



REPUBLIC OF TURKEY
MINISTRY OF ENVIRONMENT AND FORESTRY
General Directorate of Environmental Management

Update on the UNFCCC Negotiations

Climate Change Strategy of TURKEY

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12 November 2009 – İSTANBUL

Climate Change, Global Threats & Low Carbon Prosperity Towards Copenhagen



Turkey's Legal Status: UNFCCC and KP

- A party to the UNFCCC since May 2004.
 - Annex-I Party
 - Non Annex-II Party
 - Decision 26/CP.7, COP 7, Marrakech, 2001
(deleted Turkey's name from Annex-II and placed her in a situation different than the other Annex-I Parties)
- Turkey has ratified Kyoto Protocol on 26 August 2009.
 - Non Annex-B Party
 - "A sui-generis case vis-a-vis the Annex-1 Parties"



Vulnerability of Turkey

Turkey's high vulnerability to the negative effects of climate change shows how important it is to adapt to this change as well as fight against it.

Being an important economic and social sector in Turkey, agriculture will require special attention, since the studies show that it is one of the most vulnerable sector to climate change

The IPCC report makes it clear that future climate change could critically undermine efforts for sustainable development throughout the world and especially in the Mediterranean Basin.

Turkey is located in the Eastern Mediterranean basin where countries are in the highest risk group.

Climate change had an additional impact on our existing problems of desertification and water scarcity.

Turkey has exceptionally rich wetlands and biological diversity



Basic Indicators

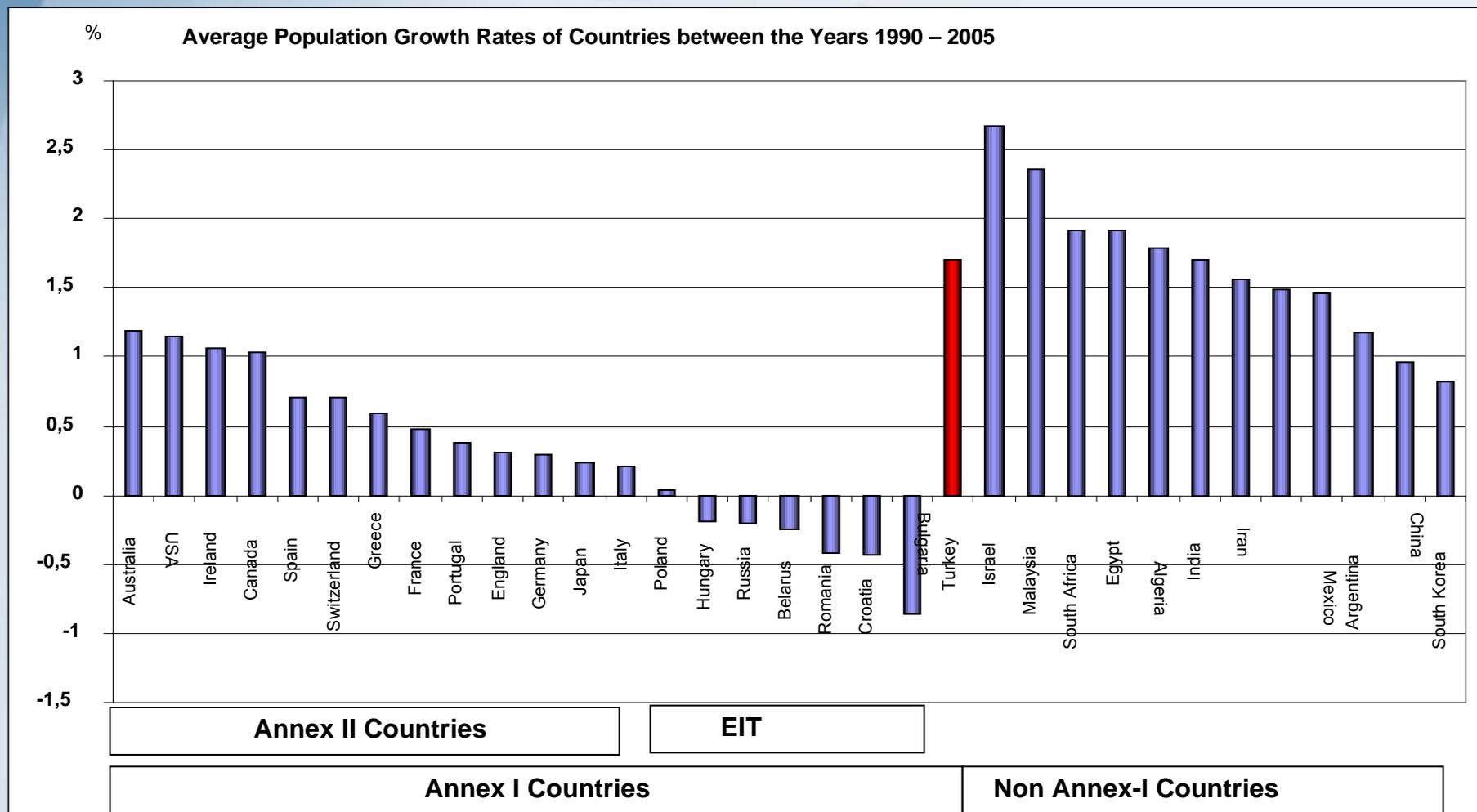
Turkey;

- was neither an industrialized country nor was in the group of countries undergoing the process of transition to a market economy in 1992
- negligible Historical Responsibility i.e. less than 1%
- the lowest per capita emission figures among the Annex-I Parties, less than many non-Annex-I
- the cumulative emission figures lower than Annex-I Parties and many non-Annex-I Parties
- the lowest per capita primary energy consumption figures compared to Annex-I Parties
- the lowest Human Development Index among the Annex-I and less than many non-Annex-I



Basic Indicators

Average Population Growth Rates of Countries between the Years 1990 – 2005

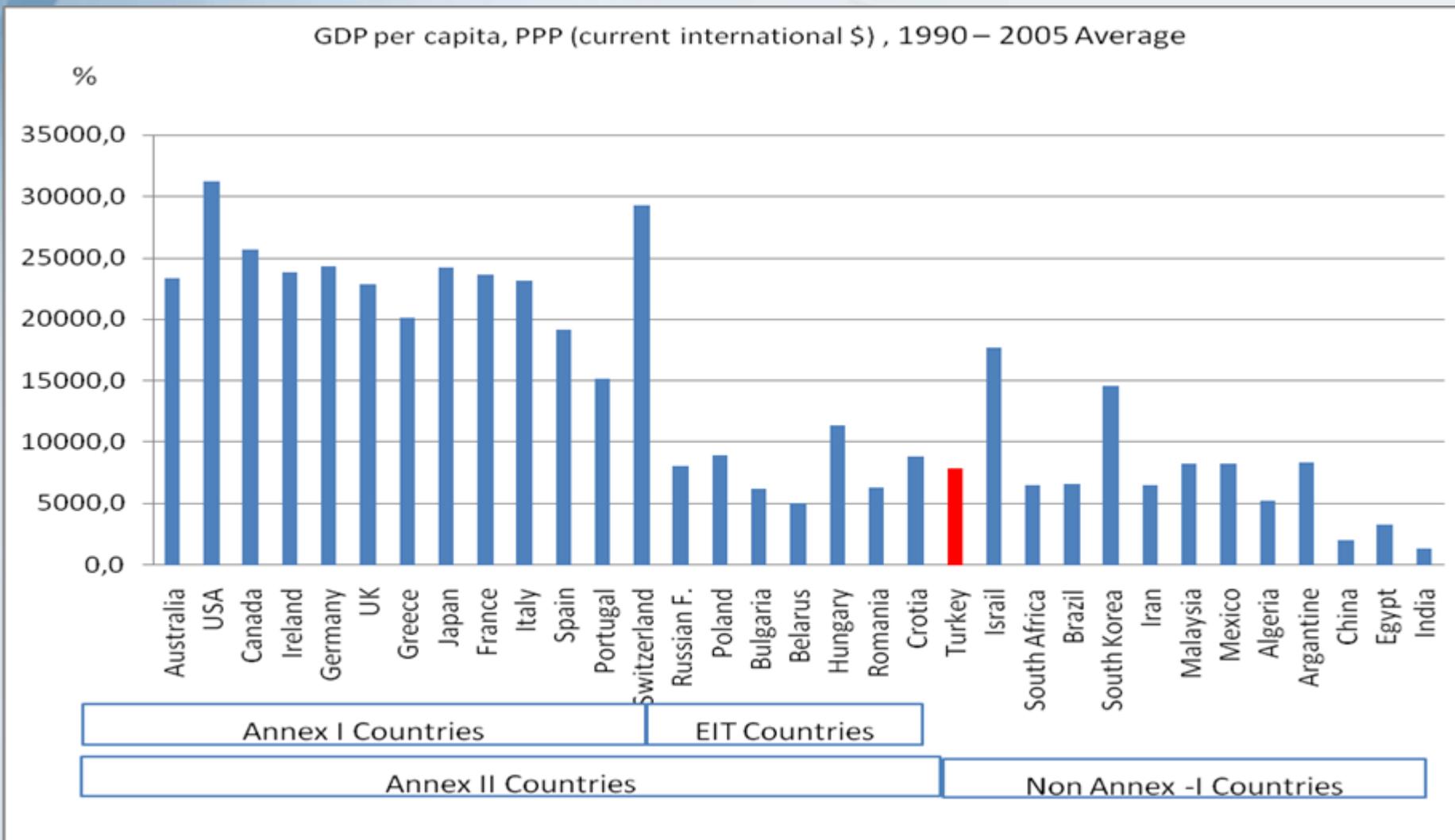


(Source: World Development Indicators, 2007)



Basic Indicators

Average Per Capita GDP Values of Countries between the Years 1990–2005



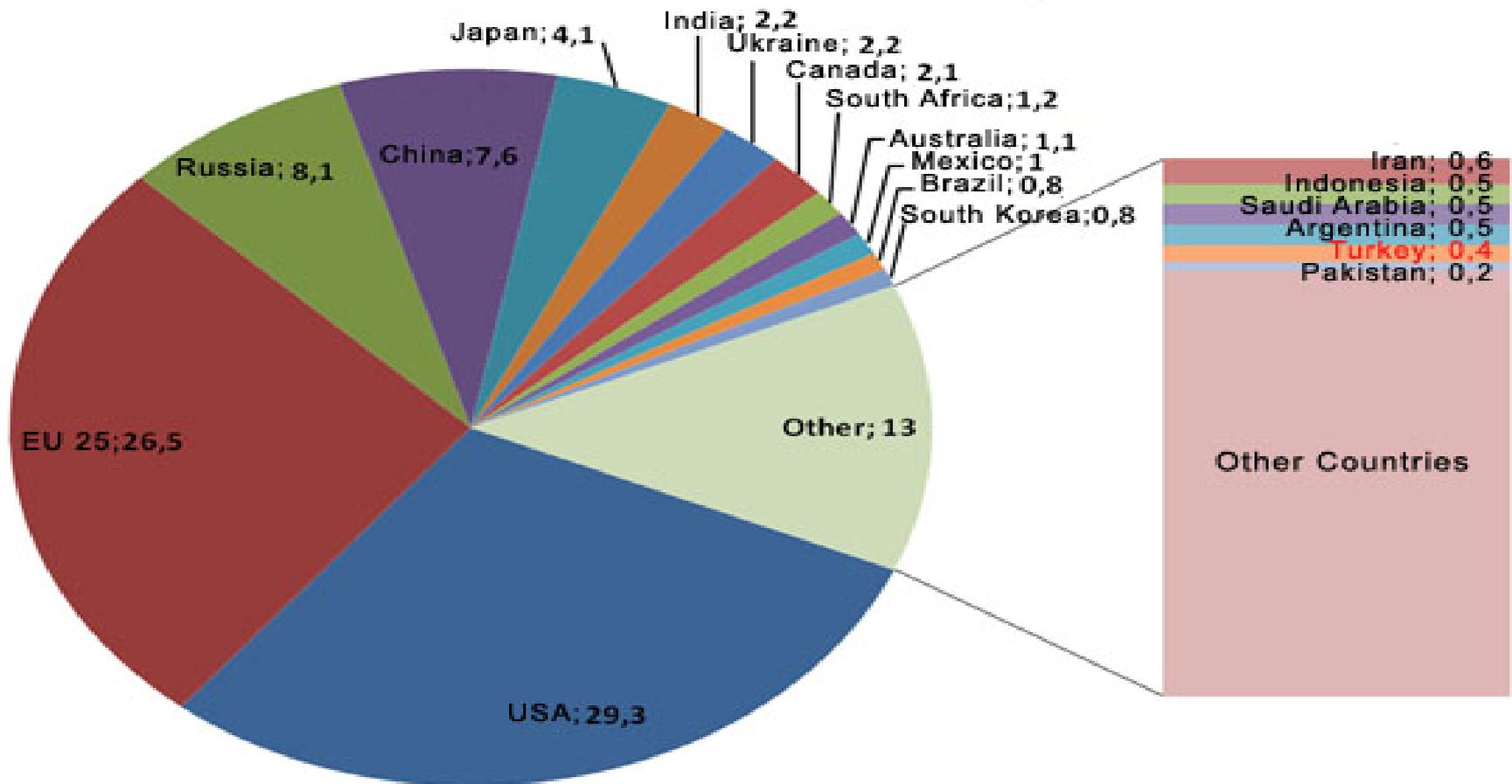
(Source: World Development Indicators)



Basic Indicators

Distribution of Cumulative CO₂ Emissions among Countries between the Years 1850–2002

Cumulative Greenhouse Gas Emissions by the Year 2002

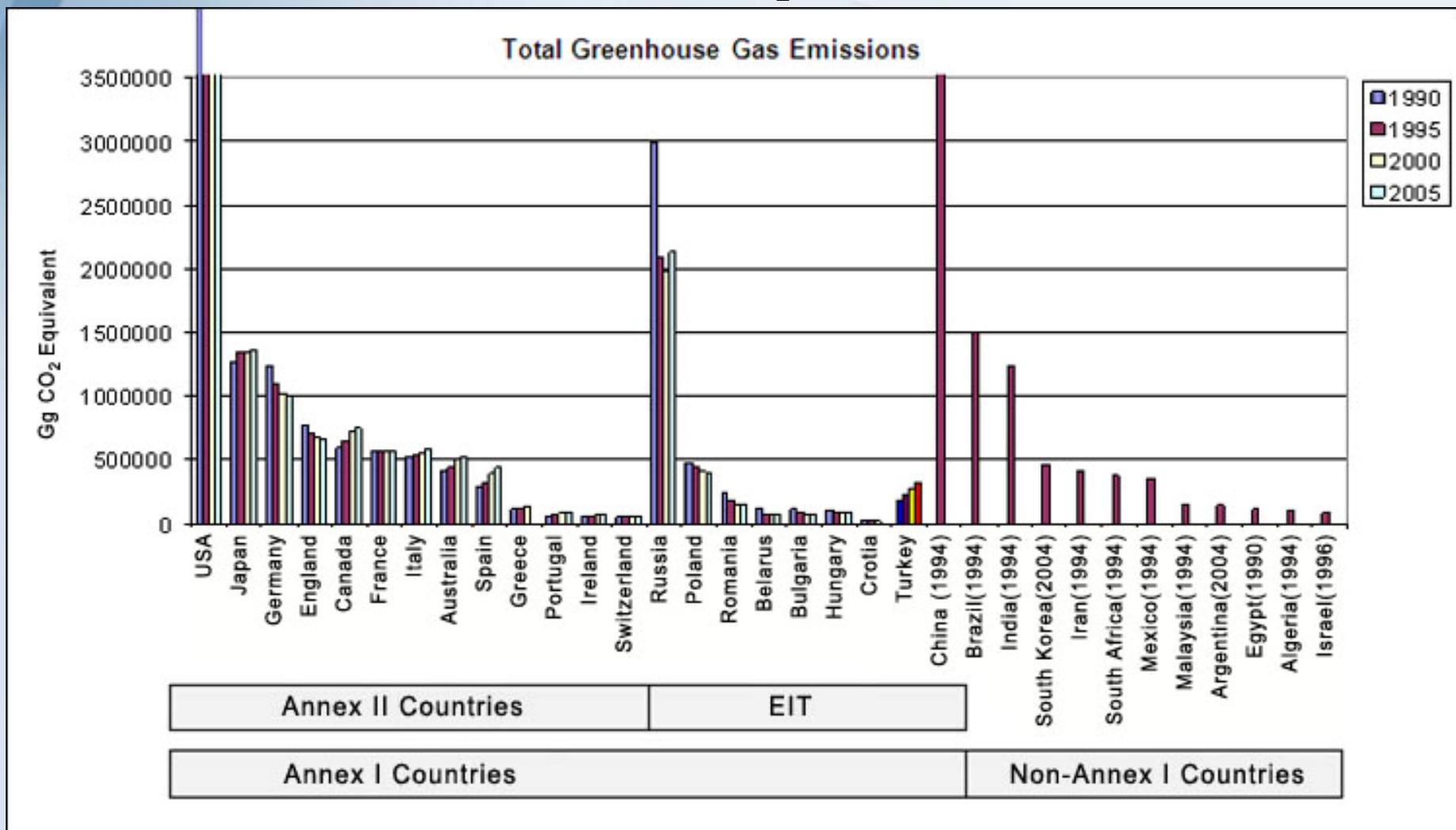


(Source: World Resources Institute, 2004)



Basic Indicators

Total Greenhouse Gas Emissions (Gg CO₂ Equivalent)

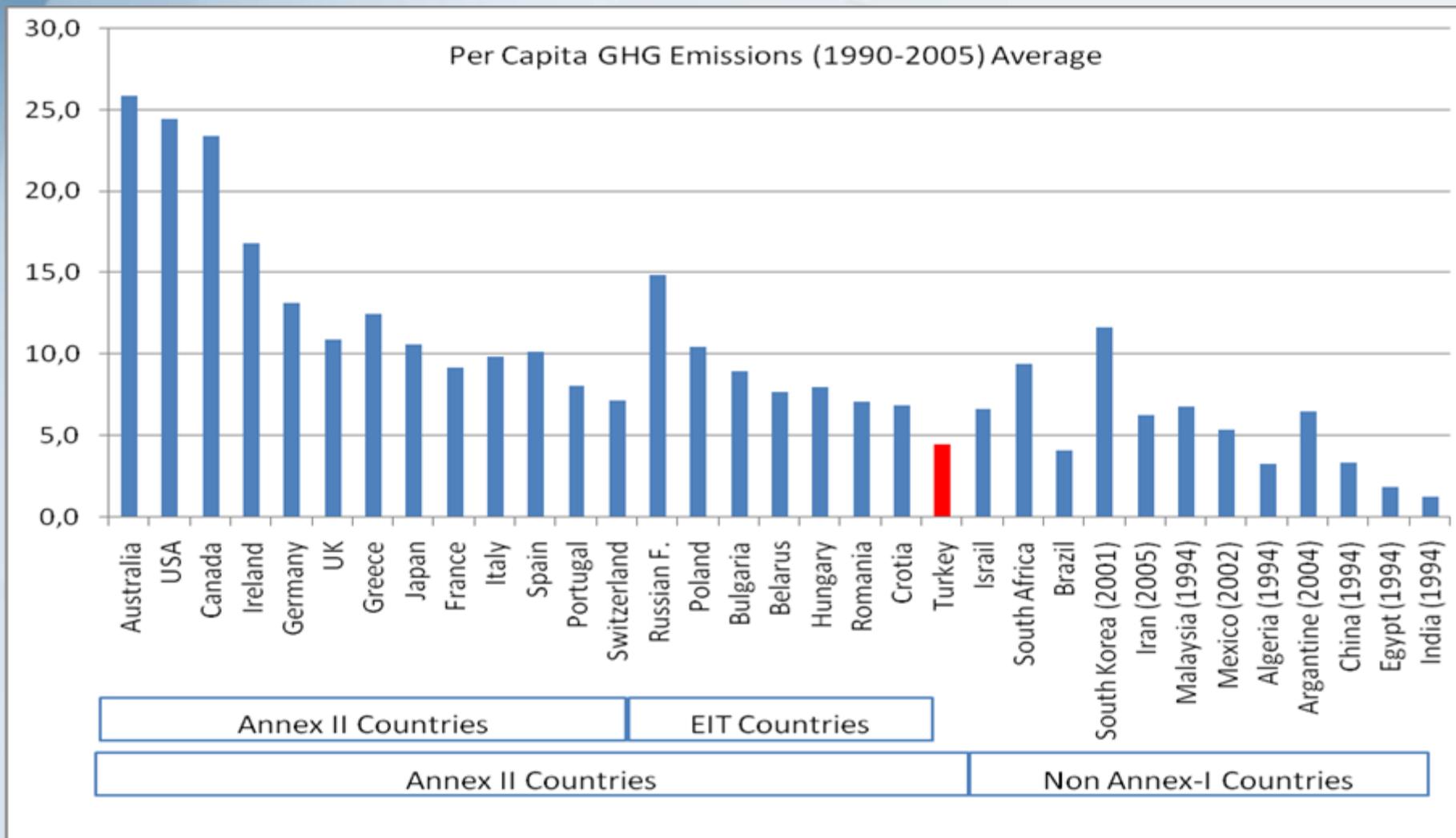


(Source: UNFCCC Secretariat Inventory Tables, 2007; National Communications of non-Annex-I Countries)



Basic Indicators

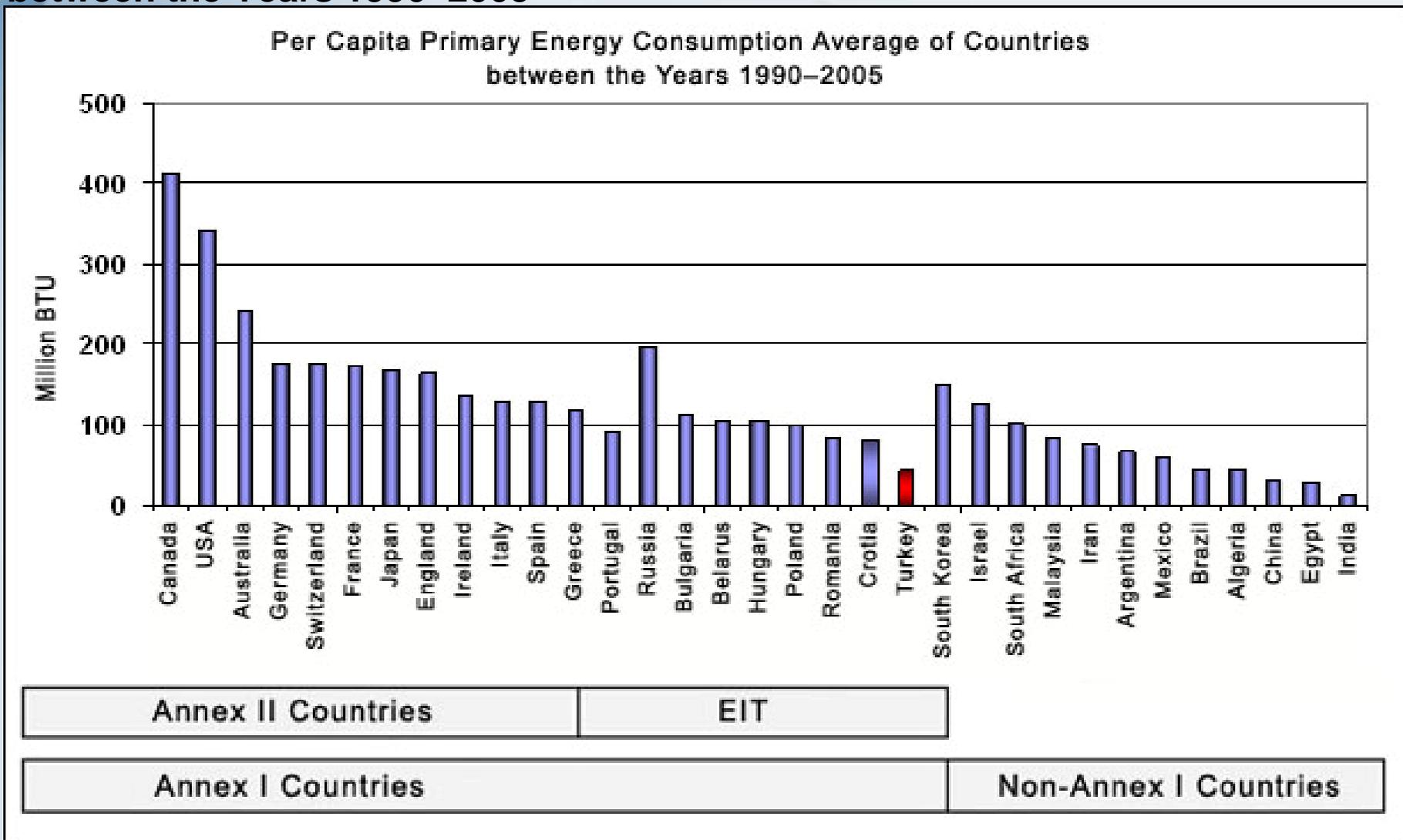
Per Capita Greenhouse Gas Emissions (Ton CO₂ Equivalent / Person)





Basic Indicators

Per Capita Primary Energy Consumption Average of Countries between the Years 1990–2005





Basic Indicators



Source: 2005 Data from OECD & IEA Study
(Differentiating Countries in Terms of Mitigation Commitments, Actions and Support, 2008)



Basic Indicators

Definition of developed	Annex I countries not included in this definition	Non-Annex I countries/territories included in this definition
2005 GDP/capita above 1990 Annex I average	Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Portugal, Romania, Slovak Republic, Turkey , Ukraine	Bahrain, Brunei Darussalam, Cyprus, Israel, Korea, Kuwait, Qatar, Singapore, United Arab Emirates
2005 GDP/capita above lowest 2005 Annex I country	N/A	Algeria, Argentina, Bahrain, Bosnia, Brazil, Brunei Darussalam, Botswana, Chile, Colombia, Costa Rica, Cuba, Cyprus, Dominican Republic, FYROM, Gabon, Gibraltar, Iran, Israel, Kazakhstan, Korea, Kuwait, Libya, Malaysia, Malta, Mexico, Namibia, Oman, Panama, Qatar, Saudi Arabia, Singapore, South Africa, Thailand, Trinidad and Tobago, Tunisia, Turkmenistan, United Arab Emirates, and Uruguay (as would Belarus and Turkey, who though Annex I in the UNFCCC, are not Annex B under the Kyoto Protocol).
Adjusted UNFCCC	--	Cyprus, Korea, Malta, Mexico
Adjusted Kyoto Protocol	Belarus, Turkey	Korea, Mexico
High human development in HDI* (2007/08)	Turkey, Ukraine	Albania, Antigua and Barbuda, Argentina, Bahamas, Bahrain, Barbados, Bosnia and Herzegovina, Brazil, Brunei Darussalam, Chile, Costa Rica, Cuba, Cyprus, Israel, Korea, Kuwait, Libya, Malaysia, Malta, Mauritius, FYROM, Mexico, Oman, Panama, Qatar, Saint Kitts and Nevis, Saudi Arabia, Seychelles, Singapore, Tonga, Trinidad and Tobago, United Arab Emirates, Uruguay
High human development in HDI* (2000)	Belarus, Bulgaria, Croatia, Lithuania, Romania, Russian Federation, Romania, Turkey , Ukraine	Antigua and Barbuda, Argentina, Bahamas, Bahrain, Barbados, Brunei Darussalam, Chile, Cyprus, Israel, Korea, Kuwait, Malta, Qatar, Singapore, Uruguay, United Arab Emirates
"High income economies" World Bank (2008)	Belarus, Bulgaria, Croatia, Lithuania, Poland, Romania, Russian Federation, Turkey , Ukraine	Andorra, Antigua and Barbuda, Aruba, Bahamas, Bahrain, Barbados, Bermuda, Brunei Darussalam, Cayman Islands, Channel Islands, Cyprus, Czech Republic, Estonia, Equatorial Guinea, Faeroe Islands, Greenland, Guam, Isle of Man, Israel, Kuwait, Liechtenstein, Malta, Monaco, Netherlands Antilles, Northern Mariana Islands, Oman, Puerto Rico, Qatar, San Marino, Saudi Arabia, Singapore, Trinidad and Tobago, Korea, Rep., United Arab Emirates, Virgin Islands (U.S.)
UNCTAD (2005)	Turkey	<i>No maximum GDP per capita threshold is specified above which countries are no longer considered developing therefore N/A</i>

* NB, this report does not present information for Lichtenstein or Monaco, so these countries are not included in this analysis. ** 1990 data not available (because data for the countries that made up the former Soviet Union are not available before 1992).

Source: OECD & IEA (Differentiating Countries in Terms of Mitigation Commitments, Actions and Support, 2008)



Basic Indicators

UNCTAD Categories	Thresholds	Major NAI GHG Emitting Countries included in this definition
High-income developing countries	Per capita current GDP in 2000 > USD 4,500 per year	Argentina, Korea, Mexico, Saudi Arabia, Venezuela
Middle-income developing countries	Per capita current GDP in 2000 between USD 1,000-4,500 per year	Bolivia, Brazil, Iran, Malaysia, South Africa, Thailand, Turkey
Low-income developing countries	Per capita current GDP in 2000 < USD 1,000 per year	China, India, Indonesia, Nigeria, Pakistan, Philippines, Vietnam
Least developed countries	Per capita current GDP in 2000 < USD 750, > USD 900 for graduation <i>and</i> human resource weakness criterion, with population < 75 million	Angola, DR Congo

Source: UNCTAD 2005

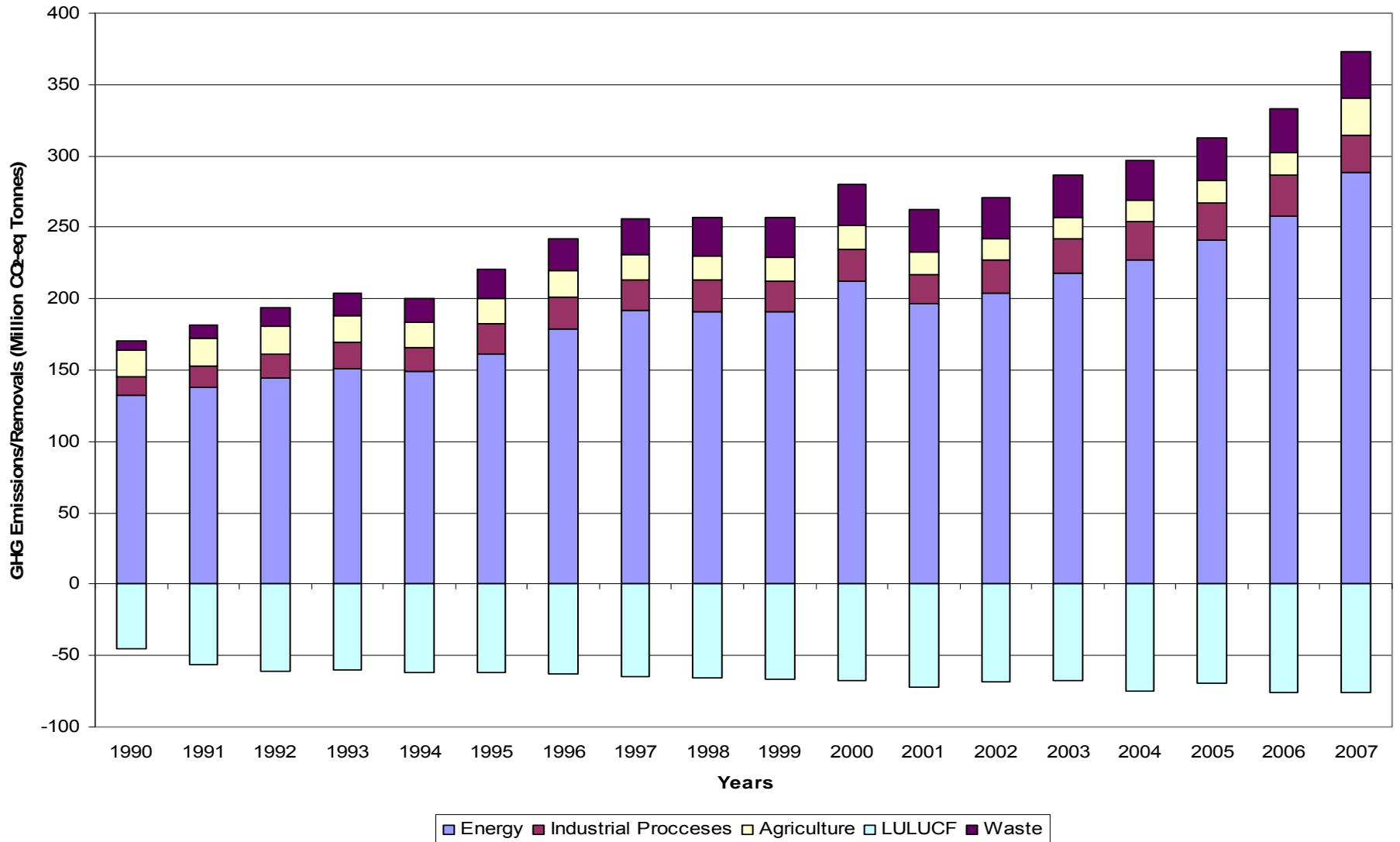
World Bank Categories	Thresholds	Major NAI GHG Emitting Countries included in this definition
High-income developing countries	Per capita GNI > USD 10,065 in 2004	Korea, Saudi Arabia
Upper-middle-income developing countries	Per capita GNI between USD 3,256 and 10,065 in 2004	Argentina, Malaysia, Mexico, South Africa, Turkey, Venezuela
Lower-middle-income developing countries	Per capita GNI between USD 826 and 3,225 in 2004	Brazil, Bolivia, China, Indonesia, Iran, Thailand
Other low-income developing countries	Non-LDC countries with GNI per capita of USD 825 or less in 2004	India, Pakistan
Least developed countries	Same as UNCTAD	Angola, DR Congo

Source: World Bank 2008



GHG Emission Inventory of Turkey

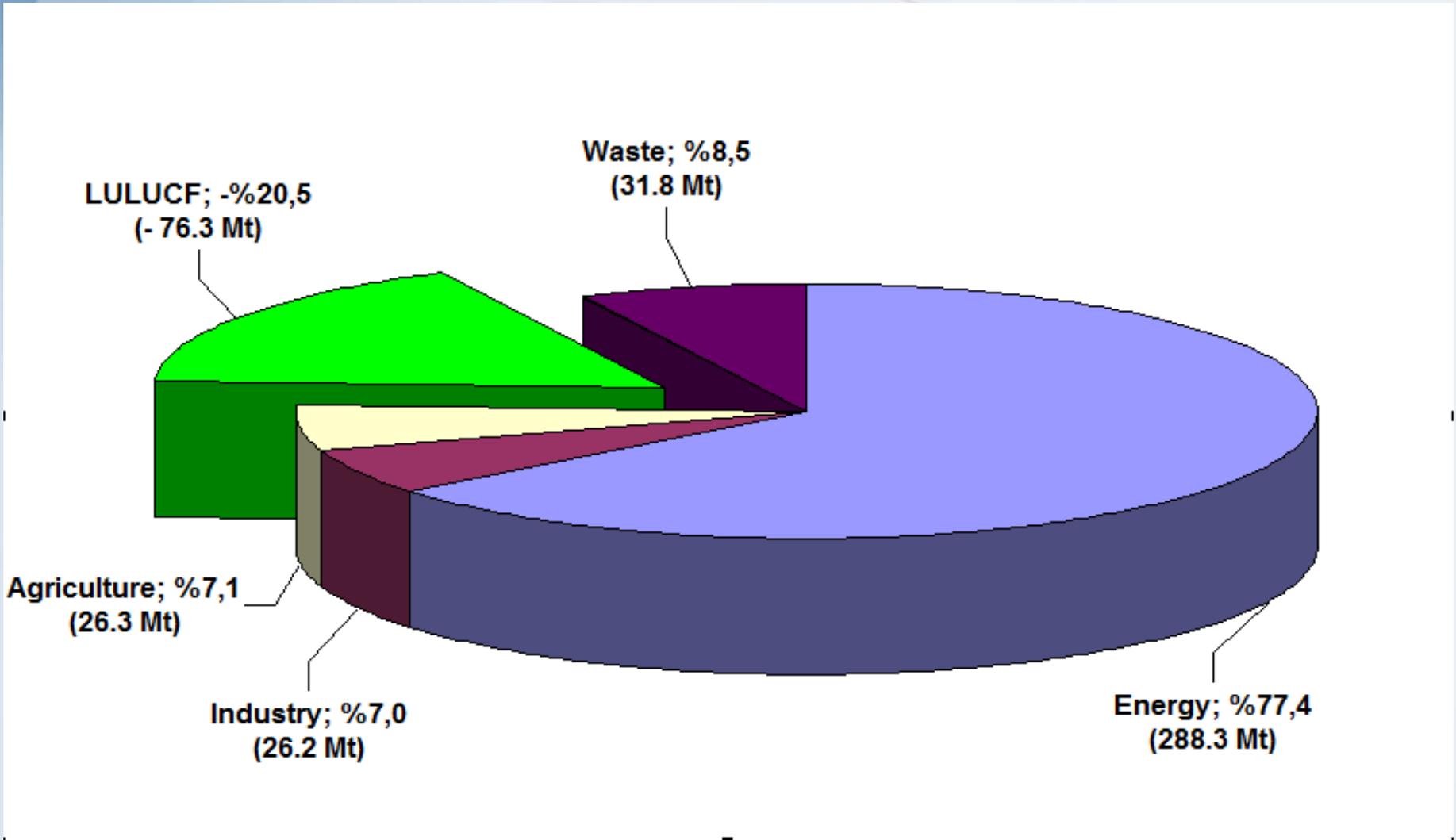
Greenhouse gases emission trend by sectors





GHG Emission Inventory of Turkey

2007 Greenhouse gases emission by sectors





Sectoral Policies and Implementations

As a party to the UNFCCC and its Kyoto Protocol, Turkey attaches importance to the implementation of measures and policies to mitigate greenhouse gas emissions and adapt to the impacts of climate change.

Although Turkey does not have any quantitative reduction commitment, significant efforts in all sectors have been launched.



Sectoral Policies and Implementations

ENERGY

- Targets for reducing energy intensity,
- Rehabilitation of power plants,
- Utilization of low carbon content fuels, fuel switch,
- Public campaign on energy efficiency and awareness raising
- Preparation of New Regulations (Energy Efficiency Law -2007, Renewable Energy Law-2005)

TRANSPORT

- Improved and expanded public transportation,
- Withdrawal of old cars from traffic,
- Improvements in the fuel quality (98/70/EC) and increasing use of biofuels,
- Preparation of urban transportation strategies and plans,
- Use of alternative fuels (LPG,CNG ethanol etc.)

INDUSTRY

- Legislative changes for new engine technologies, (started EURO IV standards diesel and gasoline vehicle in 2008),
- Increasing energy efficiency in cement and iron/steel plants,
- Use of best available technologies and techniques



Sectoral Policies and Implementations

AGRICULTURE / FORESTRY

- Increasing sink areas
- Use of biomass instead of fossil fuels
- Use of best available agricultural techniques
- Improvement of economic and social conditions of the people living in the forest villages to prevent deforestation
- Preservation of forest areas and biodiversity
- Increasing of forestry area (averagely annually 30 000 ha/year (1972 – 2005)
the goal : increasing the forest area to 2.3 million ha land in 5 years (2008-2012)

WASTE

- Introduction of landfill and recycling methods,
- Raising public awareness among the local administrations and the public, regarding solid waste recycle,
- Increasing landfill facilities (1/5 of municipalities (611/3225) which serve half of the total population have landfill facilities)



Projects on Climate Change

Ongoing Projects

“Enhance Turkey's Capacity to Adapt to Climate Change” project has began to be implemented from the 1 of August 2008.

The project for “Sectoral Mitigation Potential of GHG Emissions Reduction and Related Costs” is expected to be finalized within a year by SPO.

The project for “Developing the Capacity of Turkey to Participate Efficiently in The International Climate Change Negotiations and Voluntary Carbon Markets” expected to be finalized within a year.

The project to establish synergy between the 3 Rio Conventions (UNCCD, CBD, and UNFCCC) was initiated by the MoEF in August 2008.

The project for the “Climate Change Action Plan” has been started at the beginning of this year.



Kyoto Mechanisms for Turkey

When Kyoto Protocol was adopted, Turkey was not in Annex-B as she was not a Party to the UNFCCC, thus she won't have any quantified emission reduction or limitation commitments until 2012.

In this regard, Turkey cannot participate in the mechanisms CDM/JI/IET until 2012, as only non Annex I Parties can host CDM (Article 12) and only Annex B Parties can do JI (Article 6) and International Emission Trading (Article 17) until 2012.

Turkey will retain her non-Annex B status in the post-2012 climate regime.

Turkey wants to participate in new mechanisms actively within the climate change regime beyond 2012.



Voluntary Carbon Markets in Turkey

Participation in the Voluntary Carbon Market (VCM) seems to be the only realistic option for Turkey until 2012, unless the country changes its status towards the UNFCCC Annex I or the KP Annex B

Turkey has already materialized projects developed as Voluntary offset projects in accordance with the Gold Standard.

It was the first country to host Gold standard verified emission reduction project. Up till now 45 PDDs have been developed.

The projects are mainly in the area of renewable energy – wind power generation and small hydro power.

The expected GHG emission reductions resulting from the implementation of these projects are approximately 5 million tonnes.

The number and volume of the voluntary carbon projects make Turkey one of the first and most successful countries in the emerging voluntary market.



Up to, Now and Beyond 2012 - TURKEY

Turkey;

- is not a rich industrialized country: acceleration of industrialization process since 2000.
- has a rapidly growing economy and energy demand
- has increasing emission trends due to economic and population growth
- does not have any quantitative limitation commitment but comprehensive efforts in sectors
- is taking important actions to fulfill her responsibilities under the UNFCCC in conformity with her economic and social development objectives and priorities



Up to, Now and Beyond 2012 - TURKEY

Turkey;

- has shown good will
- work constructively with the Parties for a pragmatic Copenhagen deal
- make fair share contribution in accordance with the Decision 26/CP.7
- adopt nationally appropriate mitigation actions (NAMAs), no-loose targets to limit our emissions growth and move to a low-carbon economy
- shift to a low-carbon economy through technology transfer and multilateral financial support



Expectations of Turkey from New Regime

New Regime should;

- pay attention to each others' different circumstances
- take into account the different needs, concerns expectations of every single member of UN
- re-differentiation within the Annex-I Parties to make the regime comprehensive
- ratifiable legal text for all Parties
- no imposition upon any Party
- make empathy for others' circumstances
- respect adaptation needs of the most vulnerable countries

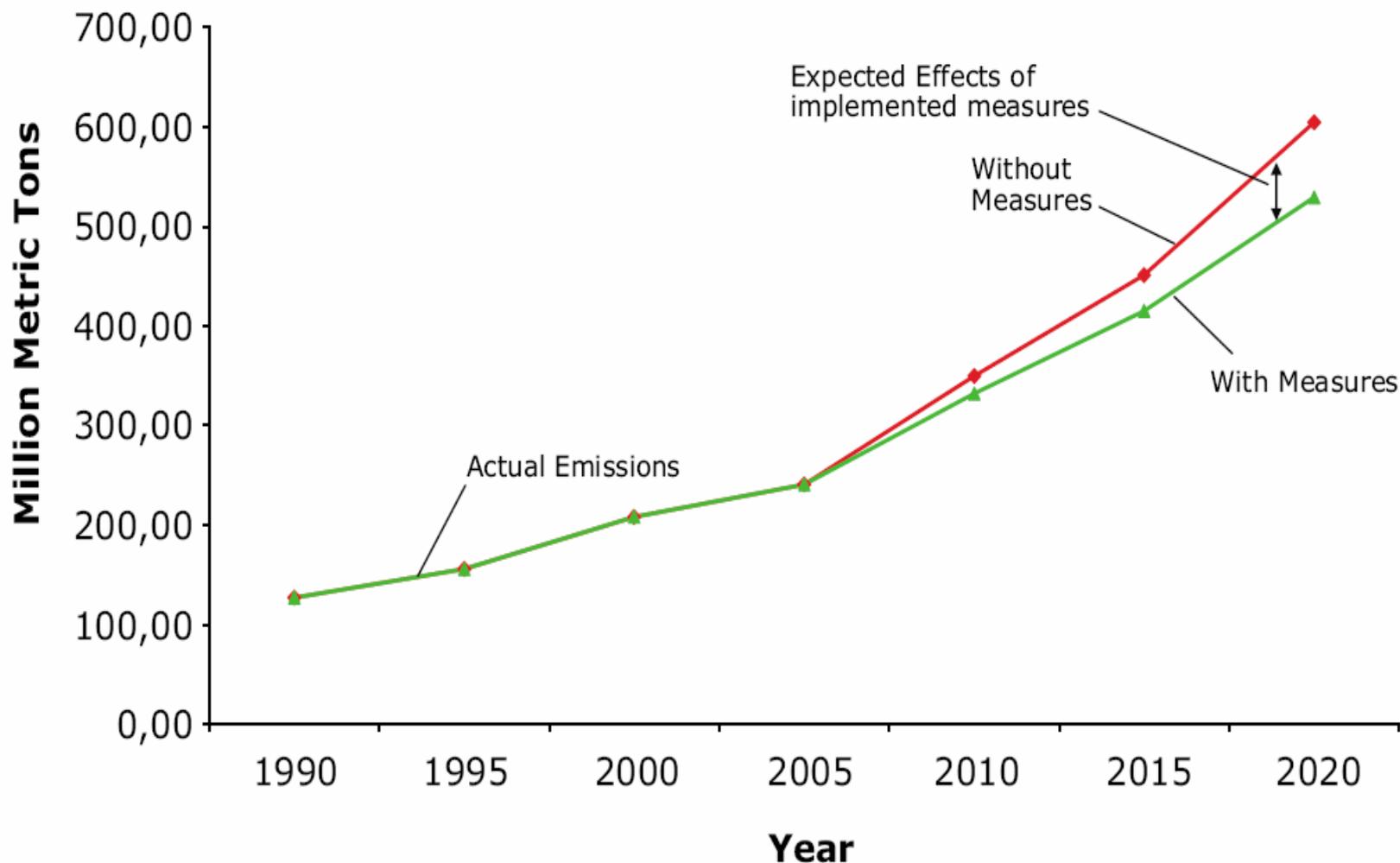


National CO₂ Emissions WOM (Reference) and WM (DSM) scenarios

- As it has been stated in the First National Communication, Turkey plans to limit her greenhouse gas emission growth by 11 % from the projected 2020 emissions on the basis of the business as usual scenario.
- Furthermore; a project regarding determination of sectoral mitigation potentials and costs has been started and is envisaged to be completed by the end of 2009.
- This study will support Turkey to assess and analyze the mitigation actions and assist policy makers in the coming years.

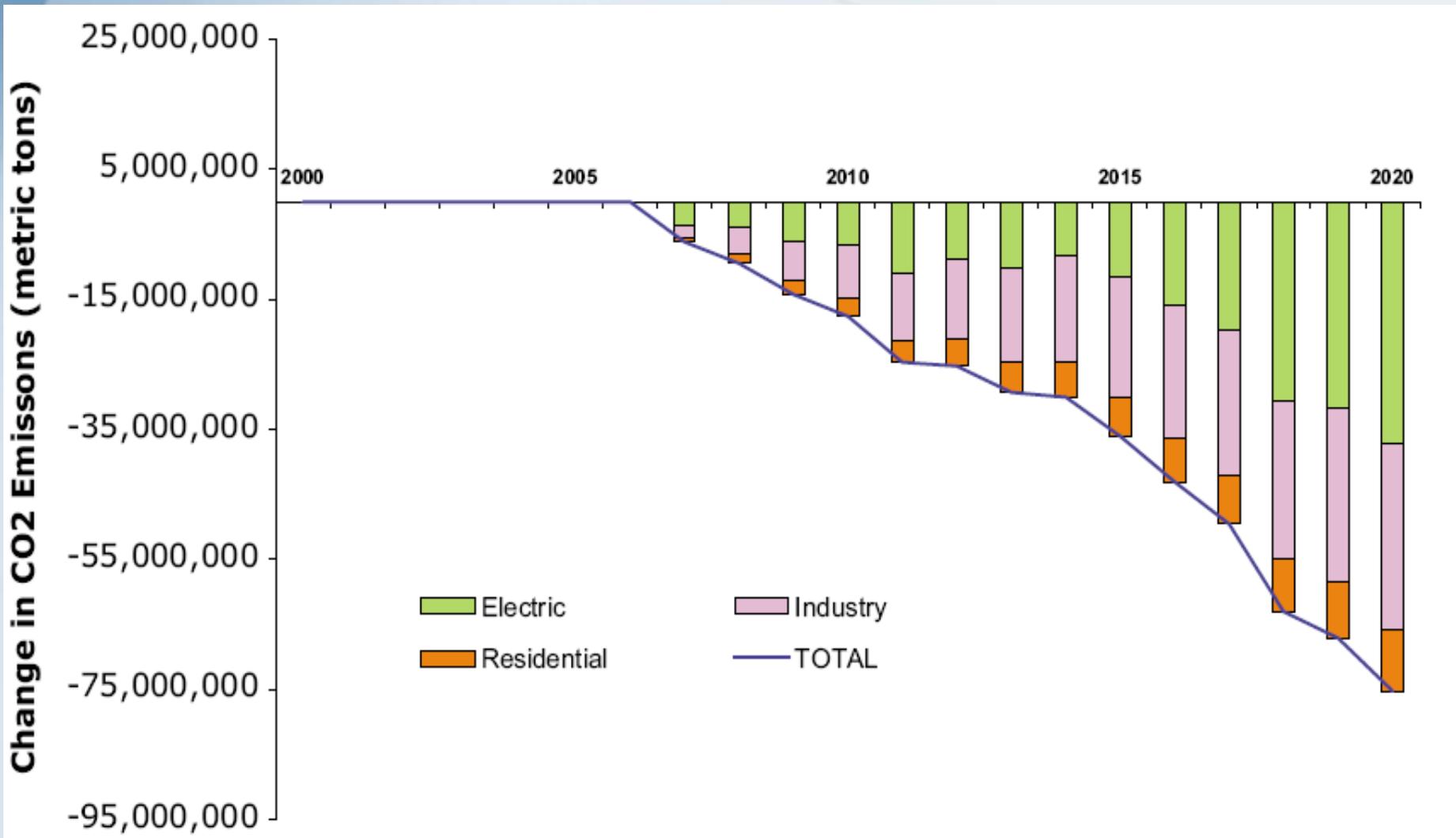


National CO₂ Emissions WOM (Reference) and WM (DSM) scenarios





National CO₂ Emissions WOM (Reference) and WM (DSM) scenarios





The road to Copenhagen

- A legally binding framework agreement is expected in Copenhagen
- Urgency building up, progress is slow
- EU prefers a single agreement
- US focuses on long term action with contribution from all major emitters
- Developing Countries unwilling to engage, want KP to continue, seem to resign on special states USA outside of KP





THANK YOU...

