Undergraduate Program in Central European Studies

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Environmental Policy in the Central European Context

Time: Tuesday 4pm
Location: at CERGE-EI, Room # 10

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10 Environmental Policy in the world context – History and current problems

Kramer – Development of environmental policies in the United States and Europe: Convergence or Divergence? EUI Working Papers 2002/33

I. Different points of departure

- **active** protection of environment started in **1960's** in both Europe and USA (but many measures existed even before: **water management, nature protection, town and country planning, waste management**)
- starting in 60s **more organized** deliberate and planned measures giving rise to the "environmental policy" (in both US and Europe)

US

- existing measures **on the individual states' levels**
- growing public concern for the environment
- gradual federalization
- **since the end of 1960s** a number of **strong, extremely detailed and prescriptive legislative** measures have been adopted, which together with federal executive institution have formed the backbone of the US environmental policy

- ⇨ 1965-67 **federal air pollution legislation**, in 1970 considerably reinforced by the **Clean Air Act Amendments**
- ⇨ 1972 the **Federal Water Pollution Control Act Amendments** federalized and sharpened water management
- ⇨ 1970 the **Environmental Protection Agency (EPA)** - regulatory and enforcing functions

  http://www.epa.gov

  EPA *was established to consolidate in one agency a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection. EPA's mission is to protect human health and to safeguard the natural environment—air, water, and land—upon which life depends. From regulating auto emissions to banning the use of DDT; from cleaning up toxic waste to protecting the ozone layer; from increasing recycling to revitalizing inner-city brownfields, EPA's achievements have resulted in cleaner air, purer water, and better protected land. What they do:*

  - *Develop and Enforce Regulations*
  - *Give Grants*
  - *Study Environmental Issues*
  - *Sponsor Partnerships*
  - *Teach People About the Environment*
  - *Publish Information*

- ⇨ Congress: product and process legislation (the Interstate Commerce Cause) power to levy taxes and charges, introduce subsidies
- ⇨ federal government owning about 1/3 of the land in the US – nature conservation measures without serious interference with property rights

Europe

- EU **not a nation but a supranational joint-venture of nation-states**
- **member states with different perceptions and objectives**
- environmental concerns **developed at the level of member states** => different subjects, variable intensity, consequences and reactions from national legislatures
- **sovereignty => all sort of difficulties that slowed the integration** and making of the common environmental standards
- The EC treaty (1958) did not contain any explicit reference to environment; not until the Single European Act of 1987.
  - **the treaty is not a constitution**, the basic competences vested in member states
  - there is no European Congress, **the environmental legislation is adopted jointly by the Council of Ministers and by the European Parliament** (directly elected members) => member states have a decisive influence on which environmental matters they want to have dealt with on national and on kind of "federal" level.
  - **EU does not own land**, member states do not own significant amounts of land either
  - **EU has no power to levy environmental taxes**

  - **EU has practically no income of its own, it receives 1.27% (?) of the national income of member states => limited resources** for economic or fiscal incentives or subsidies

- Moreover: **political, economic, social, cultural and environmental differences among the member states**; absence of European media, of European public opinion and of European-wide common interest

Since mid 70s US and EU: written communication to promote cooperation in environmental matters

- **mainly focused on matters that concerned potential trade conflicts**;
- intensive **technical cooperation** regarding chemical and air pollution with some good results;

Since 80s

US

Strong centralization since 70s **criticized** by supporters of state-level policies, economists and regulated businesses

⇨ **deregulation** started at early 80s

⇨ **regulatory responsibilities of EPA narrowed,** greater responsibility to individual states

2 factors influencing US environmental policy

⇨ Reagan's Executive Order 12291 required EPA and other federal regulatory agencies to adopt most economically efficient or **cost-effective** alternatives;

⇨ **No special department for environmental matters** existed -> the State Department and the Department of Commerce represented US at international environmental negotiations

after mid 80s US - **divergence of views** between Executive and Congress on basic questions paralyzing legislative measures and prevented innovation

EU

EC Treaty amendment in mid 80s – general consensus about the **need for comprehensive EC environmental policy**

⇨ EU environmental legislation was negotiated by the environmental departments

⇨ Environmental Dept. of EC (early 70s) -> **environmental matters kept outside the direct influence of members' foreign or trade policy**

⇨ on international level, EU had **no general competence to act** (represented by Environmental directorate general of EC and by environmental departments of member states) -> **sometimes difficult to find common position**

⇨ at many international conventions it was difficult for EU to uphold at least some position

- ⇨ e.g. US wanted to allow EU accession to global environmental conventions only under the following conditions:
  1. EU would make a precise statement on the **Community competence** in the subject-matter dealt with by convention in question (difficult for EU as the Treaty is not a constitution and the repartition of competences between EU and member states is not static)
  2. **majority of member states would ratify the convention**
- ⇨ lack of clearly defined competences sometimes stood in way of international agreement (e.g. amendment on CITES Convention on trade in endangered species to allow EUs accession – not ratified by US and many other -> EU cannot adhere to that convention and was formally barred from speaking with one voice at CITES conferences)
- ⇨ at some conventions EU was involved and occasionally it made a declaration about competence

(1978) Montreal Protocol negotiations (concerning the restrictions of production)

- ⇨ **EC managed to find common language** for its members and even obtained a clause which allowed joint implementation of the obligations under the protocol
- ⇨ the first negotiations on the international level at which **EU and US confronted** each other on environmental matters,
- ⇨ **the negotiating position of EU member states greatly improved under EU without having their national interests neglected** => encouragement to continue "speaking with one voice"

(1987) The Single European Act

- ⇨ **laid down objectives and principles of environmental policies** based on objectives and policies agreed upon by member states
- ⇨ **gave EU a mandate to contribute to search for environmental solutions and clarified that EU had the competence to act internationally**, aside from or jointly with members
- ⇨ obligation to find and promote high level of environmental protection – **EU did not try to subordinate environmental interests to commercial or economic interests**
- ⇨ EU environmental legislation covered more areas, **became more coherent** and gave political and legal framework to environmental measures in member states **– alignment of national environmental policies**

After the Single European Act

- re-evaluation of the objectives of Environmental policy,
- **attempts to integrate environmental requirements into other policy areas** (transport, energy, regional policy, agriculture and industry),
- **further attempts to align national environmental policies,**
- growing attention to **climate change** issues

- **import of some tools from US** (environmental impact assessment, access to information, management systems), some tools rejected (e.g, EPA-like enforcement agency)

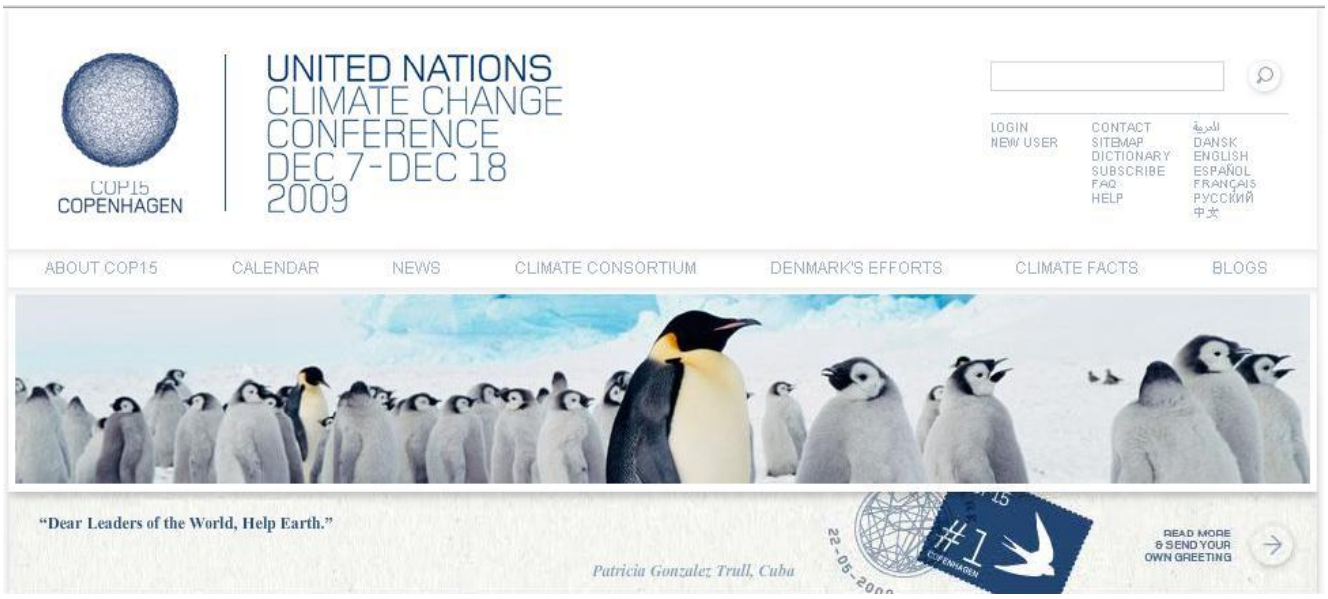
US seen as trying to subordinate environmental questions to economy/trade issues and to avoid any substantive environmental provisions at all

⇨ e.g. **Kyoto protocol**

- US considered it flawed b/c
  - **only obligations for industrialized not developing countries** to reduce GHG emissions (as a long-term problem, also developing countries should be involved)
  - it **did not expressly enable industrialized countries to comply with reduction commitments by investing in reduction technologies in developing countries**, i.e. in ways that would not require emission reductions at home
- EU saw it as a prolongation of the commitments accepted under the Climate Change Convention
- still not ratified by the US

MAIN DIVERGENCIES	
EU	**USA**
- represented on international negotiations by environmental depts. of member states and by the EC's directorate for environmental affairs - same importance to trade issues, environmental and social concerns - multilateral solutions that are globally acceptable, not necessarily best economic interest of EU - Nation states accept regulatory role of EU and global solutions it brings. - do not rely on market too much	- delegations represented by State Dept. or the Dept. of Commerce (not env. depts.) - more emphasis on economic aspects of free trade than to environmental protection - believe in market solution, - more interests of the US industry rather than of global environment - only commitments that bring economic advantage; - no compliance mechanisms and control procedures that might impinge on national sovereignty

CAUSES OF DIVERGENCIES	
EU	**USA**
- stronger commitment to social and also environmental concerns, - history of governments interfering in social (and environmental) area - EU environmental measures seen as harmonizing rather than centralizing - other than "economic" approaches – biology, geology, geography, philosophy, religion, social science…; cost-benefit and risk assessment not scientifically sound as economists failed to develop generally acceptable standards for measuring environmental harms - polls suggest care for environment; "greens" keep appearing in political life even in governments - environmental challenge seen worth investing as a new stimulus for innovation	- many businesses would "philosophically" oppose to regulation and find it illegitimate - environmental policy viewed as centralizing policy – criticism by conservative circles - cost-benefit and risk analysis viewed as scientific approach - Congress (no need of cost-benefit analysis) vs. EPA (economic principles applied to regulatory measures)



The 2009 United Nations Climate Change Conference

- commonly known as **the Copenhagen Summit**, was held at the Bella Center in Copenhagen, Denmark, between **7 December and 18 December, 2009**.
- The conference included
    1. the **15th Conference of the Parties (COP 15)** to the **United Nations Framework Convention on Climate Change**, and
    2. the **5th Meeting of the Parties** (COP/MOP 5) **to the Kyoto Protocol (1997)**.
- According to the Bali Road Map, a framework for climate change mitigation beyond 2012 was to be agreed there.

High hopes for Copenhagen

- Kyoto to expire in 2012
- search for new international agreement about emission reduction targets, hope for a legally binding treaty to replace Kyoto Protocol
- given the deadline (2012) – slowly running out of time (some say that Copenhagen was the last chance to get this agreement in time, to be ready when Kyoto expires)
- President Barack Obama raising hopes that the US stance might change and the States might be more committed

- in the end the outcome of the conference is considered a failure…

United Nations Framework Convention on Climate Change (UNFCCC or FCCC)

From Wikipedia, the free encyclopedia

- an international environmental treaty produced at the United Nations Conference on Environment and Development (UNCED), informally known as **the Earth Summit**, held in **Rio de Janeiro** from 3 to 14 June **1992**.
- the objective of the treaty is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.
- the treaty itself sets **no mandatory limits** on greenhouse gas emissions for individual countries and contains **no enforcement mechanisms**. In that sense, the treaty is considered **legally non-binding**.
- Instead, the treaty provides for updates (called "**protocols**") **that would set mandatory emission limits**.
- The principal update is the **Kyoto Protocol,** which has become much better known than the UNFCCC itself.
- opened for signature on May 9, 1992, entered into force on March 21, **1994**.
- As of December 2009, UNFCCC had **192 parties**.
- one of its first tasks was to establish national greenhouse gas inventories of greenhouse gas (GHG) emissions and removals, which were used to create the 1990 benchmark levels for accession of Annex I countries to the Kyoto Protocol and for the commitment of those countries to GHG reductions. Updated inventories must be regularly submitted by Annex I countries.
- The parties to the convention have **met annually from 1995** in **Conferences of the Parties (COP)** to assess progress in dealing with climate change. In 1997, the Kyoto Protocol was concluded and established legally binding obligations for developed countries to reduce their greenhouse gas emissions.

Parties to UNFCCC are classified as:

- **Annex I** countries - industrialized countries and economies in transition
- **Annex II** countries - developed countries which pay for costs of developing countries
- **Developing countries**

Selected Conferences of the Parties

- since the UNFCCC entered into force, the parties have been meeting annually in **Conferences of the Parties (COP)** to assess progress in dealing with climate change,
- beginning in the mid-1990s, also to negotiate **the Kyoto Protocol to establish legally binding obligations for developed countries** to reduce their greenhouse gas emissions

- from 2005 the Conferences have met in conjunction with **Meetings of Parties of the Kyoto Protocol (MOP)** (parties to the Convention that are not parties to the Protocol can participate in Protocol-related meetings as observers).

1995 - COP 1, The Berlin Mandate

- concerns about the adequacy of countries' abilities to meet commitments under the Convention were expressed in a U.N. ministerial declaration known as the "**Berlin Mandate**", which **established a 2-year Analytical and Assessment Phase** (AAP), to negotiate a "comprehensive menu of actions" for countries to pick from and choose future options to address climate change which for them, individually, made the best economic and environmental sense.
- The Berlin Mandate **exempted non-Annex I countries from additional binding obligations**, in keeping with **the principle of "common but differentiated responsibilities"** established in the UNFCCC even though, collectively, the larger, newly industrializing countries were expected to be the world's largest emitters of greenhouse gas emissions 15 years hence

1996 - COP 2, Geneva, Switzerland

- Ministerial Declaration was adopted July 18, 1996, and reflected a U.S. position statement presented by Timothy Wirth, in which US:
  1. accepted the scientific findings on climate change proffered by the Intergovernmental Panel on Climate Change (IPCC) (1995);
  2. rejected uniform "harmonized policies" in favor of flexibility;
  3. called for "legally binding mid-term targets."

1997 - COP 3, The Kyoto Protocol on Climate Change

- took place in December 1997 in Kyoto, Japan and after intensive negotiations, it adopted **the Kyoto Protocol**.
- Most industrialized nations and some central European economies in transition **agreed to legally binding reductions** in greenhouse gas emissions of an average of **6 to 8% below 1990** levels **between the years 2008-2012**
- The US would be required to reduce its total emissions an average of 7% below 1990 levels, however neither the Clinton administration nor the Bush administration sent the protocol to Congress for ratification. The Bush administration explicitly rejected the protocol in 2001.

1998 - COP 4, Buenos Aires

- it had been expected that the remaining issues unresolved in Kyoto would be finalized
- However, the complexity and difficulty of finding agreement on these issues proved insurmountable, and instead the parties adopted a 2-year "Plan of Action" to advance efforts and to devise mechanisms for implementing the Kyoto Protocol, to be completed by 2000.

2000 - COP 6, The Hague, Netherlands

- The discussions evolved rapidly into a high-level negotiation over the major political issues. These included
    1. major controversy over the United States' proposal to allow credit for **"carbon sinks"** in forests and agricultural lands, and
    2. **satisfying a major proportion of the U.S. emissions reductions in this way**;
    3. **disagreements over consequences for non-compliance** by countries that did not meet their emission reduction targets;
    4. difficulties in resolving **how developing countries could obtain financial assistance** to deal with adverse effects of climate change and meet their obligations to plan for measuring and possibly reducing GHG emissions.
    5. In the final hours of COP 6, despite some compromises agreed between the US and some EU countries, notably the United Kingdom, the EU countries as a whole, led by Denmark and Germany, rejected the compromise positions, and the talks in The Hague collapsed.
    6. was suspended without agreement, with the expectation that negotiations would be resumed in Bonn, Germany, in the second half of July.

2001 - COP 6, Bonn, Germany

- COP 6 negotiations resumed July 17-27, 2001, in Bonn, Germany, **with little progress** have been made on resolving the differences that had produced an impasse in The Hague.
- However, this meeting took place after President George W. Bush had become the U.S. President, and had rejected the Kyoto Protocol in March; as a result the **US delegation to this meeting declined to participate in the negotiations** related to the Protocol, and chose to act as observers at that meeting.
- other parties, to the surprise of most observers given the low level of expectations that preceded the meeting, reached agreement. The agreements included:
    1. **Flexible Mechanisms** which allow industrialized countries to fund emissions reduction activities in developing countries as an alternative to domestic emission reductions (strongly favored by the US initially); including
        - emissions trading;
        - Joint Implementation (JI);
        - the Clean Development Mechanism (CDM).
        - with **no quantitative limit on the credit a country could claim** from use of these mechanisms, but domestic action must constitute a significant element of the efforts of each Annex B country to meet their targets.

2. **Carbon sinks**: Credit was agreed to for broad activities that absorb carbon from the atmosphere or store it, including forest and cropland management, and re-vegetation, with no over-all cap on the amount of credit that a country could claim for sinks activities (some country-specific caps).
3. **Compliance**: final action on compliance procedures and mechanisms that would address non-compliance with Protocol provisions was deferred to COP 7, but included broad outlines of consequences for failing to meet emissions targets that would include a requirement to "make up" shortfalls at 1.3 tons to 1, suspension of the right to sell credits for surplus emissions reductions; and a required compliance action plan for those not meeting their targets.
4. **Financing**: Three new funds were agreed upon to provide assistance for needs associated with climate change;
    - a fund for climate change that supports a series of climate measures;
    - a least-developed-country fund to support National Adaptation Programs of Action;
    - a Kyoto Protocol adaptation fund supported by a CDM levy and voluntary contributions.

2001 - COP 7, Marrakech, Morocco

- completed the work of the Buenos Aires Plan of Action and finalizing most of the operational details and setting the stage for nations to ratify the Protocol
- The completed package of decisions are known as the **Marrakech Accords**.
- **The United States delegation continued to act as observers, declining to participate in active negotiations**.
- Other parties continued to express their hope that the United States would re-engage in the process at some point, but indicated their intention to seek ratification of the requisite number of countries to bring the Protocol into force (55 countries representing 55% of developed country emissions of carbon dioxide in 1990).
- A target date for bringing the Protocol into force was put forward: the August-September 2002 World Summit on Sustainable Development (WSSD) to be held in Johannesburg, South Africa (here, again, the absence of the United States rendered the summit partially impotent)
- The main decisions at COP 7 included:
    - Operational rules for international emissions trading among parties to the Protocol and for the CDM and joint implementation;
    - A compliance regime that outlines consequences for failure to meet emissions targets but defers to the parties to the Protocol after it is in force to decide whether these consequences are legally binding;
    - Accounting procedures for the flexibility mechanisms;

2005 - COP 11/MOP 1, Montreal, Canada

- marked the entry into force of the Kyoto Protocol.

- The Montreal Action Plan is an agreement hammered out at the end of the conference to "extend the life of the Kyoto Protocol beyond its 2012 expiration date and negotiate deeper cuts in greenhouse-gas emissions."

2007 - COP 13/MOP 3, Bali, Indonesia

- Agreement on a timeline and structured negotiation on the post-2012 framework (the end of the first commitment period of the Kyoto Protocol) was achieved with the adoption of the Bali Action Plan (Decision 1/CP.13).

2008 - COP 14/MOP 4, Poznań, Poland

- Delegates agreed on principles of financing for a fund to help the poorest nations cope with the effects of climate change. And also they approved a mechanism to incorporate forest protection into efforts.

2009 - COP 15/MOP 5, Copenhagen, Denmark

- The overall goal for the COP 15/MOP 5 United Nations Climate Change Conference in Denmark was to establish an ambitious global climate agreement for the period from 2012 when the first commitment period under the Kyoto Protocol expires.
- However, on November 14, 2009, the New York Times announced that "President Obama and other world leaders have decided to put off the difficult task of reaching a climate change agreement... agreeing instead to make it the mission of the Copenhagen conference to reach a less specific “politically binding” agreement that would punt the most difficult issues into the future."
- Ministers and officials from 192 countries took part in the Copenhagen meeting
- The conference did not achieve a binding agreement for long-term action.
- A 13-paragraph '**political accord**' was negotiated **by approximately 25 parties including US and China**, but it was **only 'noted' by the COP** as it is considered an external document, not negotiated within the UNFCCC process.

Kyoto protocol

- The Protocol was initially adopted on Dec 11, 1997, in Kyoto, Japan and entered into force on Feb 16, 2005
- result of tough, 10-day negotiations
- As of July 2010, 191 states have signed and ratified the protocol
- the EU and its member states ratified the protocol in May 2002; as of Nov 2009, 187 countries and one regional economic organization (EC) have ratified the agreement, representing over 63.9% of 1990 Annnex-I-countries emissions.

- US is the most notable non-party, being responsible for 36.1% of 1990 Annex-I-countries emissions
- countires like China, India, Brazil are still in non-annex group, i.e. without any commitments
- Under the protocol, 39 industrialized countries and the EU (=Annex I countries) commit themselves to a reduction of four GHG (carbon dioxide, methane, nitrous oxide, sulphur hexafluoride) and two groups of gases (hydrofluorocarbons and perfluorocarbons)
- Annex I countries agreed to reduce their collective emissions by 5.2% from the 1990 level by 2012 (the limits do not include emissions by international aviation and shipping but are in addition to the industrial gases, chlorofluorcarbons which are dealt with under the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer.
- national limitations range from 8% (EU and others), 7% for the US, 6% for Japan, 0% for Russia and permitted increases of 10% for Australia and 10% for Iceland

→ **Principle of common but differentiated responsibilities**

- the largest share of historical and current global emissions of GHG originated in developed countries
- per capita emissions in developing countries are still relatively low
- the share of global emissions originating in developing countries will grow to meet social and development needs

Annex I countries

- which have ratified the Protocol have committed to reduce their emission levels of greenhouse gasses to targets that are mainly set below their 1990 levels (emission trading).
- there are 40 Annex I countries and the European Union is also a member
- these countries are classified as industrialized countries and countries in transition:

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

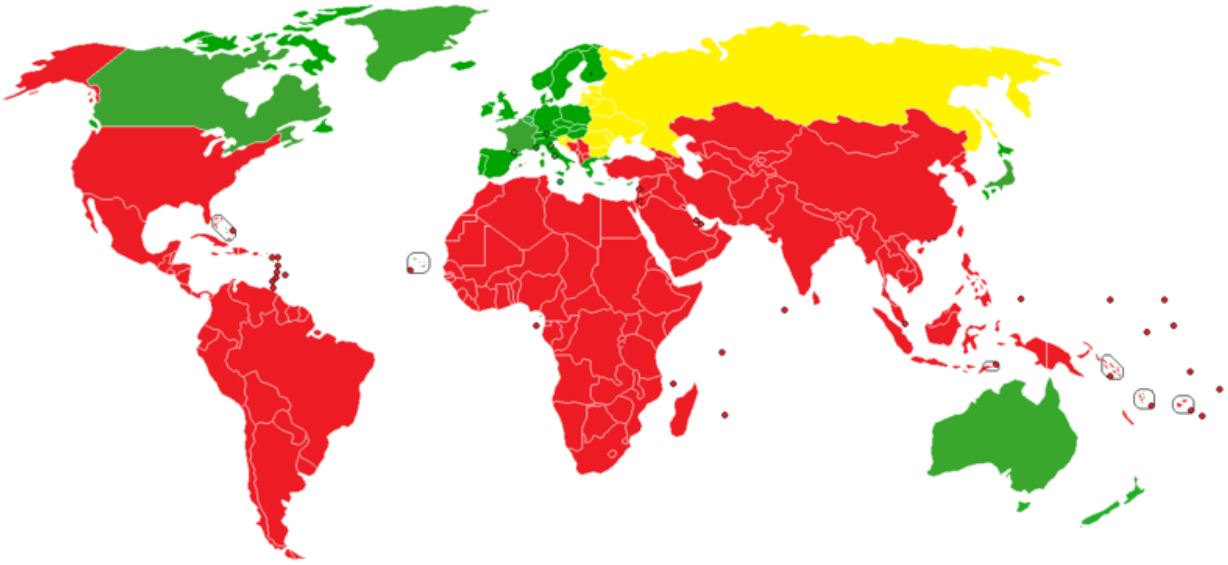
Annex II countries

- are a sub-group of the Annex I countries
- they comprise the OECD members, **excluding those that were economies in transition in 1992**.
- there are 23 Annex II countries and the European Union.
- Turkey was removed from the Annex II list in 2001 at its request to recognize its economy as a transition economy.
- these countries are classified as developed countries which pay for costs of developing countries:

Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America

Developing countries

- are not required to reduce emission levels unless developed countries supply enough funding and technology.
- may volunteer to become Annex I countries when they are sufficiently developed.
- Setting no immediate restrictions under UNFCCC serves three purposes:
  - it avoids restrictions on their development, because emissions are strongly linked to industrial capacity
  - they can sell emissions credits to nations whose operators have difficulty meeting their emissions targets
  - they get money and technologies for low-carbon investments from Annex II countries.



Overview map of States obligated by the Kyoto Protocol as of 2010.
Green countries = Those of the Annex I countries who are fully obligated (=Annex II countries).
Yellow countries = Annex I countries who only are obligated within some freedom as to their requirements in the protocol (=countries with Economics in Transition (EIT)).
Red countries = are <u>not obligated</u> by the Kyoto Protocol. Are either countries who have Non-annex 1 status in the protocol, and thereby are not obligated or countries that have not signed the protocol yet.

- the benchmark 1990 emission levels were accepted by COP were the values of global warming potential calculated for the IPCC Second Assessment Report. These values are used for converting the various GHG emissions into comparable CO2 equivalents when computing overall sources and sinks

- Each Annex I country is required to submit an annual report of inventories of all anthropogenic GHG emissions; they nominate a so-called "designated national authority" to create and manage this GHG inventory
- Recall **Flexible mechanisms**
    1. **International Emissions trading** (cap and trade, like EU ETS)
    2. **Clean Development Mechanism (CDM)** which allows a country with an emission-reduction or emission-limitation commitment under the Kyoto Protocol (Annex B country) to implement an emission-reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one ton of CO2, which can be counted towards meeting Kyoto targets (e.g. a rural electrification project using solar panels or the installation of more energy-efficient boilers).
    3. **Joint Implementation (JI)** which allows a country with an emission reduction or limitation commitment under the Kyoto Protocol (Annex B) to earn emission reduction units (ERUs) from an emission-reduction or emission removal project in another Annex B party, each equivalent to one ton of CO2, which can be counted towards meeting its Kyoto target.

    - 39 out of 40 Annex I countries have ratified the protocol and of these 34 have committed themselves to a reduction of GHG emissions = Annex B countries
    - The emission reductions achieved by the CDM or JIare measured against a hypothetical baseline that would have occurred in absence of a particular project; these reductions produced by CDM or JI can by used by Annex B countries in meeting their commitments
    - between 2001 (1st year) and 2012 the CDM is expected to produce some 1.5bn tons of CO2 equivalent in emission reductions. Most of these come through renewable energy, energy efficiency and fuel switching projects. By 2012, the largest potential for production of CER (=certified emission reduction; produced by CDM) are estimated in China and India (52% and 16% of total, respectively)
    - the formal crediting period for JI did no start until Jan'08 and by Nov'08 only 22 projects had been registered and approved; the total emission savings are expected to be about 10 times Loir than those from CDM; Russia accounts for about 2/3 of savings, the rest about equally divided between Ukraine and new WU member states.
- **Enforcement:** if Annex I country is found out of compliance with its limitations, then that country is required to make up the difference plus an additional 30%. In addition that country will be suspended from making transfers under the emission trading program
- **Top 10 emitters**

  (first number is % of total emissions, 2nd is per-capita emissions in tons of GHG)

    1. China[1] – 17%, 5.8
    2. United States[3] – 16%, 24.1
    3. European Union-27[3] – 11%, 10.6
    4. Indonesia[2] - 6%, 12.9
    5. India – 5%, 2.1
    6. Russia[3] – 5%, 14.9

7. Brazil – 4%, 10.0
8. Japan[3] – 3%, 10.6
9. Canada[3] – 2%, 23.2
10. Mexico – 2%, 6.4

- **Tough Negotiations:**
  - **role of developing countries…** it was recognized that
    - developed nations had contributed most to the then-current concentrations of GHGs in the atmosphere
    - developing country emissions per-capita were still relatively low
    - and that the share of global emissions from developing countries would grow to meet their development needs.

  → developing countries were not subject to emission reduction commitments in the first Kyoto commitment period. However, the large potential for growth in developing country emissions made negotiations on this issue tense… The general assumption was that developing countries would face quantitative commitments in later commitment periods

  - **Base year**
    - The choice of the 1990 main base year remains in Kyoto (no good data available prior to 1990).
    - the 1990 base year also favored several powerful interests including the UK, Germany and Russia (UK and Germany had high emissions in 1990)
    - In the UK following 1990, emissions had declined because of a switch from coal to gas ("dash for gas"), which has lower emissions than coal, due to privatization of coal mining and its switch to natural gas supported by North sea reserves.
    - Germany benefitted from the 1990 base year because of its reunification between West and East Germany. East Germany's emissions fell dramatically following the collapse of East German industry after the fall of the Berlin Wall.
  - **Emission cuts**
    - The G77 (http://www.g77.org/doc/) wanted strong uniform emission cuts across the developed world of 15%
    - Countries, such as the US, made suggestions to reduce their responsibility to reduce emissions. These suggestions included:
      - the inclusion of carbon sinks (e.g., by including forests, that absorb CO2 from the atmosphere).
      - and having net current emissions as the basis for responsibility, i.e., ignoring historical emissions.
    - The final days of negotiation of the Protocol saw a clash between the EU and the US and Japan. The EU aimed for flat-rate reductions in the range of 10-15% below 1990 levels, while the US and Japan supported

reductions of 0-5%. The final agreement is a result of last minute compromises.

- **Flexibility mechanisms**
    - Japan and EU wanted as much transparency as possible, concerns that US would use flexibility mechanisms to its own advantage, over the interest of weaker countries…

- **"Achievements"** (as of 2008, World Bank report)
    - For the **Annex I non-Economies-in-Transition (non-EIT) Kyoto Protocol (KP) Parties**, emissions in 2005 were 5% higher than 1990 levels while their Kyoto target for 2008-2012 is for a 6% reduction in emissions.
    - the **Annex I Economies in Transition (EIT) KP Parties** emissions in 2005 were 35% below 1990 levels while their Kyoto target is for a 2% reduction
    - In 2005, the Annex I non-KP Parties emissions were 18% above their 1990 levels. (Turkey and the United States)
    - In total, **the Annex I KP Parties** emissions for 2005 were 14% below their 1990 levels. Their Kyoto target is for a 4% reduction.
    - **Non Annex:** In several large developing countries and fast growing economies (China, India, Thailand, Indonesia, Egypt, and Iran) GHG emissions have increased rapidly. For example, emissions in China have risen strongly over the 1990-2005 period, often by more than 10% year. Emissions per-capita in non-Annex I countries are still, for the most part, much lower than in industrialized countries. Non-Annex I countries do not have quantitative emission reduction commitments, but they are committed to mitigation actions. China e.g. has had a national policy program to reduce emissions growth, which included the closure of old, less efficient coal-fired power plants.

Copenhagen Conference (Dec 2009)

The **2009 United Nations Climate Change Conference**, commonly known as the **Copenhagen Summit**, was held at the Bella Center in Copenhagen, Denmark, between 7 December and 18 December. The conference included the 15th Conference of the Parties (COP 15) to the United Nations Framework Convention on Climate Change and the 5th Meeting of the Parties (COP/MOP 5) to the Kyoto Protocol.

BBC NEWS – special report - Where countries stand on Copenhagen

Country	What's on the table	Climate facts (2007)	Public opinion
China			
 "Developed countries should support developing countries in tackling climate change." *President Hu Jintao, 22/9/09*	• Set a "binding goal" to cut CO2 per unit of GDP by 40-45% below 2005 levels by 2020 • Wants rich countries to reduce emissions to 40% below 1990 level by 2020 • Says they should pay 1% of their GDP per year to help other countries adapt • Wants West to provide low-carbon technology	• The world's biggest GHG producer (20.7% of global emissions, 8,106mt of CO2 equivalent) • Emissions per head: 30th in the world (6t of CO2 equivalent) • GDP (2008): $4.3tn • Amount of GHG emitted per $1m of GDP: 1,152t • Kyoto: Signed as a developing country so not obliged to cut emissions	How serious a threat is global warming to you and your family? Very/Somewhat serious 33% Not very/Not at all serious 62%
United States			
 "This is not fiction, this is science. Unchecked, climate change will pose unacceptable risks to our security, our economies, and our planet." *Barack Obama, US president, 18/12/09*	• Prepared to work "with other countries" to raise $100bn a year by 2020 • Will cut emissions to 17% below 2005 levels by 2020 pending congressional approval - this is close to 4% below 1990 levels • Against Kyoto-style treaty imposing international legal obligations • Insists China, India, South Africa and Brazil must commit to slow growth of emissions • Climate bill is currently bogged down in Senate	• The world's second-biggest GHG producer (15.5% of global emissions, 6,087mt of CO2 equivalent) • Emissions per head: Fifth in the world (20t of CO2 equivalent) • GDP (2008): $14.2tn • Amount of GHG emitted per $1m of GDP: 441t • Kyoto: Signed, but never ratified	How serious a threat is global warming to you and your family? Very/Somewhat serious 64% Not very/Not at all serious 36%
EU			
 "Things are fragile but I believe that common sense will prevail. We have to focus on the substance and we have to take political decisions." *Stavros Dimas, EU environment commissioner, 18/12/09* The EU is a grouping of 27 European states	• Will cut emissions by 20% from 1990 levels by 2020, or 30% if other big emitters take tough action • Wants rich nations to make 80-95% cut by 2050 • Wants poorer nations to slow emissions growth • Says they face costs of $150bn per year by 2020, of which EU will pay $7bn-22bn from public finances	• The world's third-biggest GHG producer (11.8% of global emissions, 4,641mt CO2 equivalent) • Emissions per head: 17th in the world (9t of CO2 equivalent) • GDP (2008): $18.3tn • Amount of GHG emitted per $1m of GDP: 315t • Kyoto: Signed - has to get average emissions for 2008-2012 8% below 1990 level	How serious a threat is global warming to you and your family? Very/Somewhat serious 62% Not very/Not at all serious 32% (Results represent the median of 23 out of the 27 EU states polled by Gallup)
Japan			
 "Japan will, with this assistance, support a broad range of developing countries which are taking measures of mitigation, as well as those which are vulnerable." *Japan delegation, 16/12/09*	• Will cut emissions to 25% below 1990 levels by 2020, if other countries show similar ambition • This amounts to a cut of 30% in 10 years, and is opposed by industry • "Hatoyama initiative" will increase financial and technical assistance to developing countries • Backs proposals in which each country would set its own commitments	• The world's seventh-biggest GHG producer (3.3% of global emissions, 1,293mt of CO2 equivalent) • Emissions per head: 15th in the world (10t of CO2 equivalent) • GDP (2008): $4.9tn • Amount of GHG emitted per $1m of GDP: 301t • Kyoto: Signed - has to get average emissions for 2008-2012 6% below 1990 level	How serious a threat is global warming to you and your family? Very/Somewhat serious 75% Not very/Not at all serious 25%

The nations and organisations below are also part of the G77 group of developing nations

India

"The most vulnerable country in the world to climate change is India." *Jairam Ramesh, India's environment minister, 3/12/09*

- Will cut CO2 emissions per unit of GDP by 20-25% from 2005 levels by 2020
- Rejects legally binding target, but wants rich countries legally bound
- Says rich countries are to blame for climate change and points to big gap in per capita emissions
- Wants 40% cut in rich country emissions by 2020
- Opposes goal of halving world emissions by 2050

- The world's sixth-biggest GHG producer (5% of global emissions, 1,963mt of CO2 equivalent)
- Emissions per head: 66th in the world (2t of CO2 equivalent)
- GDP (2008): $1.2tn
- Amount of GHG emitted per $1m of GDP: 655t
- Kyoto: Signed as a developing country, so not obliged to cut emissions

How serious a threat is global warming to you and your family?

Very/Somewhat serious 81%

Not very/Not at all serious 13%

African union

"My proposal scales back our expectation with respect to the level of funding in return for more reliable funding." *Meles Zenawi of Ethiopia, 16/12/09*

The African Union is a grouping of 52 African states

- Wants climate funds to reach $100bn a year by 2020 for rich countries to help poorer nations
- Wants at least 50% for vulnerable and poor regions such as African and small island states
- Like China, wants rich countries legally bound to cut emissions to 40% below 1990 level by 2020
- Describes 20 to 30% cuts as "unacceptable"

- The AU accounts for 8.1% of global emissions (3,164mt of CO2 equivalent)
- Emissions per head: 4t of CO2 equivalent
- GDP (2008): $34bn
- Amount of GHG emitted per $1m of GDP: 1,361t
- Kyoto: African nations signed as developing countries so are not obliged to cut emissions

How serious a threat is global warming to you and your family?

Sample state, Kenya:

Very/Somewhat serious 87%

Not very/Not at all serious 12%

Gulf states

"We are among the most economically vulnerable countries." *Mohammad S. Al Sabban, Saudi Arabia's lead negotiator 8/10/09*

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE

- Opec and Saudi Arabia seeking financial aid for oil-producers if new agreement requires cuts of fossil fuels
- Keen on a deal that would advance use of carbon capture and storage
- In 2007 Opec members pledged $750m to fund climate change research
- Qatar and Abu Dhabi investing heavily in clean energy technology

- Gulf states account for 2.3% of global emissions (894mt of CO2 equivalent)
- Emissions per head: 25t of CO2 equivalent
- GDP (2008): $468bn
- Amount of GHG emitted per $1m of GDP: 875t
- Kyoto: Gulf States signed as developing countries so are not obliged to cut emissions

How serious a threat is global warming to you and your family?

Sample state, Saudi Arabia:

Very/Somewhat serious 82%

Not very/Not at all serious 16%

Small islands

"The days of little money in the face of big problems are over." *Dessima Williams, head of the Alliance of Small Island States (Aosis), 9/10/09*

Aosis is a bloc of 42 island and coastal states mostly in the Pacific and Caribbean

- Regard rising sea level as threat to their existence
- Seek to limit temperature rise to 1.5 degrees above preindustrial levels
- Want concentration of CO2 in atmosphere lowered from 380 to 350 parts per million
- Want global emissions to peak by 2015 and fall 85% below 1990 level by 2050
- Want at least 1% of rich country GDP spent on "climate-inflicted damage"

- The small island states account for 0.6% of global GHG emissions (246mt of CO2 equivalent)
- Emissions per head: 4t of CO2 equivalent
- GDP (2008): $46bn
- Amount of GHG emitted per $1m of GDP: 551t
- Kyoto: Aosis members signed as developing countries so are not obliged to cut emissions

How serious a threat is global warming to you and your family?

Sample state, Dominican Republic:

Very/Somewhat serious 91%

Not very/Not at all serious 8%

SOURCES: Potsdam Institute for Climate Impact Research and the World Bank. Gallup poll data taken in 2008. Between 528 and 2,493 people interviewed in each country, either by phone or face-to-face (the question was put to people who said they knew something about climate change). The margin of error ranges from +/-3.5 to +/-5.3%.

- hopes that new targets for after-the-Kyoto-protocol would be agreed on

from *Benito Muller: Copenhagen and the Accord*

- the UNFCCC Press website,3 provide precisely a set of criteria of what was needed for Copenhagen to be considered a success:

  The Copenhagen agreed outcome need not resolve all details, but it must provide clarity on four key issues:

  [1] *The first is clarity on the mid-term emission reduction targets that industrialized countries will commit to*.
  [2] *Second, there must be clarity on the actions that developing countries could undertake to limit their greenhouse gas emissions*.
  [3] *Third, it must define stable and predictable financing to help the developing world reduce greenhouse gas emissions and adapt to the inevitable effects of climate*.
  [4] *And finally, it must identify institutions that will allow technology and finance to be deployed in a way that treats the developing countries as equal partners in the decision-making process*.

Copenhagen is to result both in a post-2012 outcome as well as important decisions and start-up finance to immediately kick-start action on climate change in 2010.

The main outcome of the summit, which was held in parallel to the Copenhagen Climate Change Conference and attended by over 110 heads of government and state, was the 'Copenhagen Accord'.

It was drafted in the final 24 hours of the conference by twenty-odd leaders convened by the Danish Prime Minister as 'Friends of the Chair'. The Accord contains 12 paragraphs in just over two pages.

Its key provisions are:

- *a recognition of the objective to reduce global emissions in order to hold the increase in global temperature below **2 degrees Celsius**, and a commitment to take action to meet this objective consistent with science and on the **basis of equity**;*
- *the commitment by **developed countries** − Annex I Parties to the Convention − to implement individually or jointly the quantified economy-wide emissions targets for 2020, to be submitted to the UNFCCC for inclusion in the first of the Appendices by 31 January 2010;*
- *the fact that **developing countries** − non-Annex I Parties to the Convention − will implement mitigation actions, including those to be submitted to the UNFCCC for inclusion in the second of the Appendices by 31 January 2010;*

- *collective commitments by developed countries to (i)* ***provide new and additional quick start resources****, approaching US$30 billion for the period 2010 −12, and (ii)* ***jointly mobilise US$100 billion dollars per annum by 2020*** *[to developing countires].*
- *the establishment of (i) a* ***High Level Panel*** *to study the contribution of the potential sources of revenue, including alternative sources of finance, towards meeting this goal, (ii) a* ***Copenhagen Green Climate Fund*** *as an operating entity of the financial mechanism of the Convention, and (iii) a* ***Technology Mechanism*** *to accelerate technology development and transfer.*

The drafting of these couple of pages was unorthodox, both ***on account of the procedure and who was drafting****. Leaders rarely engage in drafting text. In fact, they rarely meet even bilaterally – let alone at a UN summit – without the certainty that an agreement has already been produced for them to sign. To return home empty handed is simply unthinkable. This is why there must have been a degree of panic when they arrived towards the end of the Conference, with no sign of an agreed outcome ready for their signatures. The process of trying to avoid the unthinkable was frantic. Time was in very short supply − and unfortunately these constraints did leave their marks.*

The text of the accord, for one, ***is poorly drafted****. This is in part explicable by the time pressures and the fact that the key people involved were largely novices in drafting UN decisions. Time constraints also did not allow for establishing a consensus outside the Friends of the Chair group, a fact which ultimately sealed the fate of the Accord: instead of being adopted by the Conference, it was* ***merely 'taken note of'****.*

From Stern 2009 – Action and ambition for a global deal in Copenhagen (UNEP Policy Update)

Current developed country proposals
Table 1: Annex I - developed countries

Country	Description	Summary for 2020 emissions
US	Recent announcement that the US is prepared to table an emissions commitment of 17% below 2005 levels (3% below 1990[7]). Longer-term goals set out a pathway to an 83% below 2005 levels (80% reduction below 1990 levels) in 2050. Earlier draft legislation had additional provisions to buy 0.7Gt of forestry credits in 2020 and around $3bn for technology and adaptation. Currently emissions are 15% above 1990 levels.	3% below 1990 levels Plus support for reduced deforestation?
EU	Committed to reduce emissions to 20% below 1990 levels (currently 12.5% below) and 30% below 1990 levels as part of an ambitious global agreement. Indicated willingness to pay its share of significant finance flows from developed to developing countries including public finance that could support additional mitigation (including REDD).	20 to 30% below 1990 levels. Public finance for additional mitigation elsewhere
Japan	Japan has committed to reduce emissions by 25% below 1990 levels as part of an effective and comprehensive agreement at COP 15.	25% below 1990 levels
Russian Federation	Russian Federation committed to reduce emissions by up to 25% below 1990 levels. Russian emissions were 36% below 1990 levels in 2007.	25% below 1990 levels
Canada	Committed to reduce emissions by 20% relative to 2006 levels (equivalent to 3% below 1990)	3% below 1990 levels
Australia	Australia proposed to reduce its emissions to 5-25% below 2000 levels (15% to 33% below 1990 levels). Adoption of the most ambitious target of 25% depends on five conditions being met[8]. If not all the conditions are met but there is an international agreement with all major emitters the target would be -15%.	15% to 33% below 1990 levels

Based on authors understanding of existing positions

→ "Some of the intentions have not yet been legislated as national commitments or action plans and others are reliant on particular conditions being met (e.g. on international agreement)."

Table 2: Current developed country proposals in 2020 (Gt CO_2e)

	Low intentions	2020 Emissions (Gt)	High intentions	2020 Emissions (Gt)
US	-17% on 2005	5.9	-17% on 2005	5.9
EU	-20% on 1990	4.5	-30% on 1990	3.9
Japan	-25% on 1990	1.0	-25% on 1990	1.0
Other developed countries		5.1		5.0
Developed country total		**16.3**		**15.7**

→ "So current proposals would take developed countries to around 16Gt (and a significant deviation from business as usual) and around 16% below 1990 levels. It is not possible to

determine whether such commitments are enough to take the world onto a **44Gt** [*consistent with keeping temperature increase below 2°C*] pathway until it is combined with developing country actions; and it would remain open to debate whether it represents an equitable share of the mitigation effort."

Targets and actions announced by developing countries
Table 3: Non-Annex I - developing countries

Country	Description	2020 Summary
China	Announced policies such as the energy intensity target in the current 5 year plan and 2020 targets for renewable and nuclear are set to reduce emissions by around 10% below business as usual (BAU). Recent announcement to set carbon intensity of output to 40% to 45% below 2005 levels by 2020.	Carbon intensity target and existing domestic policies lead to a 10% reduction on 2020 BAU
India	Plans and policies outlined in National Plan and in the 11th 5 year plan. Many are not quantified but domestic policy initiatives with policy targets collectively amount to a deviation from BAU of at least 7%. Recent announcement to set carbon intensity of output to 20% to 25% below 2005 levels by 2020.	Carbon intensity target and existing domestic policies lead to at least 7% reduction on 2020 BAU
Brazil	Announced target reduce its emissions by 36% to 39% on 2020 BAU levels (roughly 1/3 below 1990 levels) conditional on external financing and including significant REDD. Level of finance requirements not yet clear so not certain what is own action and what requires support. Had previously announced a National Action Plan that would reduce emissions by about 25% below BAU.	36% to 39% below 2020 BAU levels with external financial support
Indonesia	Pledged to reduce emissions below BAU by 26% unilaterally and 41% below with international support (around 1/6 to 1/3 below 1990 levels). The 26% target is to be achieved primarily through reduced emissions from deforestation and land use change.	26% below 2020 BAU unilateral, 41% below conditional
South Korea	Unilateral pledge to reduce emissions by 30% below their defined BAU (around 4% below 2005 levels).	30% below 2020 BAU
South Africa	Existing domestic policies expected to reduce emissions by about 10% from BAU. Government intention to follow a peak and decline scenario which allows for the initial build-up of base-load capacity, would equate to around 20% below BAU levels.	10% below 2020 BAU
Mexico	National plan (PECC) sets out detailed policies up to 2012 that are being enacted which are likely to reduce emission by around 5% in 2020 relative to BAU. Overall strategy to reduce emissions by 50% by 2050 implies emission being around 20% below BAU in 2020.	5% below 2020 BAU but longer term goals imply greater ambition

Some of the sore points in discussions (not necessarily limited to Copenhagen):

mainly based on Muller 2010

A. Benchmarking

In the context of the UNFCCC, benchmarking is the setting of emission reduction commitments measured against a particular base year. The only quantified target set in the original FCCC was for developed countries to reduce their greenhouse gas emissions to 1990 levels by the year 2000. There are issues with benchmarking that can make it potentially inequitable. For example, take two countries that have identical emission reduction commitments as measured against the 1990 base year. This might be interpreted as being equitable, but this is not necessarily the case. One country might have previously made efforts to improve energy efficiency in the years preceding the benchmark year, while the other country had not. In economic terms, the marginal cost curve for emissions reductions rises steeply beyond a certain point. Thus, to meet its emission reduction commitment, the country with initially high energy efficiency might face high costs. But for the country that had previously encouraged overconsumption of energy, e.g., through subsidies, the costs of meeting its commitment would potentially be lower.

See e.g. EU vs. US benchmarking…. so it seems that EU has done a better job before 2005….

B. Limit on temperature increase

→ the Copenhagen Accord recognizes an objective to hold the increase in global temperature below 2°C

→ for some small islands that might still prove fatal (want below 1.5°C)

C. Provision of resources to developing countries "to help them adapt"

…and specific for Copenhagen Accord:

D. Procedural objections

- why the accord was cooked up by representatives of 25 nations and not multilaterally, within the UNFCCC negotiations? … well, to speed up the process and cook up at least something, but of course the other 100+ countries did not like it (and not only for not taking their requirements into account, many of the countries were indeed ok with the general contents)

E. International negotiations should have made much better progress long before the Copenhagen Summit

- why the US brought up the proposal about the financial support to developing countries the day before the end of the conference?

Selection from the press

Obama vows greenhouse gas emissions cuts

President Barack Obama is to pledge to cut greenhouse gas emissions in the US in several stages, beginning with a 17% cut by 2020, the White House has said.

The offer will be made at December's UN climate talks in Copenhagen, which Mr Obama will attend.

But he does not plan to be there for the crucial last days, when delegates including other world leaders are hoping to pull together a deal.

The talks aim to draw up a new treaty to supplant the 1997 Kyoto Protocol.

UN climate chief Yvo de Boer said his attendance could be vital for a deal.

"It's critical that President Obama attends the climate change summit in Copenhagen," he told journalists.

The cuts Mr Obama has proposed are similar to those included in a bill passed by the US House of Representatives in June.

But with legislation currently stuck in the Senate, correspondents say the president will be unable to commit to any of the figures he is proposing at the summit.

So far more than 60 world leaders have said they will attend.

Observers say the presence of such figures as Mr Obama will raise hopes for action on climate change, although the talks are not expected to result in a new treaty.

'Momentum for talks'

Officials said the US would pledge a 17% cut in emissions from 2005 levels by 2020, 30% by 2025, 42% by 2030 and 83% by 2050.

Mr Obama will outline a "pathway" towards the US goals at the summit, a White House statement said.

It described the cuts as "a significant contribution to a problem that the US has neglected for too long".

But most other countries' targets are given in comparison with 1990 figures.

BBC environment correspondent Richard Black says that on that basis the US figure amounts to just a few percentage points, as its emissions have risen by about 15% since 1990.

This is much less than the EU's pledge of a 20% cut over the same period, or a 30% cut if there is a global deal; and much less than the 25-40% figure that developing countries are demanding.

The US president will be in the Danish capital on 9 December, a day before receiving his Nobel Peace Prize in Oslo.

But he does not plan to return for the key last stages of the 7-18 December summit.

Major priority

Responding to the announcement, European Commission president Jose Manuel Barroso said: "I welcome that President Obama has committed to come to Copenhagen.

"I have made clear that we need as many world leaders present as possible. I hope that others will follow suit."

Danish Prime Minister Lars Loekke Rasmussen, the host of the talks, said he hoped Mr Obama could "contribute to an ambitious global deal in Copenhagen".

The announcement was also welcome by environmental group Friends of the Earth.

"Obama's pledge to go to Copenhagen is a welcome and significant development - but he must adopt a 'Yes we can' attitude in the UN climate talks if he is to earn his Nobel prize," spokesman Tom Picken said.

"The US is the world's biggest per capita polluter. It has a moral responsibility to take the lead in securing a strong and fair agreement."

The decision follows intense speculation about whether the US president would go at all.

Delegations from 192 countries will be attending the summit.

Leaders saying they will attend include UK Prime Minister Gordon Brown, French President Nicolas Sarkozy and Brazilian President Luis Inacio Lula da Silva.

Hu Jintao, president of the world's largest polluter, China, is yet to commit to attending.

The US is the second largest polluter after China.

Mr Obama has made climate change a major priority for his administration, after previous incumbents had failed to ratify the Kyoto treaty.

A bill to cap US emissions and establish a national carbon trading scheme is currently stuck in the Senate and is not expected to pass before the end of the year.

But Senator John Kerry, co-sponsor of the Senate bill, said Mr Obama's move could have an impact on domestic politics.

"This could be one hell of a global game changer with big reverberations here at home," he said.

Correspondents say most nations have given up hope of a legally binding treaty because of uncertainty about the US position.

The essentials in Copenhagen

Rather than getting every small detail of a new global climate treaty done in Copenhagen, UN climate chief Yvo de Boer hopes the conference will reach agreements on four political essentials.

*Michael von Bülow **16/03/2009** 10:30*

The UN climate conference in Copenhagen in December this year may not yield a new global climate treaty with every minor detail in place. But hope fully it will close with agreements on four political essentials, thereby creating a clarity the world – not least the financially struck business world – needs.

The wish for clarity is expressed by Yvo de Boer, executive secretary of the United Nations Framework Convention on Climate Change (UNFCCC), in an interview with Environment & Energy Publishing (E&E). According to Yvo de Boer, the four essentials calling for an international agreement in Copenhagen are:

1. *How much are the industrialized countries willing to reduce their emissions of greenhouse gases?*
2. *How much are major developing countries such as China and India willing to do to limit the growth of their emissions?*

3. *How is the help needed by developing countries to engage in reducing their emissions and adapting to the impacts of climate change going to be financed?*
4. *How is that money going to be managed?*

"If Copenhagen can deliver on those four points I'd be happy," says Yvo de Boer.

He sees a need to get something signed and agreed in Copenhagen, but he thinks it will be very difficult to get every final, small detail of a whole new treaty done. The new climate treaty will be replacing the Kyoto Protocol which was adopted in Kyoto, Japan, in December 1997 and entered into force on 16 February 2005.

The Kyoto Protocol which sets binding targets for the reduction of greenhouse gas emissions has been signed and ratified by 184 parties of the UN Climate Convention. One notable exception is the United States, and Yvo de Boer is "really happy" to see the US back in the international climate change process and that the US is also engaging domestically in the process.

"My big lesson from the Kyoto era is that it's really important that the government delegation that represents the United States is in close touch with the Senate, with the elected officials on what's acceptable and what's not," says de Boer, and he adds:

"I think that a major shortcoming of Kyoto was that the official delegation came back with a treaty they knew was never going to make it through the Senate. And this time I have the feeling that the communication is much stronger, that the Senate Foreign Relations Committee, through John Kerry, is really expressing strongly what they feel needs to be done in Copenhagen."

Yvo de Boer thinks the Kyoto Protocol was rejected by the US for mainly two reasons. Firstly, because it did not involve action on the part of major developing countries. Secondly, because it was felt by the Bush administration that Kyoto would be harmful to the US economy.

Copenhagen will be a whole different scenario, and de Boer feels confident that President Barack Obama can successfully engage China and India and convince them to sign the next treaty.

"I think that Secretary of State Clinton's visit to Beijing was a really important and encouraging step to get us moving on that road," says Yvo de Boer.

Asked about the global recession, de Boer thinks it will certainly have an impact on the negotiations in Copenhagen.

"You see already that investments in renewable energy projects are going down, partly because of the oil price going down and partly because of the economic activity going down," he says.

But even though greenhouse gas emissions are expected to slow down as a result of shrinking industrial activities, de Boer does not believe it will lessen the pressure on countries to act and sign a new treaty.

"I get the impression talking to business people that they still want clarity from Copenhagen. If you're making investments now, for example in the energy sector, in power plants that are going to be around for the next 30 to 50 years, you can't really afford to keep waiting and waiting and waiting for governments to say where they're going to go on this issue."

UN: Historic climate talks must deliver

The Copenhagen climate negotiations beginning Monday must yield an ambitious, sweeping agreement to capitalize on pledges by countries to fight global warming, UN climate chief Yvo de Boer said on Sunday.

Michael von Bülow 06/12/2009 22:15

A day before two weeks of climate talks in the Danish capital formally begin, the UN climate chief on Sunday said time was up to agree on the framework of a tougher climate deal after troubled negotiations have deepened a rift between rich and poor nations.

"I believe that negotiators now have the clearest signal ever from world leaders to draft a solid set of proposals to implement rapid action," Yvo de Boer told reporters, according to Reuters.

"Never in the 17 years of climate change negotiations have so many different nations made so many firm pledges together. Almost every day countries announce new targets or plans of action to cut emissions," he said.

In recent weeks, China, India, Indonesia and other countries have announced commitments to reduce emissions, raising hopes of success in Copenhagen.

South Africa on Sunday became the latest country to announce an emissions target. It said over the next 10 years it would reduce emissions by 34 percent from "business as usual," the level they would reach under ordinary circumstances, AP reports. By 2025 that figure would peak at 42 percent, effectively leveling off and thereafter begin to decline.

Japan said on Sunday it would stick with its target to cut emissions by 25 percent from 1990 levels by 2020, although the pledge depends on all major emitters, including China and the United States, being ambitious.

The closing stages of the UN conference will be attended by 105 world leaders who will try to seal a deal after years of bitter debates over how to divide up the burden of emissions curbs and who should pay. (Photo: Scanpix/Reuters)

192 nations at UN climate conference in Copenhagen

The largest and most important UN climate change conference in history opened Monday, with diplomats from 192 nations warned that this could be the best, last chance for a deal to protect the world from calamitous global warming.

AP/Nanet Poulsen 07/12/2009 12:05

The conference, the climax of two years of contentious negotiations, convened in an upbeat mood after a series of promises by rich and emerging economies to curb their greenhouse gases, but with major issues yet to be resolved.

Conference president Connie Hedegaard said the key to an agreement is finding a way to raise and channel public and private financing to poor countries for years to come to help them fight the effects of climate change.

Hedegaard — Denmark's former climate minister — said if governments miss their chance at the Copenhagen summit, a better opportunity may never come.

"This is our chance. If we miss it, it could take years before we got a new and better one. If ever," she said in prepared remarks.

Denmark's prime minister said 110 heads of state and government will attend the final days of the two-week conference. President Barack Obama's decision to attend the end of the conference, not the middle, was taken as a signal that an agreement was getting closer.

At stake is a deal that aims to wean the world away from fossil fuels and other pollutants to greener sources of energy, and to transfer hundreds of billions of dollars from rich to poor countries every year over decades to help them adapt to climate change.

Scientists say without such an agreement, the Earth will face the consequences of ever-rising temperatures, leading to the extinction of plant and animal species, the flooding of coastal cities — about half of humanity lives with 100 miles (160 kilometers) of a coastline — more extreme weather events, drought and the spread of diseases.

Negotiations have dragged on for two years, only recently showing signs of breakthroughs with new commitments from The United States, China and India to control greenhouse gas emissions.

The first week of the conference will be focused on refining a complex text of a draft treaty. But major decisions will await the arrival next week of environment ministers and the heads of state in the final days of the conference, which is due to end Dec. 18.

Hope for deal at conference

"A deal is within our reach," the Danish Prime Minister said on Monday – the first day of the UN climate change conference.

Marianne Bom 07/12/2009 16:25

The UN climate change conference opened Monday in an atmosphere of hope for a deal in Copenhagen within the next two weeks.

"A deal is within our reach," the Danish Prime Minister Lars Løkke Rasmussen said in his opening speech, stressing that the talks will have to overcome deep distrust between rich and poor nations on how to share the burden of curbing emissions.

The presence of more than a hundred world leaders meant "an opportunity the world cannot afford to miss," Lars Løkke Rasmussen said.

At a press briefing, the President of the UN climate change conference, Connie Hedegaard, said that "the deadline is working," referring to the fact that both developed and developing countries had been presenting emission reduction targets ahead of the conference.

Asked if there is enough time to reach a deal in Copenhagen, Connie Hedegaard said that you never feel you have sufficient time for a task that has to be done, but "within the time we have, we must solve the task".

Besides commitments to cut emissions, a major aspect of the negotiations is financing of mitigation and adaptation to climate change in developing countries. At the press briefing UN's top climate negotiator Yvo de Boer said that the talks are about the amount of money needed from the developed countries. Yet another important issue is "how do we allocate the still limited resources," according to him.

On the 17th and 18th of December, 110 heads of states and governments will come to Copenhagen in an attempt to seal a political global climate deal. If a deal is agreed, the UN will aim at transforming it into a legally binding text to replace the Kyoto Protocol as its regulations of emissions expires in 2012.