



Post-2012 Climate Change

Negotiations Guidebook

TURKEY

CLIMATE CHANGE NEGOTIATIONS GUIDEBOOK

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RECOMMENDATIONS FOR NEGOTIATORS

1. Make sure that you know fundamental concepts of climate change.
2. Have at least general knowledge about scientific evidences regarding the climate change by reading IPCC's and other institution's reports.
3. Keep UNFCCC and KP documents with you all the time.
4. Learn about both formal and informal procedures of the negotiations.
5. Apart from your country's interests, try to understand the interests of other parties.
6. Make sure that clear roles and responsibilities are assigned to the members of the delegation.
7. Underline the relevant parts in negotiation text and other important documents and use separators to mark the parts that are important to you.
8. Put each different document that relates to different processes such as COP, SBI and AWG in different folders so that it would be easier to find the documents when you are looking for. Try to keep the COP decisions with you during the negotiations. Those can also be obtained from the UNFCCC Secretariat in a CD.
9. Try to follow up the negotiations in meetings that you were not able to attend by reading Earth Negotiations or other bulletins. Personal communication would also be very important in this respect.
10. If you have any question or an ambiguity in your mind, you can always consult to the NGOs you have good relations with.
11. Try to establish a coalition or a group or be part of a group in the long run and try to meet with spokesman of different groups.
12. Try to learn more about interests of other parties by using personal communication and understand the main driving force behind their positions.
13. While reading a document, try to understand the hidden meaning. You can always consult to a legal person.
14. Before the official sessions, hold delegation meetings to review session schedule, review outcomes of prior sessions and assign responsibilities.
15. Before official sessions start, consult key negotiation partners by holding group meetings.
16. Arrange meetings with groups (such as EU in Turkey's case) prior to your arrival to the meeting venue.
17. On the first day of the official sessions, hold a delegation meeting to review logistics, contacts, general approach and roles.
18. Regularly consult with key negotiation partners including contacts and secretariat in addition to like-minded or regional groups throughout the negotiations.
19. Throughout the negotiations, follow up your country's priorities and identify items for high level decision making.
20. Ensure appropriate information flow in delegation.
21. Keep contact with the capital throughout the negotiations and ensure proper consultation and information flow.
22. Prepare delegation reports and gather important negotiation documents and relevant material from negotiation partners.
23. Throughout the negotiations, assess if any kind of intervention is needed and consider input into draft meeting reports.
24. Participate constructively even in difficult situations.
25. Support may be needed at any time during the negotiations. Thus, opportunities should be considered to support countries with different interests in case you need their support in the future.
26. Personal communication and good relationships are very important so, treat other participants courteously and honestly.
27. When you have concerns during a session, request

square brackets around the text in question, however, use this tool when it is really necessary as it can consume negotiation time.

28. Listen carefully what is said and what is not said.
29. More information and deeper understanding is required most of the time to move forward; communication, informal groups and workshops may help you to have a deeper understanding about the negotiations.
30. Your interventions should have clear focus on objectives and be brief, so that they can gain more support. Do not use interventions lightly.
31. Be prepared for practical needs such as alternative transportation, meals and local currency.
32. Based on draft rules of procedures, consensus is required to make a decision; even one party's objection would be enough to block the process. However, use this tool as a last chance and do not abuse this right.
33. Try to find out the real rationale behind "interventions and statements" of other Parties to see whether they used them to gain more time or for some other reason.
34. Regularly consult with key negotiation partners.
35. Make consultations with NGO constituencies and accredited organizations from your country.
36. Consider the need for final legal review, formalities and communications if an agreement or outcome is to be adopted.

Sources: REC Türkiye, 2006; UNEP, 2007a; UNEP, 2007b

01 PRINCIPLED NEGOTIATION THEORY

*This section is adopted from the Climate Diplomat™
Post-2012 Climate Change Negotiation Simulation*

Principled negotiation which is an interest-based approach to negotiation advocates five basic principles:

(1) Separate the people from the problem; means keeping personal issues and problems different from the main negotiation issues. Emotions such as anger and distrust make it difficult to reach to an agreement. Separating the relationship issues from negotiations and dealing with each separately is the first principle of the principled negotiation theory.

(2) Focus on interests, not positions; most of the time parties take inflexible positions that do not consider other parties' interests. Parties' positions generally ignore the legitimate interests of others and are designed to protect individual party interests or counter their opponents' positions. Instead of focusing on positions, after identifying and discussing underlying issues, negotiating a solution that meets both parties' interests would make it much easier to reach an agreement. When discussing openly their interests most of the time parties find out that their interests are not mutually exclusive. As a summary, focusing on interests not positions is negotiating about the essential issues and concerns to a party as opposed to negotiating over a position which may as a result lead to the development of better options and outcomes.

(3) Invent options for mutual gain; as a result of focusing on interests instead of positions, parties may invent options for mutual gain so that there is not one winner but two. Jointly looking for new and creative solutions to problems would make it easier to reach an agreement.

(4) Insist on objective criteria; Insisting on objective criteria for decision making is the fourth principle of the negotiations. Exemplifying this principle, when people are negotiating over price of a car, recent sales of comparable cars can be used as a reference which would be an objective criteria. Where objective criteria are available, their use in negotiations can reduce argument, simplify negotiations, and lead to a fairer outcome.

(5) **Do not accept anything less than your “Best Alternative to a Negotiated Agreement” (BATNA):** This requires parties to know their “bottom line” what is considered as their best option without the need for an agreement with the other party. Being aware of the alternatives and comparing it with BATNA prevents negotiators from accepting an agreement that is worse than not reaching any agreement, or rejecting an agreement that is a better outcome than that could be achieved on their own. Negotiators should not accept less than their “best alternative to a negotiated agreement”.

What if one party follows these principles and other party refuses to acknowledge the other’s interests and holds to their own inflexible position?

First step should be insisting on moving the discussions towards interests and options and reminding the other party that they lose nothing from discussion of the issues and interests. If this does not work, this would be the time for you to consider your BATNA and act accordingly. Sometimes if one party refuses to take the other’s interests into consideration in the negotiation, no agreement may be the best outcome.

02 MULTILATERAL ENVIRONMENTAL AGREEMENTS TREATY-MAKING PRINCIPLES AND PROCESSES

This section is adopted from the Multilateral Environmental Agreement: Negotiator’s Handbook (UNEP, 2007a).

2.1 Treaty-Making Process

The following provides a brief introduction to the Multilateral Environmental Agreements (MEAs) and treaty-making process.

2.1.1 Forms of MEAs

MEAs are legally binding agreements between several States related to the environment. While MEAs are designated as agreement, convention, covenant, protocol and treaty, most often used name is convention. While there

are distinctions, the terms treaty and convention are general terms for legally binding agreements between States.

MEAs can be global being open to all States to become Parties or regional in geographical scope. For example, while the United Nations Framework Convention on Climate Change (UNFCCC) applies throughout the world, the Convention on Long-range Transboundary Air Pollution (CLRTAP) is a regional convention.

A protocol is generally a subsequent and separate legally binding agreement that adds to or modifies an existing convention only for the States that become Parties to it. An amendment also adds to or modifies an existing agreement; however, an amendment is not a separate agreement. The adoption of some agreements is meant to provide a decisionmaking and organizational framework for the adoption of subsequent complementary agreements. The former are usually called framework conventions and contain obligations of a general institutional nature, often including information-gathering provisions (e.g. Article 4, UNFCCC). These obligations are usually meant as a first step toward the adoption of much more specific obligations (e.g. targets, timetables, mechanisms) in subsequent protocols on the same matter (e.g. Article 3, *Kyoto Protocol to UNFCCC*).

As a general rule, only the Parties to a framework convention can become Party to a subsequent protocol (though this depends on the text of the convention). In principle, there are no limits to the number of protocols that may be adopted. While there is an expectation that a protocol will be developed following the adoption of a framework convention, nothing precludes Parties to a non-framework convention from deciding to adopt a protocol if they so decide. Obligations in a MEA are considered to be legally binding for the Parties to the agreement.

MEAs are subject to rules of international law that govern treaties. The rules that apply to written treaties between States are reflected in the Vienna Convention on the Law of Treaties (VCLT), itself a treaty. In 1980, the VCLT entered into force and currently 94 States are Parties to it. Some key States (USA, for example) are not. Generally, rules in a treaty apply only to States that are Parties to it. However, in the case of the VCLT, most of its rules are considered to apply to all States.

2.1.2 Effect of an MEA

As a treaty, an MEA creates binding international obligations between Parties to it. All Parties to an MEA must perform their obligations in good faith (known as the rule of *pacta sunt servanda*) and no Party may invoke the provisions of its own domestic law to justify its failure to comply with an MEA obligation.

2.1.3 Parties

States and international organizations that have the capacity to enter into treaties may be Parties to an MEA. Regional economic integration organizations (REIOs) such as the European Union have the capacity to enter into treaties and, therefore, may be Party to an MEA.

2.1.4 Signature

After the adoption of an MEA at a Diplomatic Conference, the treaty is opened for signature and States are invited to sign it. The period of time for states to become a signatory is specified in the agreement.

The signing of an MEA is largely symbolic, and does not necessarily mean that a State becomes a Party to it unless the MEA provides that signature creates binding obligations. A State may, nonetheless, express consent to be bound through 'definitive signature'. When in doubt about a State's intentions, this should be clarified. However, though a signatory does not generally have to comply with specific obligations in the MEA, it must nevertheless refrain from acts that would defeat the object and purpose of the MEA. The provision with respect to signature is found among the last provisions of an MEA.

2.1.5 Ratification, accession, acceptance or approval

To become Party to an MEA, a State must ratify it ("accept" or "approve") or "accede" to it. Alternatively, as noted above, a State may make a 'definitive signature' which has the same affect as ratification or accession. After an MEA is adopted, it will usually be open to States for signature and then ratification. A State that has not taken part in the

negotiations or that has not signed it prior to the closing date for signature only has the option of acceding to it to become bound. Some agreements specify that they are only open to signature or ratification by some limited group of States.

Acceptance or approval of a treaty following signature has the same legal effect as ratification, and the same rules apply unless the treaty provides otherwise. Some obligations may be affected by provisions related to timing and/or deadlines. The key point is that ratification or accession is generally the mechanism through which a Party accepts binding legal obligations in international law. As noted above, some States have the legal capacity to express a willingness to be bound to an agreement by signature, but most require some form of additional executive or legislative process to enable them to ratify or accede.

Each State has its own internal procedure but in international law, for ratification or accession to take effect, the instrument of ratification or accession signed by one of three specified authorities, namely the Head of State, Head of Government or Minister for Foreign Affairs must be forwarded to the depositary of the treaty. Once this is done and a period of time specified in the treaty has elapsed, the MEA becomes binding on the ratifying State (if at the time of ratification by that State the MEA has already entered into force). Many countries have specific and often technical legal processes in place to manage ratification.

In Turkey, the decision to become party to a multilateral environmental agreement is deliberated by the Council of Ministers and if it is approved, it is forwarded to the agenda of the Turkish Grand National Assembly as a draft law. The draft law is debated and approved by the related primary and secondary committees and then brought to the agenda of the general assembly. After the draft law is debated and approved by the Parliamentary General Assembly, it is submitted to the Presidency by the Prime Ministry for ratification. Once the process is completed, it is published in the Official Gazette. After the draft law is approved and published in the Official Gazette, the "depository document" signed by the Minister of Foreign Affairs is submitted to the international depositary authority by the Ministry of Foreign Affairs.

2.1.6 Entry into force

An MEA only enters into force once the number of ratifications or accessions required has been attained. In the case of the *Kyoto Protocol*, the number of States required depended in part upon aggregate emissions of specified gases. Article 25.1 of the *Kyoto Protocol* set the date for the protocol's entry into force as "the ninetieth day after the date on which not less than 55 Parties to the Convention, incorporating Parties included in Annex I which accounted in total for at least 55 percent of the total carbon dioxide emissions for 1990 of the Parties included in Annex I, have deposited their instruments of ratification, acceptance, approval or accession".

2.1.7 Amendments

An amendment is an instrument to amend the core provisions of the treaty or its annexes. The UNFCCC and the *Kyoto Protocol* set rules and procedures for the adoption and entry into force of amendments. According to Article 15 of the UNFCCC, only Parties may propose amendments to the Convention. The secretariat communicates the text of the proposed amendment to the Parties, to signatories and the depositary at least six months before the meeting at which it is proposed for adoption. Amendments to the Convention must be adopted at an ordinary session (not an extraordinary session) of the COP.

The Convention should generally be amended by consensus. If it proves impossible to reach consensus, an amendment may be adopted by a three-fourths majority vote of the Parties present and voting (i.e. actually casting an affirmative or negative vote) as a "last resort". Once adopted, the amendment is communicated by the secretariat to the depositary who circulates it to all Parties.

An adopted amendment enters into force ninety days after three fourths of the Parties ratified it. It binds only those Parties which have accepted it. For Parties accepting the amendment at a later stage, it enters into force 90 days after the depositary has received their instrument of ratification. No amendment to the Convention has yet been adopted (UNFCCC, 2006).

Kyoto Protocol set out procedures for amendments in

Article 20, which are the same as for the Convention. Procedures for adoption and entry into force of annexes and amendments to these are laid down in Article 21. Amendments to Annex A and Annex B of the Protocol should follow the procedures defined in Article 20. There is a specific provision for amendments to Annex B; the Protocol stipulates that "any amendment to Annex B shall be adopted only with the written consent of the Party concerned" (Article 21.7).

2.1.8 Withdrawal (UNFCCC,2006)

Both the UNFCCC and the *Kyoto Protocol* allow Parties to withdraw any time after three years from the date on which the instrument entered into force for them. A withdrawal from the Convention is deemed to be a withdrawal from the Protocol. Parties may also withdraw from the amendments.

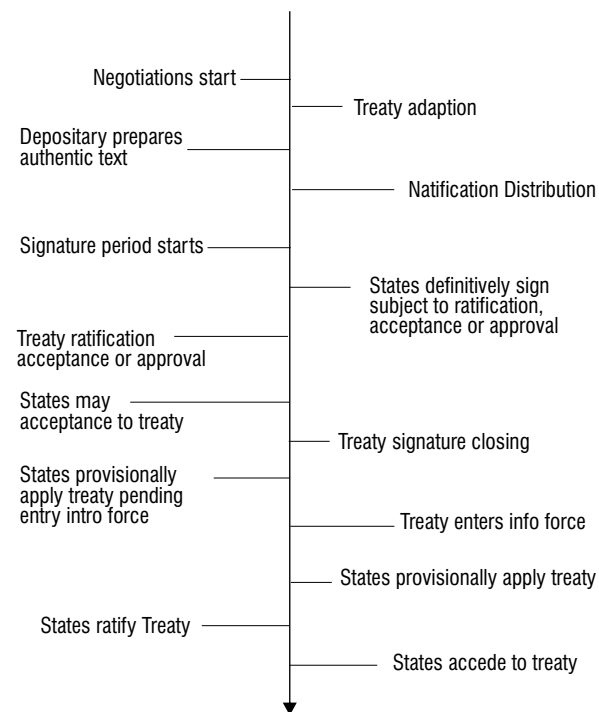


Figure 1. Treaty Process Time Line
Source: UNEP, 2007a

2.2 Conduct of the MEA meetings

The following briefly explains general procedural points in the conduct of business in MEA meetings.

2.2.1 Agenda of the meetings

Managing the agenda can be very important strategically, as it can shape, prevent or promote discussion of particular subjects. The provisional agenda for each meeting is prepared by the secretariat, with the agreement of the Chair of the COP, and is distributed to the Parties together with supporting documents, generally at least six weeks prior to the meeting depending upon the rules of procedure. A Party has many opportunities to add items to the agenda. It may do so prior to the circulation of the provisional agenda by addressing its request to the secretariat. If the provisional agenda has already been circulated, it may ask that an item be added to a supplementary provisional agenda. Finally, it may ask the COP to add items to the agenda at the time of its adoption during the meeting.

In the latter case, the rules of procedure generally provide that “only items that are considered by the COP to be urgent and important may be added.” It is relatively common practice for an agenda item to be ‘held in abeyance’ in UNFCCC and now other MEA *fora*. An item on which there is no consensus is set aside but kept on the agenda, or ‘held in abeyance’, so that the rest of the agenda can be adopted and work can start at a meeting. If at the end of the meeting the agenda item is still held in abeyance, a common procedure has been established where it would automatically be included in the provisional agenda of the next session (often with appropriate footnotes). This practice may rely on the operation of a rule of procedure that provides for an agenda item to be forwarded to the next session of that body if consideration of the item has not been completed. An example is rule 16 of the Rules of Procedure of the UNFCCC.

2.2.2 Interventions

To address a meeting, a delegate must have the permission of the Chair. A delegate raises his or her

country’s name card (called “the flag”) to get permission to speak and the rules provide that the Chair shall call upon speakers in the order in which they signify their desire to speak. Based on a proposal from a Party or the Chair, the COP may decide to limit the time allowed for each speaker as well as the number of times a representative may speak.

2.2.3 Points of order and motions

A point of order is a formal question by a delegate on whether a specific action by a delegate or presiding officer follows the rules of procedure. A point of order may be raised at any time and the Chair must rule immediately. A motion is a formal oral proposal on a matter of procedure. For example, a motion may be to decide whether a body has the competence to address an issue or adopt a proposal. Motions may be carried by consensus or vote. The following motions (in order of priority) have precedence over all other motions and proposals but not points of order:

- suspend or adjourn the meeting
- adjourn the debate on the question under discussion
- close the debate on the question under discussion.

2.2.4 Proposals and amendments

Proposals and amendments are made by Parties (even if a text is provided, at the request of Parties, by the Chair or the secretariat). The objective of a proposal is to have the Parties take a decision, and may include the adoption of a text, such as a work programme, action plan, guidelines or other products. Any proposals as well as amendments to them should normally be introduced in writing, in one of the six official UN languages, and circulated to delegations by the secretariat. As a general rule there are no discussions or votes unless the proposals or amendments have been distributed a day in advance. However, the Chair may decide otherwise with regard to amendments to proposals or procedural motions. A delegate may withdraw a proposal at any time before the vote, unless the proposal has been amended.

2.2.5 Decision-making, voting and explanation of vote (EOV)

Decision-making is generally accomplished by consensus among the Parties in MEA *fora*. Normally, after discussion if it appears that consensus is emerging, the Chair will ask if there is consensus. If no Party makes an objection, the Chair will declare that the issue is decided (often using the phrase, 'It is so decided').

Decision-making under the UNFCCC operates according to draft rules of procedure. Convention Article 7.2 stated that the COP shall "agree upon and adopt, by consensus, rules of procedure and financial rules for itself and for any subsidiary bodies". Article 7.3 mandated the COP to adopt at its first session such rules for itself and the Subsidiary Bodies established by the Convention, "which shall include decision-making procedures for matters not already covered by decision-making procedures stipulated in the Convention".

Draft rules of procedure were drawn up for adoption by COP 1. Lack of agreement on draft Rule 42 on voting, however, prevented COP 1 from reaching consensus. To enable the COP to proceed with its business, Parties agreed to apply the draft rules of procedure, as contained in COP document FCCC/CP/1996/2, with the exception of Rule 42. As a result of the continuing lack of consensus, this has been the practice ever since.

The outstanding issue is the voting majorities to be established in Rule 42 for decisions on matters of substance, and on matters relating to the financial mechanism regulated by Article 4.3 and Article 11 of the Convention. The United Nations practice, on which the draft rules of procedure are based, exhorts States to reach agreement on all matters of substance by consensus; voting is to be used as a last resort. Since no rule on voting is applied at COP sessions, decision-making on all matters of substance requires consensus. On all matters of procedure, a simple majority of those present and voting is the norm.

The draft rules of procedure are generally followed for the COP sessions, for areas such as voting, setting the date and place of the session, adopting the agenda and

conducting business (UNFCCC, 2006).

2.2.6 Official documents

Negotiating MEAs gives rise to diverse documents. Many of them are official meeting documents prepared either in advance of a meeting (pre-sessional documents) or shortly after it has ended (meeting report). The documents are normally posted on the official website of the MEA in question. Other documents will be drafted and distributed for the first time at the meeting itself. Official documents are generally negotiated and drawn up in one of the official languages of the UN and then translated into the other official languages. Treaty bodies often designate a "working language" which is often English.

In the climate change regime different kinds of documents are produced. The Table 1 presents a list of main document types.

Besides the documents listed in the table, web documents are produced as a new practice for the climate change process. These are the documents that are issued only on the official secretariat web site (hard copies may be obtained from the secretariat on request)(UNFCCC, 2002).

In addition to official documents, non-papers are often produced during negotiation sessions. Non-papers typically contain proposals or position papers from Parties and faced with the need for fast dissemination, they are simply photocopied on blank paper without an official symbol. The secretariat usually keeps a record of important non-papers.

Table 1. Document Types

Symbol	Full Name	Description	Language
FCCC/CP	UNFCCC preparatory document or regular document	Document prior to the Conference of Parties (COP)	-
FCCC/CMP	Kyoto Protocol preparatory document or regular document	Document prior to the Meeting of Parties (CMP)	-
INF.doc	Information document	Ancillary information	English
Misc.doc	Miscellaneous documents	Proposals or views submitted by Parties	Language of submission (usually Eng.)
Add.	Addendum	Extension of a previously published document	According to the original document
Corr.	Correction	Corrections to a previously published document	According to the original document
Rev.	Revision	Revised version of a previous document	According to the original document
CRP	Conference Room Paper	The working paper emerged during negotiations	English
L.docs	Limited document	Draft decisions or conclusions presented to the COP or SBs for adoption	All six UN languages
Non-papers	Informal document	Informal texts prepared to facilitate negotiations, circulated by the secretariat or Parties with neither a symbol nor a secretariat logo	Usually English
IDR	In-Depth Review	In-depth review report of National Communication	English
TP	Technical Papers	Detailed background papers on technical issues	English
NC	National Communications	National reports on implementation of the Convention submitted to the COP	-
X/CPY		UNFCCC no Y Conference of Parties Decision no X	-
Z/CMPT		Kyoto Protocol No. T, Meeting of Parties Decision no. Z	-

Source: UNEP, 2007a; Yamin and Depledge, 2004; REC Türkiye, 2006; UNFCCC, 2002

03 CLIMATE CHANGE SCIENCE

3.1 The Intergovernmental Panel of Climate Change (IPCC)

The Intergovernmental Panel of Climate Change (IPCC) is the leading body for the assessment of climate change. The panel is established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide an authoritative source of up-to-date interdisciplinary knowledge on climate change and its potential environmental and socio-economic consequences, (UNFCCC,2006)

The IPCC assesses worldwide climate change science in three working groups: 1) the physical science, 2) climate change impacts, adaptation and vulnerability and 3) mitigation of climate change. To date the Panel produced four comprehensive assessment reports, which are recognized as the most credible sources of information on climate change. The IPCC also produces technical papers and special reports on specific issues, a number of them are prepared at the specific request of the Convention bodies. The Panel describes its conclusions as “policy-relevant” not “policy-prescriptive”. Although it is not an institution of the Convention, Convention bodies cooperate with the IPCC as defined by the UNFCCC and several COP decisions (UNFCCC, 2002; UNFCCC, 2006).

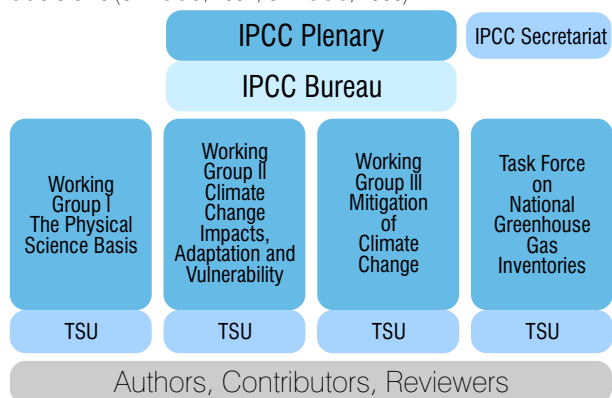


Figure 2. IPCC Organizational Structure

Source: <http://www.ipcc.ch>

Table 2. IPCC Reports

Report Title	Year
First Assessment Report (FAR)	1990
Second Assessment Report (SAR)	1995
Third Assessment Report (TAR)	2001
Fourth Assessment Report (AR4)	2007

Source: www.ipcc.ch

3.2 The Status of Climate Change Science Today

In 2007, the IPCC completed its fourth assessment and released its report. The IPCC Fourth Assessment Report (AR4) provided Parties with robust scientific evidence of the climate change and its impacts, which gave a strong input to the ongoing efforts to strengthen the regime in the light of the science. The section summarizes the key findings of the AR4 (Information in the summary is adopted in full from the UNFCCC Fact Sheet: Climate Change Science, <http://unfccc.int>).

Working Group I: The physical science

- Climate change is already happening, is unequivocal and this change can now be firmly attributed to human activity.
- Warming during the past 100 years was 0.74°C, with most of the warming occurring in the past 50 years. The warming for the next 20 years is projected to be 0.2°C per decade.
- The world faces an average temperature rise of around 3°C this century if greenhouse gas emissions continue to rise at their current pace and are allowed to double from their pre-industrial level.
- Continued greenhouse gas emissions at or above

current rates would cause further warming and induce many changes in the global climate system during the 21st century that would very likely be larger than those observed during the 20th century.

Working Group II: Climate change impacts, adaptation and vulnerability

Observed impacts

- Many natural systems, on all continents and in some oceans, are being affected by regional climate changes, particularly temperature increases:
 - enlargement and increased numbers of glacial lakes, with increased risk of outburst floods
 - increasing ground instability in mountain and other permafrost regions, and ice and rock avalanches in mountain regions
 - changes in some Arctic and Antarctic flora and fauna, including sea-ice biomes and predators high in the food chain
 - earlier timing of spring events, such as leaf-unfolding, bird migration and egg-laying
 - poleward and upward shifts in ranges in plant and animal species

Regions that will be especially affected

The Arctic, because of high rates of projected warming on natural systems

Africa:

- Increased water shortages (up to 250 million people in Africa at increased risk of water stress in 2020)
- Reductions in the area suitable for agriculture
- Sea-level rise and consequent threat to cities

Small Island Developing States:

- Sea-level rise is likely to exacerbate inundation, storm surge, erosion and other coastal hazards, thus threatening vital infrastructure that supports the

socio-economic well-being of island communities.

- There is strong evidence that under most climate change scenarios, water resources in small islands are likely to be seriously compromised.

Asian megadeltas, such as the Ganges-Brahmaputra and the Zhujiang:

- Large populations and high exposure to sea-level rise, storm surge and river flooding
- **Himalayan** glacier melt leading to flooding, rock avalanches, disruption of water sources

Fresh water resources and their management

- Impacts on water resources could be geographically extensive and in some locations dramatic. As the planet warms it is highly likely that, depending on location, there will be an increase in the frequency and severity of floods and droughts.
- By mid-century, annual average river runoff and water availability are projected to increase by 10-40% at high latitudes and in some wet tropical areas, and decrease by 10-30% over some dry regions at mid-latitudes and in the dry tropics, some of which are presently water stressed areas.

Food, fibre and forest products

- Crop yield is projected to increase in temperate regions for a local mean temperature rise of 1- 3 °C, and then decrease beyond that in some regions.
- In tropical areas, crop yield is projected to decrease, even with relatively modest rises of 1-2°C in local temperature, increasing the risk of hunger.
- Increases in the frequency of droughts and floods are projected to affect local crop production negatively, especially in subsistence sectors at low latitudes.

Ecosystems

- Increased risk of extinction among 20-30% of plant and animal species is likely if the global temperature

increase exceeds 1.5–2.5°C.

- In the second half of this century terrestrial ecosystems will see net carbon uptake weaken or reverse.

Coastal areas and low-lying areas

- Coasts are projected to be exposed to increasing risks, including coastal erosion, due to climate change and sea-level rise. The effect will be exacerbated by increasing human-induced pressures on coastal areas.
- Increases in sea surface temperatures of 1- 3 °C are projected to result in a major decline of most corals.
- Many millions more people are projected to experience severe flooding every year due to sea-level rise by the 2080s. Those densely-populated and low-lying areas where adaptive capacity is relatively low, and which already face other challenges such as tropical storms or local coastal subsidence, are especially at risk. The numbers affected will be largest in the mega-deltas of Asia and Africa, while small islands are especially vulnerable.

Health

Projected changes to the climate will affect the health of millions of people worldwide. The changes will be most felt by those least able to adapt, such as the poor, the very young and the elderly.

Industry, settlement and society

- Areas most likely to be affected are the poorer, often rapidly expanding communities near rivers and coasts, which use climate sensitive resources and are prone to extreme weather.
- Where extreme weather events become more intense and or more frequent, their economic and social costs are predicted to increase.

Responses

- Currently, adaptation is occurring to a very limited extent.
- More extensive adaptation is required.
- Future vulnerability depends not only on climate change, but also on the development pathway.
- Many impacts can be reduced or delayed by mitigation.
- Impacts of unmitigated climate change will vary regionally, but aggregated and discounted to the present, they are very likely to impose costs which would increase over time.

Working Group III: Mitigation of climate change

GHG emission trends

- Between 1970 and 2004, emissions of CO₂, CH₄, N₂O, HFCs, PFCs and Sf₆, the greenhouse gases covered by the Kyoto Protocol, have increased by 70% (24% since 1990). CO₂, being by far the largest source, has grown by about 80% (28% since 1990). This has occurred because increases in income per capita and population have outweighed decreases in energy intensity of production and consumption.
- Without additional policies, global GHG emissions are projected to increase 25-90% by 2030 relative to 2000. Fossil fuel dominance is expected to continue to 2030 and beyond, hence CO₂ emissions from energy use are projected to grow 40-110% over that period. Two thirds to three quarters of this increase is projected to come from developing countries, though their average per capita CO₂ emissions will remain substantially lower than those in developed country regions. Since 2000, carbon intensity of energy has been on the rise due to increased use of coal.

Mitigation in the short and medium term up to 2030

There is a significant economic potential for the mitigation of greenhouse gas emissions from all sectors over the coming decades, sufficient to offset growth of global emissions or to reduce emissions below current levels.

Mitigation in the long term (after 2030)

- Global emissions must peak and decline thereafter to meet any long-term GHG concentration stabilisation level. The lower the stabilisation level, the more quickly this peak and decline must occur.
- The most stringent scenarios could limit global mean temperature increases to 2 - 2.4°C above pre-industrial level. This would require emissions to peak within 15 years and decline to around 50% of current levels by 2050.
- Overview of CO₂ concentration level, corresponding temperature increases and year that concentrations would need to peak to maintain specific concentration levels.

Table 3. Projected Global Mean Temperature Increases based on CO₂ Concentration Levels

CO ₂ concentration at stabilisation (2005 = 379 ppm) ^a	Global average temperature increase above pre-industrial at equilibrium, using best estimate climate sensitivity	Peaking year for CO ₂ emissions
ppm	°C	year
350 - 400	2.0 - 2.4	2000 - 2015
400 - 440	2.4 - 2.8	2000 - 2020
440 - 485	2.8 - 3.2	2010 - 2030
485 - 570	3.2 - 4.0	2020 - 2060
570 - 660	4.0 - 4.9	2050 - 2080

Source: Adopted from IPCC 2007 Synthesis Report, Table 5.1

- Mitigation efforts over the next two to three decades will determine to a large extent the long-term global mean temperature increase and the corresponding climate change impacts that can be avoided.

Table 4. The Range of the Difference Between Emissions in 1990 and Emission Allowances in 2020/2050 for Various GHG Concentration Levels for Annex I and Non-Annex-I Countries as a Group

Scenario category	Region	2020	2050
A-450 ppm CO ₂ -eq	Annex I	-25% to -40%	-80% to -95%
	Non Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia	Substantial deviation from baseline in all regions
B-550 ppm CO ₂ -eq	Annex I	-10% to -30%	-40% to -90%
	Non Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle East
C-650 ppm CO ₂ -eq	Annex I	0% to -25%	-30% to -80%
	Non Annex I	Baseline	Deviation from baseline in Latin America and Middle East, East Asia

Source: IPCC, 2007, WG III, Box 13.7

04 INTERNATIONAL CLIMATE CHANGE REGIME: The UNFCCC and the KYOTO PROTOCOL

The current international climate change regime consists of two treaties: the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. The section introduces the regime components as set up by these agreements and evolved over time through decisions by the Parties.

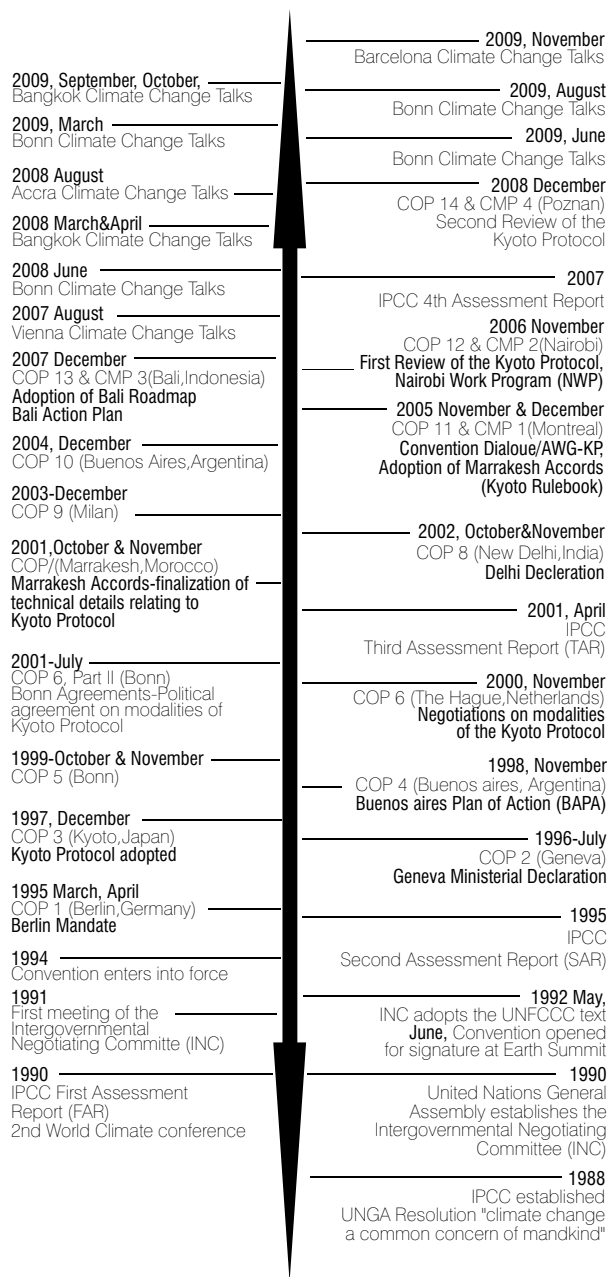
4.1 A Brief History of the Convention and the Protocol

In 1992, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted as the basis for a global response to the climate change problem. The Convention entered into force on 21 March 1994. With 192 Parties, the Convention enjoys near-universal membership. The ultimate objective of the Convention is to stabilise greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system. As a framework convention, the UNFCCC defines general rules, principles and commitments (<http://unfccc.int>).

Parties adopted the Kyoto Protocol to the Convention at COP 3 in 1997. The Protocol sets binding emissions limitation or reductions commitments for industrialized countries for the first commitment period (2008-2012). The Protocol also introduced flexibility mechanisms to facilitate compliance of the Parties with their obligations. After completion of technical and procedural details needed to ensure ratification by the states, the Protocol entered into force in 2005. The first Conference of the Parties serving as the Meeting of the Parties to the Protocol was held in Montreal in 2005. To date, 189 countries and the European Community (EC) have become Parties to the Protocol.

In addition to measures for mitigation of climate change, the UNFCCC and its Kyoto Protocol are also designed to assist countries in adapting to the inevitable effects of climate change. They facilitate the development and transfer of techniques and technologies that can help increase resilience to climate change impacts and to exchange best practices with regard to adaptation. (<http://unfccc.int>)

2009 December
COP 15-Copenhagen-Denmark



1979, First World Climate Conference (WCC)

Figure 3. The Milestones of Climate Change Regime

4.2 The United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource, whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases (<http://unfccc.int>).

4.2.1 Objective and principles

Objective: The Convention establishes its objective in Article 2. According to the Article, the ultimate objective of the Convention is "to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic [originating in human activity] interference with the climate system". This objective is qualified in that it "should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner" (UNFCCC, 2006).

The Principles: General principles of the Convention are found in the Preamble and Article 3. The principles of the Convention are stipulated in Article 3, which states that these principles inter alia shall guide the actions of Parties, and thus do not constitute an exhaustive list. The principles specified in Article 3 are as follows:

- The principle of equity (Article 3.1)
- The principle of common but differentiated responsibilities (Article 3.1)
- The precautionary principle (Article 3.3)
- The right, and obligation, to promote sustainable development (Article 3.4)

In addition, the Convention includes references to other principles, such as common concern of humankind (Preamble), free trade (3.5) and cost effectiveness.

4.2.2 Commitments under the Convention

The convention defines two interrelated policy responses to climate change and associated commitments for parties. The first is mitigation of climate change and the second is adaptation to impacts of climate change. In addition to commitments applying to all Parties, the Convention set different types of commitments for developed and developing country Parties, which can be classified as follows:

- 1) Commitments applicable to all Parties (Article 4.1)
- 2) Annex I Party commitments (Article 4.2)
- 3) Annex II Party commitments (Article 4.3, 4.4, 4.5)

Under the Convention, all Parties are required to gather and share information on greenhouse gas emissions, national policies and best practices. The Convention requires Parties to develop national emissions inventories, formulate and implement national programs containing measures to mitigate climate change and facilitate adaptation and communicate implementation related information to the COP (<http://unfccc.int>).

The Convention set more stringent mitigation commitments for developed country Parties listed in Annex I. They are required to adopt policies and measures to limit their emissions and enhance sinks. It also established a not legally binding target for these Parties to return their GHG emissions to 1990 levels by 2000.

Developed country Parties included in Annex II are required to provide financial resources to developing countries to help them comply with their commitments and in adaptation, and to take steps for transfer of technologies.

4.2.3 Parties to the convention

The Principles of the Convention are reflected in the provisions on commitments by differentiating between Parties regarding their obligations. The Convention divides Parties into two principal groups: those that are listed in Annex I, known as Annex I Parties and those not included in Annex I, known as non-Annex I Parties. The Kyoto Protocol

endorsed basically the similar division among Parties.

ANNEX I: The Convention lists 41 countries as Annex I Parties. Annex I parties include the industrialized countries that were members of the OECD in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States. These countries have contributed the most to causing climate change and have greater financial and institutional capacity to address climate change. Accordingly, these countries are assigned emissions limitation and reduction targets under the Kyoto Protocol. The Convention made further differentiation within Annex I.

EITs: The group of countries with economies in transition (EITs) - the former Soviet Union and Eastern European countries - are listed in Annex I to the UNFCCC. They are granted a certain degree of flexibility in implementing their commitments, on account of economic conditions in those countries as they were undergoing the process of transition to a market economy (UNFCCC, 2006). Under the Kyoto Protocol, the EITs are given flexibility in selecting their baseline years for determining emissions reduction or limitation obligations and other accommodations.

ANNEX II: The Countries who were OECD members in 1992 are listed in Annex II and have special obligation to provide financial assistance and facilitate the transfer of technologies to developing countries to help them implement their commitments under the Convention. Currently 24 Parties are included in Annex II.

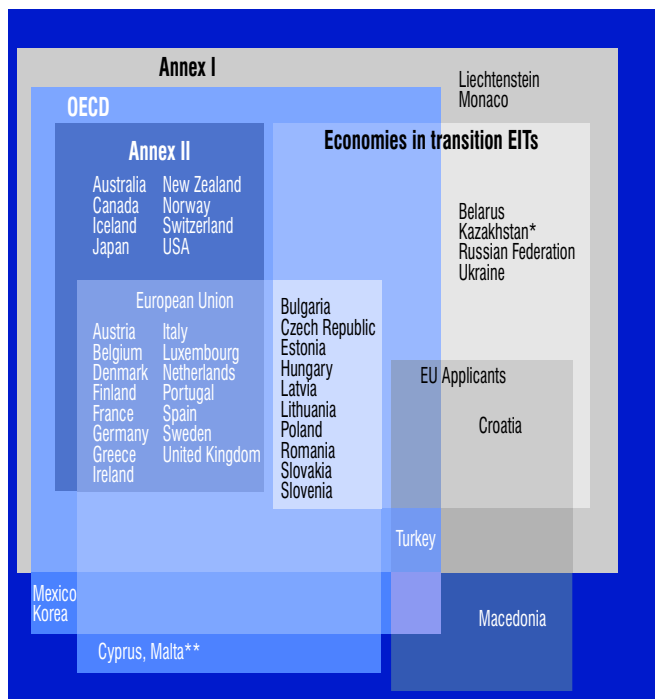


Figure 4. Country Groupings under the UNFCCC

Source: Adapted from Höhne et al., 2005

* Added to Annex I at COP7

** Malta submitted a proposal to amend Annex I to the Convention by adding the name of Malta to the list of countries contained in that Annex I.

NON-ANNEX I Parties: Parties that are not listed in Annex I. These parties do not have specific emission targets but they are nevertheless required under the Convention to take actions to prevent further emissions. They are required to report on their actions to address climate change and to adapt to its effects but their reporting commitments are less strict. Parties in this group are mostly developing countries although they display a great diversity in terms of level of development.

LDCs (Least Developed Countries): Among Non-Annex I Parties, the 49 Parties classified as least developed countries (LDCs) by the United Nations are given special consideration under the Convention because of their

limited capacity to respond to climate change and adapt to its adverse effects. Parties are urged to take full account of the special situation of LDCs when considering funding and technology transfer. In addition, reporting requirements for LDCs are less strict when compared to other non-Annex I Parties insofar as they may make their initial national communication at their discretion (UNFCCC, 2006). The UNFCCC provides special assistance to LDCs, such as by providing financial support for their reporting obligations under the Convention, and identifying them as priority countries for adaptation funding.

4.2.4 Institutional Structure of the UNFCCC

Information in this section is adopted from UNFCCC, 2006 and Yamin and Depledge, 2004.

Several institutions and bodies work within the framework of the Convention. These include those established by the Convention – the Conference of the Parties to the Convention (COP), the Subsidiary Bodies (SBs), the Bureau and the Secretariat and those established by the COP: committees, working groups and expert bodies (UNFCCC, 2006). The Figure 5 illustrates institutional structure of the Convention.

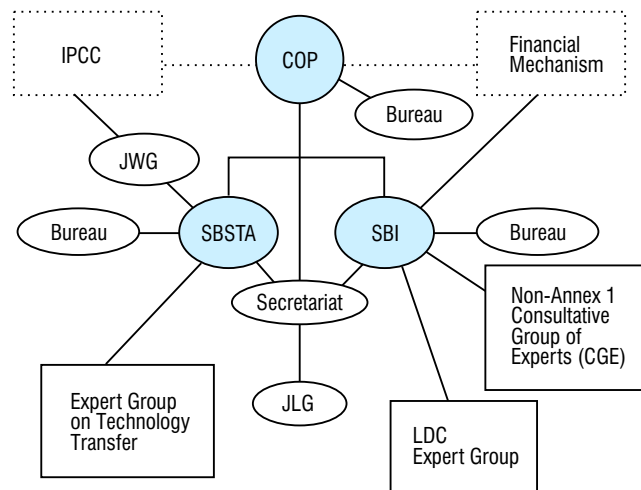


Figure 5. The Institutional Structure of the Convention

Source: Yamin, Depledge, 2004

----- Independent bodies that provide services to the climate change process

JLG: Joint Liaison Group (FCCC, CBD, UNCCD) (officers and secretariats)

JWG: Joint Working Group (officers and secretariats)

Bodies Established by the Convention

Conference of the Parties (COP)

The Conference of the Parties (COP) is the "supreme body" of the Convention, that is, its highest decision-making authority. It is an association of all the countries that are Parties to the Convention.

The COP reviews the implementation of the Convention and examines the commitments of Parties in light of the Convention's objective, new scientific findings and experience gained in implementing climate change policies. A key task for the COP is to review the national communications and emission inventories submitted by Parties. Based on this information, the COP assesses the effects of the measures taken by Parties and the progress made in achieving the ultimate objective of the Convention.

The COP meets every year, unless the Parties decide otherwise (<http://unfccc.int>).

COP outputs include reports of the sessions summarizing COP proceedings and actions taken, decisions, declarations and resolutions. COP can also adopt legally binding instruments such as amendments, annexes, amendments to annexes and protocols (Yamin, Depledge, 2004).

COP President and Bureau

President: The office of the COP President normally rotates among the five United Nations regional groups. The position of COP President is usually held by the environment minister of the presiding country. President's role is to facilitate the work of the COP and promote agreements among Parties. The COP President has also a broader role, mostly informal, in building consensus among Parties with diverse interests. S/he is also expected to exercise leadership by putting forward texts, proposals and holding consultations (Yamin, Depledge, 2004).

The Bureau: The five United Nations regional groups are represented in the Bureau which is elected by the COP from among Parties' representatives for one year. The task of the Bureau is to deal with procedural issues relating to the

organization of the work of the COP. Between sessions, the Bureau will work closely with the secretariat to provide administrative and operational direction with regard to the work that the COP or subsidiary bodies have asked the secretariat to accomplish. As the Bureau must also plan for the upcoming meetings, it will discuss agenda items and meeting structure with the secretariat. For instance, the Bureau will consider how many working groups/contact groups will likely be necessary, how long the high-level segment of the meeting should be, what dates and venues should be selected for future COPs and subsidiary groups, whether there are any pressing budget issues and so on. (Yamin, Depledge, 2004).

Subsidiary Bodies

The Convention established two permanent subsidiary bodies: the **Subsidiary Body for Scientific and Technological Advice (SBSTA)** and the **Subsidiary Body for Implementation (SBI)**. These bodies give advice to the COP and each has a specific mandate. They are both open to participation by any Party and governments often send representatives who are experts in the fields of the respective bodies. The main function of these bodies is to provide assistance and advice to the COP on their spheres of responsibility. Both operate under the guidance of the COP and must report regularly to it. The main products of the SBSTA and SBI are recommendations for draft decisions, which are then forwarded to the COP for consideration and adoption. In addition, the Subsidiary Bodies (SBs) can adopt conclusions, which are included in their meeting reports.

The SBSTA and SBI work together on cross-cutting issues that are related both their areas of expertise. These include capacity building, the vulnerability of developing countries to climate change and response measures, and the Kyoto Protocol mechanisms. The SBSTA and the SBI meet in parallel, at least twice a year (Yamin, Depledge, 2004).

Subsidiary Body for Scientific and Technological Advice (SBSTA): The SBSTA's task is to provide the COP with advice on scientific, technological and methodological matters.

Two key areas of work in this regard are promoting the development and transfer of environmentally-friendly technologies, and conducting technical work to improve the guidelines for preparing national communications and emission inventories. The SBSTA also carries out methodological work in specific areas, such as the LULUCF sector, Hydro-fluorocarbons (HFCs) and Perfluorocarbons (PFCs), and adaptation and vulnerability. In addition, the SBSTA plays an important role as the link between the scientific information provided by expert sources such as the IPCC on the one hand, and the policy-oriented needs of the COP on the other. It works closely with the IPCC and sometimes requests specific information or reports. (<http://unfccc.int>)

Subsidiary Body for Implementation (SBI): The SBI gives advice to the COP on all matters concerning the implementation of the Convention. A particularly important task in this respect is to examine the information in the national communications and emission inventories

submitted by Parties in order to assess the Convention's overall effectiveness. The SBI reviews the financial assistance given to non-Annex I Parties to help them implement their Convention commitments, and provides advice to the COP on guidance to the financial mechanism (operated by the GEF). The SBI also advises the COP on budgetary and administrative matters. (<http://unfccc.int>)

UNFCCC Secretariat

The UNFCCC Secretariat is an institution administered under United Nations rules and regulations. It organizes the meetings under the UNFCCC and coordinates activities with other international organizations like the IPCC. The UNFCCC Secretariat also helps the Parties in implementing their commitments and prepares official documents under the UNFCCC and the Kyoto Protocol and their subsidiary bodies, and conducts background studies on particular issues. The Secretariat is composed of three divisions: Executive Direction, Technical Programmes and Support Services.

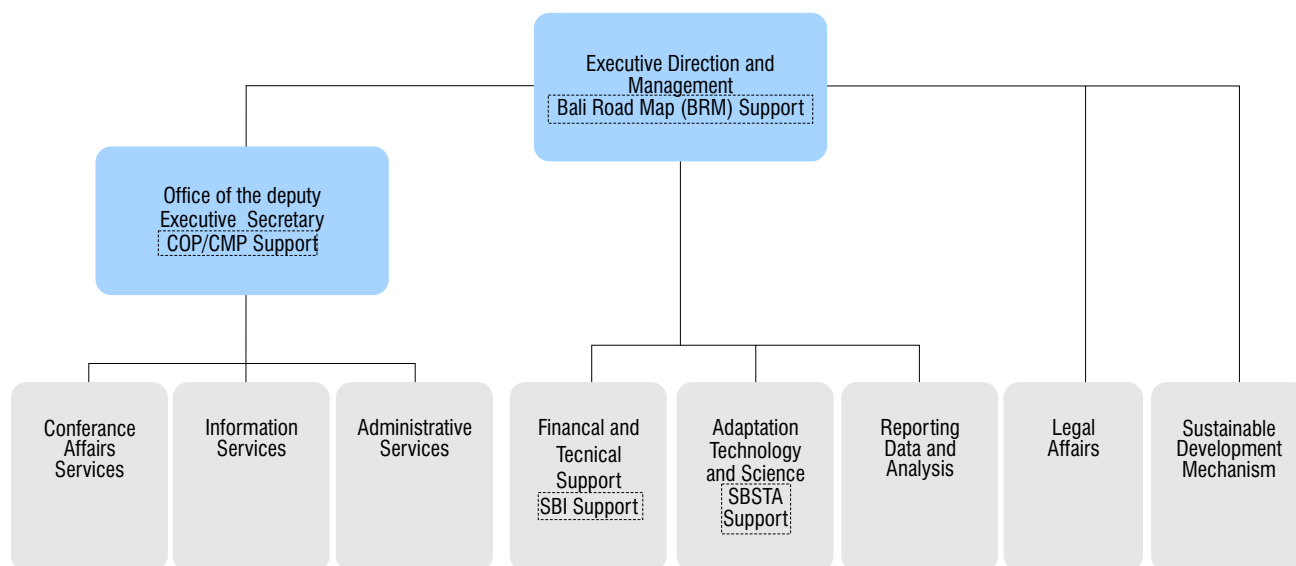


Figure 6. The Organizational Structure of the UNFCCC Secretariat
Source: <http://unfccc.int>

Bodies Established by the COP

Expert Bodies

In the framework of the Convention, several specialized bodies with a limited membership have been established to address specific areas relating to the implementation of the Convention (UNFCCC, 2006).

Consultative Group of Experts

The Consultative Group of Experts (CGE) on National Communications from Non-Annex I Parties was set up at COP 5 in 1999 to help improve the process of preparing national communications of Non-Annex I Parties under the Convention. It meets twice a year, in conjunction with sessions of the subsidiary bodies, and also holds workshops to gather regional expertise. It is composed of five experts from each of the developing country UN regions (Africa, Asia, and Latin America and the Caribbean), six experts from Annex I Parties, and three experts from organizations with relevant experience (<http://unfccc.int>).

Expert Group on Technology Transfer

The central task of the Expert Group on Technology Transfer (EGTT), established by the Marrakesh Accords, is to provide scientific and technical advice to advance the development and transfer of environmentally friendly technologies under the Convention. The Group comprises 20 experts, including three developing country members each from Africa, Asia and the Pacific, and Latin America and the Caribbean, one member from the small island developing states, seven from Annex I Parties and three from relevant international organizations. The EGTT meets twice a year, in conjunction with the subsidiary bodies, and reports to the SBSTA (<http://unfccc.int>).

Least Developed Countries Expert Group

The objective of the Least Developed Countries Expert Group (LEG), established as part of the Marrakesh Accords, is to provide advice to LDCs on the preparation and implementation of national adaptation programmes of

action. It is composed of 12 experts, including five from African LDC Parties, two from Asian LDC Parties, two from small island LDC Parties, and three from Annex II Parties. The Group meets twice a year (<http://unfccc.int>).

Temporary Subsidiary Bodies

The COP has also established some open-ended subsidiary bodies on an ad hoc basis with a specific mandate and time frame to conduct the assigned function. The first among these was the Ad hoc Group on the Berlin Mandate (AGBM). AGBM was established at COP1 in 1995 to conduct the negotiations under the Berlin Mandate which led to the adoption of the Kyoto Protocol. COP1 also established the Ad hoc Group on Article 13 (AG13) to conduct negotiations on the multilateral consultative process. The COP at its fourth session in 1998 established the Joint Working Group on Compliance (JWG) with a mandate to conduct negotiations on designing a compliance system under the Kyoto Protocol (Yamin, Depledge, 2004).

Most recent examples of temporary bodies are the AWG-LCA established by the COP and AW-KP established by CMP COP13 held in Bali in 2007 established the Ad Hoc Working Group on Long Term Cooperative Action (AWG-LCA). The AWG-LCA is given a definite time-frame to complete its work and present its outcome to the COP at its 15th session in 2009.

Other Bodies

Joint Working Group (JWG)

The Convention defines its relationship with the IPCC. According to Article 21.2, the secretariat "will cooperate closely with the Intergovernmental Panel on Climate Change to ensure that the Panel can respond to the need for objective scientific and technical advice". Cooperation with the IPCC has been further defined and strengthened by several COP decisions. Joint Working Group (JWG) of the SBSTA and the IPCC is established in 1995. The group meets regularly to ensure coordination and exchange information on the activities of the two bodies. Meetings usually take place during the session of the SBs (UNFCCC, 2006).

Joint Liaison Group (JLG)

JLG was formed to promote cooperation with other Rio Conventions. SBSTA endorsed the formation of the JLG in 2001 following a proposal by the Convention on Biological Diversity (CBD) Subsidiary Body for Scientific, Technical and Technological Advice (SBSTTA). It aims to develop coordination between the three Rio conventions, namely the UNFCCC, the CBD and the United Nations Convention to Combat Desertification (UNCCD) (UNFCCC, 2006).

4.2.5 Groups in the UNFCCC Process

The Parties to the climate change regime are organized in different groups and coalitions. Some of these groups reflect official UN listings while others consist of ad hoc political alliances.

UN Regional Groups

While the Convention refers to party groupings in relation to their commitments, the draft rules of procedure refers to the five regional groups that are defined in line with common United Nations practice. These groups are:

- Africa,
- Asia,
- Central and Eastern Europe,
- Latin America and the Caribbean states (GRULAC), and
- Western Europe and Others (WEOG; the "Others" include Australia, Canada, New Zealand, Turkey and the United States).

In addition, the draft rules of procedure also refer to the group of Small Island Developing States (SIDS) (UNFCCC, 2006).

Political Negotiating Groups

Most Parties within the climate regime belong to political negotiating groups, formed on the basis of their common interests. There is no formal process for establishing these groups. Parties decide to form the groups and notify the

COP Bureau, the SBs or the secretariat. Their purpose is to exchange information and, quite often, to share information on common issues and in some instances, develop and agree on common positions. While few Parties do not belong to any political negotiating coalition, some belong to several groups. Negotiating coalitions are important for functioning of the negotiations. Growing interest of Parties to form coalitions reflects both increasing awareness among Parties of their functions and the tendency of structuring negotiations based on coalitions. For example, invitations to "Friends of the Chair" and other consultations are typically issued via negotiating groups, rather than to individual countries (Yamin, Depledge, 2004; UNFCCC, 2006).

G77 and China

The Group of 77 is a loose alliance of developing countries established in 1964 to unite and promote the countries' economic interests and negotiating positions in various international bodies. Today, the coalition comprises 130 members. It consists of small island countries, oil-exporting countries, LDCs, industrializing countries, and middle-income countries.

The G77 Chair, which is the highest political body within the organizational structure of the G77, rotates each year between Africa, Asia, Latin America and the Caribbean. The G77 is sometimes referred to as "G77 and China" to reflect China's unique position among the Group of 77 as an advanced developing country. Sometimes G77 positions are presented as G77 and China and sometimes as separate positions. However, because the G-77 and China is a diverse group with differing interests on climate change issues, individual developing countries also intervenes in debates.

European Union

The group is composed of the 27 States that are members of the European Union. (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden,

the United Kingdom, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia, *Bulgaria and Romania-became members in 2007*). The country that holds the EU Presidency - a position that rotates every six months - speaks for the European Community and its Member States. However, where a member state has expertise on a particular issue, it may be appointed as spokesperson on that issue. In some cases individual Member States have been appointed to take the lead in bilateral negotiations with other states or groups and may act as leaders on particular issues. The Presidency receives support in its work from the Commission and the forthcoming Presidency, together making up what is known as the "Troika". The EU is the most cohesive negotiating coalition in the climate change regime. Its 27 member states and the European Community (represented by the Commission) articulate a common position, almost invariably speaking with one voice.

Umbrella Group

The Umbrella Group is a loose coalition of developed countries whose membership usually consists of Australia, Canada, Iceland, Japan, New Zealand, Norway, the Russian Federation, Ukraine and the United States. It was established after the adoption of the Kyoto Protocol at COP 3 in 1997 and evolved from the JUSSCANNZ group (JUSSCANNZ being an acronym for Japan, the United States, Switzerland, Canada, Australia, Norway and New Zealand). The main difference between the two is that the Umbrella Group excludes Switzerland and includes the Russian Federation and Ukraine. Countries in the Umbrella Group share information on issues of common concern. The fact that Umbrella Group members are not homogenous displaying different national circumstances explains why it is only a loose coalition.

Environmental Integrity Group (EIG)

This coalition comprises Mexico, the Republic of Korea, Switzerland, Monaco and Lichtenstein. It was formed in response to JUSSCANNZ (now Umbrella Group). This group emerged at the thirteenth sessions of the SBs, held in Lyon, in September 2000. The stated objective of the EIG is

to promote the environmental integrity of the climate negotiations. It is a group that brings together non-Annex I (Mexico and the Republic of Korea) and Annex I Parties (Switzerland). The group negotiates together where the group members have a common position, where they do not, its members will negotiate individually (Yamin, Depledge, 2004).

CACAM

A number of countries in Asia and Central and Eastern Europe which are not included in Annex I have joined together as Central Asia, Caucasus, Albania and Moldova (CACAM). Although these countries are not included in Annex I, they do not consider themselves to be developing countries and are not members of the G-77.

The African Group is the only regional group serving as an active negotiating group. It consists of 53 members. They have various common concerns, including the lack of resources and vulnerability to extreme weather events. The group often makes common statements on issues of particular concern to its members, such as capacity-building, finance and technology transfer.

OPEC

Members of organization of Petroleum Exporting Countries (OPEC) - Algeria, Indonesia, Iran, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, Venezuela - are countries whose economies are not fully developed and would be adversely affected by climate change response measures because they rely heavily on income from fossil fuel production and commerce. They meet during the session to coordinate their positions but unlike other coalitions, OPEC members do not negotiate as a group in the climate regime. All the Parties that are members of OPEC are also G-77 members. Saudi Arabia has considerable influence in the group (Yamin, Depledge, 2004).

Central Group and Central Group-11 (CG-11)

The CG-11 within the UNFCCC process comprising 11 Central and Eastern European countries (CEEC) that have emissions reduction targets under the Kyoto Protocol and common views on certain issues were formed in 2001. Members of the group were the 10 CEECs negotiating to join the EU - Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia - as well as Croatia. Cyprus and Malta were observers to the Group. After most of its members joined the EU, the CG11 dissolved. The remaining members - Bulgaria, Croatia and Romania- stated that they would continue to operate as the Central Group (Yamin, Depledge, 2004).

Turkey joined to the Central Group in 2008 during COP14 held in Poznan. As all the other countries in the group - except from Turkey and Croatia - became members of the EU, recently only members of this group are Turkey and Croatia (<http://ec.europa.eu>).

Least Developed Countries (LDCs)

The 49 countries defined as LDCs by the United Nations are also Convention Parties, with the exception of one state (Somalia). They include members of the African Group, the Alliance of Small Island States (AOSIS) and others. They are increasingly active in the climate change process, often working together to defend their particular interests, for example, vulnerability and adaptation to climate change. The particular situation of LDCs is recognized by the Convention.

AOSIS

The Alliance of Small Island States (AOSIS) is a coalition of some 43 low-lying and small island countries, most of which are members of the G-77, that are particularly vulnerable to climate change and sea-level rise. Most of the AOSIS members also belong to the SIDS. This group was established in November 1990 during the Second World Climate Conference. AOSIS countries are united by the

threat that climate change poses to their survival and frequently adopt a common stance in negotiations. AOSIS has been very active in the climate change regime since its inception. They were the first to propose a draft text during the Kyoto Protocol negotiations calling for cuts in carbon dioxide emissions of 20% from 1990 levels by 2005. AOSIS countries, together account for approximately 0.5 % of global greenhouse gas emissions. Although they are among the countries least responsible for climate change, they are among the most vulnerable to adverse effects of climate change.

Non-Governmental Organizations (NGOs) and NGO Constituencies

The number of NGOs admitted as observers to the sessions of Convention bodies has increased steadily over the years. NGOs participate in the sessions in formal and informal ways; they may attend formal proceedings of the regime bodies and hold side events and exhibits. Admission and participation of NGOs to the meetings are subject to rules of procedures. Admitted NGOs with similar interests and fields of activities have organized themselves into groups and initiated communication channels with the secretariat and the Parties. As a result, a constituency structure has evolved within the regime, each constituency having their focal points. Currently there are nine NGO constituencies acknowledged within the climate change regime:

Environmental NGOs (ENGO)

Business and Industry NGOs (BINGO)

Research and Independent NGOs (RINGO)

Local Government and Municipal Authorities (LGMA)

Trade Unions NGOs (TUNGO)

Indigenous Peoples Organizations (IPO)

Farmers*

Women and Gender*

Youth (YOUNGO)*

*These groups are listed as provisional constituencies by the Secretariat.
<http://unfccc.int>

4.2.6 UNFCCC Financial Mechanism

The Convention recognizes that the contribution of countries to climate change and their capacity to cope with its consequences vary enormously. Therefore, it calls for financial assistance from Parties with more capacity and resources to those Parties with less capacity and high vulnerability. Both the UNFCCC and the Protocol require financial and technological transfers from developed country Parties to developing countries. To facilitate this, the Convention established a financial mechanism to provide funds to developing country Parties. Article 11.1 of the Convention defines the financial mechanism, whose operation “shall be entrusted to one or more existing international entities”. This financial mechanism is to function under the guidance of the COP and be accountable to it, which decides on its climate change policies, programme priorities, and eligibility criteria related to the Convention, based on advice from the SBI. Article 11.3 mandates the GEF to be this entity on an interim basis. The Parties to the Convention assigned operation of the financial mechanism to the Global Environmental Facility (GEF) on an ongoing basis, subject to review every four years (UNFCCC, 2006; Yamin, Depledge, 2004; Climate Diplomat).

Global Environmental Facility (GEF)

The Global Environmental Facility (GEF) started in 1991 to provide grants to developing countries for projects that benefit the global environment and promote sustainable livelihoods in local communities. It was originally a pilot program of the World Bank, and became a separate independent entity in 1994.

The GEF is governed by the GEF member countries through the GEF Council, and the World Bank continues to serve as the trustee for funds administered by the GEF. GEF projects are managed by United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), and the World Bank, and implemented through the African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), United

Nations Food and Agriculture Organization (FAO), Inter-American Development Bank (IDB), International Fund for Agricultural Development (IFAD), and United Nations Industrial Development Organization (UNIDO).

Funds are disbursed in accordance with the guidelines of the UNFCCC COP. To implement COP guidance for the UNFCCC and the other conventions for which it administers funds, the GEF has developed its own more specific set of rules known as the GEF Resource Allocation Framework (GEF RAF), which provides criteria for assessing recipient countries for specific funds (Hart, Craig, 2009).

Funds under the Convention

Two funds are established within the UNFCCC with specific purposes. The funds under the Convention are administered by the GEF.

Least Developed Countries Fund (LDCF)

The Least Developed Countries Fund (LDCF) was established to support a work programme to assist Least Developed Country Parties (LDCs) to carry out the preparation and implementation of national adaptation programmes of action (NAPAs). NAPAs must be prepared for each LDC that identify adaptation priorities and set out adaptation plans. NAPAs are funded entirely by donations from developed countries. To date, the LDCF has received under \$200 million to be shared among LDC countries. NAPAs submitted by LDCs identified steps that must be taken now that will require over \$2 billion, far more than is currently available under the LDCF (Climate Diplomat, 2009).

Special Climate Change Fund (SCCF)

The Special Climate Change Fund (SCCF) finances projects relating to adaptation; technology transfer and capacity building; energy, transport, industry, agriculture, forestry and waste management; and economic diversification. The SCCF is intended to complement the activities of the LDCF and the Adaptation Fund.

For example, an important focus of the SCCF is to conduct training, especially for LDCs. The SCCF is funded by pledges from donor countries (ClimateDiplomat, 2009).

4.3 The Kyoto Protocol

The Kyoto Protocol was adopted at the third Conference of the Parties to the UNFCCC (COP 3) in Kyoto, Japan, on 11 December 1997. The Protocol shares the objective and institutions of the Convention. The major distinction, however, between the two agreements is the legal nature of the commitments. While the Convention required industrialized countries to stabilize GHG emissions, a non-binding commitment, the Protocol commits them to do so. The detailed rules for implementation of the Protocol, needed for preparing it for ratification, were adopted at COP 7 in Marrakesh in 2001. These rules called as “Marrakesh Accords” are then adopted by CMP in 2005. The Kyoto Protocol entered into force on 16 February 2005, and as of November 2009, 189 countries and the European Community are Parties to the treaty.

Following the Convention’s differentiation between Parties, reflecting especially “the principle of common but differentiated responsibilities”, the Protocol places a heavier burden on developed nations by setting binding mitigation commitments for them. The Protocol set quantified emission limitation or reduction commitments (QELRCs), known as emission target, for Annex I Parties listed in its Annex B, which consists of 38 industrialized countries and the European Community. The Protocol also set a collective target, or a cap, for Annex B Parties to reduce their aggregate GHG emissions by 5 percent below 1990 levels in the five-year commitment period between 2008 and 2012. Annex I Parties’ individual targets are defined as assigned amounts and inscribed in Annex B. These Parties may also make use of the “flexible mechanisms” introduced by the Protocol in achieving their collective emission reduction commitments.

Six greenhouse gases and the sources of emissions covered under the Kyoto Protocol are listed in Annex A of the Protocol (<http://unfccc.int>).

4.3.1 Kyoto Protocol Institutions

Institutional structure of the Protocol rests upon the structure created under the Convention. The Protocol deploys and draws upon the existing institutions, which are modified where necessary to ensure the distinctness of the Protocol bodies. In addition, new institutions have been established to serve specific needs of the Protocol (Yamin, Depledge, 2004). This section explains the institutions under the Protocol.

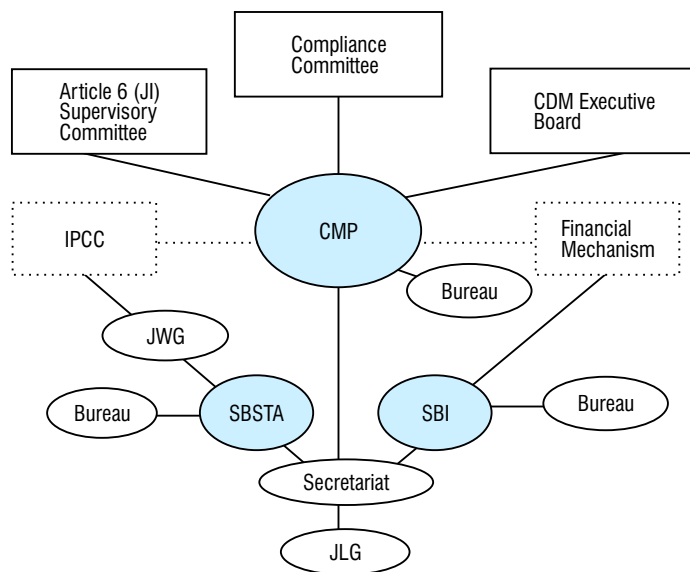


Figure 7. Kyoto Protocol Bodies
Source: Yamin, Depledge, 2004

----- Independent bodies that provide services to the climate change process
 JLG: Joint Liaison Group (FCCC, CBD, UNCCD) (officers and secretariats)
 JWG: Joint Working Group (officers and secretariats)
 Note: The work of these two more informal groups is likely to encompass both Convention and Kyoto Protocol matters.

Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP)

CMP is referred to the **Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP)**. As the supreme body of the Kyoto Protocol, the main function of the CMP is to oversee implementation of the Protocol and its other functions related to the Protocol are similar to those carried out by the COP for the Convention. The CMP meets annually during the same period as the COP. Parties to the Convention that are not Parties to the Protocol are able to participate in the CMP as observers, but without the right to take decisions (<http://unfccc.int>).

The Bureau

The Bureau of the COP also serves the CMP. However, any member of the COP Bureau representing a non-Party to the Kyoto Protocol has to be replaced by a member representing a Kyoto Protocol Party.

Subsidiary Bodies

The two permanent subsidiary bodies established under the Convention, the **Subsidiary Body for Scientific and Technological Advice (SBSTA)** and the **Subsidiary Body for Implementation (SBI)** also serve the Protocol.

Constituted Bodies under the Kyoto Protocol

Three specialized bodies are established under the Protocol: CDM Executive Board (provided for in the Protocol itself), Joint Implementation (JI) Supervisory Committee and Compliance Committee (set up by the Marrakesh Accords). Kyoto specialized bodies are different in character to those under the Convention. They operate directly under the CMP, and all have authority to take decisions (Yamin, Depledge, 2004).

Clean Development Mechanism (CDM) Executive Board

The CDM Executive Board supervises the CDM under the Kyoto Protocol and prepares decisions for the CMP. It undertakes a variety of tasks relating to the day-to-day

operation of the CDM, including the accreditation of operational entities. The board is made up of 10 members, including one from each of the five United Nations regional groups, one from the SIDS, and two members each from Annex I and non-Annex I Parties. Only representatives from countries that have become Parties to the Kyoto Protocol are eligible to serve (<http://unfccc.int>).

Joint Implementation Supervisory Committee

The Joint Implementation Supervisory Committee (JISC), under the authority and guidance of the CMP, inter alia, supervises the verification of emission reduction units (ERUs) generated by JI projects following the verification procedure under the JISC. The Committee is composed of 10 members, including three from the EITs, three from Annex I Parties that are not EITs, three from non-Annex I Parties and one from the SIDS (<http://unfccc.int>).

Compliance Committee

CMP 1, by decision 27/CMP.1, adopted the procedures and mechanisms relating to compliance, including the establishment of a Compliance Committee. The Committee functions through a plenary, a bureau, a facilitative branch and an enforcement branch. The facilitative branch aims to promote compliance, and may facilitate technical and financial advice, including technology transfer and capacity-building. It may also make recommendations to Parties. The enforcement branch is responsible for determining whether a Party is complying with its obligations, for determining consequences for Parties that are not. In the event of a disagreement between an expert review team and a Party, they are also responsible to determine whether to apply an adjustment to an inventory and a correction to the compilation and accounting database for assigned amounts (UNFCCC 2006).

4.3.2 The Kyoto Mechanisms

Emission targets for industrialized country Parties to the Kyoto Protocol are expressed as levels of allowed emissions, or “assigned amounts”, over the 2008-2012

commitment period. Such assigned amounts are denominated in tonnes (of CO₂ equivalent emissions).

Industrialized countries must first and foremost take domestic action against climate change, but the Protocol provided a certain degree of flexibility by allowing Annex I countries to achieve their mitigation commitments through three innovative mechanisms. The three Kyoto mechanisms are: Joint Implementation (JI), the Clean Development Mechanism (CDM) and Emissions Trading (ET), included in Article 6, 12 and 17 respectively. While emissions trading is purely a market-based instrument, JI and CDM are the two project-based mechanisms which feed the carbon market. Although the Protocol laid down basic provisions on the mechanisms, the detailed rules and modalities for the mechanisms to be implemented were subsequently agreed upon by Kyoto Protocol Parties on later stages as part of the Marrakesh Accords. Parties should meet eligibility criteria to be able to take part in all three mechanisms. Table 5 illustrates features of the mechanisms.

Joint Implementation (JI): Article 6 of the Protocol defines JI as a project-based mechanism implemented by Annex I parties. The mechanism allows Parties with an emission limitation or reduction commitment under the Protocol to implement emission-reduction (or emission removal) projects in other Annex I parties with commitments under the Protocol. JI projects result in the generation of emission reduction units (ERUs) which can be counted towards meeting emissions target of the investing Party. JI projects earn emission reduction units (ERUs), each equivalent to one tonne of CO₂. While JI projects can take place between any two Annex I Parties, in practice, this mechanism pertains mostly to projects in Eastern Europe and Russia, or countries considered as 'economies in transition'

Clean Development Mechanism (CDM): Defined under Article 12 of the Protocol, CDM projects involve Annex I Parties and non-Annex I Parties. The mechanism allows a Party with an emission limitation or reduction commitment under the Kyoto Protocol (Annex B Party) to implement an emission-reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO₂, which can be

counted towards meeting Kyoto target of the investing Annex I Party. The purpose of the CDM is two fold: 1) to assist non-Annex I Parties (host countries) in achieving sustainable development; and 2) to assist Annex I Parties in meeting their emission reduction obligations under the Kyoto Protocol.

Emissions Trading (ET): As a market-based mechanism, ET is the trading of AAUs between two Annex I countries. In accordance with Article 12, Parties with emissions limitation or reduction commitment under the Kyoto Protocol (Annex B Parties) can acquire emission units from other Parties with commitments under the Protocol and use them towards meeting a part of their targets. An international transaction log, a software-based accounting system, ensures secure transfer of emission reduction units between countries. An Annex I Party must meet specific eligibility requirements to participate in emissions trading.

Table 5. Kyoto Protocol Flexibility Mechanisms

Name	Project Related Mechanisms		Non-project Mechanism
	Article 6/Joint Implementation	Clean Development Mechanism	Emission Trading
Parties subject to participation/eligibility criteria	Annex I - Annex I	Non Annex I - Annex I	Annex I - Annex I
Authorised Legal Entities (dependent on party eligibility criteria)	Yes	Yes	Yes
Kyoto Unit	ERU	CER, tCER and ICER	AAUs
Unit Fungibility	Yes	Yes	Yes
Unit Use restrictions	Refrain from using ERUs from nuclear facilities	CERs from afforestation and deforestation not to exceed %1 of Party's assigned amount. Annex I are to refrain from using CERs from nuclear facilities	No restrictions
Unit Carry-over	Yes; 2,5 % of a Party's assigned amount	Yes; 2,5 % of a Party's assigned amount	Yes; without restriction
Unit Availability	2008 to 2012	From 2000	2008 to 2012
Coverage of Activities	All Kyoto eligible sources and LULUCF activities	All Kyoto eligible sources with priority to small-scale; sinks limited to afforestation/reforestation	N/A
Responsible Institutions	Accredited Independent Entities, Article 6 (JI) Supervisory Committee, CMP	Designated Operational Entities (DOEs), Executive Board, COP and CMP	National Registries, Transaction Log, CMP
Administrative Support	Secretariat	Secretariat	Secretariat
Administrative Costs	To be borne by participants	To be borne by project participant and DOEs	No specific provisions

Source: Adapted from Yamin, Depledge, 2004

Land Use and Land Use Change and Forestry (LULUCF)

The Kyoto Protocol in its several Articles laid down provisions for the inclusion of land use, land-use change and forestry activities by Parties as part of their efforts to implement the Kyoto Protocol and contribute to the mitigation of climate change. But the text of the Protocol did not set specific rules as to how LULUCF emissions and removals would be incorporated into the accounting system. Parties further elaborated the principles, rules and modalities governing LULUCF activities in Marrakesh Accords.

Article 2.1 states that Annex I Parties, in meeting their emission reduction commitments under Article 3, shall implement and/or further elaborate policies and measures to protect and enhance sinks and reservoirs of greenhouse gases (GHGs) not controlled by the Montreal Protocol, promote sustainable forest management, afforestation and reforestation and sustainable forms of agriculture. Moreover, in accordance with Article 3.3 and 3.4, Annex I Parties must report emissions by sources and removals by sinks of GHGs resulting from LULUCF activities. Under Article 3.3 of the Kyoto Protocol, Parties decided that net changes in GHG emissions by sources and removals by sinks through direct human-induced LULUCF activities, limited to afforestation, reforestation and deforestation that occurred since 1990, can be used to meet Parties' emission reduction commitments. Under Article 3.4 of the Kyoto Protocol and the Marrakesh Accords Parties may elect to account for carbon stock changes due to specifically forest management, cropland management, grazing land management and revegetation, to be included in their accounting of anthropogenic GHG emissions and removals for the first commitment period. If a country has chosen to account for any of these activities, it must account for carbon stock changes on all lands subject to these activities. When LULUCF activities under Articles 3.3 and 3.4 result in a net removal of GHGs, an Annex I Party can issue removal units (RMUs) on the basis of these activities as part of meeting its commitment under Article 3.1. (<http://unfccc.int>).

LULUCF activities can also be carried out under the two project-based Kyoto mechanisms. CDM allows for the

implementation of LULUCF project activities, limited to afforestation and reforestation, by Annex I Parties in non-Annex I countries. The CERs from these projects can count towards Annex B targets up to a limit of 1% of the Annex B country's total emissions in 1990. LULUCF projects are also possible under the Joint implementation. Therefore, an Annex I Party may implement projects that increase removals by sinks in another Annex I country (<http://unfccc.int>).

For the first commitment period; the role of non-Annex I countries in LULUCF activities has been limited to afforestation and reforestation. Avoiding deforestation was not considered as an eligible CDM activity in the Marrakesh Accords. Reducing emissions from deforestation in developing countries may have significant contribution to the mitigation efforts and thus it is being considered under the Bali Road Map.

Reducing emissions from deforestation and forest degradation in developing countries (REDD) emerged as an important agenda item in climate negotiations in 2005 with the introduction of a proposal by group of countries led by Papua New Guinea and Costa Rica suggesting that deforestation should be included in the Convention and efforts by developing countries in pursuit of avoiding deforestation should be funded. The issue is also recognized by the Bali Action Plan. The Bali Action Plan refers to these actions as part of mitigation efforts in its paragraph on REDD-plus. While REDD is acronym for reducing emissions from deforestation and forest degradation in developing countries, the 'plus' in the name "refers to the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries" (<http://www.field.org.uk>).

4.3.3 Monitoring, reporting and review under the Protocol

The Convention established the basis for reporting and review for the climate regime. But monitoring and reporting gained a particular importance under the Protocol because of the legally binding nature of the commitments. Therefore, the Protocol set up a system providing the basis

for assessing compliance with legally binding targets and ensuring validity of transactions under the Kyoto mechanisms (Yamin, Depledge, 2004). The Kyoto Protocol and Marrakesh Accords introduced a set of monitoring and compliance procedures to enforce the Protocol's rules, address any compliance problems, and avoid any error in calculating emissions data and accounting for transactions under the Kyoto mechanisms and activities related to land use, land use change and forestry (LULUCF). The Protocol's monitoring procedures are based on existing reporting and review procedures established by the Convention. But, they also include additional accounting procedures that are needed to track and record Parties' holdings and transactions of Kyoto Protocol units - assigned amount units (AAUs), certified emission reductions (CERs) and emission reduction units (ERUs) and removal units (RMUs)-generated by LULUCF activities.

Accordingly, the Protocol requires Annex I Parties to develop a national system for estimating their GHG emissions and removals which ensures accurate monitoring and reporting of emissions. Annex I Parties with binding targets under the Protocol also have the obligation, under the Marrakesh Accords, to set up and maintain a national registry to track and record all transactions in emission/removal units under the Kyoto mechanisms and LULUCF projects (<http://unfccc.int>).

As an additional monitoring tool, the secretariat keeps an independent transaction log to verify that transactions are consistent with the rules of the Protocol. The Protocol also created an independent monitoring body, the expert review team, to ensure compliance. The teams are given a mandate to conduct technical assessment of implementation by Parties and report their findings to the secretariat.

4.3.4 Financial mechanism and funds under the Kyoto Protocol

The Kyoto Protocol in its Article 11 recognizes the need for the financial mechanism to fund activities by developing country Parties and incorporates the Convention's financial provisions in its framework. Thus Convention's financial

mechanism is available to developing countries for their commitments under the Convention Article 4.1 which are delineated by Article 10 of the Protocol. The Protocol also includes adaptation related provisions. In addition to the Funds under the Convention, Marrakesh Accords established the Adaptation Fund under the Protocol (Yamin, Depletge, 2004).

Adaptation Fund

The Adaptation Fund was established to finance concrete adaptation projects and programs in developing countries to build resilience in communities and help countries adapt to climate change. The Adaptation Fund is financed from the share of proceeds on the Clean Development Mechanism (CDM) project activities and other sources of funding. The share of proceeds amounts to 2 % of certified emission reductions (CERs) issued for a CDM project activity. CDM projects in LDCs are exempt from this charge (<http://unfccc.int>).

The Fund is supervised and managed by the Adaptation Fund Board (AFB) as the operating entity of the Adaptation Fund under the authority and guidance of the CMP. Upon invitation from Parties, the (GEF) provides secretariat services to the AFB and the World Bank serves as trustee of the Adaptation Fund on an interim basis. These interim institutional arrangements will be reviewed in 2011 (<http://unfccc.int>).

05 NEGOTIATION STRUCTURES

5.1 Negotiating Forums and Techniques

Negotiations can take several forms and take place in a variety of forums. Among the basic types of negotiating forums, plenary meetings, working bodies of the COP, contact groups, informal consultations and friends of the presiding officer are common to most intergovernmental negotiations. However, different regimes can develop their own practices according to the particular political dynamics (Yamin, Depledge, 2004).

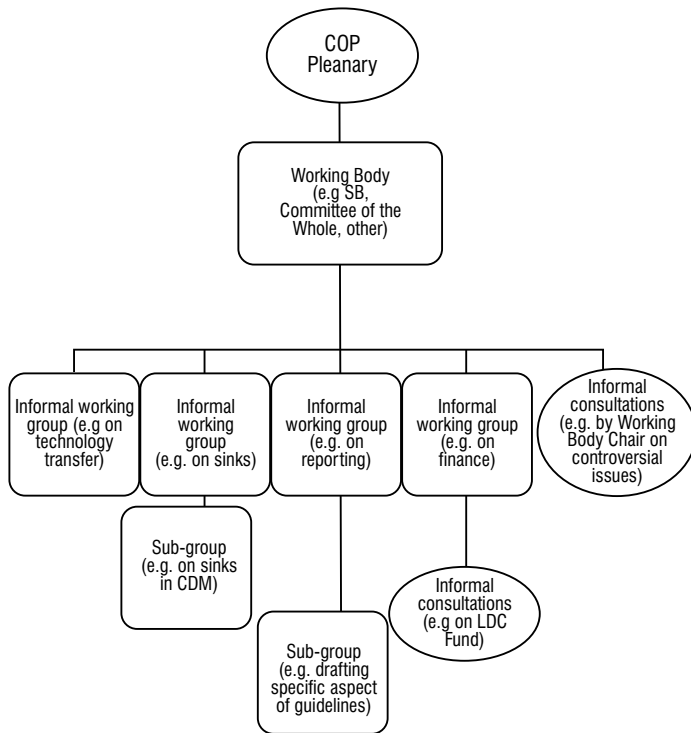


Figure 8. Negotiating Forum
Source: Adapted from Yamin, Depledge, 2004

5.2 Plenary

Formal plenary meetings of COP and subsidiary bodies (SBs) are the only meetings that COP may adopt its decisions (or other outputs) and the SBs their conclusions. COP plenary meetings are held in public unless COP decides otherwise as provided by Rule 30. On the other side the same rule provides SB meetings to be held in private however the COP may decide otherwise. These meetings also serve as an important forum for delegations to deliver statements regarding their official positions. However, the real negotiations rarely take place in plenary as they are open to public and strict adherence to the rules of procedure inhibit in-depth and frank discussions (Yamin, Depledge, 2004).

5.3 Working Groups

These groups are usually established to review at some key issues on the agenda. COPs and subsidiary bodies can both create working groups when needed. After having introduced an item and given delegations the opportunity to state their opening positions on the matter, the Chair may suggest, on his or her own initiative or at the request of one or more Parties, that the item in question be considered in more detail in a working group. This ensures that important issues are carefully considered by a group of interested States while at the same time allowing the Chair to move to the next item on the agenda on the understanding that he or she will return to the deferred item once the working group is ready to report back to the COP or subsidiary body in question (UNEP, 2007a).

While the working groups are open-ended, the number of participants to the group will, in practice, vary depending on the number of States interested.

5.4 Informal Groups

In order to resolve some difficult issues, Parties may meet in informal groups to reach an agreement. A large part of the negotiations in the climate change regime is taken place in informal working groups. Informal groups in the climate change regime are open-ended, that is, open to participation by all parties. Negotiations are conducted in English only (interpretation has only been provided in exceptional cases) and working documents are rarely translated. NGOs are now allowed to attend open-ended contact group meetings as observers (unless at least one third of parties object), but the group Chair may request them to leave at any time, usually when negotiations enter a delicate stage. Informal groups are not bound by traditional UN meetings times, however, established practice requires that no more than two meetings (including plenary meetings and informal groups) be held at any one time. Meetings of informal groups are advertised in the official daily programme of meetings and on electronic noticeboards (Depledge, 2005).

Informal groups are known by variety of names reflecting their task and stage of negotiations. They can take several forms as contact groups, joint contact groups, drafting groups, negotiating groups. Contact groups are the most common form in the climate change regime. For example, in the ongoing negotiation process for the post-2012 agreement, Parties have discussed the negotiating text in informal groups and contact groups.

5.5 Contact Groups

Parties may set up contact groups to deal with a specific issue that proves difficult to resolve and that could slow down progress on many related issues. The Chair of the COP, or of a subsidiary body or of a working group may suggest a contact group. While such a group may be open-ended, it most often involves the few states that have strongly opposed opinions on an issue (UNEP, 2007a).

Contact group meetings are announced in the daily program and electronic notice boards. Documents are rarely translated and proposals are circulated as “non-papers”. In some cases, two contact groups working on related issues may sit as a Joint Contact Group to attempt to resolve differences between them. Moreover, contact groups may decide to convene sub-groups on particular issues. Delegates in the contact groups may also hold informal consultations on specific issues. These last two, called as spin-off groups, hold discussions and report back to the contact group. Discussions in these groups are conducted in English (Depledge, 2005).

5.6 Informal Consultations

Another form of informal arena is ‘informal consultations’. The presiding officer typically invites a delegate (sometimes two) to consult informally with interested parties on a particular topic or draft text. Presiding officer may choose sometimes to conduct consultations himself/herself. It is expected that the consulting Chair will discuss the issue at hand in private with representatives of the main negotiating coalitions and interested delegations

in order to forge a consensus. Therefore, informal consultations are a much more private process than a contact group or any other type of informal group. Ongoing informal consultations are listed in daily program, but meeting venues and times are not advertised and observers are not invited. Importantly, informal consultations are not bound by the no-more-than-two-meetings practice (Yamin, Depledge, 2004; Depledge, 2005).

In general, informal consultations are convened for two contrasting reasons. Firstly, on more technical or procedural issues, or on those where there is limited general interest, so that a full-scale informal group is not warranted. Alternatively, informal consultations are sometimes convened to address more sensitive political issues, where private discussions are likely to prove more productive than an open group negotiations which would give rise to inconclusive confrontation. Informal consultations are similarly used where a more discreet process is appropriate, notably for elections (e.g. to the COP Bureau or CDM Executive Board) or on issues relating to a specific country, such as Turkey’s request to be deleted from Annex I and Croatia’s special circumstances as an EIT (Depledge, 2005).

5.7 Friends of the Chair

In addition to the negotiating forums explored above that are open to all parties, presiding officers may take the initiative to create a small group to carry out specific tasks. S/he can invite a limited number of parties to a series of private meetings to engage in substantive discussions aimed at advancing the negotiation process especially in the context of particularly sensitive or complex negotiations. These groups are called by various names as “Friends’ group”, “Friends of the Chair,” or the “Eminent Persons Group”. In the climate change negotiations, such groups are sometimes called as the Expanded Bureau. The group is often comprised of a relatively small number of delegates selected to represent major groupings. Those that are invited are often the Parties that have most actively intervened on relevant issues. Other actors with relevant

interests may also be invited. The main aim of these groups is to explore strategies for achieving consensus. Such groups are mostly convened by the COP President in the final stages of major negotiating rounds. They may sometimes take place prior to the session. When they are formed in the final stages, representation often takes place at the ministerial level (Yamin, Depledge, 2004).

Organising such a group is fully at the discretion of the presiding officer. As with other informal arenas, there are no set rules governing the conduct of these groups, which opens up “considerable room for improvisation on the part of the presiding officer” regarding the type and the purpose of the group (Depledge, 2005). Discussions in these groups are held in English.

Shuttle Diplomacy: Shuttle diplomacy involves the President (or subsidiary body Chair, or a designated colleague) literally ‘shuttling’ between each negotiating coalition (and sometimes individual parties), meeting with representatives in succession, and drafting and redrafting text until all the coalitions individually agree to it. Shuttle diplomacy therefore constitutes a form of informal consultation and, needless to say, presiding officers have always held private meetings on all sorts of issues. It can provide a useful alternative (or complement) to friends groups in the final stages of negotiations (Depledge, 2005).

5.8 Committee of the Whole (CoW)

A Committee of the Whole (CoW) is a body created by a COP in order to coherently address cross-cutting issues that are of concern to more than one subsidiary body. A CoW generally runs in a parallel session with the COP, allowing the COP to continue with its agenda, and is open-ended. It is often created by a COP to aid in negotiating text. It consists of the same membership as the COP. When the Committee has finished its work, it turns the text over to the COP, which finalizes and then adopts the text during a plenary session (UNEP, 2007a). For instance, in the case of COP 3, a CoW was convened under the AGBM Chair (rather than the COP President) to finalize negotiations on the Kyoto Protocol on behalf of the COP. Like an informal group,

it met in a much smaller room than the main plenary room, often long into the night, sometimes without interpretation and without written record in the COP report. Like a formal plenary, however, it met in the presence of NGOs and the media, using the traditional seating arrangements and formal rules for the conduct of business, and with sound recordings that are still kept at secretariat headquarters (Deplege, 2005).

5.9 Complementary Forums

Intersessional workshops: Intersessional workshops are organized by the Secretariat at the request of the SBs, and less frequently by the COP. The aim is to advance understanding of the technical components of an issue, discuss approaches and options relevant for the formal negotiations. Participation is by invitation only, with the invitation list drawn up by the presiding officer of the convening body. In addition to other benefits, convening a workshop, in some cases, can serve a politically feasible means of moving ahead on a difficult issue. There are other types of workshops which are denoted as expert workshops, indicating that these are smaller, more select affairs, involving experts on the topic, rather than ‘ordinary’ delegates. Regional workshops have also been held on issues where a regional focus is particularly pertinent, notably technology transfer and capacity-building. Moreover, in the period after Marrakesh there emerged a new practice to hold in-session workshops (Yamin and Depledge, 2004; Deplege, 2005).

Pre-session consultations: These are held immediately prior to a negotiation session. The term ‘consultation’ suggests even greater informality than ‘workshop’ and can also imply stronger political linkage to the negotiation process (Deplege, 2005).

Expert meetings: A small number of complementary forums have been convened as expert meetings. As with expert workshops, these are smaller occasions, aimed more at providing an opportunity for technical experts to exchange views, ideas and latest research results, than for delegates to engage in discussion (Deplege, 2005).

5.10 Ministerial Participation (High level segment)

High level participation at the ministerial level in climate change negotiations is seen as important sign of the growing saliency of the climate change issue on the international agenda. Thus, COP sessions have included a segment with participation of ministers usually taking place in the last two to three days. This would help to bring the influence of ministers to bear on the final stages of negotiations. There are different forms of ministerial participation.

In what is called general debate, ministers deliver statements outlining their countries' positions in the plenary room. Another form is direct participation of ministers in the negotiations. For example, at COP3 ministers concentrated their efforts in participating in the "friends" group and conducted behind-the-scenes talks with counterparts. They at times also involved in the working bodies of the COP during other sessions. The third form is roundtables. Roundtable discussions, aimed at promoting a lively exchange of views on issues relating to climate change policy, have provided a more interactive means for participating ministers. They do not produce formal decisions or conclusions (Yamin and Depledge, 2004).

The last night / round-the-clock talks

The last nights of negotiating rounds have acquired a momentum of their own in the climate change process. Round-the-clock talks on the last night usually come at the close of intensive week of negotiations, which may have already gone through the night. Such "negotiation by exhaustion", which impacts on the presiding officers and secretariat as well as parties, can have repercussions on the quality of the resultant agreement. Working through the last night-or sometimes the last two nights, thus has significant procedural equity considerations, which clearly impact smaller and less well-resourced delegations. Large delegations, mostly from industrialized countries, may be able to replace tired delegations, who have negotiated throughout night, with well-rested delegates.

Source: Yamin, Depledge, 2004

06 FUTURE OF THE CLIMATE REGIME: ONGOING NEGOTIATIONS FOR THE PERIOD BEYOND 2012

The international climate change regime has arrived at a pivotal point. Ongoing negotiations for designing the new architecture of the regime for the period beyond 2012 are expected to come to a conclusion with an agreed outcome at COP15/CMP5 to be held in 7-18 December in Copenhagen. The chapter provides a brief history and current state of the negotiations conducted under the two tracks in the run up to Copenhagen.

6.1 From Montreal to Bali

COP11/CMP1 held in Montreal in 2005 was a milestone in the history of climate change regime. Its significance derived first from its being the First Meeting of the Parties to the Kyoto Protocol after it came into effect in February 2005. Both COP11 and CMP1 took important actions delivering decisions on implementation, improvement and innovation, within the Convention and the Protocol, which are called as three "I"s. It also marked a turning point in the history of the regime by setting the stage for considerations on the future of both the Convention and the Protocol. The Conference set up a two track process, one under the Convention and the other under the Protocol.

First, the Parties at CMP1 decided to initiate a process to consider further commitments for Parties included in Annex I for the period beyond 2012 in accordance with Article 3, paragraph 9, of the Kyoto Protocol. The Decision 1/CMP1 established an open-ended ad hoc working group to conduct the process. This new subsidiary body (AWG-KP) was given a mandate to complete its work and have its results adopted by CMP as early as possible and in time to ensure that there is no gap between the first and second commitment periods (FCCC/KP/CMP/2005/8/Add.1).

Second, COP11 initiated another track under the Convention to ensure involvement of Parties which are not Parties to the Protocol. Hence, the Parties at COP11 established, by the Decision 1/CP.11, the "Dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention" (FCCC/CP/2005/5/Add.1). The process was intended to engage Parties "in a dialogue, without prejudice to any future negotiations, commitments, process, framework or mandate under the Convention, to exchange experiences and analyze strategic approaches for long-term cooperative action to address climate change". The dialogue was given a mandate to address issues, inter alia, in four thematic areas: a) Advancing development goals in a sustainable way, b) Addressing action on adaptation, c) Realizing the full potential of technology, d) Realizing the full potential of market-based opportunities.

With the preference of the Parties, especially those of non-Annex I Parties, the Dialogue was structured as a process for "open and non-binding exchange of views, information and ideas in support of enhanced implementation of the Convention", which "will not open any negotiations leading to new commitments". To be conducted under the guidance of the COP, the Dialogue was planned to take place in four workshops, where possible pre-sessional workshops, and report to the COP at its twelfth and thirteenth sessions in November 2006 and December 2007 respectively.

The Dialogue, which met in four workshops between 2006 and 2007, provided the parties a platform to engage in an exchange of ideas and views with a constructive approach, and without the pressure of formal negotiations, to identify building blocks of long-term cooperative action under the Convention. It concluded its work at COP13 in Bali and views emerged from the Dialogue were incorporated into the Bali Action Plan under the Bali Road Map agreed in COP13.

6.2 From Bali to Copenhagen: Bali Road Map and Two Track Process

UN Climate Change Conference held in Bali in December 2007 is considered as a watershed in the climate change negotiations history as it paved the way for the negotiations for post-2012. Findings of the IPCC Fourth Assessment Report and diplomatic endeavors in many forums prior to the Conference culminated in a political momentum that enabled the Parties at the Conference to deliver outcomes which will shape the future of the regime. Building on this momentum and the outcomes of the Convention Dialogue, the Parties at COP13/CMP3, adopted *the Bali Road Map* which consists of a set of forward-looking decisions related to both the Convention and the Protocol and which are essential to strengthening international action on climate change. But, central to the Bali Road Map was the establishment of a two-year negotiation process under the Convention to be concluded in 2009 at COP15 in Copenhagen. By the decision 1/CP.13, titled as the Bali Action Plan (BAP), Parties agreed to set out a new formal negotiation track next to the ongoing negotiations under the Kyoto Protocol launched by CMP 1 in 2005.

The Bali Action Plan (BAP) outlined the nature, scope, and timeline of this process. Accordingly, Parties agreed to launch a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012. BAP established a subsidiary body, the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), to conduct the process. The AWG-LCA was mandated to complete its work in 2009 and present the outcome of its work to the COP for adoption at 15th session in Copenhagen.

Parties in Bali also continued negotiations for consideration of further commitments by Annex I countries under AWG-KP. AWG-KP also agreed in Bali to conclude its work in 2009 and forward relevant draft decisions to the CMP at its 5th session in 2009, with a view to their adoption.

Hence the road from Bali to Copenhagen involves two fully-fledged negotiation tracks under the Convention and the Protocol to design elements of the regime for the period beyond 2012 which will come to conclusion in Copenhagen. In the regime jargon, the first track launched as part of the Bali Road Map is called as the Convention track and involves all Parties to the Convention. The second track under the AWG-KP is called as the Kyoto track and involves only Parties to the Protocol. Work in these two parallel tracks is expected to culminate in striking a comprehensive deal in 2009 in Copenhagen. The next section provides an overview of the issues addressed under these two negotiations tracks.

6.2.1 Bali Road Map and Building Blocks of Bali Action Plan

The Bali Action Plan mandated the AWG-LCA to conduct negotiations by addressing issues which are grouped into four main building blocks: mitigation, adaptation, technology and finance. Seen by some as the fifth building block, BAP also laid down the requirement that the long-term agreement should address a shared vision for long-term cooperative action, including a long-term global goal for emission reductions, to achieve the ultimate objective of the Convention.

Focus of the negotiations under each building block of BAP is outlined below:

Mitigation: Enhanced national/international action on mitigation of climate change, including consideration of:

- a) Mitigation Commitments by Developed Country Parties: Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties ensuring the comparability of efforts among them and taking into account differences in their national circumstances;
- b) Nationally Appropriate Mitigation Actions by Developing Country Parties: in the context of

sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner;

- c) REDD Plus: Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries;
- d) Cooperative sectoral approaches and sector-specific actions;
- e) Approaches to enhance the cost-effectiveness of mitigation actions, including market mechanisms;
- f) Economic and social consequences of response measures.

Adaptation: Enhanced action on adaptation, including, inter alia, consideration of:

- (a) international cooperation to support urgent implementation of adaptation actions taking into account inter alia African countries affected by drought, desertification and floods;
- (b) risk management and risk reduction strategies;
- (c) disaster reduction strategies and means to address loss and damage associated with climate change impacts in developing countries;
- (d) economic diversification to build resilience; and
- (e) ways to encourage multilateral bodies to support adaptation initiatives.

Technology: Enhanced action on technology development and transfer to support action on mitigation and adaptation.

Finance: Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation.

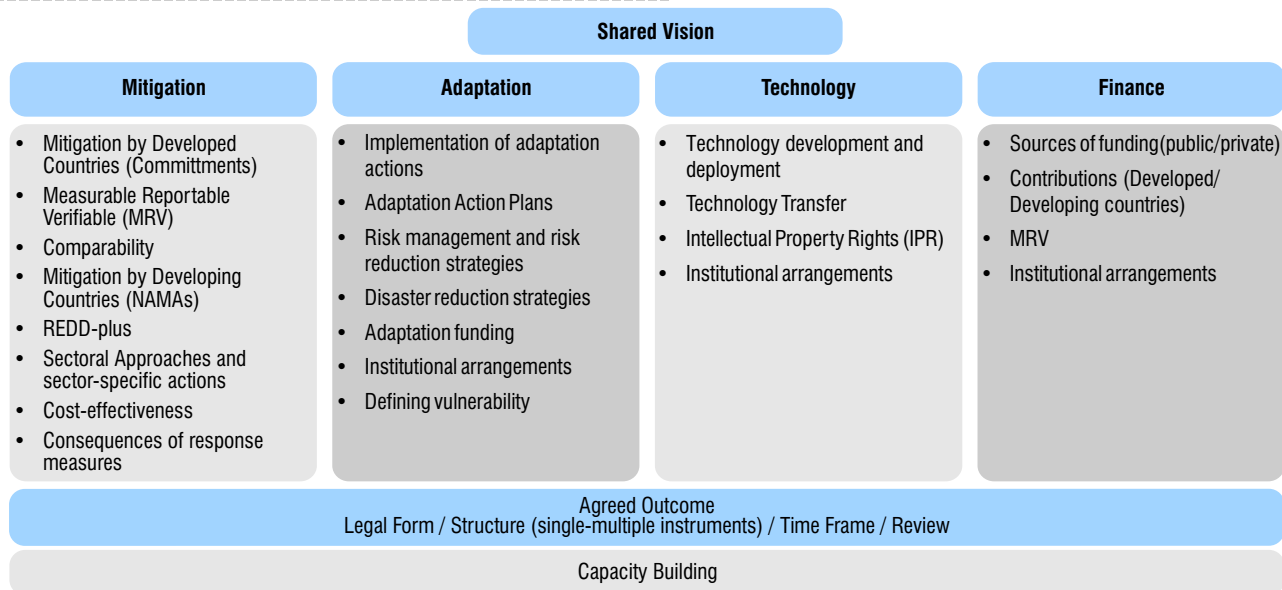


Figure 9. Bali Action Plan: Building Blocks

6.2.2 Key issues and current status of negotiations under the AWG-LCA

AWG-LCA commenced its work in 2008 and moved into full negotiating mode in 2009 at its fifth session in Bonn. Parties started to consider a draft negotiating text prepared by the Chair of the AWG-LCA at the sixth session in June in Bonn. After the first and second reading of the draft text in Bonn, Parties decided to discuss the issues in each building block of the BAP in informal groups, based on the revised negotiating text. Box 1 shows the contact groups and subgroups established by the AWG-LCA at first part of its seventh session in Bangkok.

Key issues and current state of affairs in the negotiations under the AWG-LCA are summarized below. This summary is based on the non-papers produced by the contact groups under the AWG-LCA, views submitted by the Parties and reports of the talks (FCCC/AWGLCA/2009/14; Earth Negotiations Bulletin).

Box 1. Contact groups and sub-groups established by the AWG-LCA 7

1. Contact group on a shared vision for long-term cooperative action

2. Contact group on enhanced action on adaptation and its associated means of implementation
3. Contact group on enhanced action on mitigation and its associated means of implementation
 - Subgroup on mitigation under paragraph 1 (b) (i) of the Bali Action Plan
 - Subgroup on mitigation under paragraph 1 (b) (ii) of the Bali Action Plan
 - Subgroup on mitigation under paragraph 1 (b) (iii) of the Bali Action Plan
 - Subgroup on mitigation under paragraph 1 (b) (iv) of the Bali Action Plan
 - Subgroup on mitigation under paragraph 1 (b) (v) of the Bali Action Plan
 - Subgroup on mitigation under paragraph 1 (b) (vi) of the Bali Action Plan
4. Contact group on enhanced action on provision of financial resources and investment
5. Contact group on enhanced action on development and transfer of technology
6. Contact group on enhanced action on capacity-building

Shared vision: Parties are engaged in discussions to formulate a shared vision for the long-term cooperative action. Discussions are revolved mainly around the language and level of ambition of the shared vision. Parties consider the nature of a shared vision, a long-term global goal for emission reductions and review of a shared vision. Views put forward for formulating the long-term global goal include options relating to level of temperature increase, stabilization of GHG concentrations in the atmosphere, emissions reductions for the mid and long term.

Mitigation: Mitigation is discussed in various sub-groups, which come together as “overarching contact group on mitigation”, and informal consultations. Discussion on mitigation commitments by developed country Parties focuses on collective reduction goal, individual reduction objectives, comparability of efforts of the Parties, MRV (measurability, reliability and verification) for mitigation by developed countries, and compliance. Issues in discussions on mitigation by developing countries include definition and scope of NAMAs, support and enabling activities, NAMA registry and MRV, low carbon development strategies and plans. Parties have differing views with respect to the approach to determine mitigation obligations of Parties. Developed countries, particularly US and Japan, favour a bottom-up approach for defining mitigation pledges while developing countries, especially G77/China, support a top-down criteria-based approach. Bottom-up approach suggests that countries decide their own mitigation objectives nationally and implement measures according to their domestic system. Related to this, Parties discuss whether NAMAs by developing countries will be registered through an international mechanism or undertaken voluntarily. Mitigation contact group also discusses “common frameworks for mitigation action by all parties” contained in the proposals by some developed country Parties. The textual proposal by the US on “common mitigation element by all parties” caused objections by developing countries as they see the content of the proposal contrary to the terms stipulated by the BAP.

Negotiations on REDD-plus address scope of actions, financing, safeguards on conversion of natural forest and

safeguards for indigenous peoples; and whether REDD-plus is a NAMA. Under the subgroup on cooperative sectoral approaches and sector-specific actions, Parties discuss agriculture and bunker fuels sectors and their roles. Approaches to enhance the cost-effectiveness of mitigation actions include both non-market-based approaches and market-based approaches. Discussions on market-based approaches consider both existing and new mechanisms. The options for new mechanisms explored in the negotiations include a NAMA and sectoral mechanism and related sectoral crediting and trading. Parties deal with issues such as the principles, rules, eligibility criteria, use of units for these new mechanisms. Non-market mechanisms involve options for black carbon, biosequestration and HFCs.

Adaptation: Under this item Parties discuss definition and scope of adaptation, type of adaptation activities and support, implementation of adaptation action, means of implementation, risk management and risk reduction, institutional arrangements, a mechanism to address loss and damage and MRV. Among the options addressed is establishment of a comprehensive adaptation framework or program elaborating guiding principles, objectives, types of actions implementation, scope, means of implementation and sources of funding. Discussions also consider creation of an Adaptation Fund under the Convention. Options for institutional arrangements include a subsidiary body or committee, facilitative mechanism, Executive Body on Finance and Technology for Adaptation, Executive Board and international mechanism to address risks of loss and damage. Negotiations also consider objectives, functions, elements of national adaptation plans. One of the issues on which extensive discussions have taken place is definition of vulnerability. Parties’s views differ on how vulnerability is defined and what repercussions the definition would have for adaptation measures and support.

Finance: Negotiations concentrate on generation and provision of finance and institutional arrangements. Discussions revolve around generation of funding, share of public and private sources, distribution, establishment of

specialized funds or funding windows, institutional arrangements for financial mechanisms, operating entity, governance structure etc. In addition, various options are proposed for innovative funding, such as auctioning of AAUs; levies from international aviation transport; share of proceeds of CDM, JI and emissions trading; uniform global levy on CO₂ emissions; and agreed penalties or fines for non-compliance with emission reduction commitments. Questions addressed include how much funding will be needed, how it will be generated, and how it will be disbursed and used. Parties have different views regarding sources of funding, contributions by countries and governing structure of the financial mechanism. Among the central issues discussed is the function of COP in relation to financial mechanisms and/or the funds proposed. Views diverge as to whether the mechanisms and/or funds would operate under the authority and/or guidance of, and shall be accountable to, the COP. Developed countries argue that funding should be diffused through existing channels such as Global Environmental Facility, but developing nations note problems with existing mechanism and prefer new institutional structure under the authority of the COP. Parties also consider a number of proposals suggesting establishment of funds and their sources and operating rules. For example, EU proposes continuation of existing structures with the contribution from all Parties except for LDCs. The US proposes creation of a Global Fund for Climate as an operating entity of financial mechanism. It is proposed that "all Parties, except LDCs, shall contribute to the Fund in accordance with their national circumstances and respective capabilities through multi-year pledges and multi-year replenishments." Mexican proposal includes establishment of a World Climate Change Fund or Green Fund to which all Parties should contribute, except LDCs, according to a scale of assessment based on agreed criteria. The assessed contributions are mandatory for Annex I Parties and from those non-Annex I Parties that choose to participate. The proposal suggests that all participating Parties are eligible to benefit from the Fund including Annex I Parties who may access up to 50 per cent of their contribution. Australia proposes a Facilitative Platform. G77 and China propose establishment of a Multilateral Climate Technology Fund and creation of a

Mitigation Fund under the Convention.

Technology: Focus of the discussions is on the objectives of enhanced action on technology; the establishment of a technology mechanism; national policies and actions to support technology; international cooperative actions to support technology development and deployment, relations with the existing Intellectual Property Rights (IPRs) rules. Parties consider various options for bodies or frameworks, including: a technology action committee; a technology mechanism; a technology action framework; a technology body; a climate technology center or network; a technology development and transfer facility or hub or service; and an executive body on finance and technology for adaptation, as well as one on mitigation. Different options are considered regarding the structure and functions of proposed institutional arrangements, including Executive Body on Technology, Technology Executive Committee or Panel. One major issue in discussion on technology transfer is IPRs. Developed countries favour an agreement which would not undermine enforcement of IPRs. On the other hand, developing countries look for flexibility in arrangements to enhance transfer of technologies.

Capacity Building: Discussions consider the objectives, guiding principles and scope of enhanced action on capacity building, implementation of capacity-building actions and related institutional arrangements, options for a list of actions on capacity building; provision of financial resources for capacity building, and review of the implementation of capacity building.

Legal Form of the Outcome: The Bali Action Plan did not specify the form of the AWG-LCA's outcome. Although the issue was addressed at some length throughout the process, the legal form of the AWG-LCA's outcome remained undecided before Copenhagen Conference. Among the several options considered, two are highlighted: 1) a legally binding instrument, 2) an agreed outcome consisting of a series of COP decisions which

would contain agreement on certain fundamental issues.

Besides the discussions in the negotiations taking place under the AWG-LCA, some Parties submitted, in support of their positions, proposals to the secretariat containing draft protocols to the Convention. The list of proposals is given in the Box 2 below.

Box 2. Proposals for protocols to the Convention Submitted by Parties

- FCCC/CP/2009/3 Draft protocol to the Convention prepared by the Government of Japan for adoption at the fifteenth session of the Conference of the Parties
- FCCC/CP/2009/4 Draft protocol to the Convention presented by the Government of Tuvalu under Article 17 of the Convention
- FCCC/CP/2009/5 Draft protocol to the Convention prepared by the Government of Australia for adoption at the fifteenth session of the Conference of the Parties
- FCCC/CP/2009/6 Draft protocol to the Convention prepared by the Government of Costa Rica to be adopted at the fifteenth session of the Conference of the Parties
- FCCC/CP/2009/7 Draft implementing agreement under the Convention prepared by the Government of the United States of America for adoption at the fifteenth session of the Conference of the Parties

6.3 Negotiations on Further Commitments of ANNEX I Parties under the Kyoto Protocol

Kyoto Protocol contains provisions for the review and revision of the commitments of the Parties. Article 3.9 of the Protocol stipulates that Parties should initiate the consideration of commitments for the subsequent periods at least seven years before the end of the first commitment period (2008-2012). At the CMP1 in December 2005, Parties to the Protocol launched negotiations under the AWG-KP to consider further commitments of Annex I Parties for the period beyond 2012.

Key Issues under AWG-KP

The negotiations held under the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) have progressed relatively slow. The relationship established by Parties between the AWG-KP and AWG-LCA outcomes and the tendency to wait for the developments in the AWG-LCA negotiations have prevented the achievement of a certain progress under this track. AWG-KP negotiates the issues on its agenda in informal groups established in the process. Contact groups established at the ninth session of the AWG-KP are seen in Box 3.

Box 3. Contact Groups under the AWG-KP

1. Annex I Parties' emission reductions (aggregate/individual)
2. Other issues identified by the AWG-KP at its resumed sixth session:
 - a. Emissions trading and the project-based mechanisms
 - b. LULUCF
 - c. Methodological issues
3. Potential consequences
4. Legal matters (on an "as-needed"/referral basis)

Key issues addressed in the AWG-KP negotiations are outlined below, based on the proposals submitted by Parties. Table 6 presents key elements in the proposals contained in the AWG-KP agenda.

Emission Reduction Targets of Annex-I Parties: The negotiations on this item aim at identifying the aggregate emission reduction to be achieved by the Kyoto Protocol Annex-I Parties after 2012 as well as the quantified emission reduction commitments of individual Parties. Countries also consider proposals on the length and the number of new commitment periods to be covered by the agreement and the base year to be used in setting the reduction targets. Several Parties proposed different years other than 1990 as

a base year or reference year against which reductions will be measured. Although the AWG-KP process has been designed to consider the reduction targets for Annex-I Parties, the negotiations under this group also address the proposals on formation of new annexes containing the commitments to be undertaken by non-Annex I countries. Another important negotiation subject related to the emission reduction targets is review of commitments. Discussions are focused on the timing and nature of the review. Establishment of a mid-commitment period assessment and review process is considered to assess the efforts made by Parties to meet quantified emission limitation and reduction commitments for the second commitment period and determine whether additional measures are needed.

Despite the lack of progress in the negotiations on aggregate scale of reductions and individual Parties' contributions, developed countries have been coming out with their own emission reduction pledges for the post-2012 period. Many of the announced pledges are based on certain assumptions regarding the availability of flexibility mechanisms and rules governing the LULUCF activities in the subsequent periods and conditional on the level of ambition of the outcome to be agreed. Pledges also vary in terms of base year to be used. Furthermore, announced targets are lower than the emission reductions expected from the Annex-I countries. According to estimations, the targets announced correspond to a reduction of 17-20 % against the 1990 level in the emissions of Annex-I countries. For the targets announced by Parties, see Table 7.

Kyoto Mechanisms and LULUCF: Negotiations have focused on identification of the role of flexibility mechanisms of the Protocol namely; Clean Development Mechanism, Joint Implementation and Emission Trading and LULUCF in the fulfillment of reduction commitments to be effective in the post-2012 commitment period and on the arrangements for increasing the efficiency of project-based mechanisms. Furthermore, improvements to the mechanisms are also being addressed in the light of experience gained in the ongoing commitment period. Negotiations also include discussions on expansion of the project-based mechanisms. Parties consider proposals on new sectoral crediting and trading mechanisms within the framework of

the NAMAs by developing countries. The negotiations on LULUCF address definitions, modalities, rules and guidelines. Parties have submitted various proposals suggesting new activities to be considered as LULUCF in the subsequent commitment period(s). These proposals expanding the scope of LULUCF activities include forest management, harvested wood products and wetlands.

Negotiations on reduction commitments and Kyoto mechanisms are closely linked since the contribution of mechanisms and LULUCF activities are seen essential by Annex I Parties in meeting their emission reduction targets.

Greenhouse Gases, Sectors and Methodology: Discussions are focused on greenhouse gases, sectors and source categories, common metrics to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks, and other methodological issues as contained in proposals by the Parties. One of the issues addressed in this context is the need and possibility of adding new greenhouse gases and sectors to the list contained in Annex A of the Protocol. Parties discuss whether or not to incorporate the gases included in the IPCC 4th Assessment Report into reporting process. In connection with the other issues under discussion, Parties also address common methodologies to be used in accounting greenhouse gases and contribution of LULUCF activities to the reduction targets.

Transfer of Kyoto Units to Subsequent Periods: Rules for Kyoto Units is another important issue on the agenda. Marrakech Accords had introduced limitations on transfer of "Kyoto Units" to the second commitment period, which Parties would have at the end of the first commitment period of the Protocol. Parties discuss whether to continue with limitations on banking and transfer of the surplus Kyoto units. Three options under consideration are; continuing with the limitation, allowing transfer to subsequent period at a certain level, and allowing the transfer of units to subsequent commitment periods without any limitation. The decision on this issue is important due to high levels of AAU surplus in Russia, Ukraine, and Central and Eastern European countries.

Table 6. Key Issues in Negotiations under the AWG-KP

Quantified Emission Reductions	<ul style="list-style-type: none"> Aggregate Annex I emissions reductions Quantified emission reductions of individual Annex I Parties Review Process: Mid-term review of commitment efforts Greenhouse gases, sectors and source categories length and number of commitment Period(s) Moving on with existing list in Annex B or forming new annexes containing list of new Parties with emission reduction commitments
Kyoto Mechanisms / LULUCF	<ul style="list-style-type: none"> Clean Development Mechanism (CDM) New activities LULUCF under CDM Nuclear under CDM CCS under CDM Regional distribution and access to project activities under CDM Share of proceeds Sectoral crediting and trading mechanism NAMAs crediting and trading mechanism Joint Implementation Emissions Trading Sectoral emission targets and trading Carry-over (banking) restrictions on Kyoto units LULUCF Definitions, modalities, rules, guidelines
Potential Consequences	Adverse and spill over effects of mitigation measures
Legal Matters	Form of the outcome

Source: FCCC/KP/AWG/2009/10/Add.1/Rev.2, FCCC/KP/AWG/2009/10/Add.3/Rev.3, FCCC/KP/AWG/2009/10/Add.2

Table 7. Emission Reduction Targets Announced by Annex I Countries (October 2009)

Party	Information relating to possible QELROs		Inclusion of LULUCF	Status
	Range or single value by 2020, percentage	Reference year		
Australia	-5% up to -15% or -25%	2000	Y	Officially announced
Belarus	-5% to -10% ¹	1990	TBD	Officially announced
Canada	-20%	2006	TBD	Officially announced
Croatia ²	+6%	1990	Y	Under consideration
European Union	-20 to -30%	1990	N for -20% Y for -30%	Adopted by legislation
Iceland	-15%	1990	Y	Officially announced
Japan	-25%	1990	TBD	Officially announced
Liechtenstein	-20 to -30%	1990	N	Officially announced
Monaco	-20%	1990	--	Officially announced
New Zealand	-10 to -20%	1990	Y	Officially announced
Norway	-30% to -40 %	1990	Y ³	Officially announced
Russian Federation	-10 to -15%	1990	TBD	Officially announced
Switzerland	-20 to -30%	1990	Y	Officially announced
Ukraine	-20%	1990	TBD	Under consideration

Source: FCCC/KP/AWG/2009/10/Add.4/Rev.2

¹ Conditional for accessing to flexible mechanisms

² An increase of emissions by 6 per cent by 2020 relative to 1990 is equivalent to a decrease by 5 per cent of emissions compared to Croatia's base year calculated according to decision 7/CP.12.

³ LULUCF is included in light of the present rules. If the rules are changed Norway's national goal will be changed accordingly.

* Announced at the AWG-KP7, this 40% target is conditional on a strong Copenhagen outcome.

The negotiations held under AWG-KP for the purpose of identifying the post-2012 commitments of Annex-I Parties and implementation mechanisms are envisaged to be concluded at CMP5. Any proposed amendment to the Protocol and/or its annexes are required to be submitted to the secretariat for communication to the parties and inclusion in the agenda, at least six months before the session in which the proposals are requested to be discussed. Pursuant to this provision, known as the “six-month rule”, a document agreed by Parties within the framework of the AWG-KP negotiations had to be submitted to the secretariat by June 2009 in order for it to be discussed at CMP5. Because negotiations were not able to produce an amendment text agreed by Parties within this period in the AWG-KP process, some Parties have submitted their own proposals for amendment to the Protocol. There are 12 proposals submitted for amending the Protocol which are provided in Box 4.

Box 4. List of Proposals for Amendments to Kyoto Protocol Submitted by Parties

- Proposal from the Czech Republic and the European Commission on behalf of the European Community and its member States for an amendment to the Kyoto Protocol
- Proposal from Tuvalu for an amendment to the Kyoto Protocol with respect to immunities for individuals serving on constituted bodies established under the Kyoto Protocol
- Proposal from Tuvalu for amendments to the Kyoto
- Protocol Proposal from the Philippines for amendments to the Kyoto Protocol
- Proposal from New Zealand for an amendment to the Kyoto Protocol
- Proposal from Algeria, Benin, Brazil, Burkina Faso, Cameroon, Cape Verde, China, Congo, Democratic Republic of the Congo, El Salvador, Gambia, Ghana, India, Indonesia, Kenya, Liberia, Malawi, Malaysia, Mali, Mauritius, Mongolia, Morocco, Mozambique, Nigeria, Pakistan, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Sri Lanka, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe for an amendment to the

Kyoto Protocol

- Proposal from Colombia for amendments to the Kyoto Protocol
- Proposal from Belarus for amendments to the Kyoto Protocol
- Proposal from Australia for amendments to the Kyoto Protocol
- Proposal from Japan for an amendment to the Kyoto Protocol
- Proposal from the Plurinational State of Bolivia on behalf of Malaysia, Paraguay and the Bolivarian Republic of Venezuela for an amendment to the Kyoto Protocol
- Proposal from Papua New Guinea for amendments to the Kyoto Protocol
- Proposal from Kyrgyzstan for amendments to the Kyoto Protocol

6.4 Climate Change Talks between Bali and Copenhagen

This section presents the short summaries and achievements of the negotiations held under the UNFCCC and the Protocol between Bali and Copenhagen Conferences. The second part of the section gives highlights of the climate change discussions undertaken at a number of high-level events aiming at facilitation of the process for building momentum and consensus among countries towards Copenhagen.

6.4.1 UNFCCC Talks between Bali and Copenhagen

Table 8. Summary of UNFCCC and KP Talks between Bali and Copenhagen

Session	Main Outcomes Achievements	Summary
COP 13 and CMP 3 3-14 December 2007 Bali, Indonesia	Bali Road Map	Parties agreed on Bali Road Map which includes Bali Action Plan in order to guide discussions with the aim of creating a new agreement to tackle climate change for the post-2012. An agreement on a two-year process was reached which set a deadline for concluding the negotiations at COP 15 to be held in December 2009.
COP 14 and CMP4 AWG-LCA 4 & AWG-KP 6 1-12 December 2008 Poznań, Poland	Shifting into full negotiating mode	Resulted with a clear commitment from governments to shift into full negotiating mode in 2009 in order to shape an ambitious and effective international response to climate change, to be agreed in COP15. Parties agreed that the first draft of a concrete negotiating text would be available at a UNFCCC gathering in Bonn in June of 2009.
BONN- I Talks: AWG-LCA 5 & AWG-KP 7 29 March- 8 April 2009 Bonn, Germany	Further clarified options for inclusion in draft negotiating text.	The Parties continued working towards the negotiation text. Under the AWG-LCA: The delegates further progressed with clarifying options for inclusion in a negotiating text for the upcoming June session. Some of the thematic issues such as those related to nationally appropriate mitigation actions (NAMAs) and a framework for adaptation have been initiated to be formed. Under the AWG-KP: The emission reduction targets for industrialized countries beyond 2012 were the key focus.
BONN- II Talks: AWG-LCA 6 & AWG-KP 8 1-12 June 2009, Bonn, Germany	Draft negotiating text	After completing two "readings" of the text, the talks resulted in a 200-page draft negotiating text, which will be forwarded to the next meeting in Bonn in August. Discussions focused on proposals by various parties for Annex I countries' aggregate and individual emission reduction targets beyond 2012.
BONN- III Talks: AWG-LCA & AWG-KP Intersessional Informal Consultations 10-14 August 2009, Bonn, Germany	-	Under the AWG-LCA: Governments focused on a negotiating text covering the issues of a "shared vision" for long-term cooperative action, enhanced action on adaptation, mitigation, finance, technology and capacity building. Under the AWG-KP: Governments focused on proposed amendments, including ones on new emission reduction commitments for 37 industrialized countries (except for the US, which refused to ratify the treaty) for the second phase of the Protocol-the "post-2012" period.
AWG-LCA 7 & AWG-KP 9 28 September - 9 October 2009 Bangkok, Thailand	Reduced negotiation text	Largely focused on reducing the negotiating text and a number of options in advance of the next sessions in Barcelona. Unlike during the previous meetings in Bonn, the discussions quickly centered on mitigation actions - what many parties saw as the core, "make-or-break" issue. A largely unified group of developed countries called for consideration of mitigation actions by developing countries. The USA, EU, Australia, and Japan together emphasized that their future pledges are conditional on developing country action. This is signaling that recent goodwill, especially with Japan's highly praised announcement of new and more stringent targets, has been replaced with harder negotiating positions.
Resumed AWG-LCA 7 & AWG-KP 9 2 - 6 November 2009 Barcelona, Spain	-	The dominant issue in Barcelona was mitigation. Parties remain without agreement on aggregate developed country targets. As such, mitigation remained blocked in both discussion tracks, with no clarity on financing available for developing country actions and specific next commitment period targets from critical developed countries, such as the US, being the major roadblocks.

Source: Earth Negotiations Bulletins, UNDPCC, 2009a, 2009b, 2009c, 2009d, 2009e

6.4.2 Other International Developments in the run up to the Copenhagen Conference

UN Secretary General's High Level Event on Climate Change, 24 September 2007

Just before COP13/MOP3 in 2007 and on the occasion of UN General Assembly meeting, United Nations Secretary-General Ban Ki-moon convened a high-level event on climate change in New York on 24 September 2007 to raise the profile of the issue among world leaders and to build momentum for launching negotiations on a new international framework to address climate change at the UN Climate Change Conference in Bali, Indonesia, in December. The event - entitled *The Future in Our Hands: Addressing the Leadership Challenge of Climate Change* - was attended by representatives of 168 Member States, including more than 70 Heads of State and Government, making it the largest gathering of world leaders on climate change so far (<http://www.un.org>).

Prime Minister Recep Tayyip Erdoğan attending the Event announced in his statement that "Provided that its special circumstances setting it apart from the other Annex-I countries is acknowledged, Turkey is favorably considering accession to the Kyoto Protocol" (<http://www.un.org>).

UN Secretary General's High Level Event: The Summit on Climate Change, 22 September 2009

UN Secretary-General Ban Ki-moon convened the Summit on Climate Change in New York on 22 September 2009 to mobilize political will and strengthen momentum for a climate deal in Copenhagen in December. In his summary of the Summit, UN Secretary-General stated that "The message from the Summit is clear - the Copenhagen deal must be comprehensive and ensure:

1. Enhanced action to assist the most vulnerable and the poorest to adapt to the impacts of climate change;
2. Ambitious emission reduction targets for industrialized countries;
3. Nationally-appropriate mitigation actions by developing countries with the necessary support;
4. Significantly scaled-up financial and technological resources; and
5. An equitable governance structure."

In his video statement to the Summit, Prime Minister Recep Tayyip Erdoğan announced that "Turkey is willing to take part in the post-2012 new climate regime with a fair legal status, on the basis of the principle of "common but differentiated responsibilities" and in accordance with its national circumstances, economic and social development objectives and respective capabilities. This will enable Turkey to do its part on the implementation of "nationally appropriate mitigation actions" within the context of international efforts towards the combat against global emissions and cooperation in this field, without jeopardizing its sustainable development initiatives" (<http://www.un.org>).

G8 and Climate Change, 2005-2009

The Group of Eight (G8) comprising the world's richest countries (France Germany, Italy, Japan, the United Kingdom, the United States, Canada and Russia) is a vital actor and a forum for international action on climate change since these countries are the ones with higher emissions levels and capacity to tackle the problem. Accordingly, climate change has risen to the forefront of priority issues for the Group.

Climate change was the major issue on the G8 summit at Gleneagles 2005. The Summit launched the *Dialogue on Climate Change, Clean Energy and Sustainable Development* with the participation of G8 countries, EU and major developing countries, which held four consequent meetings and concluded in 2007. The Summit also produced the *Gleneagles Plan of Action on Climate Change Clean Energy and Sustainable Development*. On

the request of G8 countries in Gleneagles the World Bank produced the *Clean Energy Investment Framework* 2005. Climate change was also among the priority issues on the agenda of the most recent G8 Summits, respectively 2006 St. Petersburg-Russian Federation, 2007 Potsdam-Germany, 2008 Hokkaido Toyako-Japan and 2009 L'Aquila-Italy.

At the latest G8 Summit held in L'Aquila, Italy on 8-10 July 2009, G8 leaders addressed the interlinked challenges of the economic crisis, poverty, climate change and international political issues. During the Summit, climate change was discussed both in the G8 and in the MEF format. In the G8 session, leaders recognized in the *Declaration on Responsible Leadership for a Sustainable Future* the scientific view that the increase in global average temperature above pre-industrial levels should not exceed 2°C and agreed on a global long-term goal of reducing global emissions by at least 50% by 2050 and, as part of this, on a 80% or more reduction goal for developed countries by 2050. They also agreed on the need for significant mid-term targets consistent with the long term goals and for global emissions to reach their peak as soon as possible (G8, 2009a). The active engagement of all major emitting countries through quantifiable mitigation actions was highlighted as an indispensable condition to successfully tackle climate change. Participants at the MEF also adopted a Declaration on Energy and Climate, paving the way for a comprehensive global agreement in Copenhagen and agreed to continue to work together in the coming months (G8, 2009b).

G20 and Climate Change, 2008-2009

The Group of Twenty (G20), established in 1999 and made up of the finance ministers and central bank governors of 19 countries and the EU, brings together systemically important industrialized and developing economies to discuss key issues in the global economy. Members of G20 are: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom, European Union and United States of America (www.g20.org).

Climate change gained more importance in the G20 agenda over the years. For instance, the G20 leaders who met in Washington in November 2008 to discuss the challenges facing the world economy stated their commitments to addressing other critical challenges rather than the economic crisis such as the climate change. At the London summit in April 2009, building a green and sustainable economy was listed among the core commitments of the economic recovery. Leaders at the summit reaffirmed their commitment to tackle climate change, based on the principle of common but differentiated responsibilities, and to reach agreement in Copenhagen (G20, 2009a). This was seen as first collective commitment from all the major countries, to find a deal to stop climate change.

At the Pittsburgh Summit in September 2009, G20 Leaders announced that they are committed to phase out inefficient fossil fuel subsidies over the medium term. The statement also mentioned that the G20 is committed to a resilient, sustainable and green recovery and committed to intensify its efforts to a successful outcome of the UN Climate Conference in Copenhagen. Leaders again called on their finance ministers to report back at their next meeting with a range of possible options for climate change financing, and to make those options available as a resource in the UNFCCC negotiations (G20, 2009b).

In their communiqué, dated 7 November 2009, G20 ministers stated that G20 is committed to work towards an ambitious outcome in Copenhagen within the objective, provisions and principles of the UNFCCC. It is also underscored that there is need to increase significantly and urgently the scale and predictability of finance to implement an ambitious international agreement and G20 is committed to work further on climate change finance to define financing options and institutional arrangements (G20, 2009c).

Major Economies Forum (MEF), 2009

Shortly after taking the office in 2009, the US President Obama launched the Major Economies Forum on Energy and Climate in March 2009, which includes 16 major economies: Australia, Brazil, Canada, China, the European

Union, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, Russia, South Africa, the United Kingdom, and the United States. Denmark, in its capacity as the President of the December 2009 Conference of the Parties to the UNFCCC, and the United Nations have also been invited to participate in this dialogue. The aim of the forum is stated as “to facilitate the dialogue among key developed and developing countries to help generate the political leadership necessary to achieve a successful outcome at the climate change negotiations and advance the exploration of initiatives and joint ventures that increase the supply of clean energy.” Since its inception, the Forum participants have met several times. At its meeting during the G8 Summit in L’quila, leaders of the Forum adopted the Declaration of the Major Economies Forum on Energy and Climate which sets out a framework for key pillars of the Copenhagen climate deal. Some major outcomes of the L’quila meeting as announced in the Declaration include the following (www.whitehouse.gov):

- Developed countries will undertake robust mid-term emissions reductions
- Developing countries will undertake actions to deviate their emission levels from business as usual supported by financing, technology transfer and capacity building
- They will increase public investments in R&D with a view to doubling such investments by 2015
- Financial resources for mitigation and adaptation will need to be scaled up urgently, from public and private sources, including through carbon markets and additional investment in developing countries should be mobilized, including by creating incentives for and removing barriers to funding flows
- Necessary steps will be taken to reduce emissions from deforestation and forest degradation
- Further support will need to be mobilized for adaptation which will include resources additional to existing financial assistance
- Establish a Global Partnership to drive transformational low-carbon, climate-friendly technologies

US-China Talks, November 2009

As being the two largest green house gas emitting countries and thus key actors in the negotiations towards a post-2012 deal, the talks between the US and China on climate change has been anticipated with great interest and high expectations. There have been suggestions and speculations that the US and China would announce an agreement on climate change during the President Obama’s visit to China in November 2009. Although this did not happen, the two countries pledged to cooperate on clean energy technologies. On November 17, the leaders announced several joint initiatives as part of a package titled “U.S.-China Clean Energy Announcements”, including the launch of a Renewable Energy Partnership, Energy Efficiency Action Plan, Electric Vehicles Initiative and establishment of the Energy Cooperation Program and Clean Energy Research Center (The White House, 2009a). The joint statement by the leaders reaffirmed the countries’ positions: “while striving for final legal agreement, an agreed outcome at Copenhagen should include emission reduction targets of developed countries and nationally appropriate mitigation actions of developing countries” (The White House, 2009b), which indicates that a legally binding agreement would not be in reach in 2009.

EU-US Summit, November 2009

Climate change was the main issue on the agenda of the EU-US Summit on 3 November 2009, which was the first since the Obama Administration took office. However, the summit made little progress in terms of emission reduction targets to be agreed in Copenhagen. At the Summit, the EU and US agreed to promote an ambitious and comprehensive international climate change agreement in Copenhagen, which aspire a global goal of 50% global emissions reductions by 2050 reflecting the respective mid-term mitigation efforts of all major economies, including developed and emerging ones. In the Summit Declaration, they announced that in the context of an ambitious agreement in Copenhagen, they are ready to work to mobilize substantial financial resources for supporting adaptation in the most vulnerable countries and

mitigation in developing countries. They also emphasised the role of strong and well-functioning carbon markets, which they consider "essential" to engage emerging and developing countries in ambitious emissions reduction actions (www.se2009.eu).

07 POSITIONS of MAJOR GROUPS AND PARTIES on POST-2012 CLIMATE CHANGE REGIME

This section outlines positions of the major groups and parties on the issues negotiated under the two tracks towards Copenhagen based on their views expressed and submissions made throughout the sessions.

7.1 G 77 and China

G77 and China is one of the major groups in climate change process representing developing countries with diverse national circumstances in terms of emission levels and vulnerability to the effects of climate change.

Besides, China has a key role in the global response to climate change due to its huge population and high greenhouse gas emission levels. In this context, China is one of the determining parties in formulating the actions within the climate change regime. While G77 and China usually act jointly as a negotiation group within the climate change regime, differences in the views and positions may be observed within the group on certain issues due to the difference of country conditions. In the context of ongoing negotiations, the differences of view in the approach to differentiation of post-2012 developing country commitments is an example of this. Another difference of view arises in connection with the proposals relating to the definition of vulnerability against the negative impacts of climate change as well as the classification of countries eligible for adaptation support.

G77 and China argue that the developed and developing country commitments should be addressed separately in the post-2012 negotiations and they object to link the negotiations under AWG-LCA established under the

Convention and AWG-KP established under the Protocol. Favoring the distinction of two negotiation tracks, the Group calls for an amendment to the Kyoto Protocol such that developed countries undertake higher binding reduction commitments as a requirement of their historical responsibilities. They also want the US to undertake reduction commitments comparable to other developed countries. The Group proposes the view that Annex-I countries should undertake emission reduction targets of at least 40% below the 1990 level during the second commitment period which they want it to cover the years 2013-2020. The Group objects to the proposals that developing countries should undertake binding emission reduction commitments and emphasizes the need for support to developing countries through financial resources and technology transfer in the context of mitigation and adaptation. Accordingly, the Group proposes that developed countries should contribute to the funding of the climate change mitigation and adaptation measures in developing countries, by allocating new and additional resources as much as 1.5 % of their GDP.

Furthermore, China is concerned that developed countries would resort to protectionist measures in international trade based on the justification of their climate change policies. China has officially expressed its view in this direction. India, Indonesia and some other developing countries raised the same concern.

7.2 European Union

The EU has assumed a leadership role in international efforts to combat climate change particularly in the absence of the US. It endorsed a comprehensive policy package for climate change and energy and adopted relatively ambitious emission reduction target for the period beyond 2012.

Soon after COP 14, on 28 January 2009 the European Commission (2009) published a Communication entitled "Towards a Comprehensive Climate Change Agreement in Copenhagen" – COM (2009). The document contains directions and recommendations on international climate policy targets, the role of developed and developing countries in terms of mitigation and adaptation actions,

financing, and the role of carbon emissions trading. In the document, the Commission reaffirms emission reduction targets adopted by the European Council in 2007 and the main elements of the EU “Energy and Climate Package” adopted in December 2008.

Environment Council conclusions from 2 March 2009 on “Further development of the EU position on a comprehensive post-2012 climate agreement” reiterate many of the statements contained in the Communication. The Conclusions underline the opportunity and the need to build on the synergies between climate change and economic recovery actions. On mitigation the Conclusions acknowledge that developed countries should collectively reduce their GHG emissions by 25 to 40 % by 2020 compared to 1990 levels, through domestic and international efforts, and transform their economies over the coming decades in order to collectively reduce their GHG emissions by 80 to 95% by 2050 compared to 1990 levels.

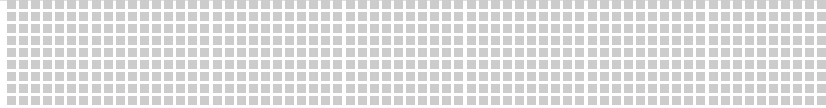
The Conclusions call on developed countries to propose, as soon as possible and not later than mid-2009, quantified emission limitation or reduction commitments for the medium-term. In this context, conclusions stress that the Copenhagen agreement should contain binding quantified emission limitation or reduction commitments for at least all Parties listed in Annex I to the UNFCCC and all current EU Member States, EU candidate countries and potential candidate countries that are not included in Annex I to the UNFCCC; and calls upon other non Annex I Parties that are at levels of development and GDP/capita comparable to those of the group of developed countries, notably OECD member countries and candidates for membership thereof, to consider making similar commitments; also proposes that the Copenhagen agreement include an appropriate level of ambition of measurable, reportable and verifiable mitigation commitments and actions by Parties.

EU made a submission¹, on 28 April 2009, proposing a negotiation text for consideration at AWG-LCA 6, Bonn, 1-12 June 2009. This submission was supported by the Former Yugoslav Republic of Macedonia, Serbia and Turkey. The submission’s Annex A provides a proposal for a text based on the previously expressed positions of the EU and elaborated on the content of Low Carbon

Development Strategies (FCCC/AWGLCA/2009/MISC.4 (Part I)).

EU’s position is further elaborated by the Environment Council meeting on 21 October 2009. Some of the key conclusions of the EU Council on EU Position for the Copenhagen Climate Conference are presented below (Council of the European Union, 2009).

¹ http://unfccc.int/files/kyoto_protocol/application/pdf/czechonbehalfofec050509.pdf



Theme	Conclusions
Mitigation	<p>REAFFIRMS its commitment for an autonomous 20% reduction of the EU emissions by 2020 below 1990 levels; a 30% reduction target in the context of a sufficiently ambitious and comprehensive international agreement that provides for comparable reductions by other developed countries, and appropriate actions by developing countries;</p> <p>CALLS upon all Parties of a Copenhagen Agreement to embrace the 2°C objective and to agree to global emission reductions of at least 50% 80 to 95% reduction of emissions by 2050 in developed countries; leading to global 50% emission reduction by 2050.</p> <p>NOTES that, based on available elements such as current population projections, global average greenhouse gas emissions per capita should be reduced to around two tones CO₂ equivalent by 2050, and that, in the long term, gradual convergence of national per capita emissions between developed and developing countries would be necessary, taking into account national circumstances.</p> <p>REITERATES that at least all Parties listed in Annex I to the UNFCCC and all current EU Member States, EU candidate countries and potential candidate countries that are not included in Annex I to the UNFCCC should commit to ambitious binding quantified emission limitation or reduction commitments; CALLS UPON other non-Annex I Parties that are at levels of development and GDP/capita comparable to those of the group of developed countries, notably OECD member countries and candidates for membership thereof, to consider making similar commitments commensurate with their responsibilities, capabilities and national circumstances.</p> <p>STRESSES that the EU will conduct further analysis of all other Parties' proposed commitments / actions and contributions; CONFIRMS that the EU should be guided by considerations of capability and responsibility and, for assessing developed countries' proposed commitments, making use of a balanced combination of criteria such as:</p> <ul style="list-style-type: none">- <i>the capability to pay for domestic emission reductions and to purchase emission reduction credits from developing countries;</i>- <i>the greenhouse gas emission reduction potential;</i>- <i>domestic early action to reduce greenhouse gas emissions;</i>- <i>population trends and total greenhouse gas emissions</i> <p>in order to prepare the EU for a decision whether to step up to a 30% emission reduction commitment; UNDERLINES that the analysis of comparability of commitments, actions and contributions will be conducted also using the 2°C objective as yardstick.</p>



Adaptation

RECOGNIZES that climate change is already occurring, that many vulnerable countries are already experiencing the impact of climate change and that the ability to cope with adverse climate change effects varies considerably among countries; UNDERLINES that adaptation is a necessary complement to mitigation; REITERATES therefore that adaptation must be comprehensively addressed by all Parties in a Copenhagen agreement; and in this Context RECALLS its proposal to create a Framework for Action on Adaptation as part of this agreement, with the aim of building a more climate-resilient society through effective adaptation actions as integral part of sustainable development in all parts of the world;

STRESSES the need to effectively integrate adaptation into national and sectoral planning, sustainable development policies and strategies at all levels and into development cooperation, fostering a decentralized bottom-up approach building on existing and if necessary reformed institutions and developing countries' own structures, and promoting enhanced regional cooperation, cross-sectoral approaches as well as stakeholder involvement;

STRESSES the need to step up efforts to further exploit synergies between the UNFCCC and other UN Conventions, in particular the UN Convention on Biological Diversity and the UN Convention to Combat Desertification, as well as between the UNFCCC and processes and programmes carried out by United Nations Agencies and other organizations;

FURTHER STRESSES the need to continue to cooperate to improve research and systematic observation and to strengthen capacities in vulnerable developing countries, and to develop and transfer technology and knowledge on adaptation, including climate systematic observation and development of regional climate scenarios; and to enable the provision of high quality climate services; in this context SUPPORTS the establishment of a Global Framework for Climate Services, as recently decided by the World Meteorological Organization's 3rd World Climate Conference.

WELCOMES the operationalisation of the Kyoto Protocol Adaptation Fund and looks forward to the disbursement of funds to support concrete adaptation actions; RECOGNIZES that further financing will be needed to support adaptation in developing countries and therefore UNDERLINES the need to scale up support for adaptation in developing countries, until and beyond 2012, focusing on countries and regions that are particularly vulnerable to the adverse impacts of climate change, especially SIDS, LDCs and African countries prone to drought, desertification and floods; STATES that such support would be first provided for urgent needs, as identified in National Adaptation Programmes of Action (NAPAs) and other relevant documents, making effective use of both UNFCCC and non-UNFCCC institutions and channels by inter alia building capacity in partner countries to start integration of adaptation into national development planning, improving the knowledge base for adaptation and building up experience in areas such as designed pilot programmes on insurance as a tool for risk management.

Land Use and Forestry

RECALLS the importance of action to reduce deforestation and forest degradation (REDD) and also of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+), as well as the EU's objectives of reducing gross tropical deforestation by at least 50% by 2020 compared to current levels and to halt global forest cover loss by 2030 at the latest.

Low Carbon Development Strategies

UNDERLINES the need for measuring, reporting and verification (MRV) of mitigation actions in order to ensure transparency, accountability and enhance public and private confidence for the achievement of global and national objectives.

Carbon Market

WELCOMES the continued development of cap-and-trade legislation in a number of OECD countries; REITERATES its call for an OECD-wide carbon market through the linking of cap-and-trade systems comparable in ambition and compatible in design as soon as practicable and preferably by no later than 2015 and the extension of this market to more advanced developing countries by 2020 as important steps towards achieving a fully integrated global carbon market which at the same time will promote a level-playing field.

RECALLS that maintaining a continuing strong role for the project-based mechanisms Clean Development Mechanisms (CDM) and Joint Implementation (JI), including programmatic approaches, is important for broadening carbon markets and maintaining the trust of carbon market investors; EMPHASISES the importance of reforming the CDM and JI mechanisms, including through enhancing their effectiveness, efficiency, environmental integrity and governance; CONSIDERS to this end that the use of ambitious standardised benchmarks for baseline setting and additionality testing for specific CDM project types should be adopted where possible; FURTHER EMPHASIZES the importance of enhancing the contribution to sustainable development and to global emission reductions of the CDM and the importance of strengthening the participation of the Least Developed Countries.

Climate Finance, Governance and Delivery

REAFFIRMS the importance of increasing private and public energy-related RD&D compared to current levels, working towards at least a doubling of global energy related RD&D by 2012 and increasing it to four times its current level by 2020 with a significant shift in emphasis towards safe and sustainable low greenhouse-gas-emitting technologies, especially renewable energy and energy efficiency; and STRESSES the necessity of protecting and enforcing intellectual property rights (IPRs) for promoting technological innovation and incentivizing investments from the private sector.

STRESSES that all official development assistance (ODA) expenditure should take climate considerations into account with a view to making it climate-proof; EMPHASIZES that synergies in the implementation of international climate finance and other assistance in developing countries should be used as much as possible, that the experience of existing institutions, including multilateral and bilateral development financial institutions, in delivering aid in developing countries should be used and the agreed principles of aid effectiveness should be applied.

Technology

PROPOSES that developing countries perform national assessments of their needs and barriers related to technology and use those assessments in order to make strategic choices in their LCDS/LCGPs; EMPHASISES that LCDS/LCGPs should set out what support is needed to implement actions and policy frameworks that lead to enhanced technology development and deployment;

REAFFIRMS the importance of increasing private and public energy-related RD&D compared to current levels, working towards at least a doubling of global energy related RD&D by 2012 and increasing it to four times its current level by 2020 with a significant shift in emphasis towards safe and sustainable low greenhouse-gas-emitting technologies, especially renewable energy and energy efficiency; and STRESSES the necessity of protecting and enforcing intellectual property rights (IPRs) for promoting technological innovation and incentivizing investments from the private sector.

Legal Issues

EMPHASIZES the need for a legally binding agreement for the period starting 1 January 2013 that builds on the Kyoto Protocol and incorporates all its essentials, as an outcome from Copenhagen in December 2009.

CONSIDERS that a single legally binding instrument would provide the best basis for enhancing the implementation and ensuring consistency in the application of the international climate regime post-2012 and facilitating ratification by Parties and entry into force of the agreement with a view to achieving universal participation and expresses its willingness to an open discussion with other Parties on different options to the same ends.

EMPHASIZES the importance of a strong and effective compliance regime, building on the Kyoto Protocol's approach.

7.3 USA

The position of the US, the only Annex I country not Party to the Kyoto Protocol, entered a new phase indicating an intention to take an active and constructive part in the regime with the new administration coming to the Office in 2009, after years of staying aloof towards international cooperation on climate change during Bush Administration. The new US Administration's position under President Obama was anticipated with a great interest since, during his campaign, he put combating climate change among his highest priorities and pledged to cut US greenhouse gas emissions by 80 % by 2050.

However, developments in the country since then reminded observers that the US position in international

negotiations is tied up to the dynamics in the country's domestic system. As the Congress has a vital role in ratifying international agreements, any commitments to be made by the new US administration under the climate change regime should gain approval of the Congress. To avoid the fate of the Kyoto Protocol, ratification of which rejected by the Senate, the US strives to put domestic legislation into place before an international agreement reached, with a view to set a national goal and implementing mechanisms ensuring the international agreement can be ratified by the Congress. In pursuit of this, the Congress initiated a legislative process to pass a law setting US domestic climate regulations based on a cap-and-trade system. House of Representatives concluded its part accepting a draft bill. The legislative

process is underway in the Senate to approve the draft bill introduced by Senator Kerry and Boxer. Both bills take 2005 as the base year and propose 80% reduction in 2050. They also contain mid-term target for 2020 as 17% and 20%, respectively. As this domestic legislative process is not expected to be completed before the COP15/CMP5 in Copenhagen, the US advocates an idea to defer the conclusion of negotiations to 2010.

The US under the new Administration has taken part in the negotiations under the Bali Action Plan since AWG-LCA fifth session in Bonn in 2008. In a much anticipated statement at the Bonn Talks, the US recognized its unique position as the largest historical emitter of greenhouse gases and as a country with important capabilities, but underscored that the US alone cannot provide the solution to the climate change problem. The essence of the US position is that all major emitters should take part in the mitigation efforts. Therefore, in addition to industrialized countries, the emerging economies with high and growing current GHG emissions should assume binding reduction obligations. This implies that it seeks differentiation among developing countries in terms of their obligations under the new agreement. Furthermore, it argues that since each country has differing national circumstances with regard to sources of and potential to reduce emissions, and economic and technological capacity, each country should decide its own mitigation pledges in a way reflecting these national circumstances. Thus, the US position in regard to mitigation is based on a 'pledge and review' approach which is seen by some as replacing economy-wide internationally binding targets. Accordingly, each Party would pledge national actions that would be open to some degree of measurement, reporting and verification (MRV) by other Parties through an international registry. These individual pledges then make up the aggregate reduction goal to be achieved globally under the new agreement. These actions pledged nationally will be subject to a domestic review process instead of a binding compliance mechanism as sought by developing countries and the EU.

The technology element of US position comprises of technology hubs and centers of excellence to be established in regions where they are much needed. Although it is yet to announce how much its own

contribution will be, the US proposes a Global Fund for Climate to be resourced from contributions by all Parties, except LDCs, in accordance with their national circumstances and respective capabilities.

The most distinctive element of the US position is its preferred form of the agreed outcome from negotiations under the Bali Action Plan. The US proposes an "Implementing Agreement" under the UNFCCC. This has given rise to concerns on the part of developing countries that enforcement of the commitments by developed countries in the new agreement would not be guaranteed. Thanks to components of the US position outlined above, developing countries accuse the US of "killing the Convention".

7.4 Australia, Japan and Russia

Australia, who joined the Kyoto Protocol just before the Bali Climate Conference in 2007, is in the process to introduce a national cap-and-trade system. The country announced officially that it will reduce its emissions by 5% up to 15% or 25% below 2000 levels in 2020; 15% target depends on an agreement involving all major emitters and % 25 figure is conditional on the level of ambition of the outcome to be adopted in Copenhagen. In its "schedules proposal", Australia wants quantified emission reduction commitments for developed countries and NAMAs for developing countries, both inscribed in the national schedules. The proposal requires "developing country Parties whose national circumstances reflect greater responsibility or capability" to take, at a minimum, "nationally appropriate mitigation commitments and/or actions aimed at achieving substantial deviation from baselines." Proposing a new protocol to the Convention, Australia prefers "one-treaty model" and thus seeks a single agreement as the outcome of ongoing negotiations.

Japan's new government just after coming into power announced a new pledge to reduce its emission by 25% below 1990 by 2020. Its position on mitigation is based on sectoral bottom up approach. Japan wants a fair and effective single framework, a new single agreement, not just extension of the Protocol into new commitment period, and thus participation of all major developing countries with mitigation actions.

Russia is a critical country within the climate change regime due to its high emissions levels and what is called the “Russian hot air”. It has accumulated a large volume of assigned amount units (AAUs) under the Protocol because its emissions are still well below 1990 levels. Thus, one of the issues under the negotiations is what will happen these unused AAUs, including Russia’s, in period after 2012. It is feared that, if these Kyoto units are allowed to be carried over into the next commitment period they would undermine environmental integrity of the regime. Russia’s role is also important because of its relations with EITs. It supports the EITs countries in their search for recognition of their status in the new period.

Russia had originally announced its pledge to reduce its emissions by 10 - 20 % below 1990 levels by 2020. But, at the last EU-Russia Summit, Russian President indicated that the country would adopt a 25% reduction target (<http://en.cop15.dk>). It also called for in what is known as the “Russian proposal” more flexibility for the Parties, wishing to do so, to join the Protocol Annex B with voluntary emission targets.

7.5 EITs

UNFCCC and Kyoto Protocol have introduced certain flexibilities for the economies in transition countries (EITs) in terms of their emission commitments and support mechanisms for the fulfillment of these commitments. Arguing that their situation has not been reflected properly in the negotiation texts discussed under Bali Action Plan and AWG-LCA, these countries request that the negotiation texts be reviewed in the light of related Convention provisions and COP decisions.

7.6 Mexico and South Korea

Mexico and **South Korea**, both are current OECD member countries, were not included in Annex I of the Convention since they were not OECD members when the Convention was adopted. Both countries belong to the Environmental Integrity Group and are participants of the processes like Major Economies Forum (MEF) and G8+5, which aim at contributing to shaping international climate policy.

Mexico adopted a voluntary emission target and announced that it will reduce emissions 50% below 1990 levels in 2050. Mexico’s proposal on financing climate change measures has drawn attention in the negotiations and received support of some Parties. The country proposes establishment of a climate change fund under the Convention, called as Green Fund, to finance mitigation and adaptation measures. According to the proposal, the fund will be resourced by contributions of all Parties based on an agreed formula, and the rules and criteria to benefit from the Fund will be established by the Parties.

South Korea also announced a voluntary emission reduction target. The country pledged to reduce its emissions 30 % below expected levels by 2020 (<http://en.cop15.dk/>). In the AWG-LCA negotiations, South Korea proposes NAMA crediting as a new mechanism in which any reduction beyond business-as-usual would be eligible.

7.7 AOSIS

AOSIS, consisting of countries which are highly vulnerable to risks associated with climate change, maintains a strong position urging for a strengthened climate change regime with more stringent post-2012 emission limitation and reduction targets and adaptation measures. The Group calls for an agreement that should contain a set of goals for long term global action, including stabilizing atmospheric concentrations of GHGs at the level below 350 ppm CO₂-equivalent, limiting global average surface temperature increase below 1.5° C above pre-industrial levels and reducing global GHG emissions by more than 85% below 1990 levels by 2050. They call on developed countries to undertake a pioneering role given their historical responsibility for climate change. In this effect, AOSIS wants Annex I parties to reduce their aggregate GHG emissions by more than 45% below 1990 levels by 2020, and more than 95% below 1990 levels by 2050. Developing countries should achieve a significant deviation from BAU through measurable, reportable and verifiable NAMAs in the context of sustainable development, supported and enabled by technology, financing and capacity-building. They also expect that SIDS are provided with new and

additional sources of grant-based financing to meet their adaptation needs (AOSIS, 2009).

7.8 The African Group

The African Group representing the countries most vulnerable to adverse effects of climate change wants climate change be addressed in the context of development and seeks support from developed countries for adaptation measures. The Group urges Annex I Parties to commit themselves to at least 40% emission reductions by 2020 with strict limitations on the use of offsets. In this sense, the Group wants continuation of the Kyoto Protocol with amendment setting stronger binding targets. At Barcelona Climate Talks, the Group called for suspension of contact groups in reaction to the slow pace of negotiations under the AWG-KP. One of the underlying reasons of the slow pace was the reluctance of developed countries to agree on aggregate and individual reduction targets. Supported by other developing countries, including G77 and China, the Group's action was seen as a signal to Parties about the prospect of negotiations in Copenhagen.

08 GLOBAL CLIMATE CHANGE COOPERATION and TURKEY

8.1 Turkey's Current Position

Turkey, as a member of the OECD, was included in Annex-I and Annex-II of the UNFCCC together with the developed countries when it was adopted in 1992. At the COP7 held in Marrakech in 2001, the name of Turkey was removed from Annex-II of the Convention (Decision 26/CP.7) and Turkey remained as an Annex-I Party of the UNFCCC, in a position that is different than other Annex-I countries. Turkey acceded to the UNFCCC as the 189th Party on 24 May 2004.

Turkey became Party to the Kyoto Protocol on 26 August 2009, after the deposit of instrument of accession to the United Nations following the adoption of the Law² (No. 5836) approving Turkey's accession to the Kyoto Protocol to the United Nations Framework Convention on Climate Change by the Turkish Grand National Assembly on 5 February 2009 and adoption by the Council of Ministers of the Cabinet Decree (No. 2009/14979) on 13 May 2009. As Turkey was not a Party to the UNFCCC at the time the Protocol was adopted, it was not included in the Annex B of the Protocol which defined quantified emissions limitation or reduction commitments for Annex I parties. Therefore, Turkey does not have a quantified emissions limitation or reduction commitment in the first commitment period between the years 2008-2012 under the Protocol.

Turkey under the UNFCCC and the KP

- A party to the UNFCCC since May 2004
- An Annex-I Party
- Have a specific COP Decision (Decision 26/CP.7, -at COP7 in Marrakech, 2001- deleted Turkey's name from Annex-II and placed her in a situation different than the other Annex-I Parties)
- A sui-generis case vis-a-vis the Annex-I Parties
- A Party to the Kyoto Protocol as of 26 August 2009
- Not included in Annex B

8.2 Turkey's Perspective on the post-2012 Climate Change Regime

Recognizing that global problems require global solutions, Turkey attaches a great importance to the regional and international cooperation on combating climate change. Turkey is willing to contribute to international efforts by taking a part in cooperative action in the post-2012 period with a view of a new agreement establishing a fair mechanism providing flexibilities for countries to take appropriate mitigation and adaptation action based on their national circumstances and levels of economic development.

² 5836 sayılı "Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesine Yönelik Kyoto Protokolüne Katılmamızın Uygun Bulunduğuna Dair Kanun".

Turkey actively engaged in the negotiations and provided its views on the long-term global cooperative action in its submissions and statements since the launch of the process. Turkey's views on the process and contributions to elements of the deal to be adopted in Copenhagen are presented in the following section.

Turkey's Key Submissions, Statements on the Road to COP15

In support of global cooperative action and its own position, Turkey has expressed its views in its statements and submissions to the sessions of negotiations held so far. The quotations from the statements and submissions are provided below in the order of the date of delivery.

On 29 August 2007 during the 4th workshop of the Convention Dialogue, Turkey made the following statement:

"...Turkey as a developing country with high aspirations strives to continue its economic development following the principles of sustainability. However, as a country having lower greenhouses gas emissions per capita than other OECD countries and transition economies, the major issue for Turkey is how to contribute to reducing the burden on global resources at a low cost and without jeopardizing its economic and social development prospects."

By the end of February 2008 with regard to the work programme of the AWG-LCA, Turkey made a submission providing views on the key elements of the Bali Action Plan (FCCC/AWGLCA/2008/MISC.1). A section from Turkey's submission emphasizing her special circumstances is given below.

"Turkey, although being an OECD country, is neither a developed industrialized country nor in the group of countries, the economies of which are in transition. Special circumstances of Turkey, which place Turkey, in a situation different from that of other Parties included in Annex I to the Convention was recognized in the 7th Conference of the Parties (COP-7) held in Marrakesh in 2001, which also deleted its name from Annex II. Some might say that the Marrakesh decision improved the status of Turkey. However, the most realistic solution would have been to be deleted

from both Annexes. Turkey's status as an Annex I Party in the framework of the Convention, doesn't reflect its actual industrialization level. Turkey is in a sui generis situation vis-à-vis the current international climate change regime."

Between 21-27 August 2008 during the plenary session of AWG-LCA 3 Turkey called for flexibility in the future regime for the dynamic nature of national circumstances to be taken into account.

On 5 December 2008 during the AWG-LCA 4, the submission made by Turkey regarding the Paragraph 1 of the Bali Action Plan is as follows (FCCC/AWGLCA/2008/MISC.5/Add.2 (Part II):

"...we consider that differentiation among developed Parties needs to be done before we actually proceed with defining the nationally appropriate commitments or actions.

In this respect, the definitions of "developed countries" and "developing countries" should be revised to reflect the new developments in the world economy since the adoption of the Convention. Turkey believes that differentiation among developed Parties on the basis of composite indicators is crucial in identifying future commitments or actions in terms of mitigation or technological and financial supports.

Developed Parties can be differentiated based on the national circumstances, historical responsibilities, development levels, economic and social indicators, such as GDP per capita, energy consumption emissions per capita, population growth rate, import dependency, foreign debt, and human development index. In this context, AWG-LCA should establish a list of parameters and criteria to differentiate developed Parties. In developing such a composite indicator, input could be provided by relevant international institutions."

On 1 April 2009, Turkey has outlined her case in the "Workshop on subparagraphs 1 (b) (i) and 1 (b) (ii) of the Bali Action Plan" held during the Bonn Climate Change Talks (Turkey's Presentation on Workshop on Subparagraphs 1 (b) (i) and 1 (b) (ii) of the BAP, 1 April 2009, Bonn Climate Change Talks). The followings are the highlights of Turkey:

- Turkey is a *sui generis case vis-à-vis* the Annex-I Parties. The Decision adopted in Marrakesh in the 7th COP, deleted Turkey's name from Annex-II and placed it in a situation different than the other Annex-I Parties;
- Turkey has a negligible historical responsibility;
- Turkey has many similarities with developing country Parties;
- Turkey plans to take NAMAs for emission limitation and adopt "no-lose target" strategy;
- Turkey has already been taking many important steps and actions to fulfill its responsibilities under the UNFCCC in conformity with her economic and social development objectives and priorities, and to the extent allowed by her national capacity;
- Turkey's success in future climate change regime will be proportional to the international financial and technological support, the level of access to flexibility mechanisms and new technologies such as carbon capture and storage.

During the workshop, Turkey reiterated her situation under the UNFCCC as a developing country considering herself as a developing country with a reference of the OECD & IEA table from "Differentiating Countries in Terms of Mitigation Commitments, Actions and Support, 2008" (UNDP & MOEF, 2009).

Basic respective indicators of Turkey shared during the presentation are:

- 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 HDI among the Annex I and less than many

The presentation also emphasized Turkey's willingness to participate in post-2012 regime by:

- Making fair share contribution in accordance with the Decision 26/CP.7;
- Adopting nationally appropriate mitigation actions (NAMAs);
- Accepting no-lose targets to limit emissions growth and move to a low-carbon economy;
- Shifting to a low-carbon economy through technology transfer and multilateral financial support.

On 3 April 2009 at the AWG-LCA contact group on mitigation, Turkey noted the need to develop eligibility criteria for support of the mitigation actions of the developing countries.

On 24 April 2009 following the Bonn Talks, Turkey made a submission stating her views on the fulfillment of the Bali Action Plan and the components of the agreed outcome. The submission highlights the national circumstances of Turkey and announces Turkey's plans to "take NAMAs for emission limitation and adopt "no-lose target" strategy."

The entire submission presenting "Turkey's Views on The Fulfillment of the Bali Action Plan and the Components of the Agreed Outcome" is given below.

General Considerations

Turkey strongly believes that there is a need for coherence, consistency and coordination between the works of the AWG-LCA and AWG-KP in order to establish a fair, comprehensive and effective post-2012 climate change framework.

1. A shared vision for long-term cooperative action

Turkey is of the view that the shared vision should encompass all aspects of the Bali Action Plan. Therefore, the shared vision should be a comprehensive one, meeting the expectations of every Party to the UNFCCC. The shared vision for long-term cooperative action should lead to full, effective and sustained implementation of the Convention. The shared vision should seek balance, coherence and fairness among the four building blocks of the Bali Action Plan, namely mitigation, adaptation, finance and technology.

The shared vision should provide a clear statement of political will and emphasize the urgency of the challenge as outlined by the IPCC 4th Assessment Report. It should be simple in form. The shared vision should be a vision of sustainable development for all countries. It should be designed in a way that will not prejudice Parties' economic and social development rights. The shared vision should be realistic in terms of long-term global goal. It should set an achievable, economically and politically feasible long-term global goal that would be acceptable by all Parties.

2. Enhanced national/international action on mitigation of climate change

The world of today is different from the one in the early 1990's, when the international community negotiated the UNFCCC and composed clusters of countries with varying responsibilities in the fight against climate change. In the current climate change regime, there are a number of non-Annex-I Parties, the development levels of which are higher than many Annex-I Parties, there are non-Annex-I Parties who are expected to have the highest greenhouse gas emission levels in the years to come.

The current classification of countries fails to reflect the changing economic circumstances. Turkey strongly holds the opinion that the new agreement should reflect today's

circumstances. Turkey is of the view that the Bali Action Plan is unclear in terms of "developed countries" and "developing countries". Suitable criteria, agreeable to every Party, should be used in re-grouping the Parties with a view to reaching a fair "agreed outcome" in COP 15 in Copenhagen. Any such criteria will have to include historical responsibility, economic capability, per capita energy consumption, mitigation capacity, technological capacity, human development index and vulnerability. The post-2012 outcome will need to reflect a wide range of differentiated mitigation commitments and actions, based on the principles of "common but differentiated responsibilities", "respective capabilities" as well as differences in national circumstances.

Turkey believes that flexibility encourages participation by allowing countries greater latitude in the pace and focus of their commitments. To achieve broad participation in the post-2012 climate change regime, Turkey holds the opinion that the post-2012 climate change regime must be a flexible one, enabling every Party to undertake a kind of commitment suitable for her respective capacity. In another words, each country should decide on the suitable commitment for itself.

- Turkey strongly emphasizes that there should not be any imposition upon the Parties regarding to the type of the commitment that the Parties willing to take. The mitigation provisions of the new regime should be designed in a way that some Parties can take quantified emission reduction and limitation commitments, some can take nationally appropriate mitigation actions (NAMAs), some can do it voluntarily, some can do it in a binding context at the international level, and some can do it in a binding context at domestic level.
- Turkey has outlined her case in the "Workshop on subparagraphs 1 (b) (i) and 1 (b) (ii) of the Bali Action Plan" held during the Bonn Climate Change Talks, on April 1st, 2009. Turkey is a *sui generis* case *vis-à-vis* the Annex I Parties. The Decision adopted in Marrakesh in the 7th Conference of the Parties to the UNFCCC, deleted Turkey's name from Annex-II and placed her in a situation different than the other Annex-I Parties.

Turkey has a negligible historical responsibility. Turkey has a particular situation under the Convention, as there are many similarities with developing country Parties. According to the UNCTAD category of developing countries, Turkey falls into the category of middle-income developing countries. Similarly, the World Bank categorizes Turkey as upper middle-income developing country.

Under these circumstances, Turkey plans to take NAMAs for emission limitation and adopt “no-lose target” strategy. Turkey has already been taking many important steps and actions to fulfill her responsibilities under the UNFCCC in conformity with her economic and social development objectives and priorities, and to the extent allowed by her national capacity. Turkey has been successful in fulfilling her responsibilities under the Montreal Protocol on Substances That Deplete the Ozone Layer due to her just legal status under the Vienna Convention for the Protection of the Ozone Layer.

Turkey would like to place itself to a rightful legal status in the new climate change agreement. Once Turkey is placed in a just legal status in the post-2012 climate change regime, Turkey can offer the same success. Turkey’s success in future climate change regime will be proportional to the international financial and technological support, the level of access to flexibility mechanisms and new technologies such as carbon capture and storage.

3. Enhanced action on adaptation

Adaptation is a priority issue for Turkey. Being situated in the Mediterranean basin, Turkey will be severely affected by climate change, according to the 4th Assessment Report of the IPCC. In accordance with the Convention, Turkey is a country defined as “vulnerable” to the adverse impact of climate change. As a matter of fact, Turkey has been experiencing impacts of climate change such as infrequency of rainfall, decreasing trend in precipitation, scarcity of water and desertification. Turkey, placing high priority to increase the adaptive capacity of the country, has shown serious efforts in recent years to introduce and implement adaptive measures ranging from effective water management, irrigation to afforestation with its own national resources. Turkey is of the view that the funds for adaptation

should be provided to Parties on the basis of certain criteria including vulnerability to the adverse effects of climate change, level of associated risks and the technical and financial capacity of the Parties to adapt to climate change.

Generation of new, adequate, predictable and sustainable financial resources should be based on the principles of “equity” and “common but differentiated responsibilities” and respective capabilities. Turkey is of the opinion that there is a need for an international, multi-optional insurance mechanism in compensating losses and damages that arise from climate induced extreme events such as droughts, desertification, floods, frost and landslides, as indicated in the Bali Action Plan.

4. Enhanced action on technology development and transfer

Developed countries that bear historical responsibility in climate change need to play a leading role in developing and transferring technology. In this context, Turkey recommends the establishment of a new Technology Transfer Mechanism (TTM) under the Convention with the contribution of developed countries that have historical responsibilities. This mechanism should include investment incentives, such as privileged credits and export credits for the development and diffusion of new technology.

Assistance received from TTM should be given according to the criteria of Parties’ level of development as well as their emissions reduction, limitation and adaptation potentials and their absorption capacities (human capital, depth of domestic market, establishing an externality potential) and should be established as a reduction credits system in order to make technology transfer bilateral.

Cooperation in the field of technology should not only be limited to technology transfer, but also should ensure the spread of technological information, experience and know-how by guaranteeing relevant costs and Intellectual and Industrial Property Rights. In this context, apart from a TTM, Turkey also recommends a type of “Technological Information Transfer Agreement/Multiple Agreements”. Such an agreement or multiple agreements will be able to introduce a structure that will facilitate the spread of environment-friendly products and healthy and reliable agricultural production systems.

As a complementary to the Technological Information Transfer Agreement, a global database including “green production” techniques and the best environmental practices could be established through the already used TT: CLEAR technological information system. This database should be up-to-date on a sectoral basis and should include information such as availability, licensing, applicable costs and greenhouse gas reduction potentials. Cooperation between the UNFCCC and the World Trade Organization would be beneficial in benefiting from scale economies and liberalizing the trade of climate-friendly goods and services (or environmental goods and services).

5. Enhanced action on the provision of financial resources and investment

Turkey believes that the financing structures to combat climate change should be designed taking into consideration the historical responsibilities, current emission levels and financial capacities of the Parties. The contribution to and the use of the financial mechanism should be determined in accordance with these criteria.

Flexible mechanisms need to be given a more functional structure. The implementation principles of the Clean Development Mechanism – for benefiting from the opportunities where reduction costs can be lowered more effectively – need to be adjusted in a way that will enable Annex-1 Parties to host such projects. In this way, the potential of countries such as Turkey whose capability for technological innovations is high, infrastructure is ready, but who cannot efficiently use its emissions limitation potential due to financial constraints, can be deployed.

On 28 April 2009, Turkey (together with the Former Yugoslav Republic of Macedonia and Serbia) supported the submission of EU, dated 28 April 2009, proposing a negotiation text for consideration at AWG-LCA 6 (Bonn, 1-12 June 2009).

The Annex A of the submission contains the EU's proposals for negotiation text on all the negotiating issues under AWG-LCA. Of special importance for Turkey is the proposal for mitigation commitments for developed countries, in which

the EU reiterates its proposition that developed countries should commit to collectively reducing their emissions of GHGs in the order of 30% by 2020 compared to 1990 levels, distributed in a manner that is fair and ensures the comparability of efforts. The EU proposes for non Annex I Parties that are at levels of development and GDP/capita comparable to those of the group of developed countries, notably OECD member countries and candidates for membership thereof, to consider making similar commitments in line with their responsibilities, capabilities and national circumstances.

Bangkok Sessions, 28 September - 9 October 2009

Turkey made an intervention at the the closing plenary of the AWG-LCA reaffirming the principles of equity, historical responsibility, common but differentiated responsibilities and respective capabilities and sustainable development in accordance with national circumstances.

Barcelona Talks, 2 - 6 November 2009

During the closing plenary Turkey called for recognition of the Decision 26/CP.7 and noted that country should be differentiated from other Annex I countries.

8.3 Special Circumstances of Turkey

The Decision 26/CP.7 recognizing Turkey's circumstances which differentiate the country from other Annex I parties provides a relevant ground for Turkey in seeking a fair status for her participation in the long term cooperative action, based on the principles of equity and common but differentiated responsibilities and respective capabilities as laid down by the Convention and referred by the decision. A series of indicators relevant for climate change policies suggest that Turkey has different national circumstances which need to be taken into consideration in sharing the burdens among Parties. Among the indicators to be used, Turkey's historical responsibility in terms of concentration of greenhouse gases in the atmosphere and temperature increase, level of economic development, energy use per capita, GHG per capita, population growth account for its

special national circumstances. Moreover, many parties to the negotiations under both the AWG-LCA and AWG-KP submitted views proposing lists of indicators to be considered as a basis of any decision in differentiating responsibilities among the Parties. Those proposed

indicators would also be used to place Turkey's special circumstances as distinct from other Annex I Parties. The table below provides a key set of indicators supporting the fact that the special circumstances of Turkey is immensely vital for Turkey's fair participation in the Post-2012 regime.

Table 9. Climate Change Related Facts about Turkey¹

Indicator	Turkey vs. Annex-I Countries	Turkey vs. Non Annex-I Countries
Average Population Growth Rate (1990-2005)	<ul style="list-style-type: none"> Higher than the Annex-I countries EIT countries have negative population growth rates. Turkey has a value close to all other analyzed non-Annex-I countries, except for Israel and Malaysia. 	
Average Urban Population Growth Rate (1990 - 2005)	<ul style="list-style-type: none"> Higher than all Annex-I countries 	<ul style="list-style-type: none"> The growth rate in Turkey is lower than Malaysia and China, higher than South Korea and Argentina.
Human Development Index (2007)	<ul style="list-style-type: none"> Turkey ranked 79th out of 182 countries in 2007. 	<ul style="list-style-type: none"> Turkey is lower ranked than many non-Annex-I countries.
Per capita GDP (2005)	<ul style="list-style-type: none"> Lower than that of all Annex-I countries, other than Belarus Furhermore, Turkey is not at a comparable level with other OECD countries and countries included in Annex I to the UNFCCC in terms of industrialization level. 	<ul style="list-style-type: none"> Some of the Non-Annex I Countries with emerging economies and with no quantitative emissions reduction commitments under the Kyoto Protocol hold higher per capita GDP values than Turkey.
Cumulative GHG Emissions (1850 - 2002)	<ul style="list-style-type: none"> Throughout the whole period of 152 years, the 30% of the total GHGs emitted by the USA, 27% by EU countries, 8.1% by Russia and 7,6% by China. Turkey stands 31st with emissions ratio of 0.4%. The developed countries were responsible for 76% of the CO₂ emissions in 2002. 	<ul style="list-style-type: none"> A considerable number of non-Annex I countries have higher cumulative GHG emission than Turkey.
Per Capita Emissions (1990-2005)	<ul style="list-style-type: none"> All Annex-I countries, including EIT countries, have higher per capita emissions than those of Turkey. Per capita greenhouse gas emission value for 2007 is equivalent to 5.3 tons of CO₂. In the same period, per capita emission was equivalent to 15,0 tons of CO₂ in OECD countries, and 10.2 tons of CO₂ in 27 Member States of the European Union. 	

<p>Emissions per Gross National Product</p> <p>Carbon Dioxide Emissions Per GDP (Average Value for the Years between 1990-2004; Kg CO₂ / 2000 PPP \$ GDP)</p>	<p>↓</p> <ul style="list-style-type: none"> The carbon intensity of Turkey's economy is not only equal to the average of the Annex-I countries, but also that Turkey has a high carbon density among the Annex-I countries in terms of "Greenhouse Gas Emissions per Total Primary Energy Production". 	<p>—</p>
<p>Primary Energy consumption per capita</p>	<p>↓</p> <ul style="list-style-type: none"> Turkey had a primary energy consumption value per capita equivalent to 1.29 tons of oil while the world average of such value was equivalent to 1.80 tons, and OECD average was equivalent to 4.70 tons of oil based on 2008 energy indicators. 	<p>—</p>
<p>Climate Vulnerability</p>	<p>—</p> <ul style="list-style-type: none"> Turkey is located in the Mediterranean Basin which is one of the regions to be most affected by the negative impacts of Climate Change (IPCC 4th Assessment Report- 2007). 	<p>—</p>

¹ Based on the availability of the set of the data for the entire analyzed countries, the 1990-2005 is taken as the data source interval.
Source: MoEF, 2009, Republic of Turkey, 2009.

Table 10. GHG Emissions of Turkey

	1990	2007	Change Rate (%)
Per capita GHG emissions (CO ₂ eq ton)	~3.0*	5.3	177
Total Greenhouse Gases (million CO ₂ eq ton)	170	372	119

*Estimation based on the national population and GHG statistics published by the TURKSTAT (2009)
Source: Republic of Turkey, 2007; MoEF, 2009; Republic of Turkey, 2009

8.4 Institutional Structure in Turkey

The inter-ministerial Coordination Board on Climate Change (CBCC) consisting of senior representatives of various relevant Ministries holds national level responsibility for designing and implementing climate change mitigation and adaptation policies and strategies. The CBCC was established in 2001 by a circular issued by the Prime Ministry. It is restructured in 2004, in accordance with a circular issued by the Prime Ministry, upon Turkey's participation to the UNFCCC. The Ministry of Environment and Forestry has the chairmanship role of the CBCC and is responsible for coordination of the tasks of the ten thematic working groups which are coordinated by the several line ministries and executed with various member institutions (www.iklim.cevreorman.gov.tr). The coordinators and the thematic working fields of these groups are given in Table 11.

Table 11: Technical Working Groups of the National Coordination Board on Climate Change.

Technical Working Group	Coordinator	Associated Institutions	Responsibilities
Researching Impacts of Climate Change	State Meteorological Affairs	State Hydraulic Works, Ministry of Health, Ministry of Agriculture and Rural Affairs	Conduct climatic observations and assessments; identify and monitor the impacts of climate change at the national scale
Emission Inventory of GHG	Turkish Statistical Institute (TURKSTAT)	Ministry of Energy and Natural Resources, Ministry of Industry and Trade, Ministry of Public Works and Settlement, Directorate General of Forest Management, Ministry of Transport	Calculate and evaluate GHG emissions; prepare CRF tables and National Inventory Reports
Mitigation of GHG from Industry, Building, Waste Management and Service Sector	Ministry of Energy and Natural Resources - Electrical Power Resources Survey Administration	Ministry of Industry and Trade, Ministry of Public Works and Settlement, Ministry of Environment and Forestry, Ministry of Transport	Develop and implement energy efficiency activities in the industry, building and services sectors
Mitigation of GHG from Energy Sector	Ministry of Energy and Natural Resources – General Directorate of Energy Affairs		Carry out cost-benefit analysis in order to identify energy demand model as well as the policies and measures concerning GHG mitigation
Mitigation of GHG from Transportation	Ministry of Transport		Take necessary measures for mitigating the impacts of climate change, and make recommendations to the related institutions
Land Use, Land Use Change and Forestry	Directorate General of Forestry	Ministry of Environment and Forestry / Research and Development Department, Ministry of Agriculture and Rural Affairs	Provide technical expertise regarding the GHG emissions from Land Use, Land Use Change and Forestry

Table 11. Technical Working Groups of the National Coordination Board on Climate Change.

Development of Policies and Strategies	Ministry of Environment and Forestry	All other institutions / organizations	Conduct studies for the formulation of policies and strategies concerning climate change, supervise and coordinate the joint subjects among related institutions and organizations
Education and Public Awareness	Ministry of Environment and Forestry	All other agencies / organizations	Implement and coordinate education and public awareness raising activities at the national scale
Adaptation	State Hydraulic Works	Ministry of Health, Ministry of Agriculture and Rural Affairs, Directorate General of Forestry, Directorate General of Disaster Affairs	Develop, enforce and supervise adaptation policies and implementation recommendations
Financial Resources	State Planning Organization	Ministry of Finance, Ministry of Environment and Forestry	Identify the sectoral costs of the impacts of climate change and mitigation measures; evaluate financial mechanisms and explore the potential financial resources

8.5 National Implementations

8.5.1 National Activities

Since its accession to the UNFCCC in 2004, Turkey has undertaken several activities to comply with its commitments under the Convention and made considerable progress in implementing its provisions at the national level.

The activities undertaken for purpose of compliance are as follows:

- Submissions of National Greenhouse Gas Emissions Inventories (in 2006, 2007, 2008, 2009);
- Submission of the First National Communication (FNC) of Turkey to the UNFCCC (2007);
- Initialization of the preparation of the Second National Communication (2008);

- Establishment of the necessary governmental institutions for implementing climate change related activities, as well as extensive public awareness actions.

8.5.2 Climate Change Strategy, Action Plan of Turkey

Turkey is also making progress in implementing the provisions of the Convention at the national level. In this context, Turkey is preparing its National Climate Change Action Plan and National Adaptation Action Plan, which are also called for by the 9th National Development Plan (2007–2013). Moreover, several studies are commissioned by the government to relevant institutions to assess the country's potential for greenhouse gas (GHG) mitigation and related costs involved. Besides these national level initiatives, in 2009, Turkey devised a "National Strategy Paper on Climate Change" in order to contribute to the global efforts to reduce the impacts of climate change on the basis of its

special circumstances and capacities. The Strategy Paper formulates Turkey's strategy to tackle global climate change and its effects at the national and international level. The paper contains policy actions to be implemented in specific areas, including mitigation actions in the energy, transport, industry, waste management, land use, agriculture and forestry sectors. It also lists some possible adaptation measures.

The strategy paper defines Turkey's national vision within the scope of "Climate Change" as to become a country which has integrated its climate change policies into the development policies.

Turkey will take her part in the solution by committing herself through laying down short-, mid- and long-term policy actions on mitigation, adaptation, technology development and transfer, financing, education, capacity building and institutional structure. Some examples of the actions listed in the strategy are presented below (Republic of Turkey, 2009):

For Mitigation of Greenhouse Gasses;

- In Energy Sector: Energy intensity shall be reduced by 2020 with reference to the levels in 2004.
- The share of renewable energy in total power generation shall be increased up to 25% by 2020.
- 7% CO₂ emission limitation in the reference scenario shall be targeted in the energy sector for 2020.

In Transportation Sector:

- Public transportation systems, especially in metropolitan areas, shall be extended by means of subways and light rail systems.
- Policies promoting the use of alternative fuels and new technology engines will be developed.

In Industry:

- Incentive mechanisms will be developed for the application of management tools for monitoring greenhouse gas emissions such as energy control and management systems, greenhouse gas inventory and

reporting systems, greenhouse gas management systems (for instance, ISO 14001 standard) and benchmarking which will not require any capital investment or operating cost.

- Use of resources for clean production in the industry and relevant substitute and alternative materials will be encouraged.

In Waste Sector:

- The Waste Management Action Plan (2008-2012) developed with a view to increase waste reuse and recovery will be implemented.
- The amount of organic substances transferred to the sanitary landfills will be reduced.

In LULUCF:

- The law on soil protection and land use will be efficiently implemented, the relevant secondary legislation will be elaborated; legal regulations on protection and improvement of meadows and pastures will be efficiently implemented and monitored.
- 2.3 million ha will be afforested and rehabilitated within the scope of National Afforestation Campaign between the years 2008 – 2012. Thus, 181.4 million tons of carbon will be absorbed by forestry areas within 12 years until 2020, in addition to the amount of carbon absorbed by existing sinks.

For Adaptation to Climate Change:

- Development of the Watershed Master Plans and River Basin Management Plans for 25 watersheds within the scope of development, multi-purpose usage and protection of all ground and surface water resources in Turkey will be initiated.
- Seed production will be ensured by regionally identifying the varieties of cereals that are highly tolerant to drought; seed production improvement activities will be continued together with the public institutions, associations and private sector institutions; and a “Drought Test Centre” will be established in order to develop and test drought-tolerant crops.

For Technology Development and Transfer:

- Innovative funding alternatives will be developed in order to encourage clean technologies, and R&D activities for climate-friendly technologies will be improved and financed.

For Finance:

- Regulations will be drafted on the use of funding methods, structured for the action plans, which will put emission control and adaptation measures of the local administrations into practice.

For Education and Capacity Building:

- Researchers’ studies on climate change will be encouraged and a “Climate Change Research Institute” will be established for carrying out scientific studies on climate change at national and regional levels.

A Strategy Monitoring and Steering Committee will be established under CBCC, with the aim of monitoring and assessing the implementation of the Strategy and the secretariat services of this Committee will be carried out by the Ministry of Environment and Forestry. The Committee

will inform CBCC members on the implementation of the Strategy through quarterly reports.

8.5.3 Associated Sectoral Policies and Measures

Energy

The Renewable Energy Law, adopted in 2005, promotes incentives for renewable energy sources. Adopted in 2007, the Energy Efficiency Law is projected to result in 75 CO₂-eq tones of emissions by 2020. The Electricity Energy Market and Supply Security Strategy of Turkey aims at increasing the installed capacity of wind power to reach 20,000 MW by 2023 and promotion of solar power while taking into account of other renewable sources such as use of the full potential of hydropower by 2023.

Industry

The transition to clean production in the industry is supported by increased use of best available technologies and techniques which are primarily initiated in the most energy intense industries of Turkey including cement and steel-iron. The continuous research and development studies explore eco-design requirements of energy using products under the Industry Thesis Project (SAN-TEZ). The emissions from motor vehicles are regulated and in parallel, the consumers are being made aware of CO₂ emissions and fuel economies of new passenger cars.

Transportation

Some of the significant measures taken in the transport sectors include improvement of quality of fuels consumed in vehicles, the use of bio fuels, shifting towards new technology engines in vehicles, removal of old vehicles from the traffic, the expansion of metro and light rail networks in metropolitan cities and extension and improvement of the railway network.

Agriculture

Turkey has a considerable potential for reduction of GHG emissions generated due to the land use, land use practices. Thus, Turkey promotes the use of biomass replacing the use of fossil fuels and use of best available agricultural and irrigation techniques. The law on soil conservation and the law on grassland and pasture conservation contribute to sequestration of CO₂. Within the scope of activities for enabling adaptation to climate change, the protection and efficient use of water resources, the spreading and the subsidizing modern irrigation techniques, the establishment of early warning systems, the promotion of renewable energy resources and the initiation of development of drought-tolerant seeds are some of the key implementations conducted.

Waste

The emissions generated due to the untreated solid waste disposal have a significant ratio in the total GHG emissions of Turkey. According to the National Waste Management Action Plan (2008-2012), 114 landfill sites are planned to be developed which will serve for 70% of the population by 2012. Turkey has also started practising generation of energy from waste by recovery of methane from landfill sites. There are four energy recovery systems installed in Turkey which are located in Istanbul, Bursa and Ankara.

Forestry

Turkey is committed to increasing afforestation and deforestation through a national campaign which aims for an ambitious afforestation with a target of 2.3 million hectares of land in a five years period (2008-2013). It is expected to achieve sequestration of 181.4 million tonnes of CO₂ as a result of the campaign. Those activities also target improving the economic and social conditions of the forestry people while promoting use of renewable energy sources in order to prevent deforestation.

8.5.4 UNFCCC Accredited Organizations in Turkey

Turkish NGOs acceded to UNFCCC and attended the UN Climate Conference for the first time at the COP13/CMP3 in Bali in 2007. Since then the number of accredited organizations has grown gradually and in 2009 six organizations are admitted as observer NGOs. Accredited organizations from Turkey are as follows:

BINGO: TÜSIAD, TISK*, İKV*

ENGO: TEMA

RINGO: Enerji Ekonomisi Derneği (EED), Marmara Üniversitesi-MURCIR*

*Organizations which are granted provisional admission, formal decision on which will be made at COP15 (<http://maindb.unfccc.int>).

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