
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

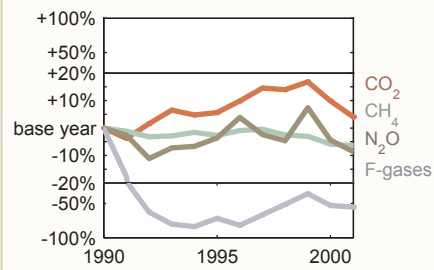


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

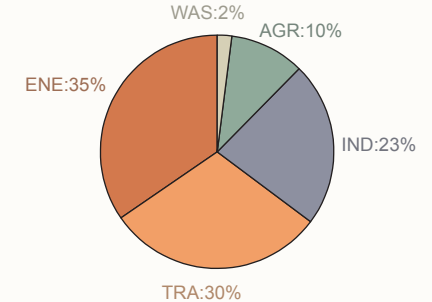
Emissions by Gas (2000)



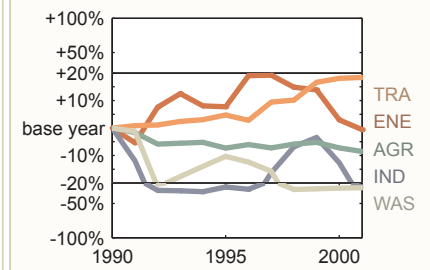
Emissions by Gas (Trend)



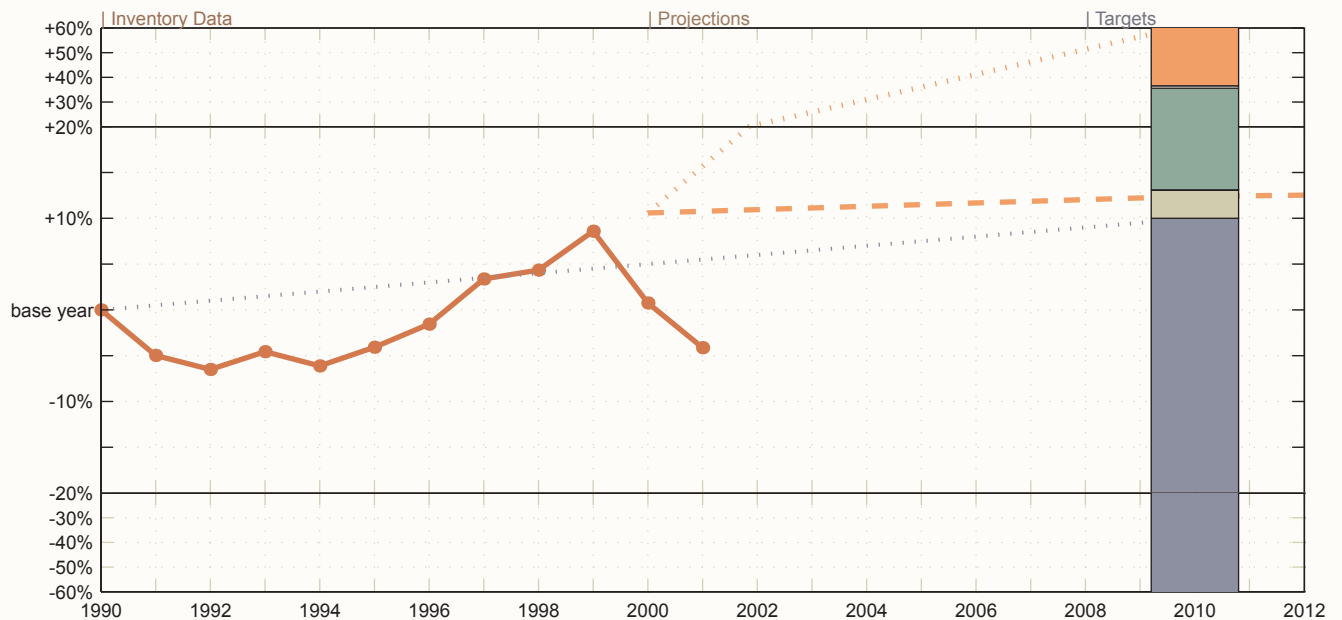
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Ireland

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	53.42	100%
1990:	53.24	99.7%
2000:	68.25	127.8%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-0.07	-0.1%
2000:	-0.05	-0.1%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	1.13	2.1%
2000:	2.06	3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	54.37	100%
Actual 2000:	70.31	129.3%
Distance to aim:	15.94	29.3%

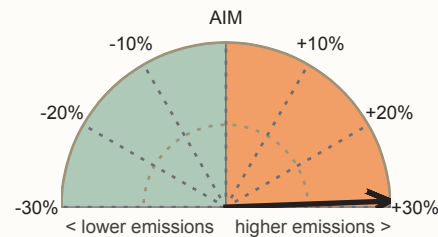
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	60.36	113%
Distance from 2001	9.66	18.1%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.53	1%
Agr.Mng.(est.):	0.9	1.7%
For.Mng. I (AppZ):	0.18	0.3%
Aff&Def.:	3.35	6.3%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	4.97	9.3%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	15.47
2000:	18.49

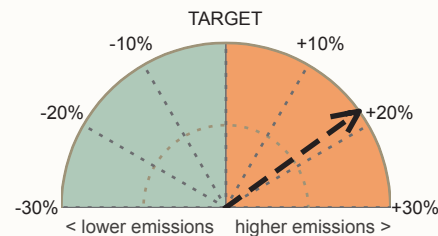
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



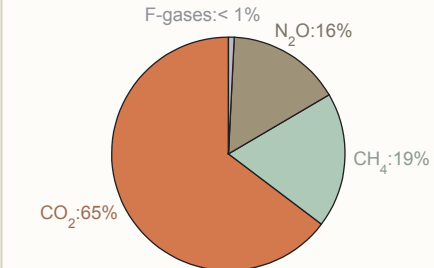
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

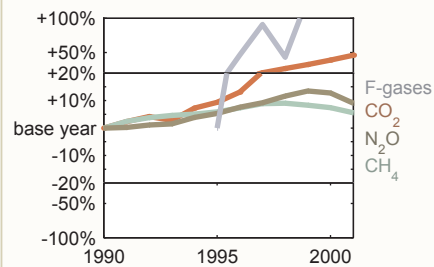


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

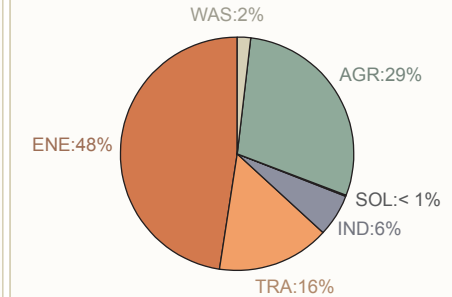
Emissions by Gas (2000)



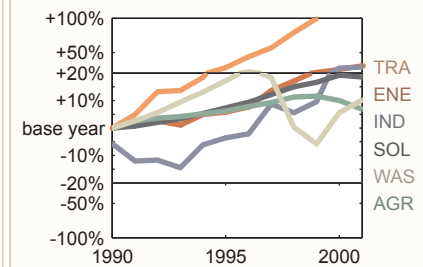
Emissions by Gas (Trend)



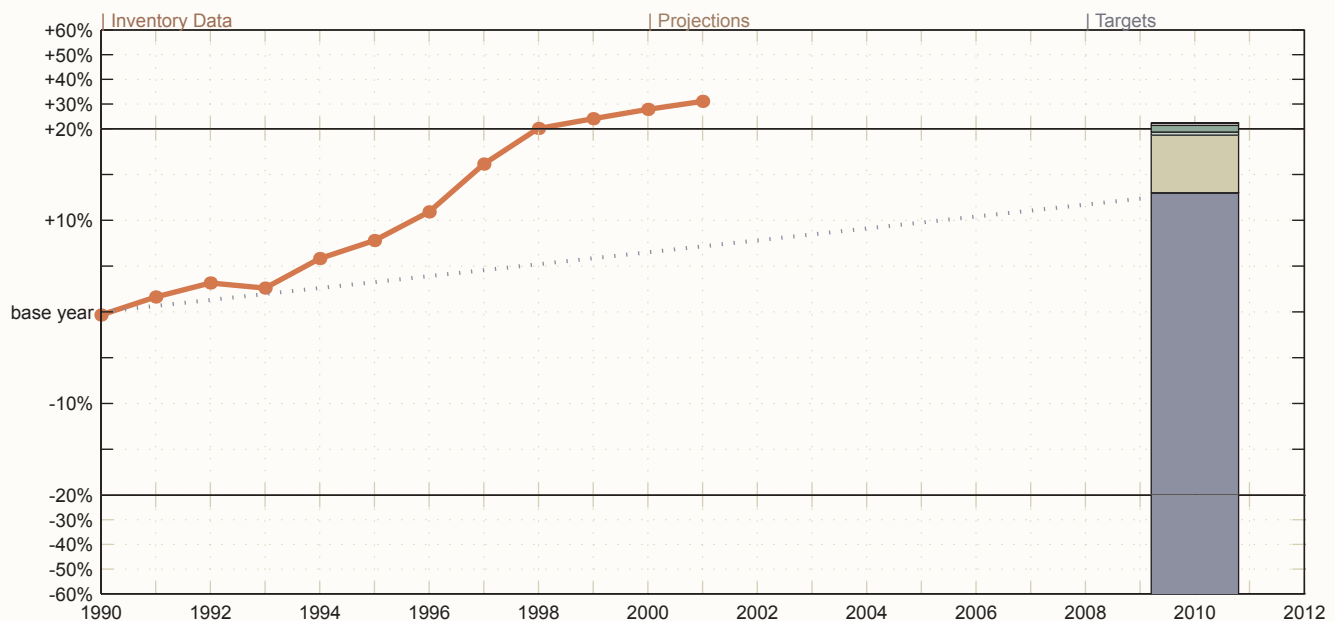
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Italy

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	509.25	100%
1990:	508.63	99.9%
2000:	543.75	106.8%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-23.53	-4.6%
2000:	-15.63	-2.9%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	8.65	1.7%
2000:	12.52	2.3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	546.9	107.4%
2010 WM:	540.1	106.1%
2010 WAM:	496.25	97.4%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	517.28	100%
Actual 2000:	556.27	107.5%
Distance to aim:	38.99	7.5%
Achieved?:	Missed	

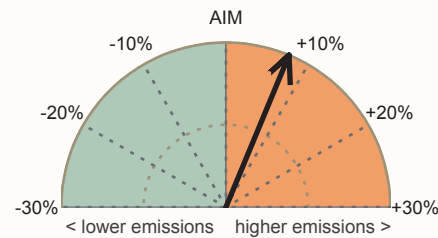
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	476.15	93.5%
Distance from 2001:	69.21	13.6%
Distance from WM:	63.95	12.6%
Distance from WAM:	20.1	3.9%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	5.09	1%
Agr.Mng.(est.):	3.43	0.7%
For.Mng. I (AppZ):	0.66	0.1%
Aff&Def.:	1.73	0.3%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	10.91	2.1%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	9.12
2000:	9.67

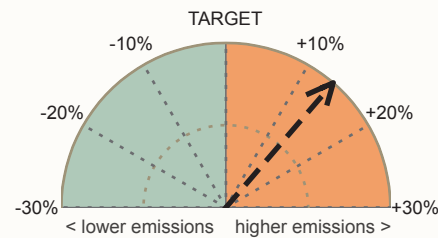
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



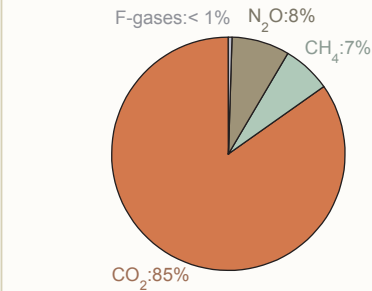
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

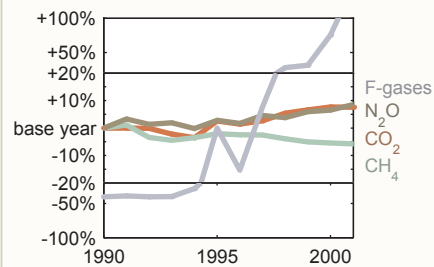


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

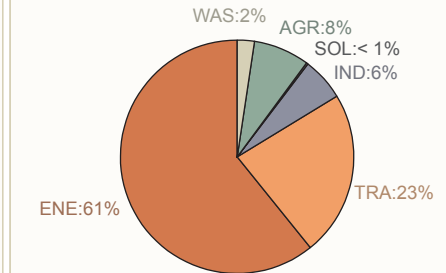
Emissions by Gas (2000)



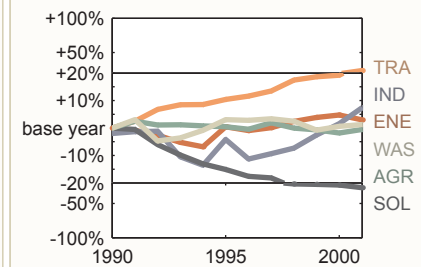
Emissions by Gas (Trend)



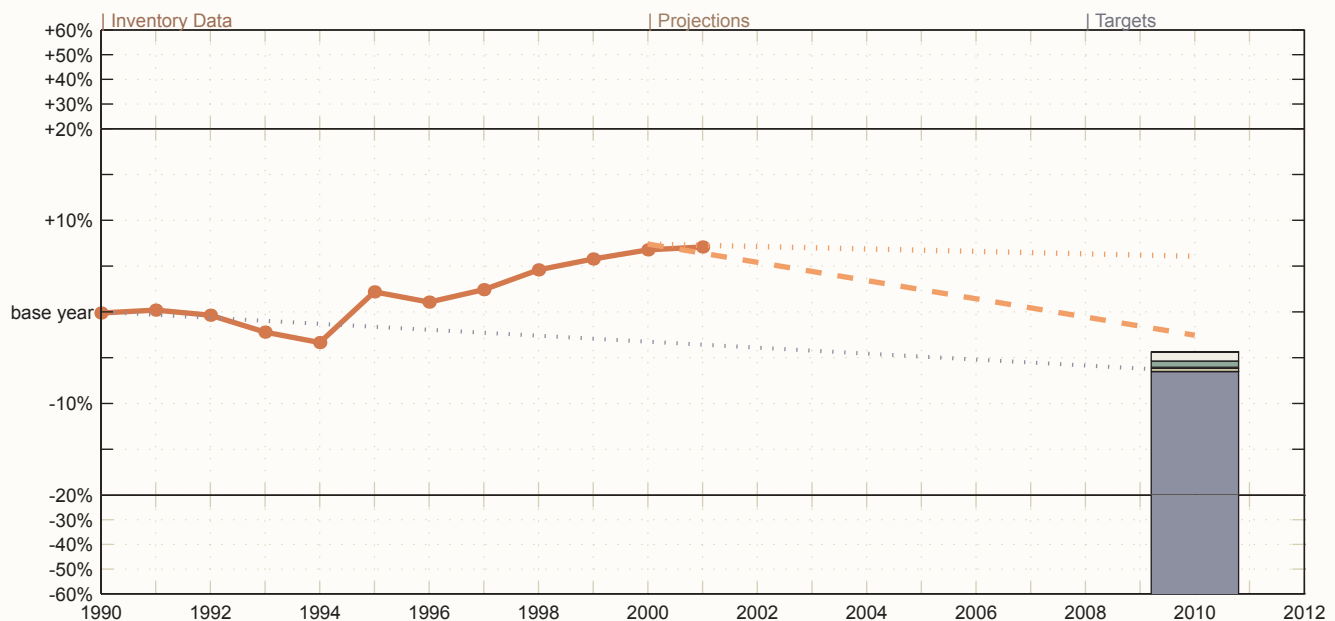
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Japan

Annex I; Annex B; Annex II

Ratification date Kyoto: 04/06/02 (At)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	1235.37	100%
1990:	1187.11	96.1%
2000:	1332.95	107.9%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-83.9	-7.1%
2000:	data unavailable	

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	31.25	2.6%
2000:	34.05	2.6%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	1386.3	112.2%
2010 WM:	1317.4	106.6%
2010 WAM:	1221.4	98.9%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	1218.36	100%
Actual 2000:	1367	112.2%
Distance to aim:	148.64	12.2%
Achieved?:	Missed	

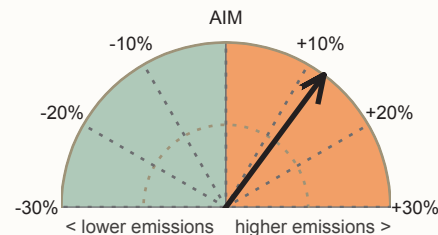
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	1161.25	94%
Distance from 2001	138.19	11.2%
Distance from WM:	156.15	12.6%
Distance from WAM:	60.15	4.9%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	12.35	1%
Agr.Mng.(est.):	1.2	0.1%
For.Mng. I (AppZ):	47.67	3.9%
Aff&Def.:	-2.74	-0.2%
For.Mng. II:	2.74	0.2%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	61.22	5%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	9.86
2000:	10.76

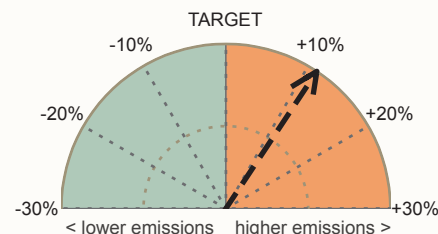
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



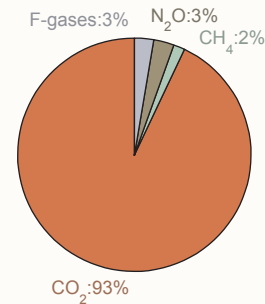
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

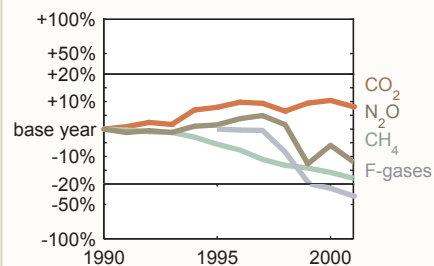


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

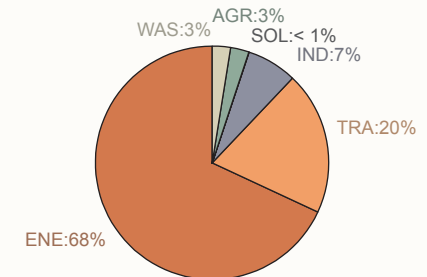
Emissions by Gas (2000)



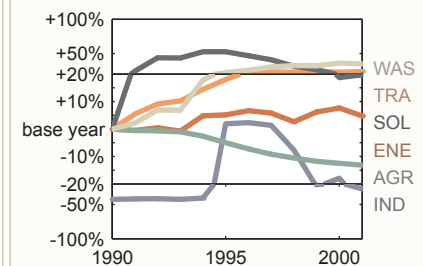
Emissions by Gas (Trend)



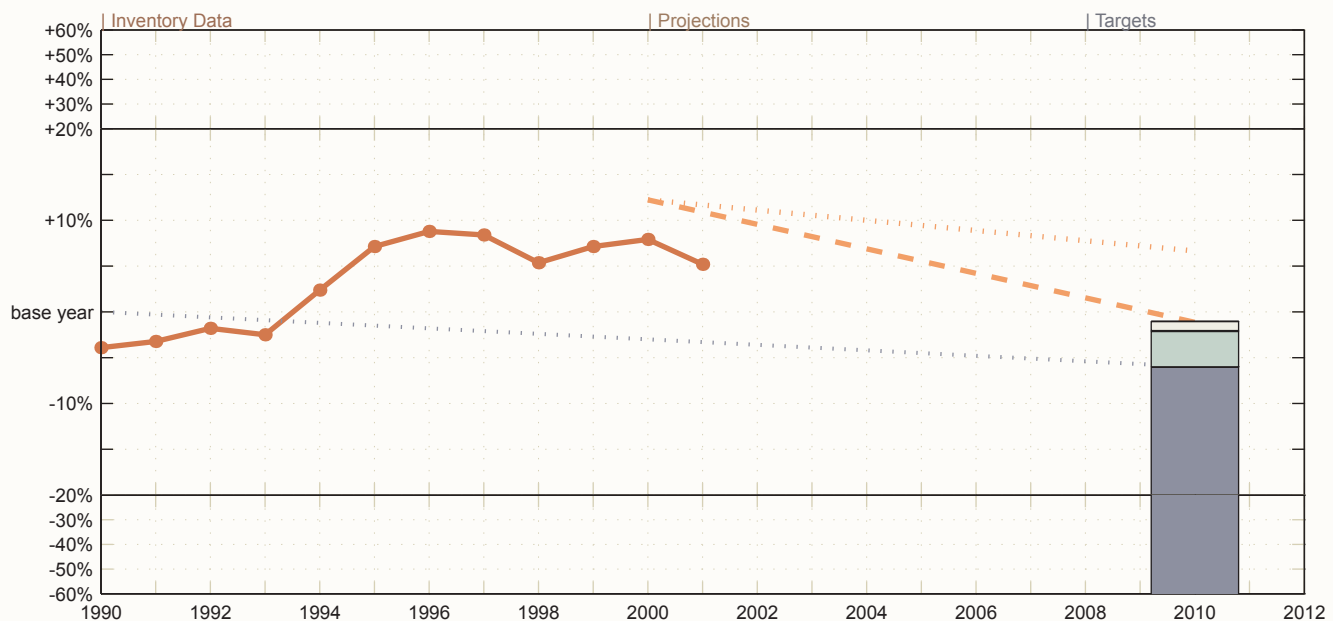
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Kazakhstan

Annex I (no Kyoto target); EIT

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	270.15	100%
1990:	270.15	100%
1994:	219.24	81.2%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-3.99	-1.5%
1994:	-6.63	-3%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	4.49	1.7%
1994*:	1.48	0.7%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	274.63	100%
Actual 2000:	data unavailable	
Distance to aim from 1994:	-53.91	-19.6%
Achieved?:	data unavailable	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	not yet determined	
Distance from 1994	data unavailable	

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
□ CDM sinks:	2.7	1%
■ Agr.Mng.(est.):	41.06	15.2%
For.Mng. I (AppZ):	not yet determined	
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	43.76	16.2%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	16.35
1994:	13.23

1990: 270.15 100%

1994: 219.24 81.2%

LULUCF MtCO₂e/yr %Yr.

1990: -3.99 -1.5%

1994: -6.63 -3%

Int. Bunker Fuels MtCO₂e/yr %Yr.

1990*: 4.49 1.7%

1994*: 1.48 0.7%

Projections MtCO₂e/yr %B.Yr.

2000 (projection base): data unavailable

2010 WM: data unavailable

2010 WAM: data unavailable

UNFCCC Aim MtCO₂e/yr % 1990

Allowed 2000: 274.63 100%

Actual 2000: data unavailable

Distance to aim from 1994: -53.91 -19.6%

Achieved?: data unavailable

Kyoto Target MtCO₂e/yr %B.Yr.

Allwd 2008-12 (An.B): not yet determined

Distance from 1994 data unavailable

Sink Allowances MtCO₂e/yr %B.Yr.

□ CDM sinks: 2.7 1%

■ Agr.Mng.(est.): 41.06 15.2%

For.Mng. I (AppZ): not yet determined

Aff&Def.: data unavailable

For.Mng. II: data unavailable

Defo in B.Yr.: not applicable

Sink Allowances Total: 43.76 16.2%

Per Capita Emissions tCO₂e/per/yr

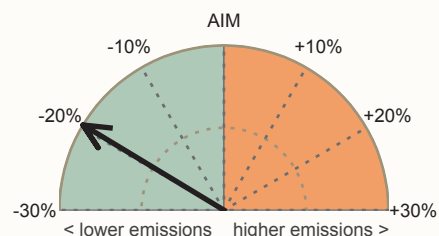
1990: 16.35

1994: 13.23

Main Data Sources

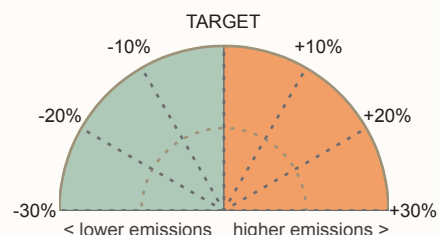
Inventory data: ghg.unfccc.int; *EDGAR

UNFCCC Aim (1994)



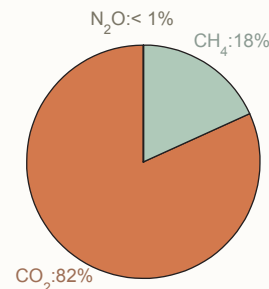
Distance from latest inventory data (1994) to UNFCCC aim (2000) in percent of 1990 emissions.

Distance to Kyoto Target

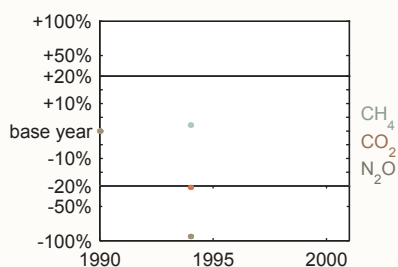


As by COP9, 2003, no Kyoto-target had been determined for Kazakhstan.

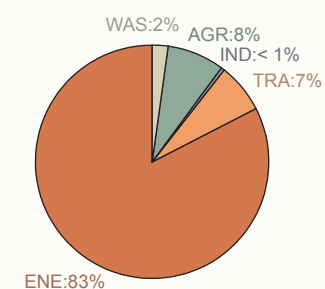
Emissions by Gas (1994)



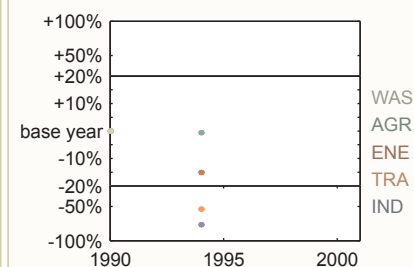
Emissions by Gas (Trend)



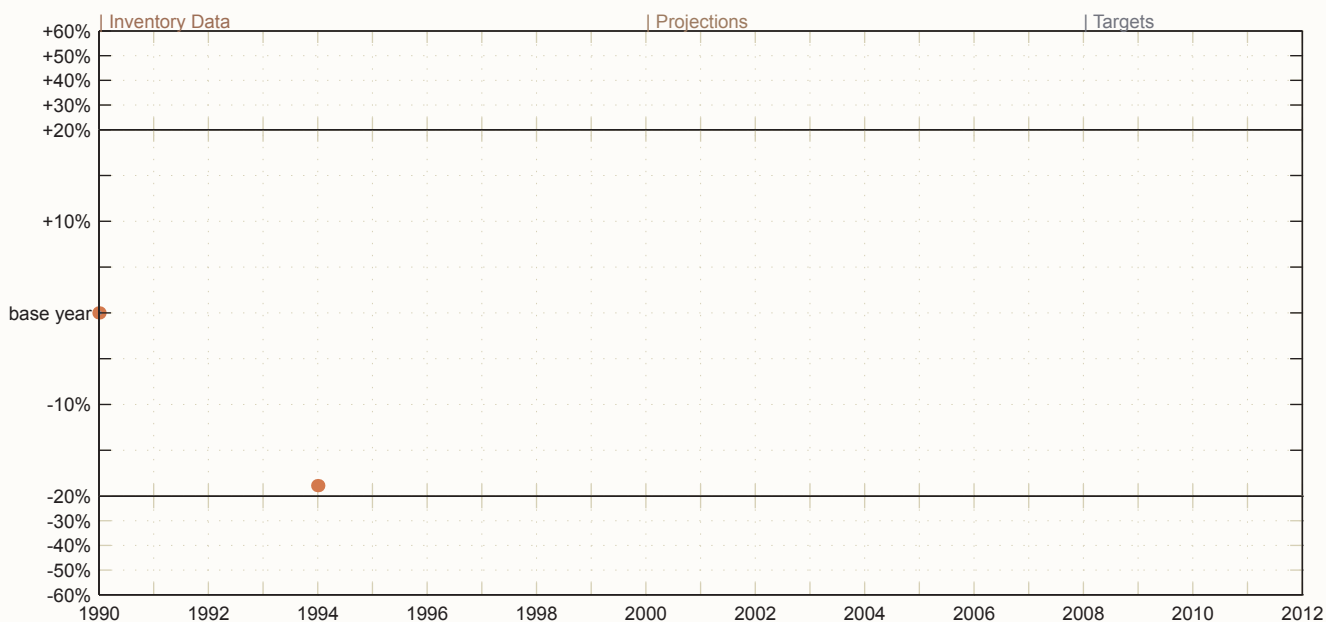
Emissions by Sector (1994)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Latvia

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 05/07/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	29.11	100%
1990:	29.11	100%
2000:	9.86	33.9%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-18.95	-65.1%
2000:	-8.22	-83.4%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0.2	0.7%
2000:	0.24	2.4%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	10.68	36.7%
2010 WM:	12.81	44%
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	29.3	100%
Actual 2000:	10.1	34.5%
Distance to aim:	-19.21	-65.5%

Achieved?:	Achieved
Kyoto Target	MtCO ₂ e/yr %B.Yr.

Allwd 2008-12 (An.B):	26.78	92%
Distance from 2001:	-15.28	-52.5%
Distance from WM:	-13.97	-48%

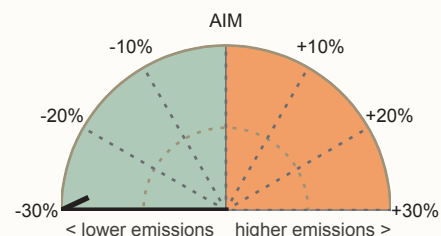
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.29	1%
Agr.Mng.(est.):	0.56	1.9%
For.Mng. I (AppZ):	1.25	4.3%

Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	2.1	7.2%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	11.16
2000:	4.17

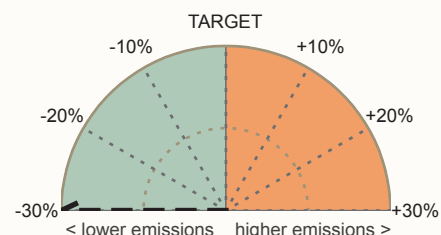
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



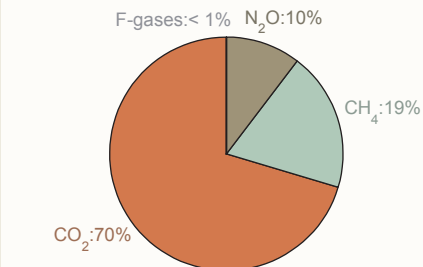
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

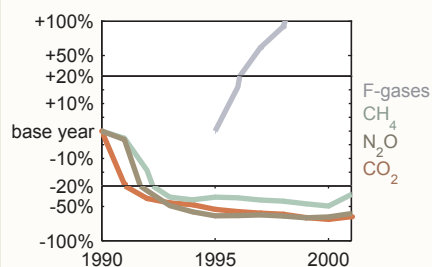


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

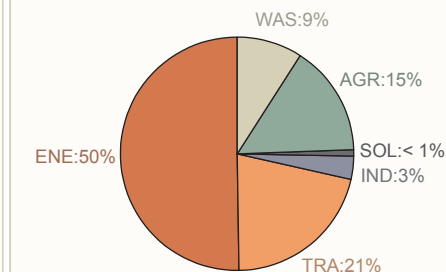
Emissions by Gas (2000)



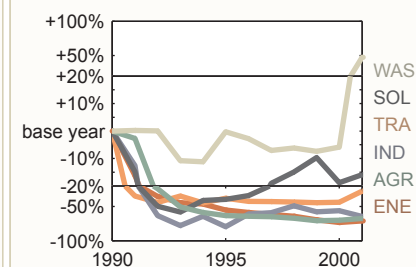
Emissions by Gas (Trend)



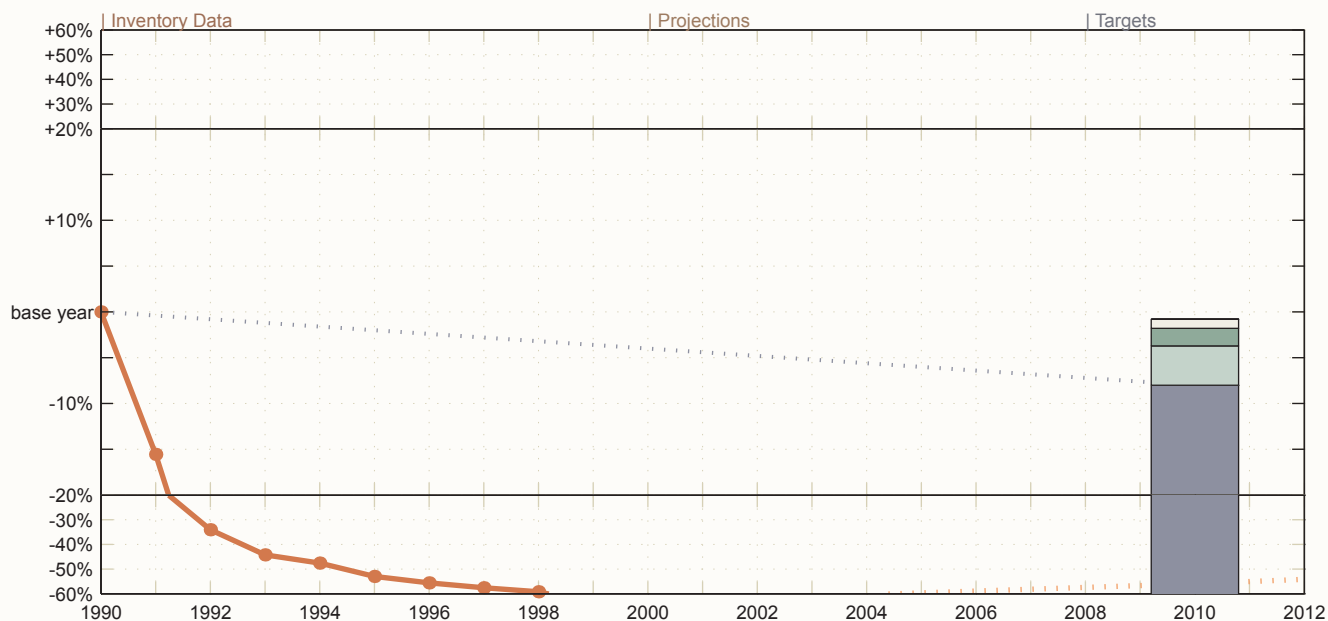
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Liechtenstein

Annex I; Annex B

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	0.22	100%
1990:	0.22	100%
1999:	0.22	99.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	data unavailable	
1999:	data unavailable	

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	0	0%
1999*:	0	0%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	0.22	101%
2010 WM:	0.22	101%
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	0.22	100%
Actual 2000:	data unavailable	
Distance to aim from 1999:	0	-0.3%
Achieved?:	data unavailable	

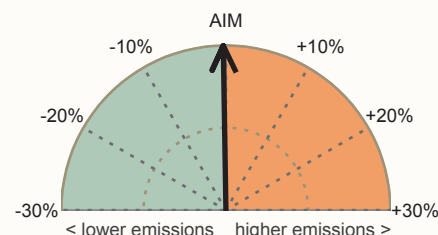
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	0.2	92%
Distance from 1999	0.02	7.7%
Distance from WM:	0.02	9%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0	1%
Agr.Mng.(est.):	0	0.9%
For.Mng. I (AppZ):	0.04	16.8%
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	0.04	18.7%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	7.51
1999:	6.78

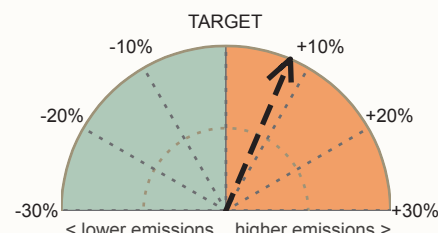
Main Data Sources	
Inventory data:	ghg.unfccc.int; *EDGAR

UNFCCC Aim (1999)



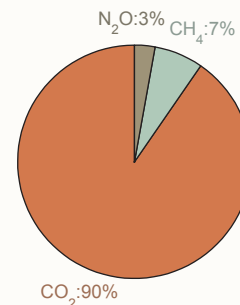
Distance from latest inventory data (1999) to UNFCCC aim (2000) in percent of 1990 emissions.

Distance to Kyoto Target

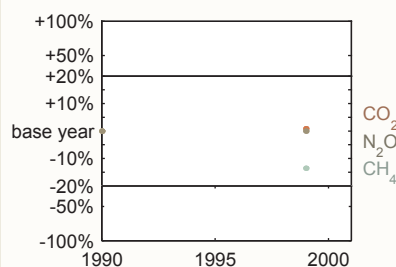


Distance from latest inventory data (1999) to Kyoto targets in percent of base year emissions.

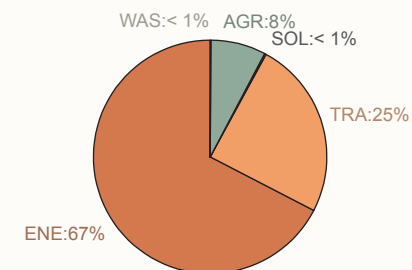
Emissions by Gas (1999)



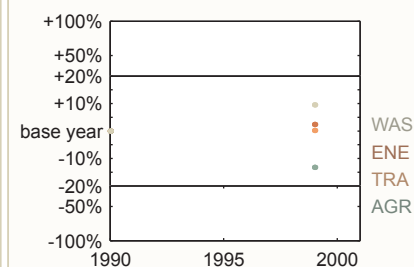
Emissions by Gas (Trend)



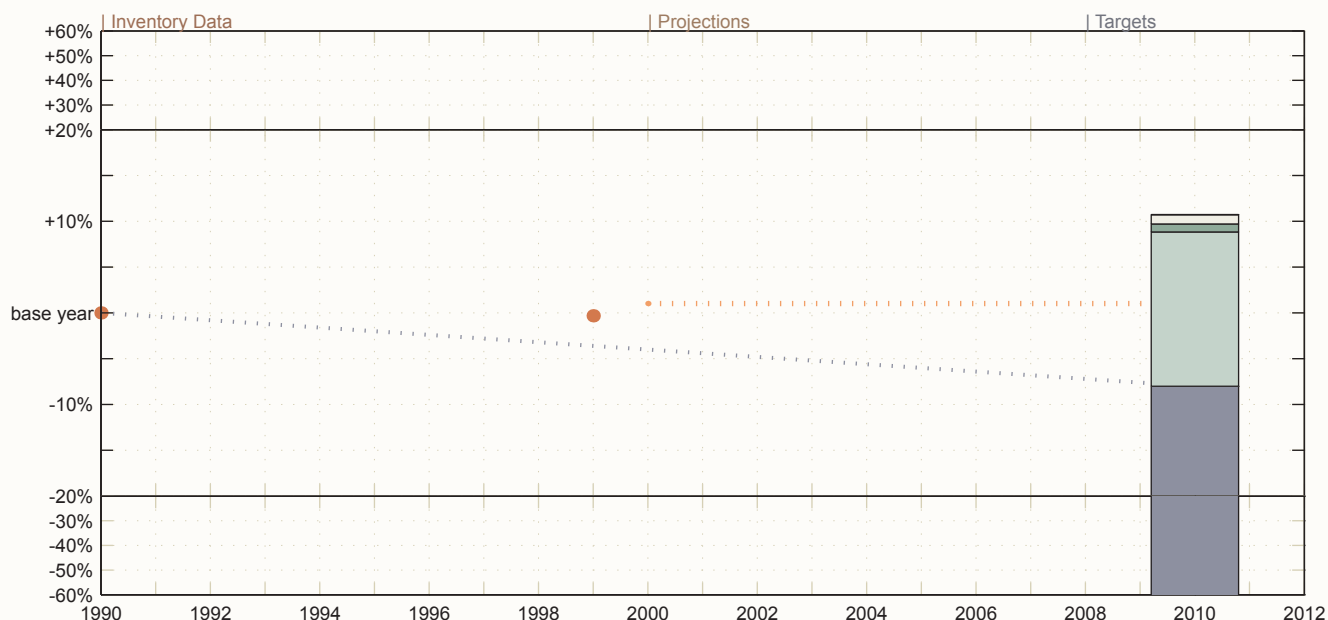
Emissions by Sector (1999)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Lithuania

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 03/01/03 (R)

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	51.55	100%
1990:	51.55	100%
1998:	23.85	46.3%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-8.85	-17.2%
1998:	-7.71	-32.3%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	1.4	2.7%
1998:	0.16	0.7%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	52.95	100%
Actual 2000:	data unavailable	
Distance to aim from 1998:	-28.94	-54.7%
Achieved?:	data unavailable	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	47.42	92%
Distance from 1998	-23.57	-45.7%

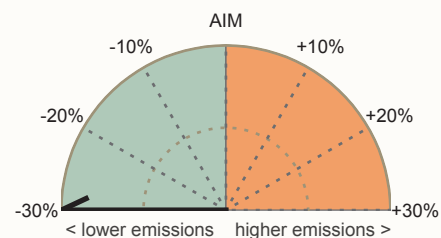
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.52	1%
Agr.Mng.(est.):	0.8	1.5%
For.Mng. I (AppZ):	1.03	2%
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	2.34	4.5%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	14.17
1998:	6.48

Main Data Sources

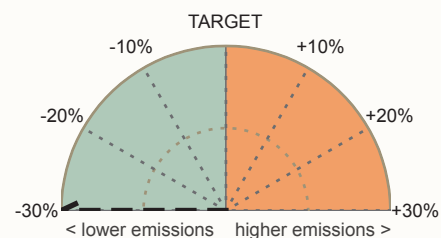
Inventory data: ghg.unfccc.int; *EDGAR

UNFCCC Aim (1998)



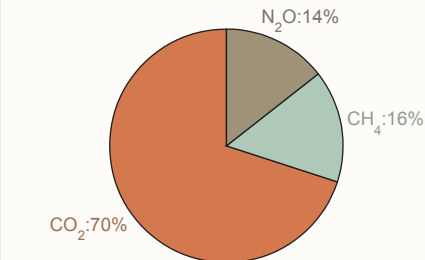
Distance from latest inventory data (1998) to UNFCCC aim (2000) in percent of 1990 emissions.

Distance to Kyoto Target

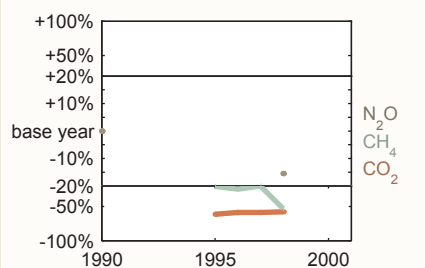


Distance from latest inventory data (1998) to Kyoto targets in percent of base year emissions.

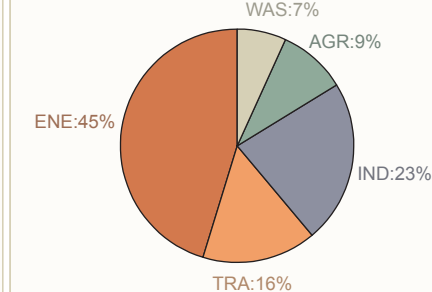
Emissions by Gas (1998)



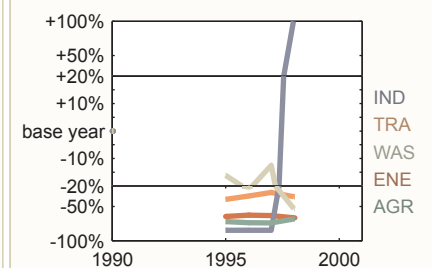
Emissions by Gas (Trend)



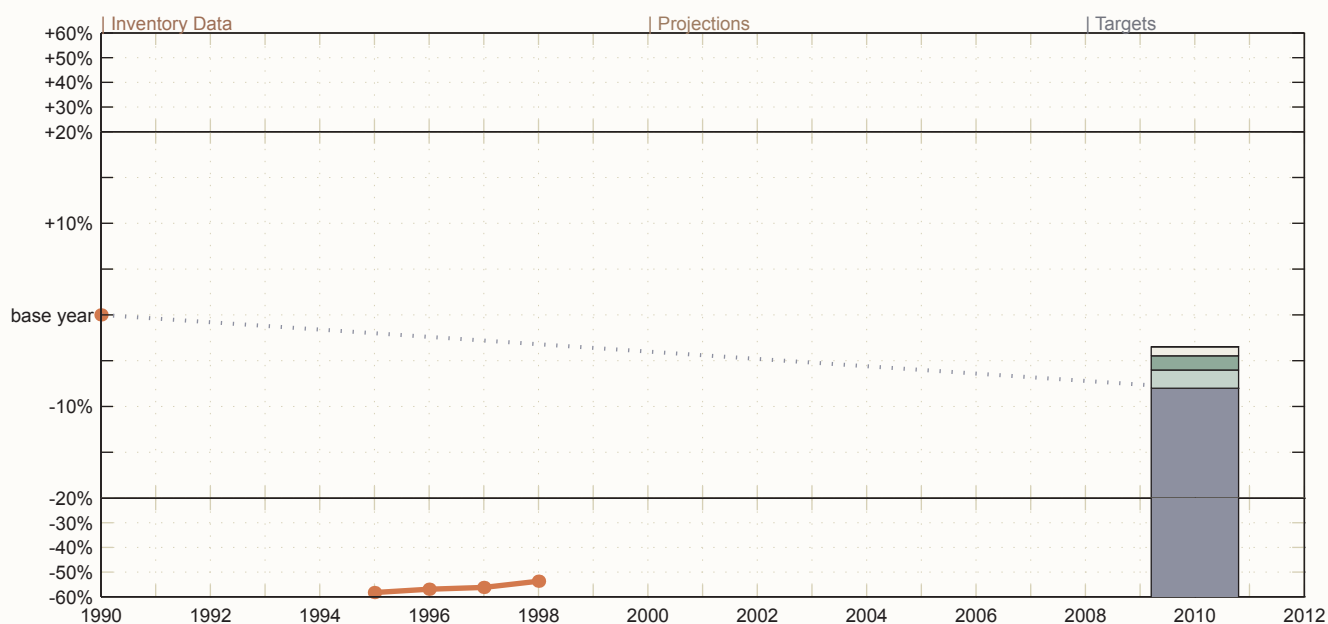
Emissions by Sector (1998)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Luxembourg

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	13.45	100%
1990:	13.45	100%
2000:	5.97	44.4%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-0.29	-2.1%
2000:	-0.27	-4.6%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	0.41	3%
2000:	0.97	16.3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	13.85	100%
Actual 2000:	6.94	50.1%
Distance to aim:	-6.91	-49.9%

Achieved?:	Achieved
Kyoto Target	

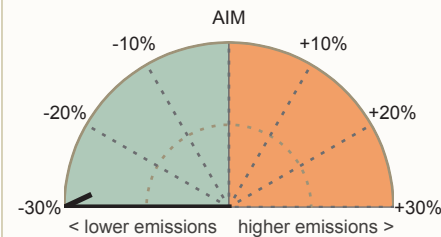
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	9.68	72%
Distance from 2000	-3.71	-27.6%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.13	1%
Agr.Mng.(est.):	data unavailable	
For.Mng. I (AppZ):	0.04	0.3%
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	0.17	1.3%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	36.27
2000:	15.88

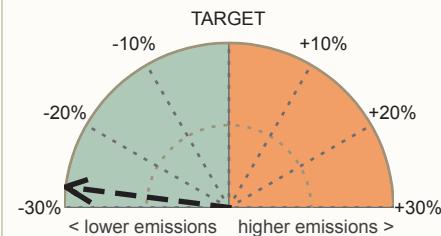
Main Data Sources	
Inventory data:	ghg.unfccc.int; *EDGAR

UNFCCC Aim (2000)



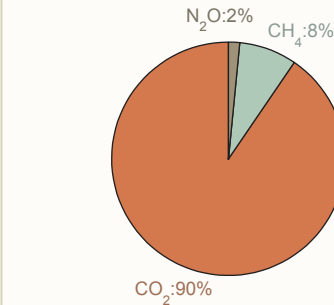
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

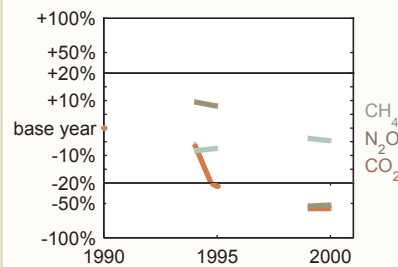


Distance from latest inventory data (2000) to Kyoto targets in percent of base year emissions.

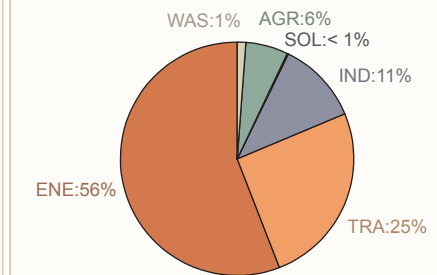
Emissions by Gas (2000)



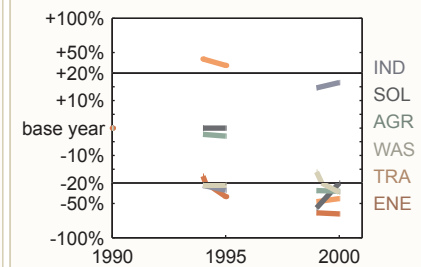
Emissions by Gas (Trend)



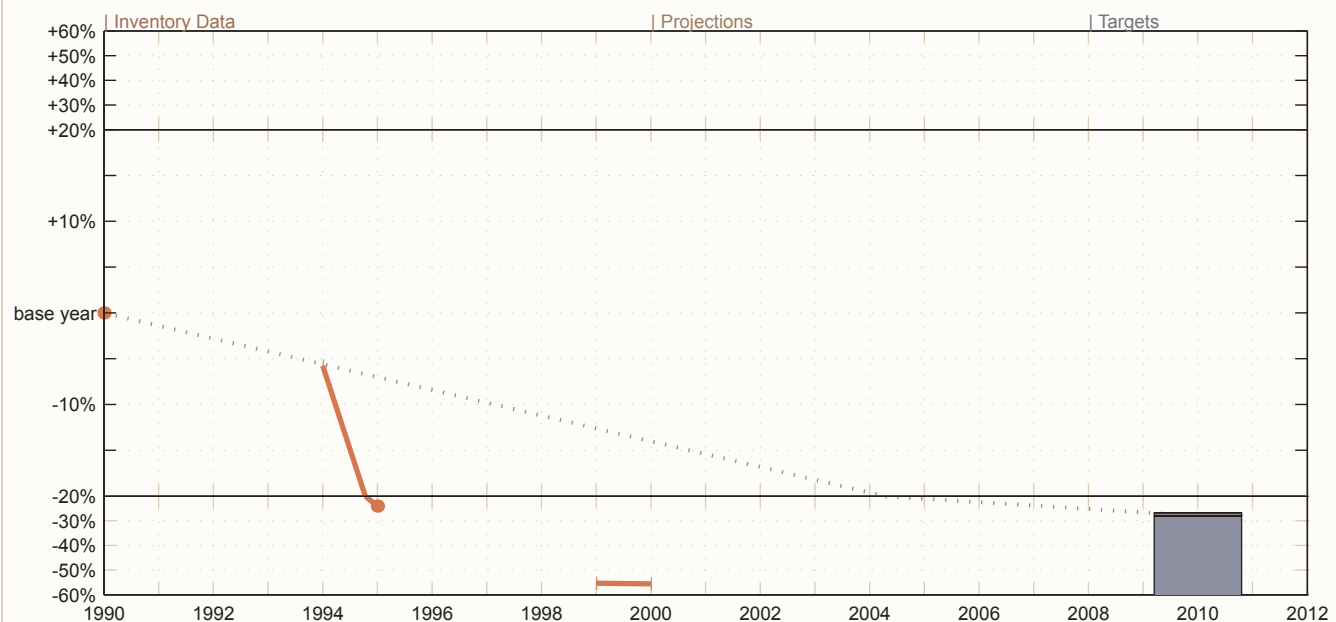
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Monaco

Annex I; Annex B

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	0.1	100%
1990:	0.1	100%
2000:	0.14	135.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	data unavailable	
2000:	data unavailable	

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0	0%
2000:	0	0%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	0.1	100%
Actual 2000:	0.14	135.7%
Distance to aim:	0.04	35.7%

Achieved?:	Missed
Kyoto Target	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	0.09	92%
Distance from 2001	0.05	48.5%

Single Project	MtCO ₂ e/yr	%B.Yr.
Allowance 2008-2012:	1.6	1603.5%

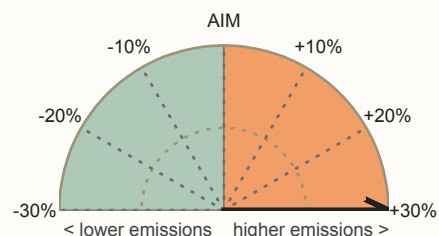
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0	1%
Agr.Mng.(est.):	0	0%
For.Mng. I (AppZ):	0	0%

Aff&Def.:	data unavailable
For.Mng. II:	data unavailable
Defo in B.Yr.:	not applicable

Sink Allowances Total:	0	1%
Per Capita Emissions	tCO ₂ e/per/yr	
1990:	3.33	
2000:	4.1	

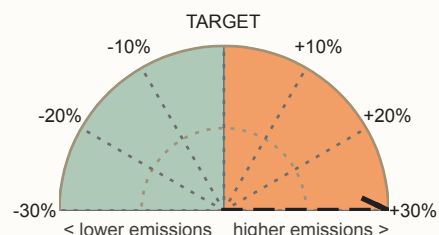
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



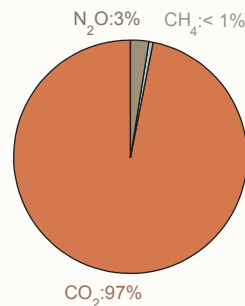
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

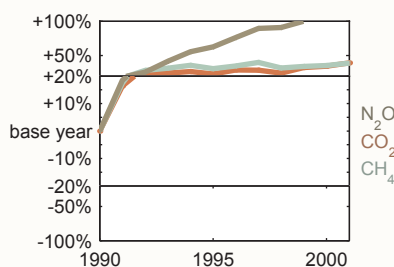


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

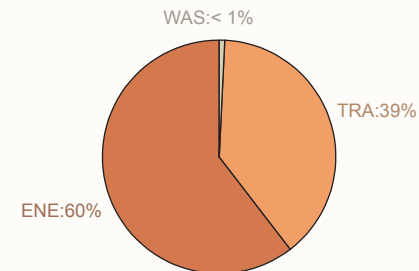
Emissions by Gas (2000)



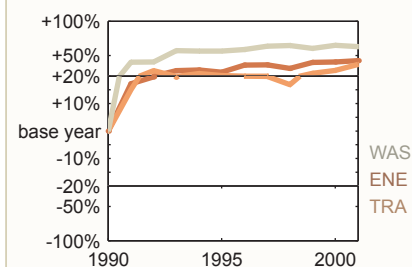
Emissions by Gas (Trend)



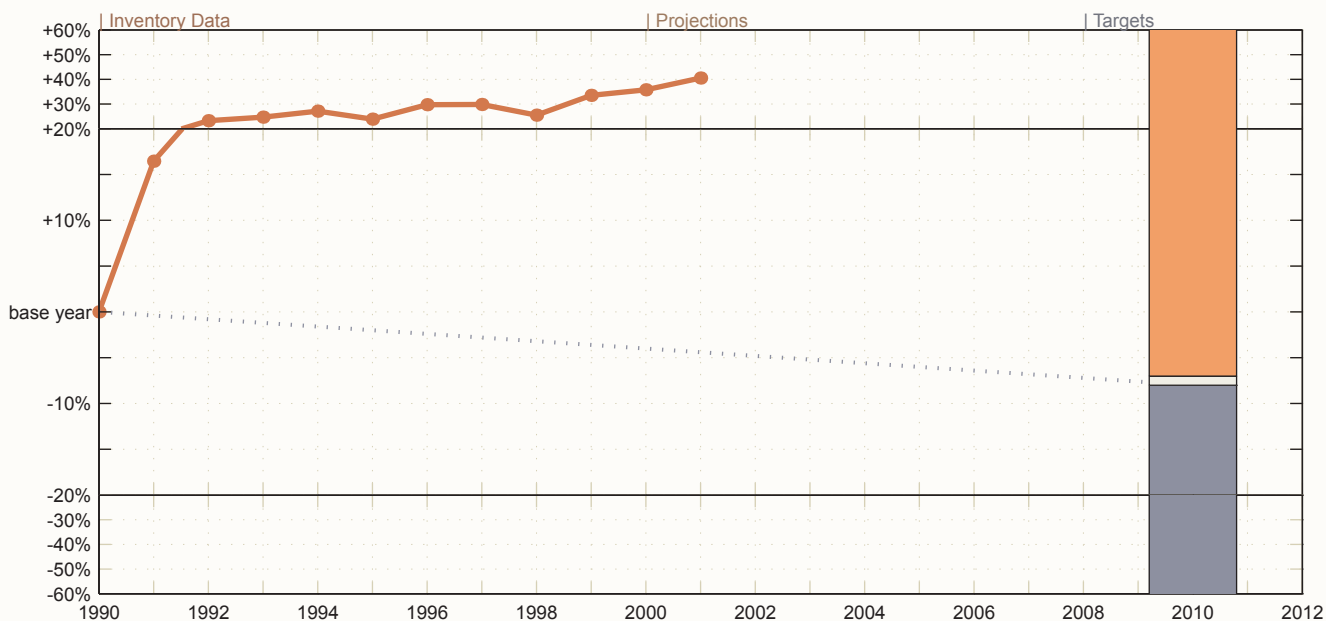
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Netherlands

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (Ac)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	211.11	100%
1990:	210	99.5%
2000:	216.82	102.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-1.42	-0.7%
2000:	-1.41	-0.7%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	39.76	18.9%
2000:	53.5	24.7%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	242	114.6%
2010 WM:	256	121.3%
2010 WAM:	230	108.9%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	249.77	100%
Actual 2000:	270.31	108.2%
Distance to aim:	20.54	8.2%

Achieved?:	Missed
Kyoto Target	

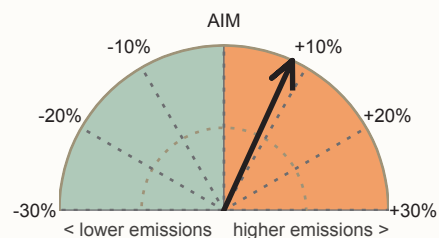
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	198.45	94%
Distance from 2001	21.25	10.1%
Distance from WM:	57.55	27.3%
Distance from WAM:	31.55	14.9%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	2.11	1%
Agr.Mng.(est.):	0.41	0.2%
For.Mng. I (AppZ):	0.04	0%
Aff&Def.:	0.11	0.1%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	2.67	1.3%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	16.7
2000:	17.04

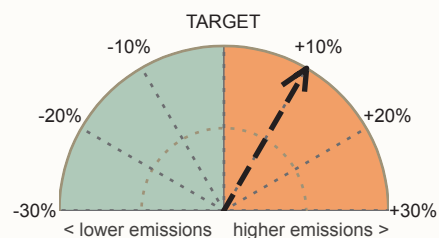
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



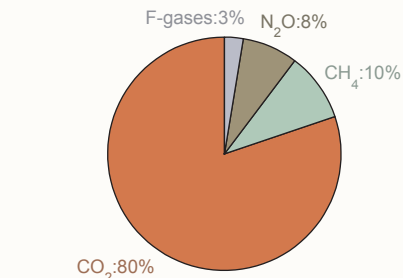
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

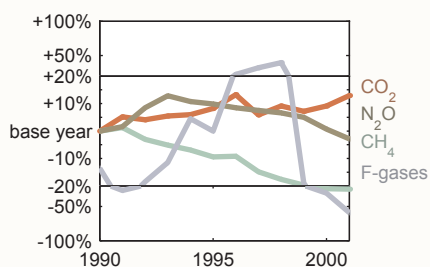


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

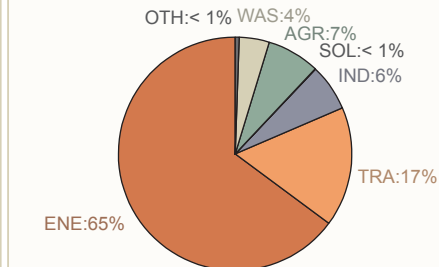
Emissions by Gas (2000)



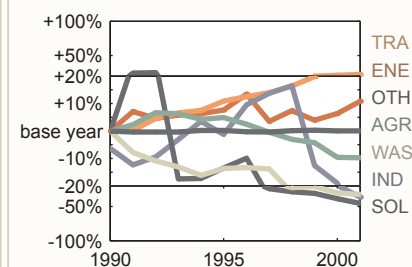
Emissions by Gas (Trend)



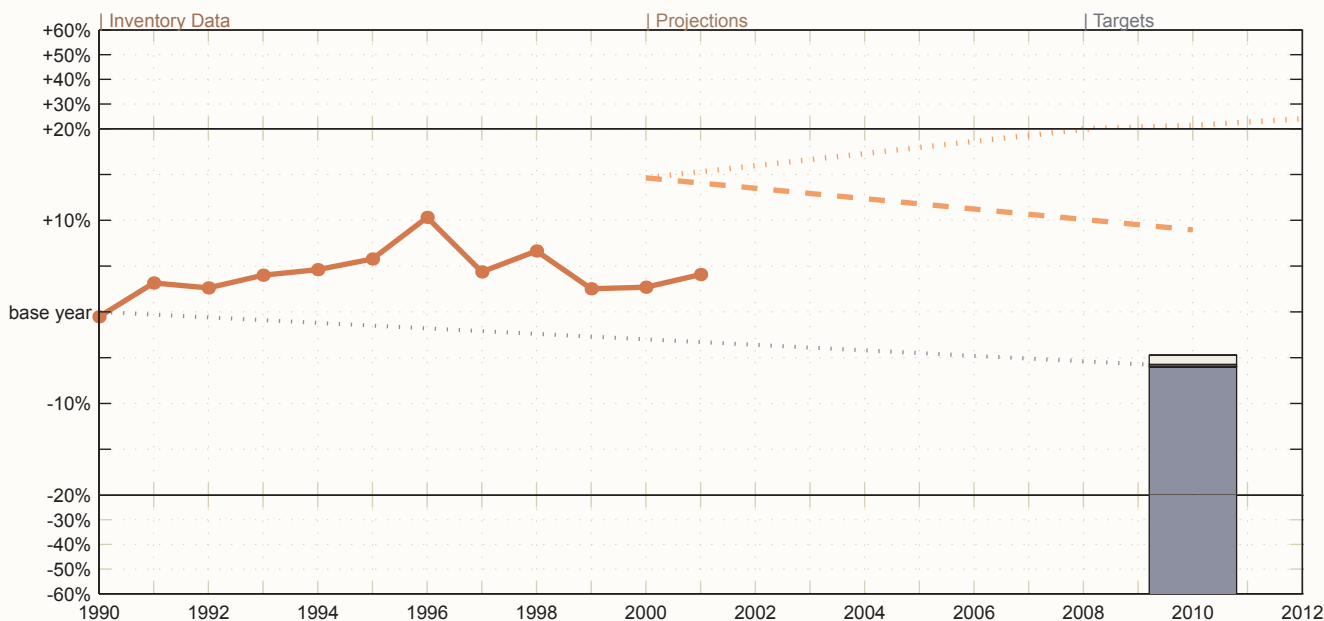
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

New Zealand

Annex I; Annex B; Annex II

Ratification date Kyoto: 19/12/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	61.75	100%
1990:	61.75	100%
2000:	70.35	113.9%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-21.77	-35.3%
2000:	-23.71	-33.7%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	2.41	3.9%
2000:	2.55	3.6%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	76.95	124.6%
2010 WM:	88.09	142.6%
2010 WAM:	84.14	136.3%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	64.16	100%
Actual 2000:	72.9	113.6%
Distance to aim:	8.73	13.6%
Achieved?:	Missed	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	61.75	100%
Distance from 2001	10.63	17.2%
Distance from WM:	26.34	42.6%
Distance from WAM:	22.39	36.3%

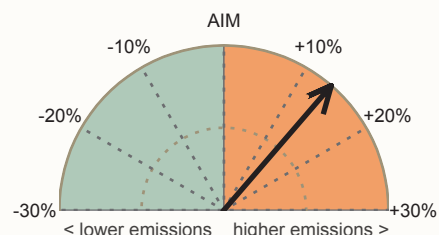
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.62	1%
Agr.Mng.(est.):	3.49	5.6%
For.Mng. I (AppZ):	0.73	1.2%
Aff&Def.:	28.29	45.8%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	33.13	53.6%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	19.1
2000:	19.29

Main Data Sources

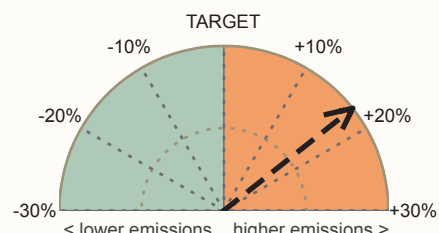
Inventory data: CRF 2003

UNFCCC Aim (2000)



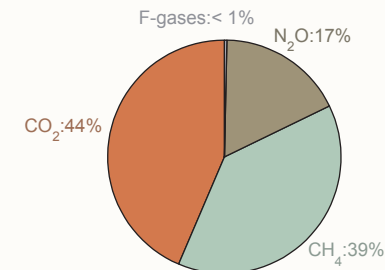
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

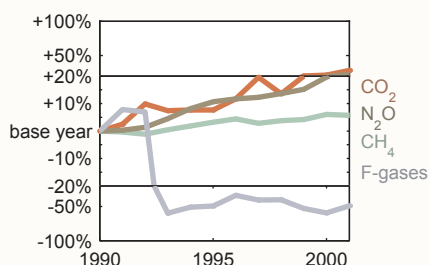


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

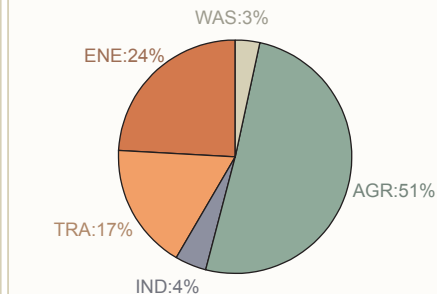
Emissions by Gas (2000)



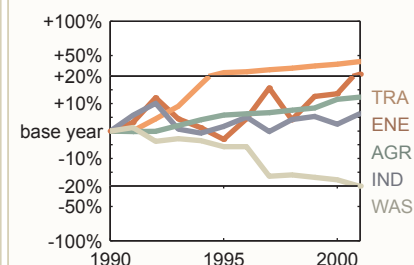
Emissions by Gas (Trend)



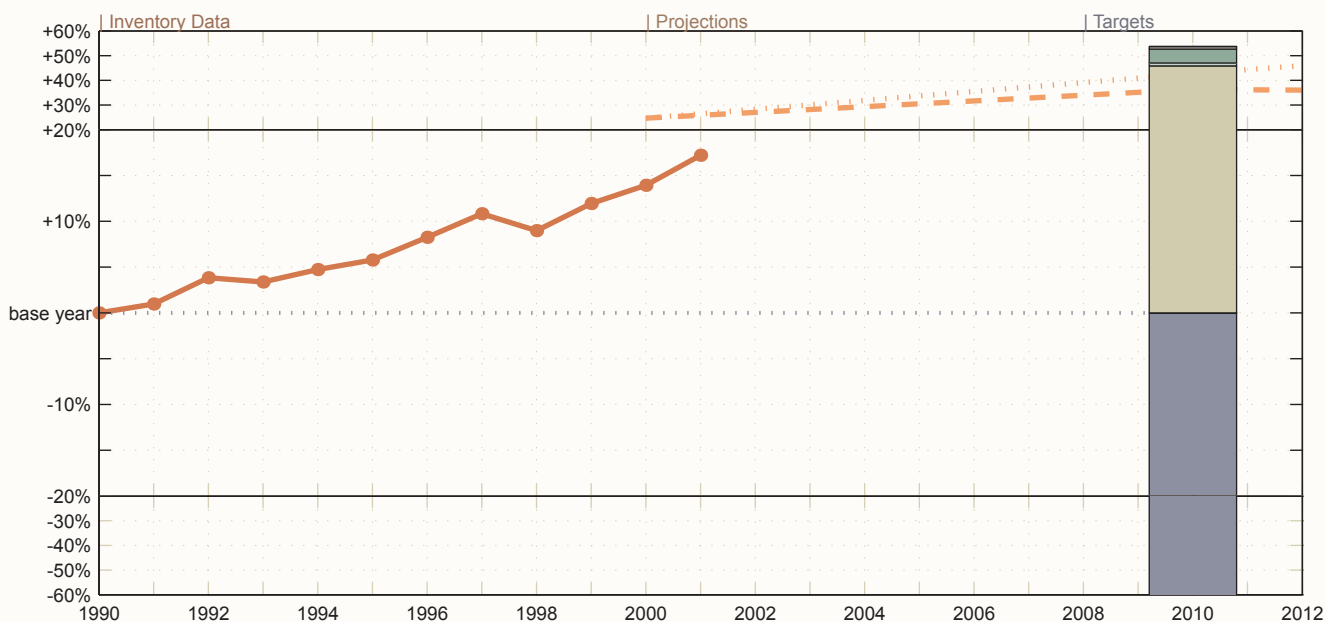
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Norway

Annex I; Annex B; Annex II

Ratification date Kyoto: 30/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	52.01	100%
1990:	52.01	100%
2000:	55.66	107%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-9.77	-18.8%
2000:	-18.74	-33.7%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	2.12	4.1%
2000:	3.66	6.6%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	55.25	106.2%
2010 WM:	63.2	121.5%
2010 WAM:	57.9	111.3%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	54.13	100%
Actual 2000:	59.32	109.6%
Distance to aim:	5.19	9.6%

Achieved?:	Missed
Kyoto Target	

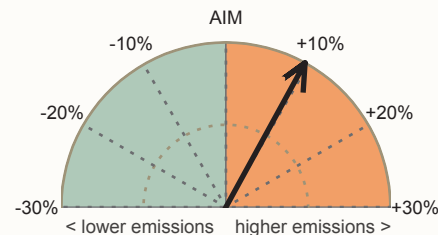
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	52.53	101%
Distance from 2001	3.69	7.1%
Distance from WM:	10.67	20.5%
Distance from WAM:	5.37	10.3%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.52	1%
Agr.Mng.(est.):	0.24	0.5%
For.Mng. I (AppZ):	1.47	2.8%
Aff&Def.:	0.07	0.1%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	2.29	4.4%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	12.76
2000:	13.27

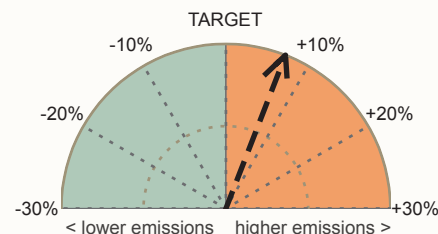
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



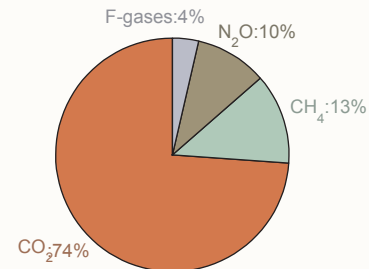
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

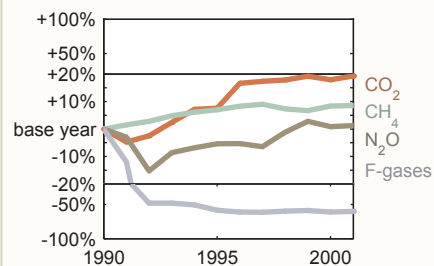


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

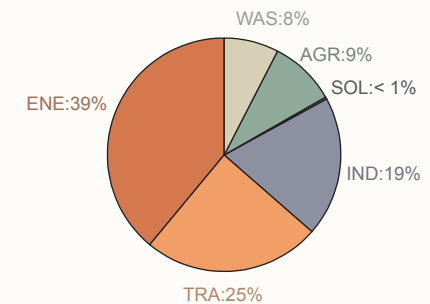
Emissions by Gas (2000)



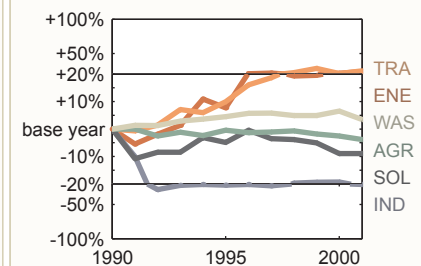
Emissions by Gas (Trend)



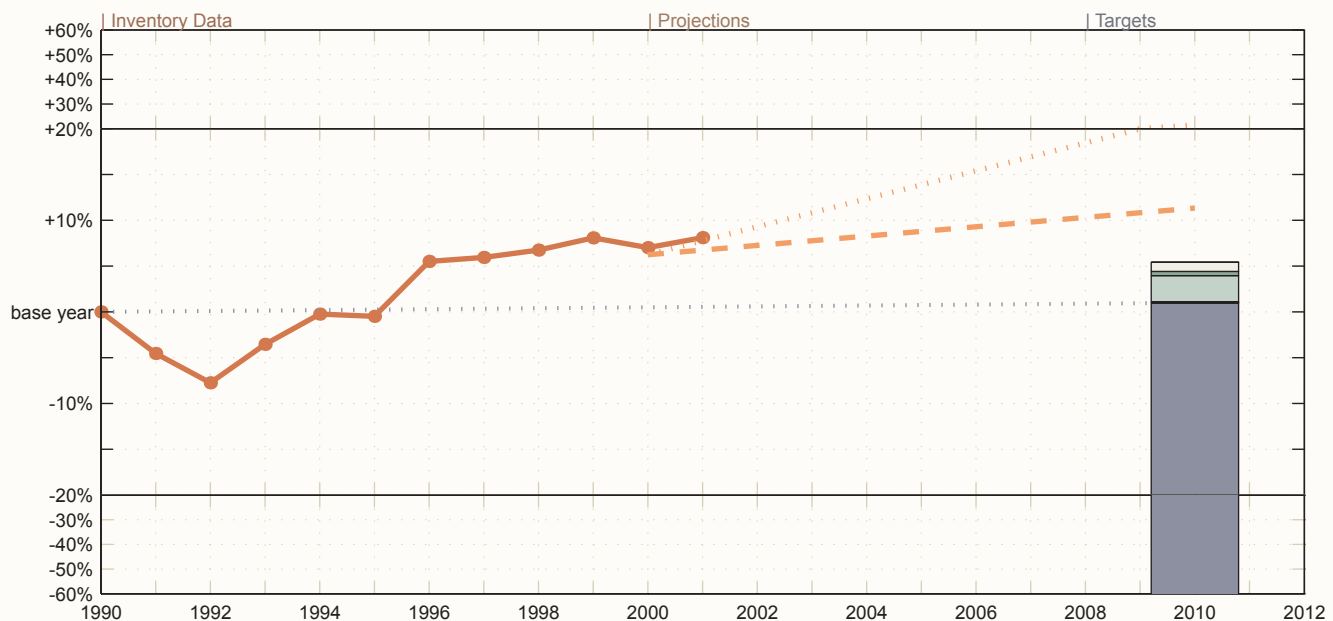
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Poland

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 13/12/02 (R)

Base Year

CO₂, CH₄, N₂O : 1988

HFCs, PFCs, SF₆ (est.): 1988

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	564.42	100%
1990:	458.95	81.3%
2000:	386.19	68.4%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-44.66	-9.7%
2000:	-43.09	-11.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0	0%
2000:	1.66	0.4%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	370	65.6%
2010 WM:	394	69.8%
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	458.95	100%
Actual 2000:	387.85	84.5%
Distance to aim:	-71.1	-15.5%

Achieved?:	Achieved
Kyoto Target	MtCO ₂ e/yr %B.Yr.

Allwd 2008-12 (An.B):	530.55	94%
Distance from 2001	-147.76	-26.2%
Distance from WM:	-136.55	-24.2%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	5.64	1%
Agr.Mng.(est.):	4.15	0.7%
For.Mng. I (AppZ):	3.01	0.5%

Aff&Def.: data unavailable

For.Mng. II: data unavailable

Defo in B.Yr.: not applicable

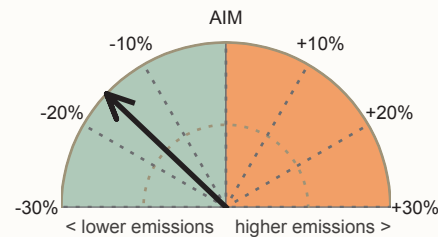
Sink Allowances Total: 12.8 2.3%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	12.04
2000:	10.05

Main Data Sources

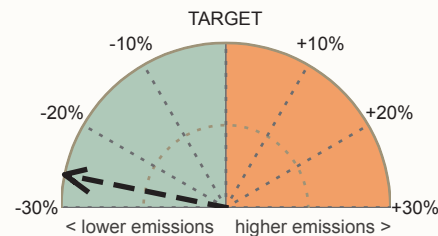
Inventory data: CRF 2003

UNFCCC Aim (2000)



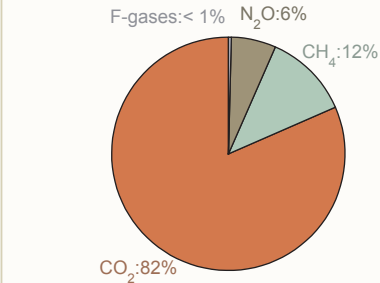
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

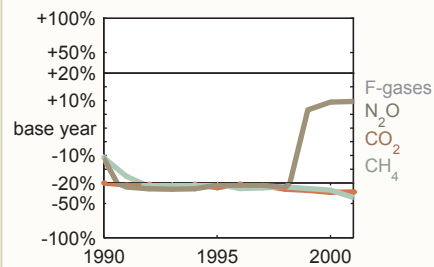


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

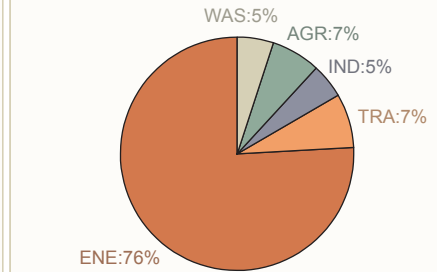
Emissions by Gas (2000)



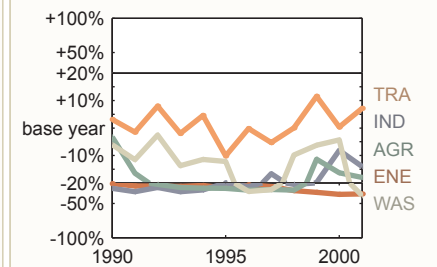
Emissions by Gas (Trend)



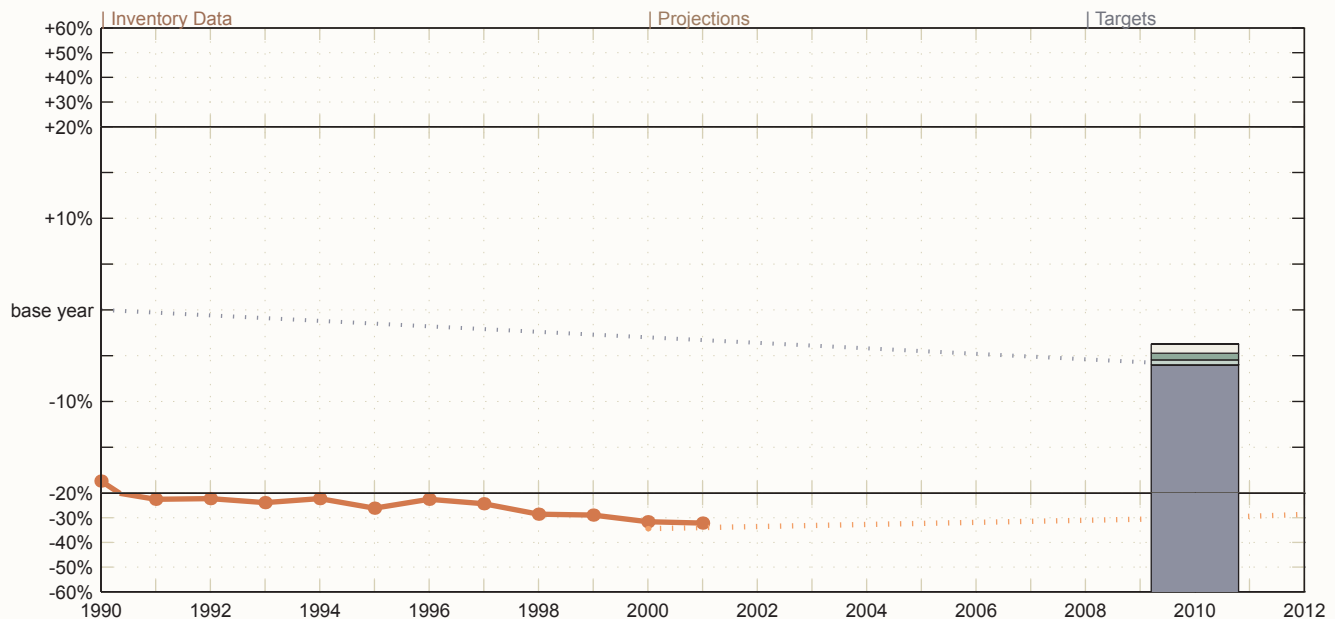
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Portugal

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (Ap)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	61.6	100%
1990:	61.44	99.7%
2000:	82.37	133.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	0	0%
2000:	-2.15	-2.6%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	2.1	3.4%
2000:	2.62	3.2%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	63.54	100%
Actual 2000:	84.99	133.8%
Distance to aim:	21.45	33.8%

Achieved?:	Missed
Kyoto Target	

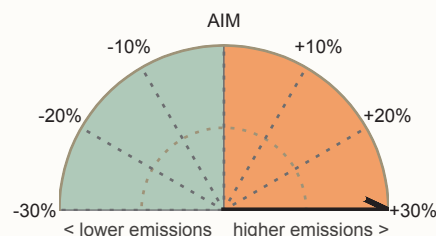
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	78.23	127%
Distance from 2001	5.68	9.2%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.62	1%
Agr.Mng.(est.):	0.91	1.5%
For.Mng. I (AppZ):	0.81	1.3%
Aff&Def.:	1.55	2.5%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	3.89	6.3%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	6.42
2000:	8.49

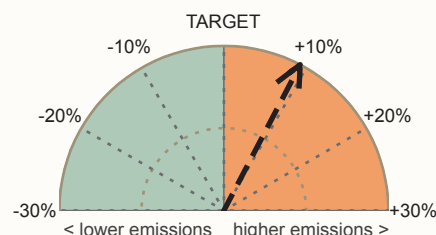
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



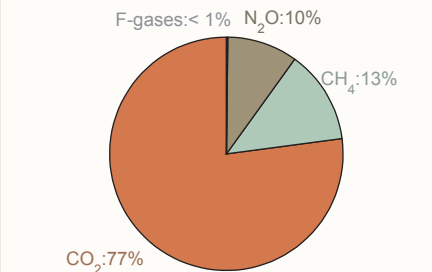
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

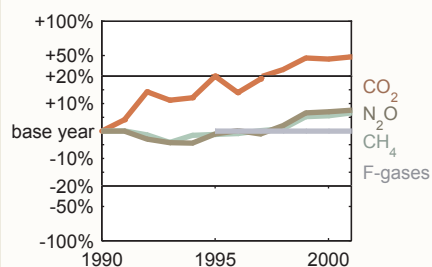


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

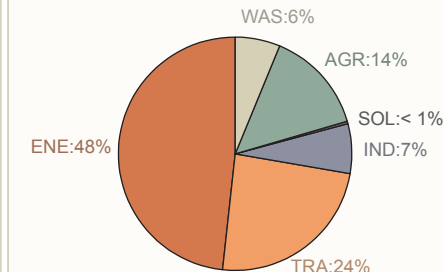
Emissions by Gas (2000)



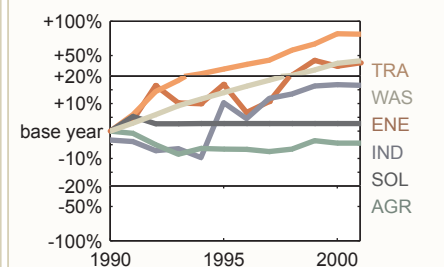
Emissions by Gas (Trend)



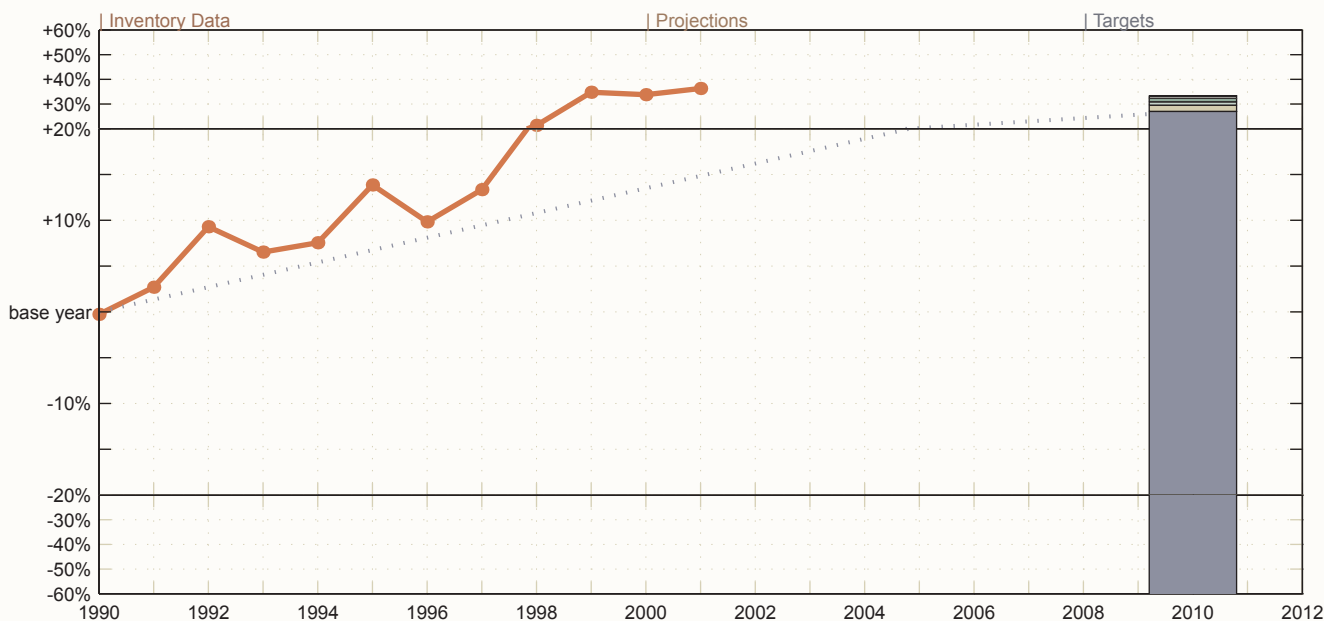
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Romania

Annex I; Annex B; EIT

Ratification date Kyoto: 19/03/01 (R)

Base Year

CO₂, CH₄, N₂O : 1989

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	229.04	100%
1990:	228.51	99.8%
2000:	155.75	68%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-5.65	-2.5%
2000:	-8.17	-5.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	0.71	0.3%
2000*:	0.59	0.4%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	229.22	100%
Actual 2000:	156.34	68.2%
Distance to aim:	-72.88	-31.8%

Achieved?:	Achieved
Kyoto Target	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	210.72	92%
Distance from 2001	-62.52	-27.3%

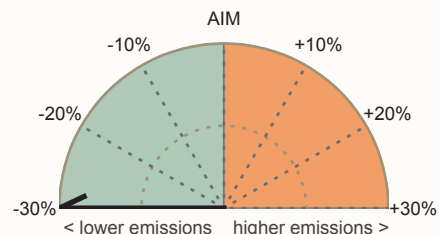
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	2.29	1%
Agr.Mng.(est.):	3.29	1.4%
For.Mng. I (AppZ):	4.03	1.8%

Aff&Def.:	data unavailable
For.Mng. II:	data unavailable
Defo in B.Yr.:	not applicable

Sink Allowances Total:	9.61	4.2%
Per Capita Emissions	tCO ₂ e/per/yr	
1990:	9.88	
2000:	6.97	

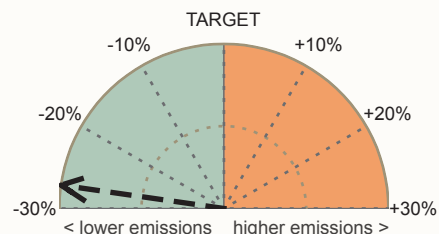
Main Data Sources	
Inventory data:	CRF 2003; *EDGAR

UNFCCC Aim (2000)



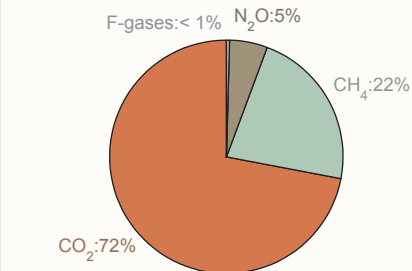
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

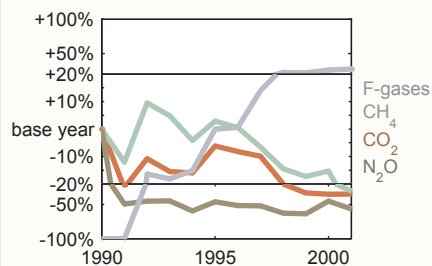


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

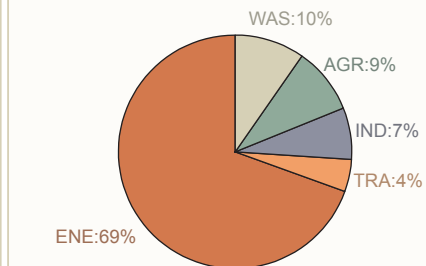
Emissions by Gas (2000)



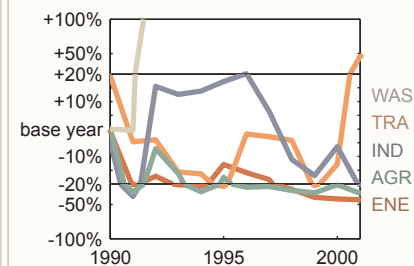
Emissions by Gas (Trend)



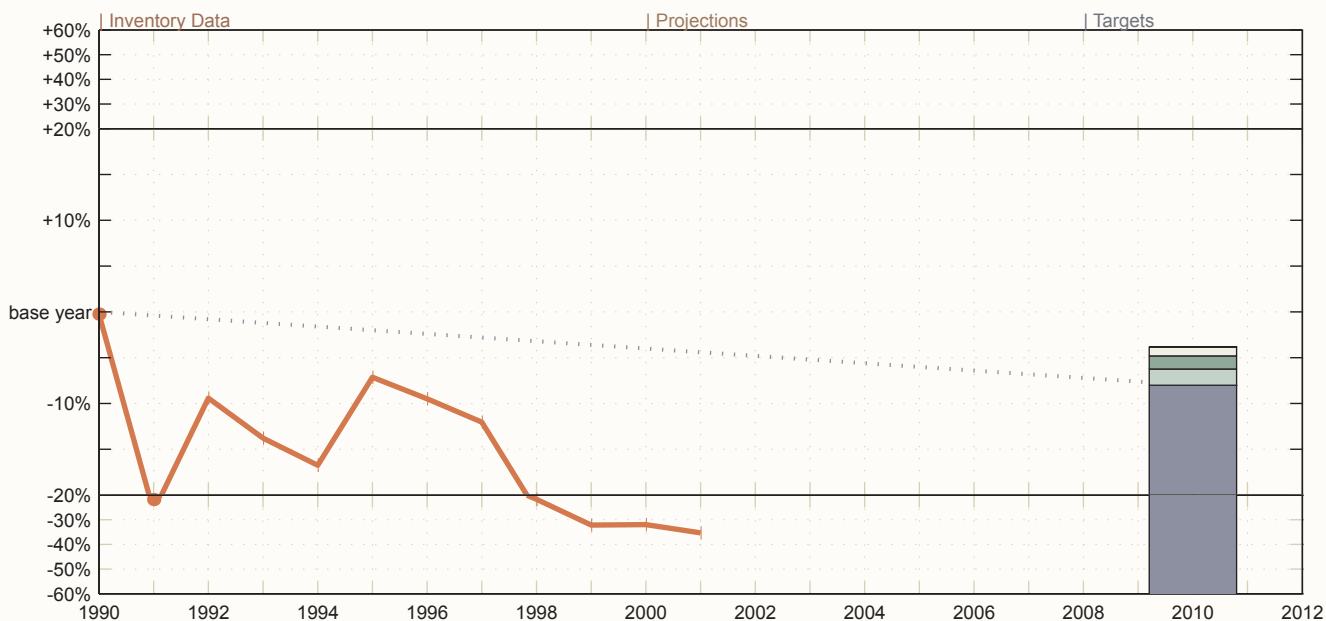
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Russian Federation

Annex I; Annex B; EIT

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	3048	100%
1990:	3048	100%
1999:	1877	61.6%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-382.67	-12.6%
1996:	-830.67	-42.2%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	56.67	1.9%
1996:	11.25	0.6%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	1952.44	64.1%
2010 SCEN III:	2508.26	82.3%
2010 SCEN II:	2116.08	69.4%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	3104.67	100%
Actual 2000:	data unavailable	
Distance to aim from 1999:	-1216.43	-39.2%
Achieved?:	data unavailable	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	3048	100%
Distance from 1999	-1171	-38.4%
Distance from SCEN III:	-539.74	-17.7%
Distance from SCEN II:	-931.92	-30.6%

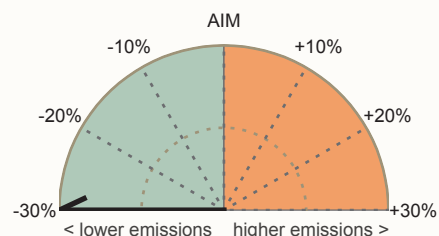
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	30.48	1%
Agr.Mng.(est.):	47.21	1.5%
For.Mng. I (AppZ):	121	4%
Aff&Def.:	-29.99	-1%
For.Mng. II:	29.99	1%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	198.69	6.5%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	20.87
1999:	12.91

Main Data Sources

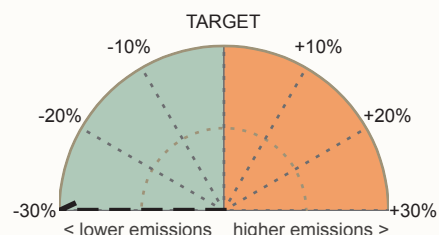
Inventory data: ghg.unfccc.int; *EDGAR

UNFCCC Aim (1999)



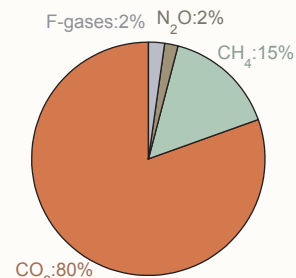
Distance from latest inventory data (1999) to UNFCCC aim (2000) in percent of 1990 emissions.

Distance to Kyoto Target

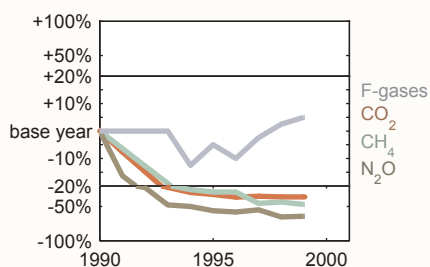


Distance from latest inventory data (1999) to Kyoto targets in percent of base year emissions.

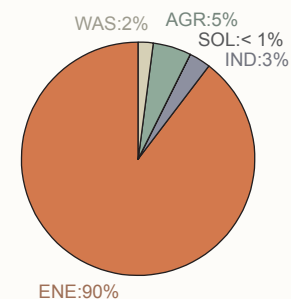
Emissions by Gas (1999)



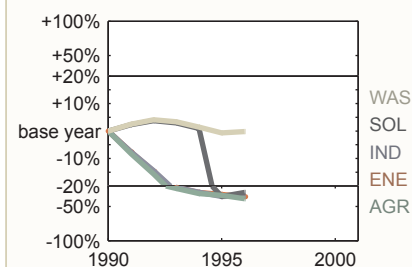
Emissions by Gas (Trend)



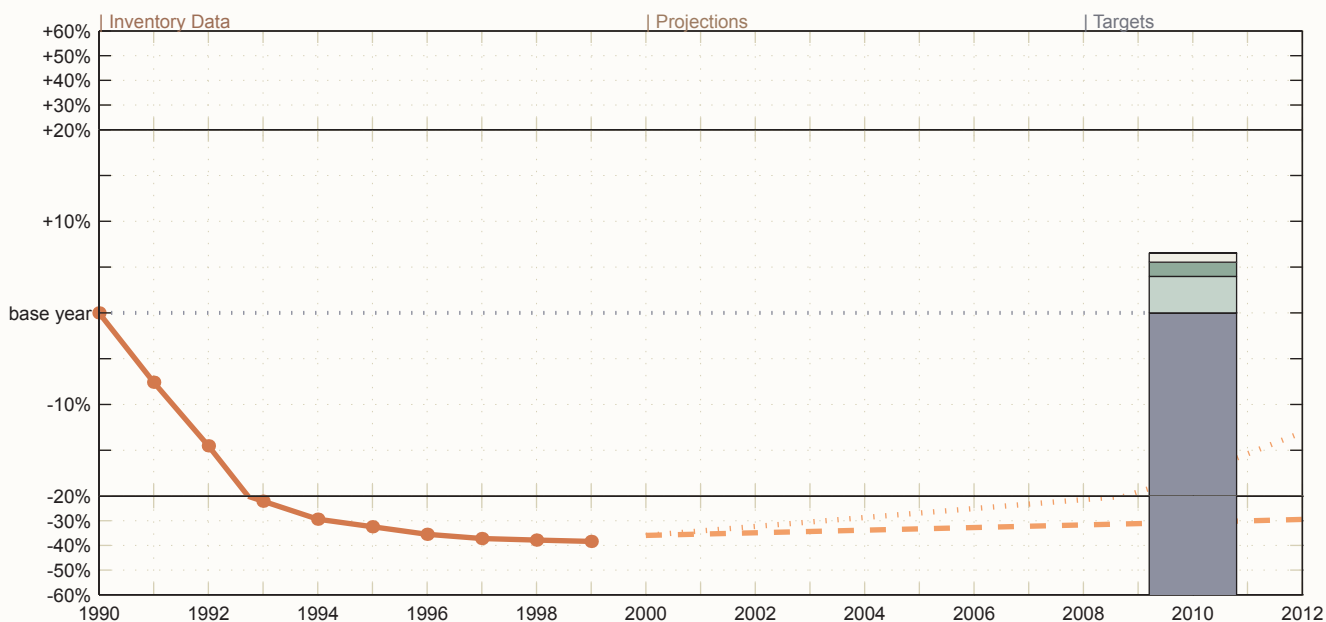
Emissions by Sector (1999)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Slovakia

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	72.18	100%
1990:	72.18	100%
2000:	47.9	66.4%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-2.43	-3.4%
2000:	-2.44	-5.1%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	0	0%
2000*:	0.08	0.2%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	49.17	68.1%
2010 WM:	53.19	73.7%
2010 WAM:	48.14	66.7%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	72.18	100%
Actual 2000:	47.98	66.5%
Distance to aim:	-24.2	-33.5%

Achieved?:	Achieved
Kyoto Target	66.41 92%

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	66.41	92%
Distance from 2001	-16.28	-22.6%
Distance from WM:	-13.22	-18.3%
Distance from WAM:	-18.27	-25.3%

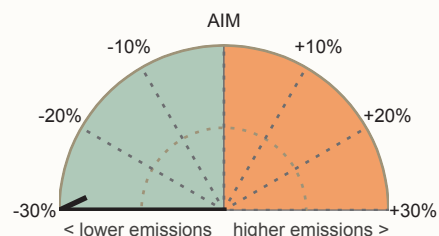
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.72	1%
Agr.Mng.(est.):	0.54	0.7%
For.Mng. I (AppZ):	1.83	2.5%

Aff&Def.:	data unavailable
For.Mng. II:	data unavailable
Defo in B.Yr.:	not applicable
Sink Allowances Total:	3.09 4.3%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	13.55
2000:	8.89

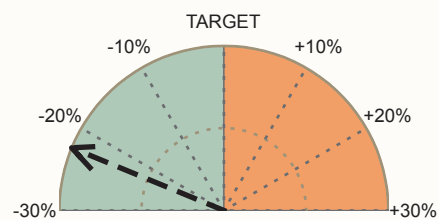
Main Data Sources	Inventory data:	CRF 2003; *EDGAR
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UNFCCC Aim (2000)



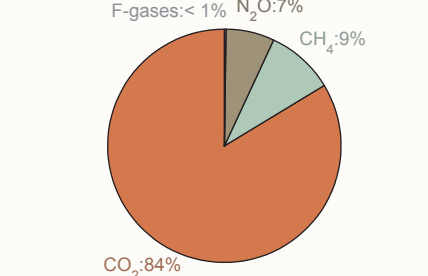
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

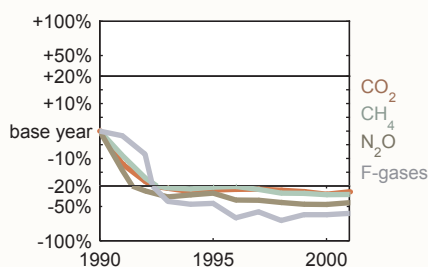


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

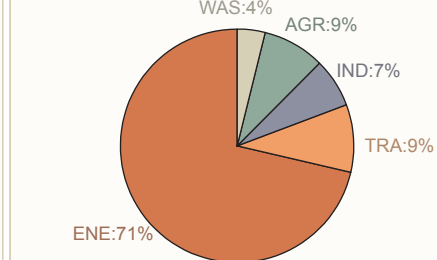
Emissions by Gas (2000)



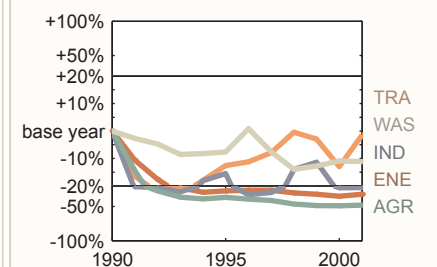
Emissions by Gas (Trend)



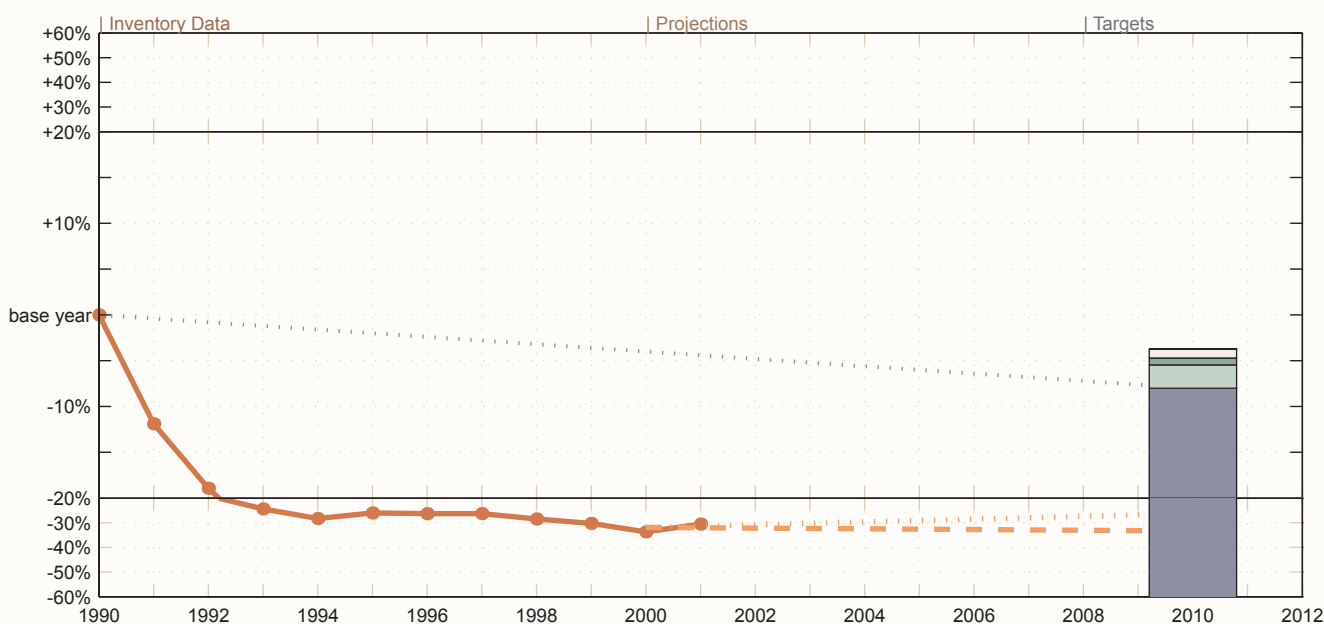
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Slovenia

Annex I; Annex B; EIT; EU-25

Ratification date Kyoto: 02/08/02 (R)

Base Year

CO₂, CH₄, N₂O : 1986

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	20.1	100%
1990:	18.54	92.2%
1996:	19.96	99.3%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-4.33	-23.4%
1996:	-5.56	-27.9%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	0.08	0.4%
1996:	0.05	0.3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	20.75	103.2%
2010 WM:	22.15	110.2%
2010 WAM:	19.9	99%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	18.61	100%
Actual 2000:	data unavailable	
Distance to aim from 1996:	1.4	7.5%
Achieved?:	data unavailable	

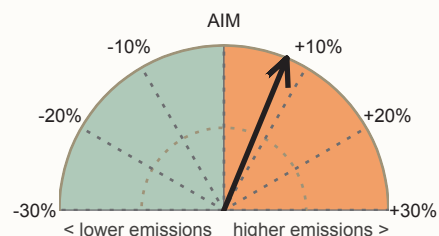
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	18.49	92%
Distance from 1996	1.46	7.3%
Distance from WM:	3.66	18.2%
Distance from WAM:	1.41	7%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.2	1%
Agr.Mng.(est.):	0.11	0.5%
For.Mng. I (AppZ):	1.32	6.6%
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	1.63	8.1%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	9.56
1996:	10.03

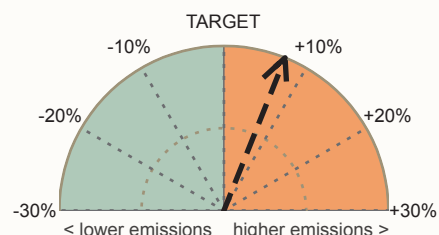
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (1996)



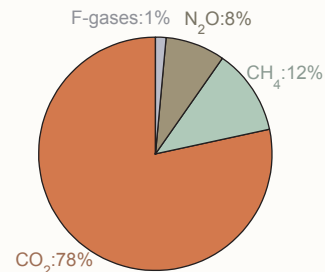
Distance from latest inventory data (1996) to UNFCCC aim (2000) in percent of 1990 emissions.

Distance to Kyoto Target

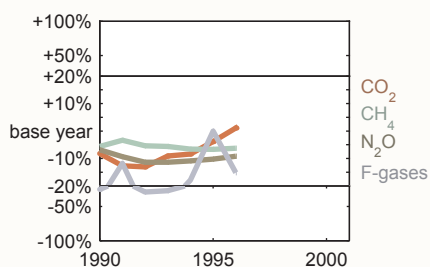


Distance from latest inventory data (1996) to Kyoto targets in percent of base year emissions.

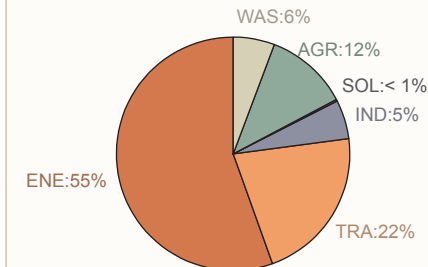
Emissions by Gas (1996)



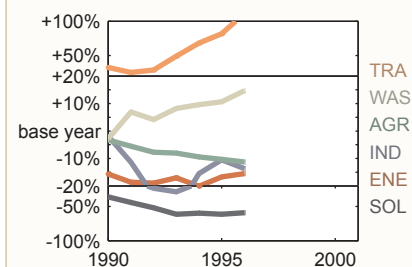
Emissions by Gas (Trend)



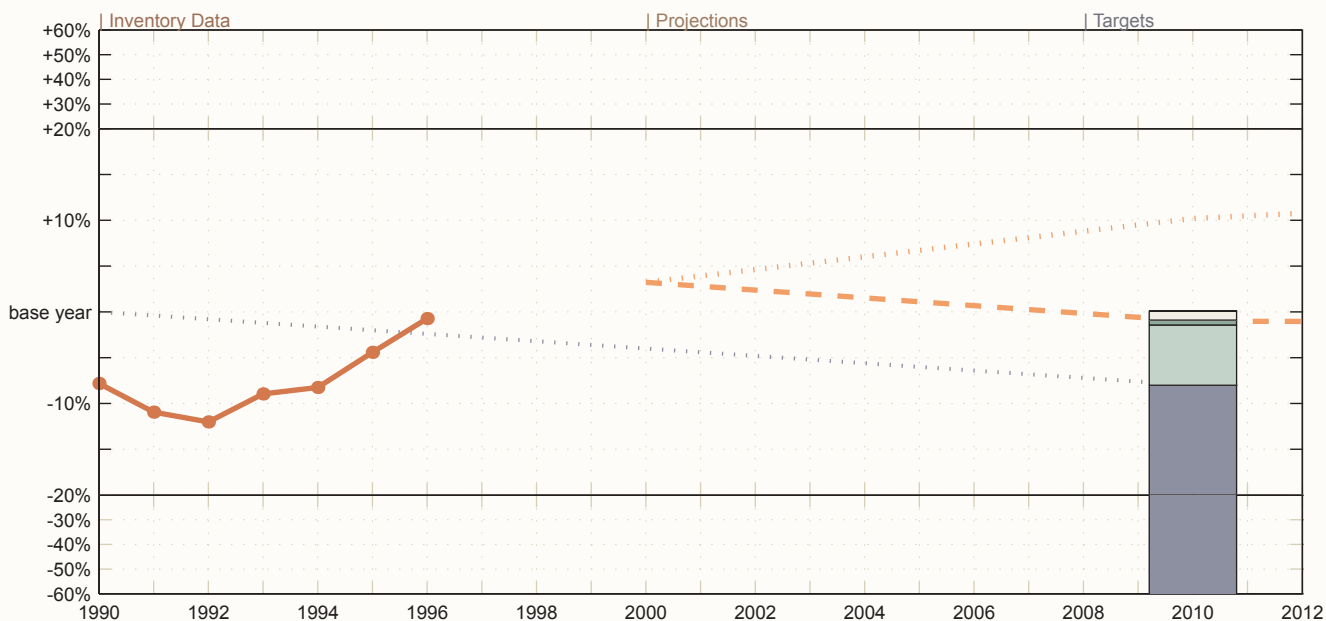
Emissions by Sector (1996)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Spain

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	289.85	100%
1990:	287.61	99.2%
2000:	387.1	133.6%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-29.25	-10.2%
2000:	-29.25	-7.6%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	15.35	5.3%
2000:	28.07	7.3%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	285.26	98.4%
2010 WM:	307.4	106.1%
2010 WAM:	265.4	91.6%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	302.96	100%
Actual 2000:	415.17	137%
Distance to aim:	112.21	37%

Achieved?:	Missed
Kyoto Target	

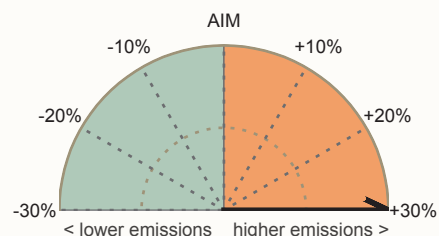
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	333.33	115%
Distance from 2001	49.46	17.1%
Distance from WM:	-25.93	-8.9%
Distance from WAM:	-67.93	-23.4%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	2.9	1%
Agr.Mng.(est.):	6.44	2.2%
For.Mng. I (AppZ):	2.46	0.8%
Aff&Def.:	6.82	2.4%
For.Mng. II:	not applicable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	18.61	6.4%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	7.71
2000:	10.4

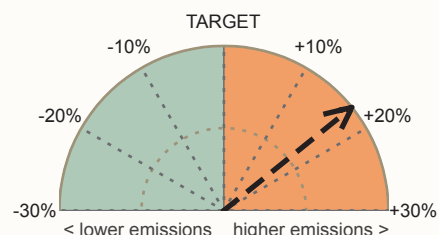
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



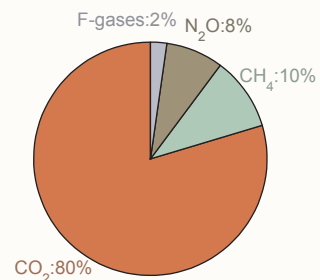
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

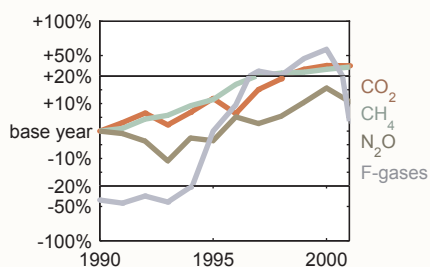


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

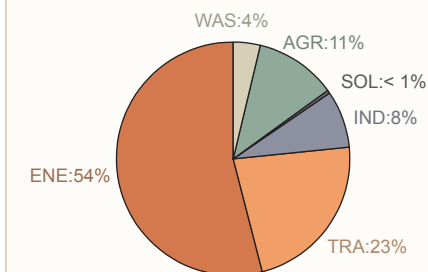
Emissions by Gas (2000)



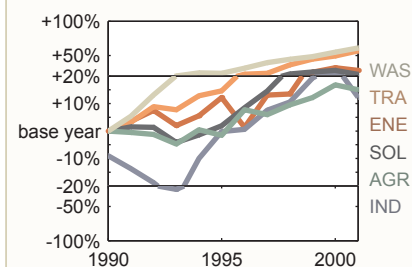
Emissions by Gas (Trend)



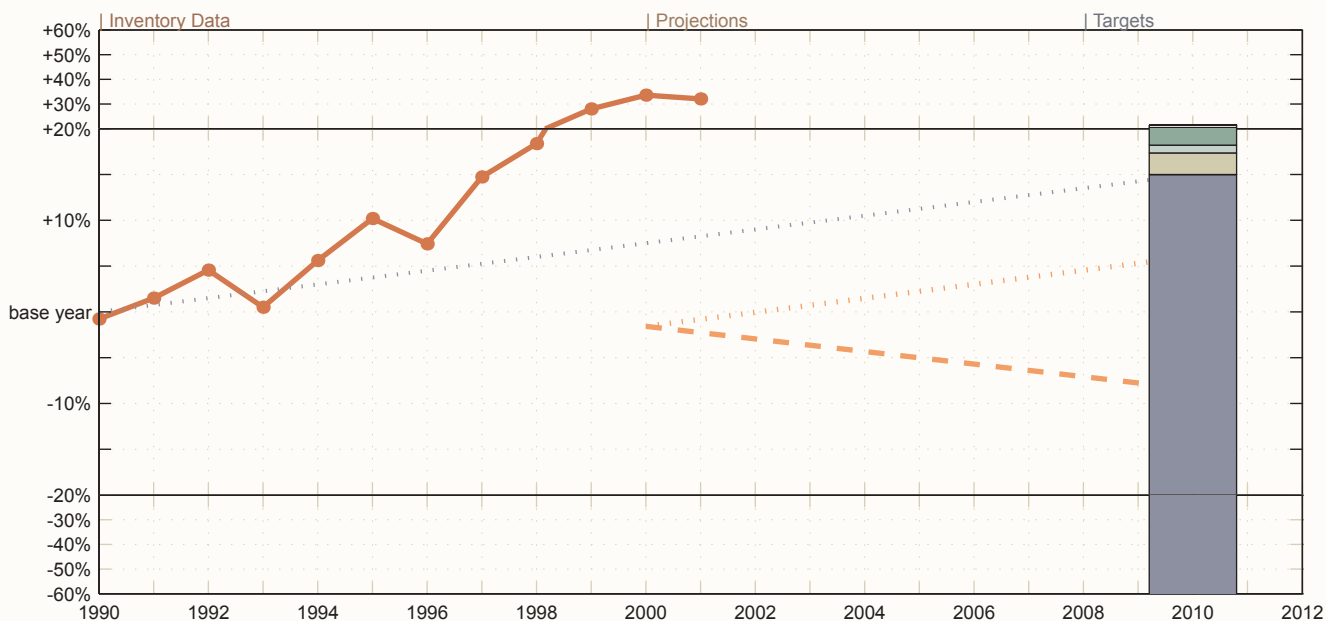
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Sweden

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	72.87	100%
1990:	72.76	99.8%
2000:	68.95	94.6%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-20.29	-27.9%
2000:	-27.31	-39.6%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	3.54	4.9%
2000:	6.64	9.6%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	69.36	95.2%
2010 WM:	70.88	97.3%
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	76.3	100%
Actual 2000:	75.59	99.1%
Distance to aim:	-0.72	-0.9%

Achieved?:	Achieved	
Kyoto Target	MtCO ₂ e/yr	%B.Yr.

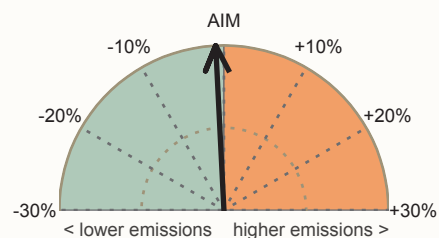
Allwd 2008-12 (EU):	75.78	104%
Distance from 2001	-5.3	-7.3%
Distance from WM:	-4.9	-6.7%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.73	1%
Agr.Mng.(est.):	0.72	1%
For.Mng. I (AppZ):	2.13	2.9%
Aff&Def.:	-0.33	-0.5%
For.Mng. II:	0.33	0.5%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	3.58	4.9%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	8.91
2000:	8.55

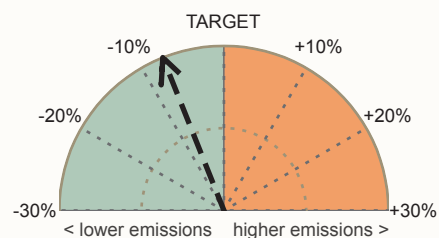
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



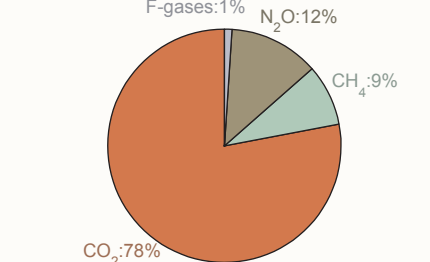
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

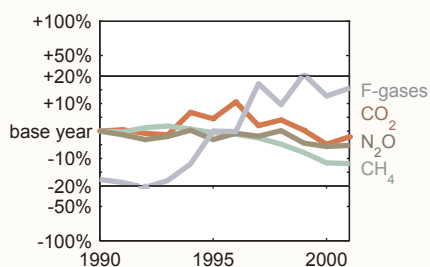


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

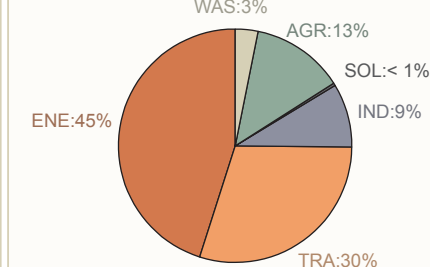
Emissions by Gas (2000)



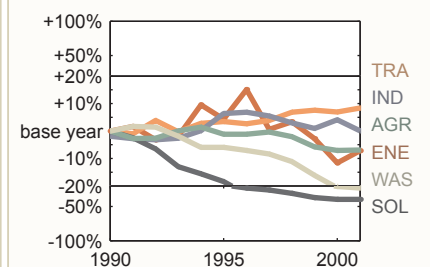
Emissions by Gas (Trend)



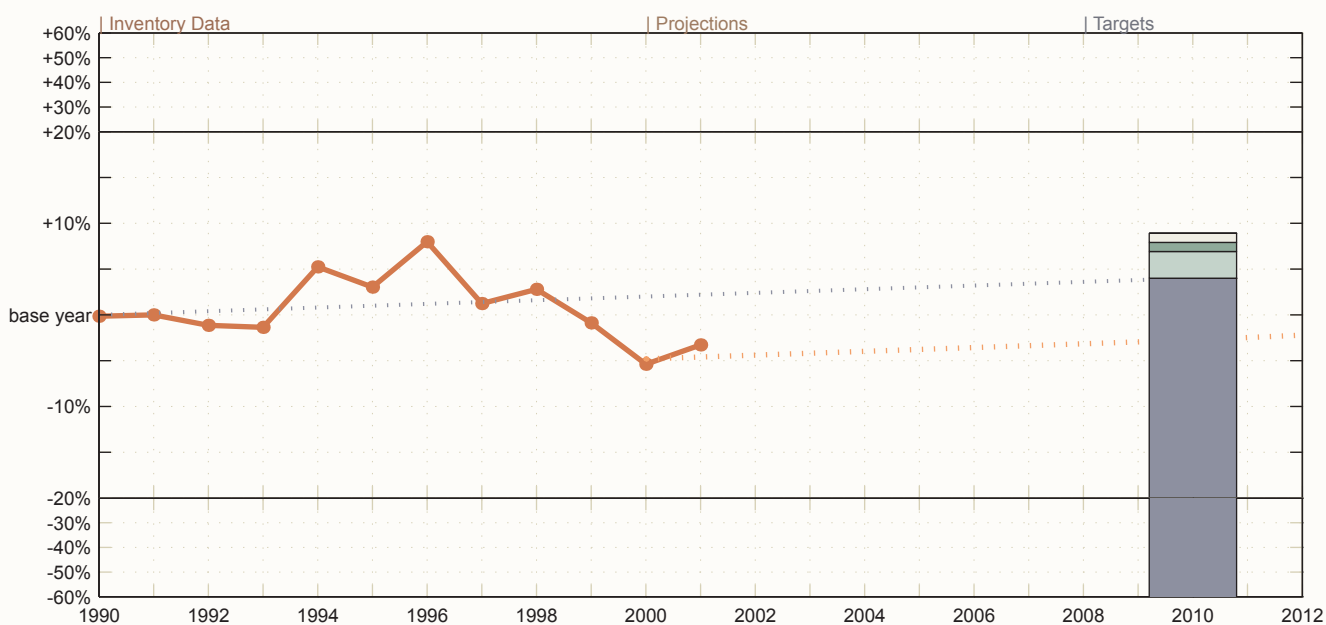
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Switzerland

Annex I; Annex B; Annex II

Ratification date Kyoto: 09/07/03(R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	53.06	100%
1990:	53.06	100%
2000:	52.41	98.8%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-3.19	-6%
2000:	-1.82	-3.5%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	3.25	6.1%
2000:	4.8	9.2%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	52.74	99.4%
2010 WM:	52.69	99.3%
2010 WAM:	50.09	94.4%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	56.3	100%
Actual 2000:	57.21	101.6%
Distance to aim:	0.9	1.6%
Achieved?:	Missed	

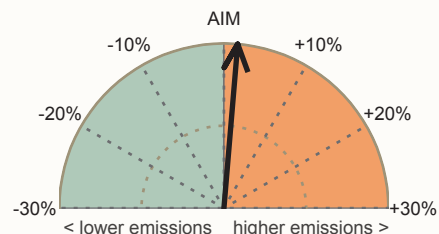
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	48.81	92%
Distance from 2001	4.64	8.7%
Distance from WM:	3.88	7.3%
Distance from WAM:	1.28	2.4%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	0.53	1%
Agr.Mng.(est.):	0.32	0.6%
For.Mng. I (AppZ):	1.83	3.5%
Aff&Def.:	-0.04	-0.1%
For.Mng. II:	0.04	0.1%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	2.69	5.1%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	8.24
2000:	7.98

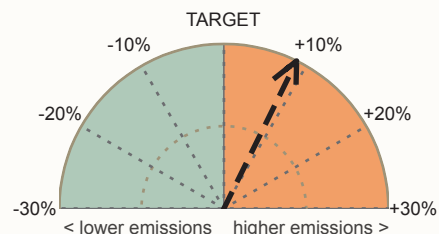
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



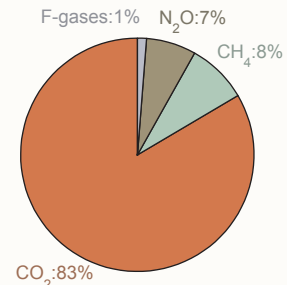
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

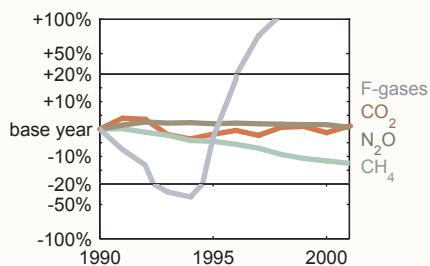


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

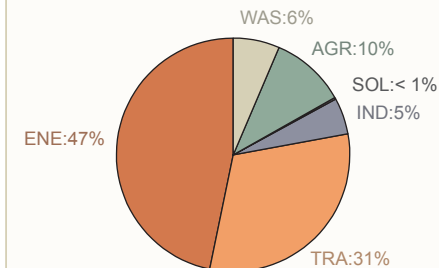
Emissions by Gas (2000)



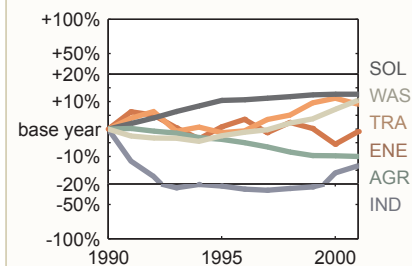
Emissions by Gas (Trend)



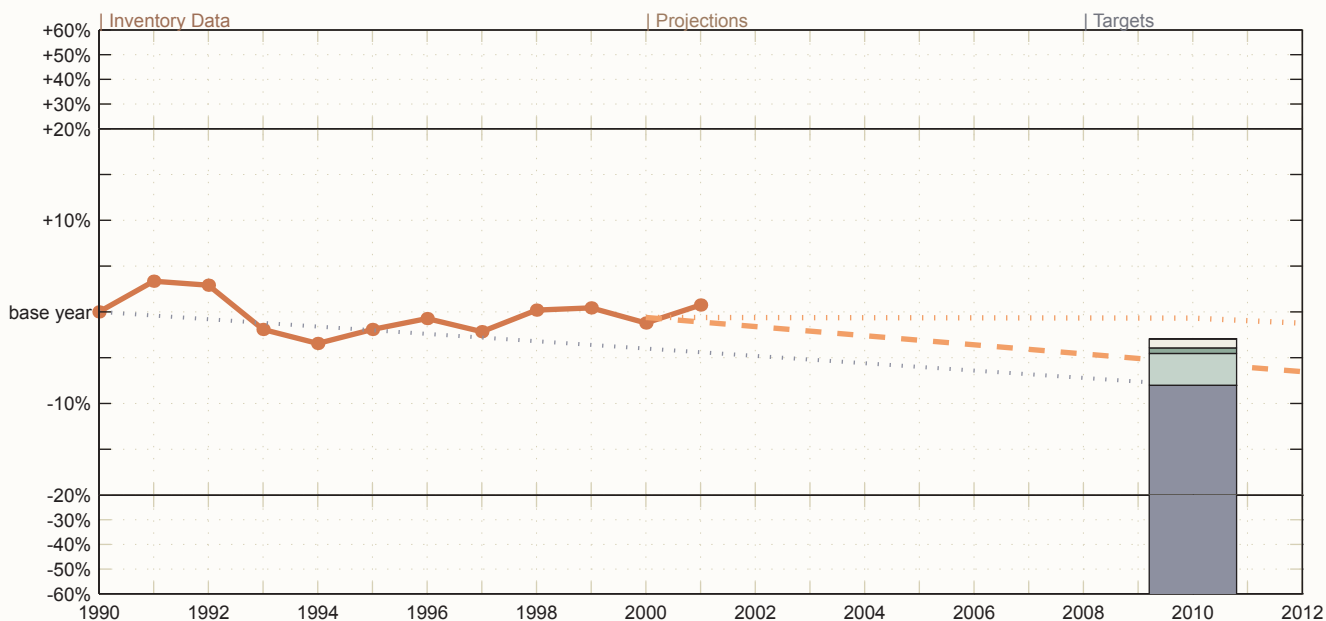
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Turkey

Annex I (no Kyoto target)

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1990

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	227.9	100%
1990:	227.9	100%
1995:	248.87	109.2%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	data unavailable	
1995:	data unavailable	

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	1.87	0.8%
1995:	4.16	1.7%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	229.77	100%
Actual 2000:	data unavailable	
Distance to aim from 1995:	23.26	10.1%
Achieved?:	data unavailable	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	data unavailable	
Distance from 1995	data unavailable	

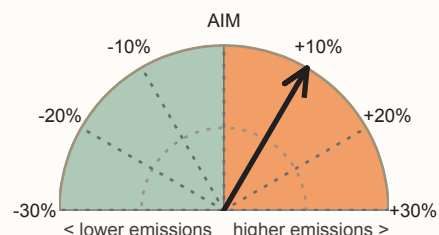
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
□ CDM sinks:	2.28	1%
■ Agr.Mng.(est.):	8.59	3.8%
For.Mng. I (AppZ):	not yet determined	
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	10.87	4.8%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	4.1
1995:	4.11

Main Data Sources

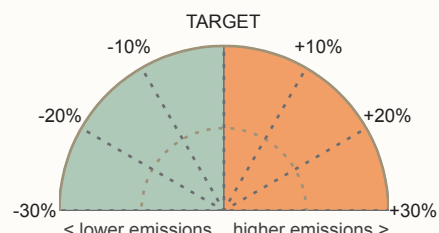
Inventory data: EDGAR

UNFCCC Aim (1995)



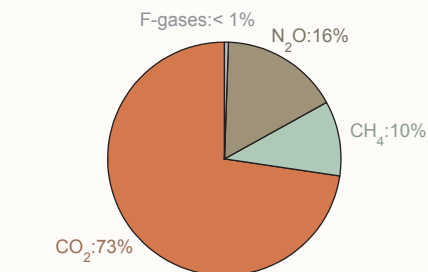
Distance from latest inventory data (1995) to UNFCCC aim (2000) in percent of 1990 emissions.

Distance to Kyoto Target

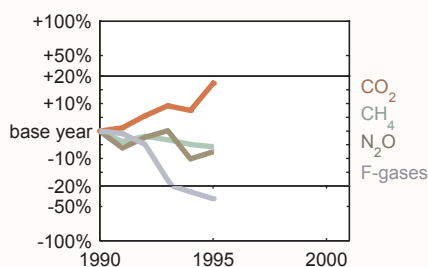


As by COP9, 2003, no Kyoto-target had been determined for Turkey.

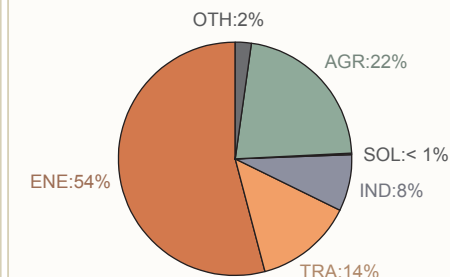
Emissions by Gas (1995)



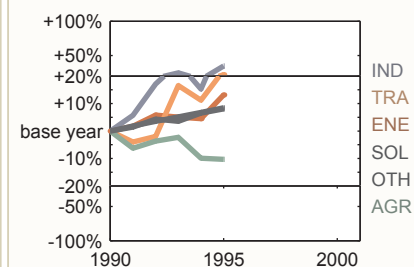
Emissions by Gas (Trend)



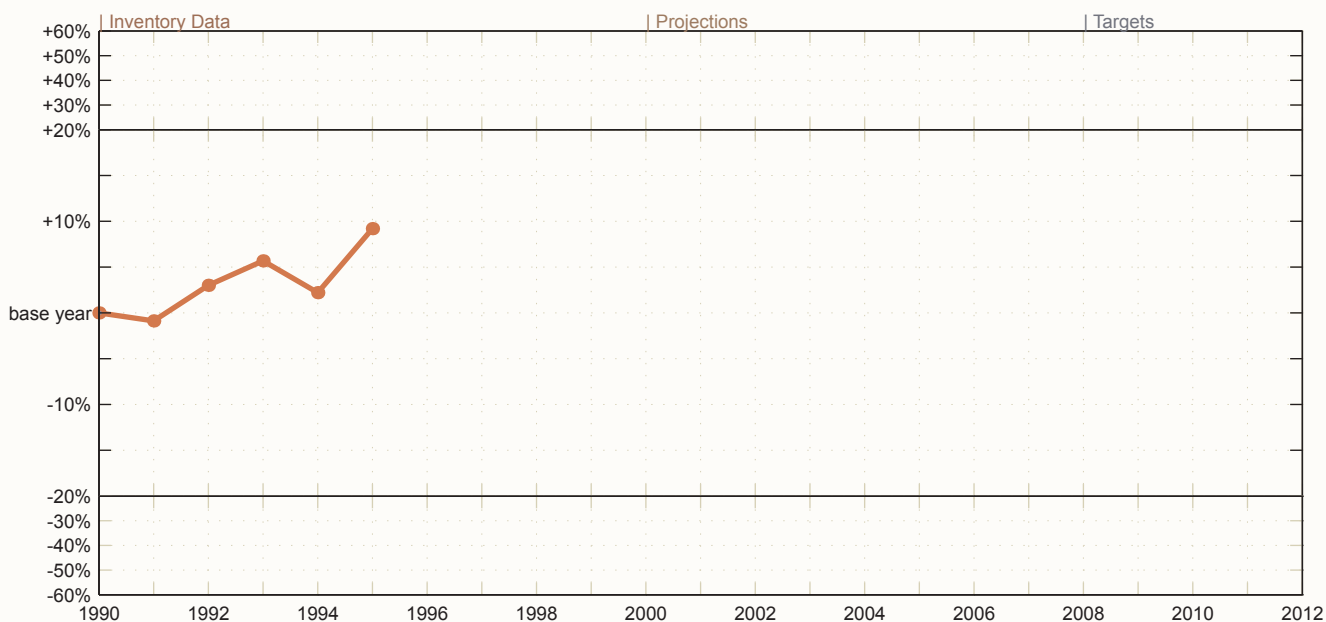
Emissions by Sector (1995)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

Ukraine

Annex I; Annex B; EIT

Ratification date Kyoto: 03/04

Base Year

CO₂, CH₄, N₂O: 1990

No reported F-gases emissions

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	919.22	100%
1990:	919.22	100%
1998:	454.93	49.5%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-52.11	-5.7%
1998:	-68.71	-15.1%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990*:	8.05	0.9%
1998:	10.81	2.4%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	data unavailable	
2010 WM:	data unavailable	
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	927.27	100%
Actual 2000:	data unavailable	
Distance to aim from 1998:	-461.52	-49.8%
Achieved?:	data unavailable	

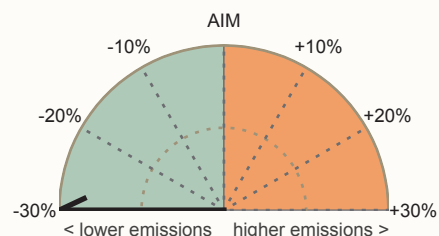
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	919.22	100%
Distance from 1998	-464.29	-50.5%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	9.19	1%
Agr.Mng.(est.):	9.4	1%
For.Mng. I (AppZ):	4.07	0.4%
Aff&Def.:	data unavailable	
For.Mng. II:	data unavailable	
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	22.66	2.5%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	17.85
1998:	9.23

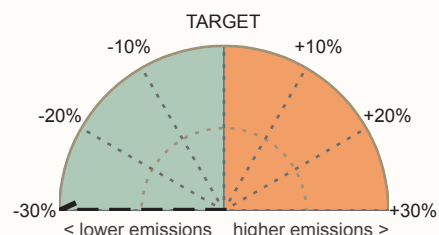
Main Data Sources	
Inventory data:	ghg.unfccc.int; *EDGAR

UNFCCC Aim (1998)



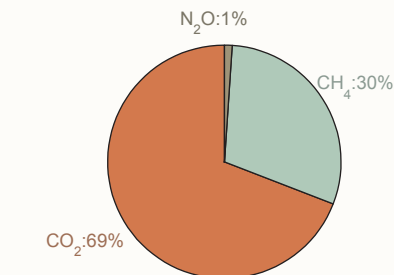
Distance from latest inventory data (1998) to UNFCCC aim (2000) in percent of 1990 emissions.

Distance to Kyoto Target

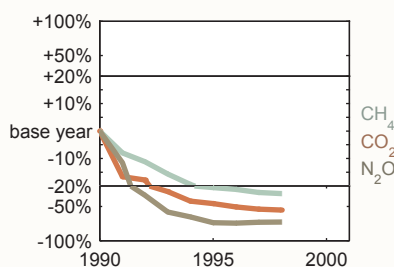


Distance from latest inventory data (1998) to Kyoto targets in percent of base year emissions.

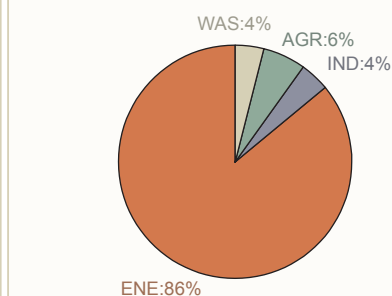
Emissions by Gas (1998)



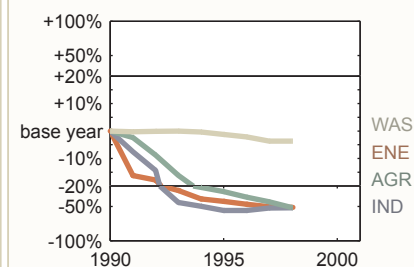
Emissions by Gas (Trend)



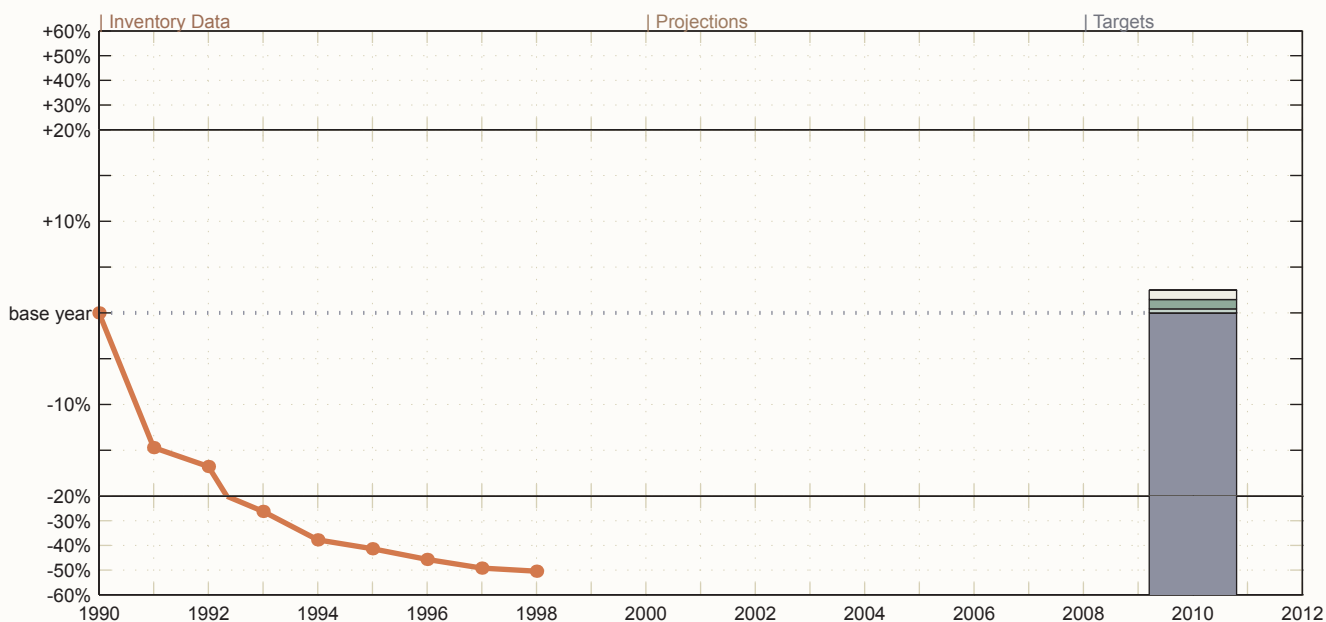
Emissions by Sector (1998)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available.
See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

United Kingdom

Annex I; Annex B; Annex II; EU-15

Ratification date Kyoto: 31/05/02 (R)

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	747.19	100%
1990:	744.14	99.6%
2000:	648.37	86.8%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	8.79	1.2%
2000:	3.38	0.5%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	21.69	2.9%
2000:	35.5	5.5%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	649.11	86.9%
2010 WM:	630.67	84.4%
2010 WAM:	564.85	75.6%

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	765.83	100%
Actual 2000:	683.88	89.3%
Distance to aim:	-81.95	-10.7%

Achieved?:	Achieved
Kyoto Target	Achieved

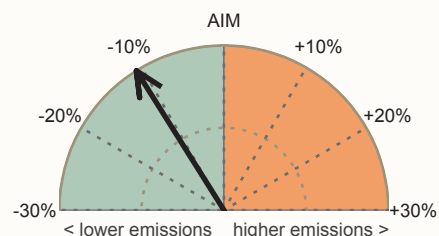
Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (EU):	653.79	87.5%
Distance from 2001	3.44	0.5%
Distance from WM:	-23.12	-3.1%
Distance from WAM:	-88.94	-11.9%

Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	7.47	1%
Agr.Mng.(est.):	3.52	0.5%
For.Mng. I (AppZ):	1.36	0.2%
Aff&Def.:	-2.2	-0.3%
For.Mng. II:	2.2	0.3%
Defo in B.Yr.(est.):	0	0%
Sink Allowances Total:	12.35	1.7%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	13.26
2000:	11.47

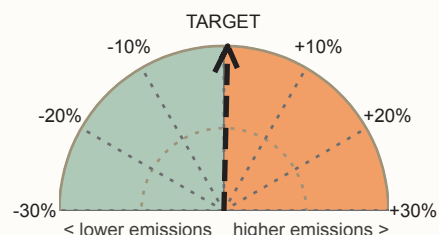
Main Data Sources	
Inventory data:	CRF 2003

UNFCCC Aim (2000)



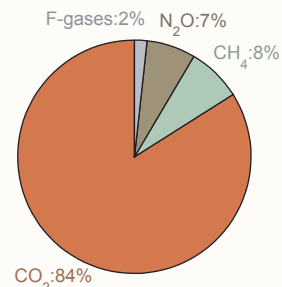
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

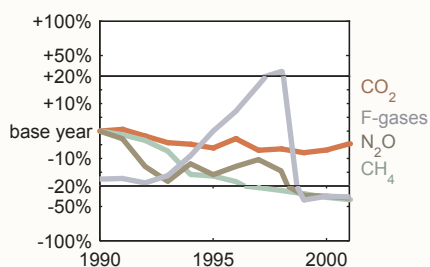


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

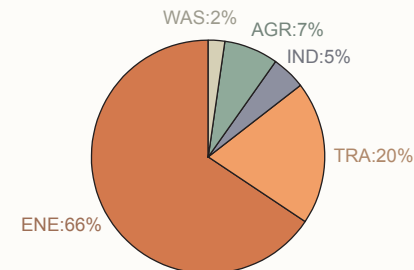
Emissions by Gas (2000)



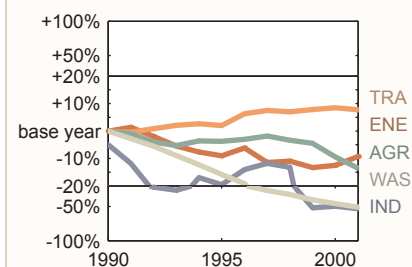
Emissions by Gas (Trend)



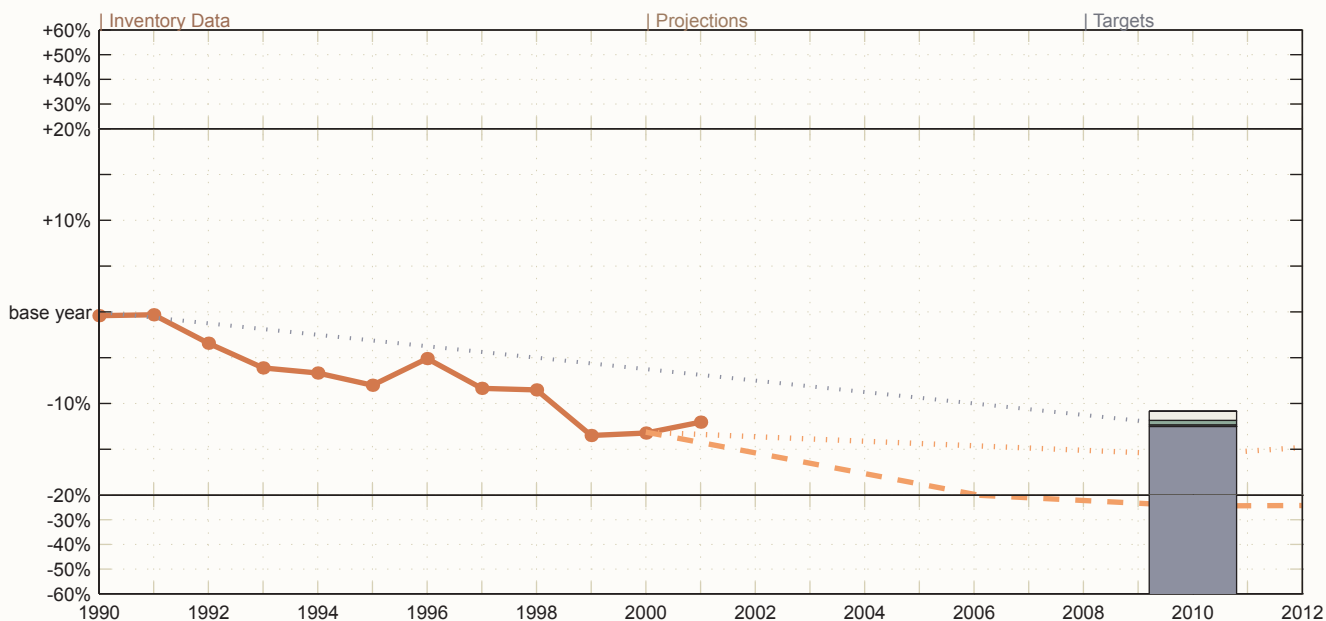
Emissions by Sector (2000)



Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.

USA

Annex I; Annex B; Annex II

Ratification date Kyoto:

Base Year

CO₂, CH₄, N₂O: 1990

HFCs, PFCs, SF₆ (est.): 1995

Emissions	MtCO ₂ e/yr	%B.Yr.
Base Year (B.Yr.):	6144.75	100%
1990:	6139.64	99.9%
2000:	7047.36	114.7%

LULUCF	MtCO ₂ e/yr	%Yr.
1990:	-1072.81	-17.5%
2000:	-834.64	-11.8%

Int. Bunker Fuels	MtCO ₂ e/yr	%Yr.
1990:	115	1.9%
2000:	100.27	1.4%

Projections	MtCO ₂ e/yr	%B.Yr.
2000 (projection base):	7001.22	113.9%
2010 WM:	8115	132.1%
2010 WAM:	data unavailable	

UNFCCC Aim	MtCO ₂ e/yr	% 1990
Allowed 2000:	6254.63	100%
Actual 2000:	7147.64	114.3%
Distance to aim:	893	14.3%
Achieved?:	Missed	

Kyoto Target	MtCO ₂ e/yr	%B.Yr.
Allwd 2008-12 (An.B):	5714.62	93%
Distance from 2001:	1221.59	19.9%
Distance from WM:	2400.38	39.1%

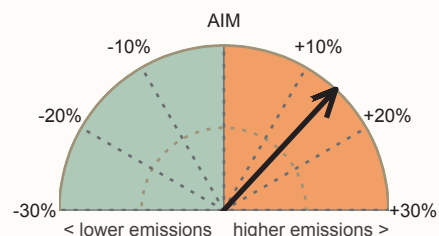
Sink Allowances	MtCO ₂ e/yr	%B.Yr.
CDM sinks:	61.45	1%
Agr.Mng.(est.):	87.07	1.4%
For.Mng. I (AppZ):	102.67	1.7%
Aff&Def.:	-26.4	-0.4%
For.Mng. II:	26.4	0.4%
Defo in B.Yr.:	not applicable	
Sink Allowances Total:	251.18	4.1%

Per Capita Emissions	tCO ₂ e/per/yr
1990:	24.55
2000:	25.24

Main Data Sources

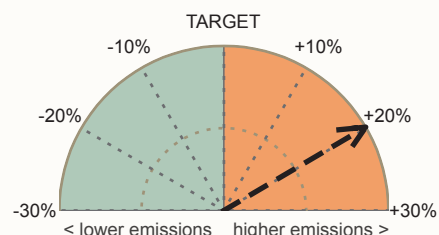
Inventory data: CRF 2003

UNFCCC Aim (2000)



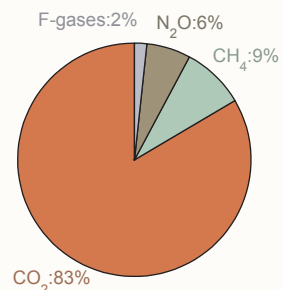
Difference between allowed and actual emissions in year 2000 in percent of 1990 emissions.

Distance to Kyoto Target

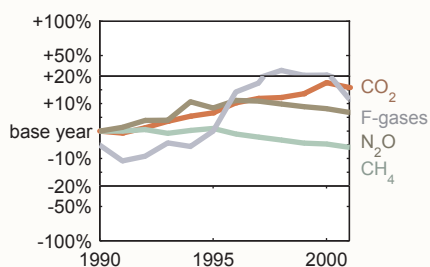


Distance from latest inventory data (2001) to Kyoto targets in percent of base year emissions.

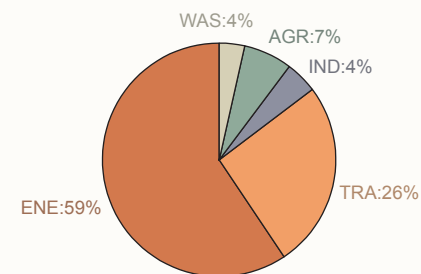
Emissions by Gas (2000)



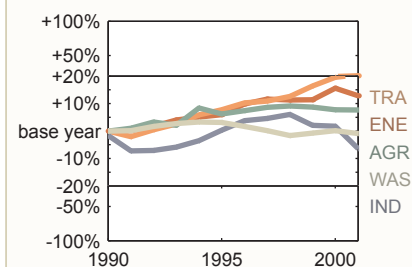
Emissions by Gas (Trend)



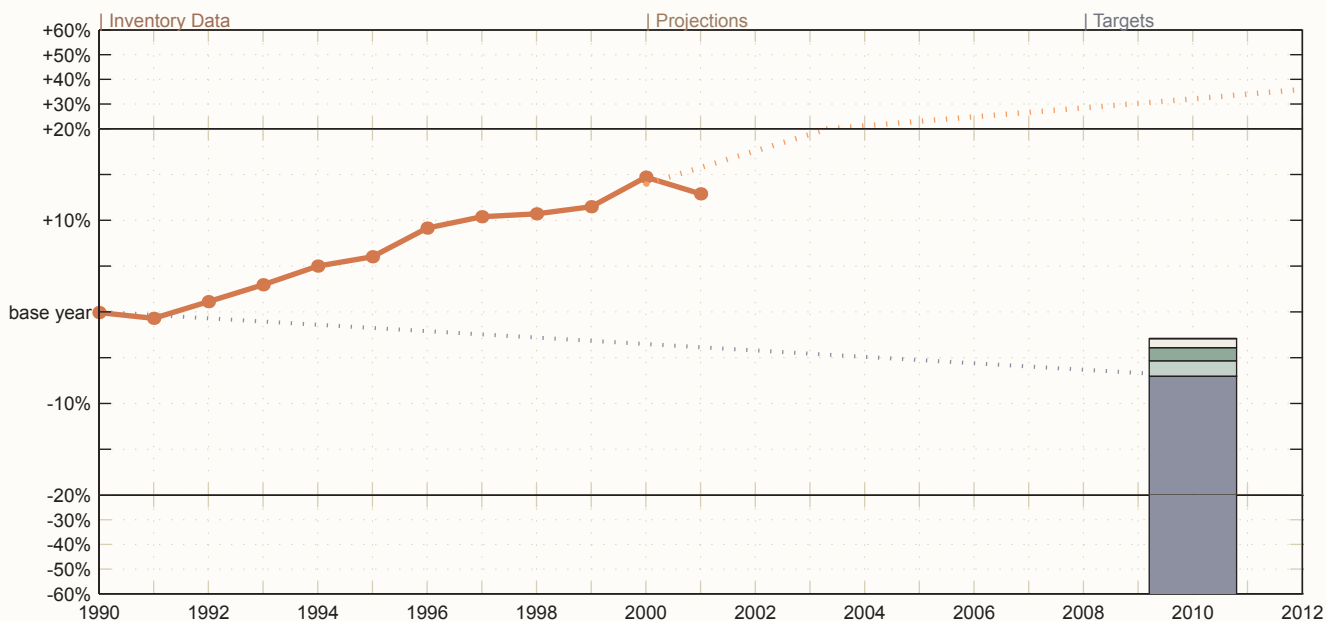
Emissions by Sector (2000)



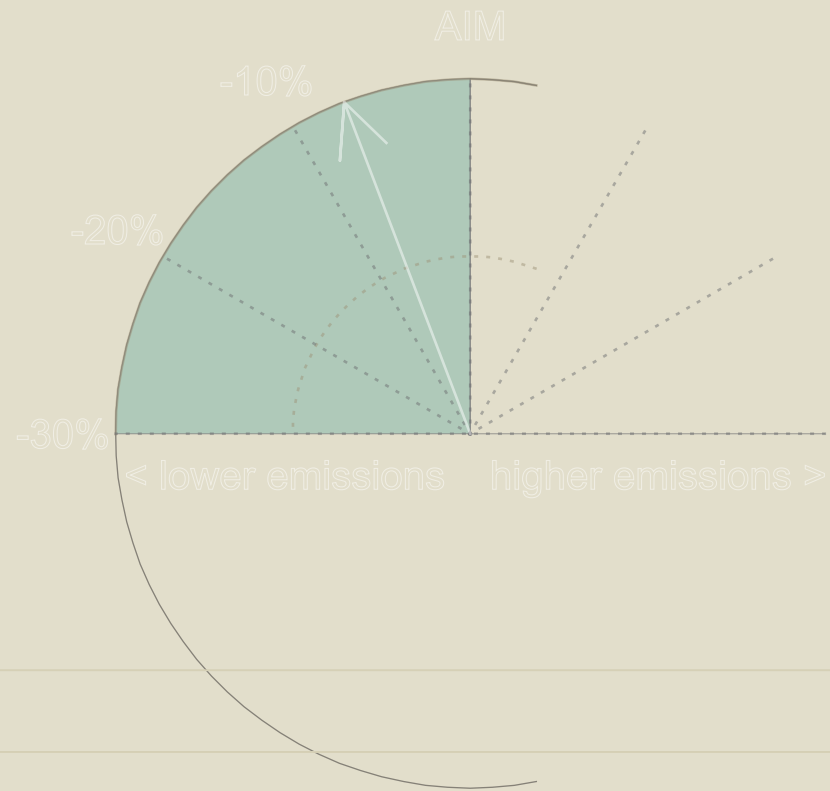
Emissions by Sector (Trend)



Past Emissions, Projections and Targets



Inventory data (red; solid) and projections (orange; dashed/dotted) for Annex A gases and sources, if available. See left table for color codes of Kyoto targets and potential additional emission allowances, if applicable.



This data compendium is an excerpt from the forthcoming book by Farhana Yamin and Joanna Depledge. The fact sheets might be referenced as Meinshausen, M. (2004). "Emissions, Targets and Projections for Annex I Parties" in *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures*. F. Yamin and J. Depledge. Cambridge, Cambridge University Press. Please consult the accompanying website www.ids.ac.uk/ids/env/climatechange.html for updates and downloads.

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