Negotiations on a new international climate agreement

Roadmap towards a new agreement
Negotiations on a new international climate agreement

The international climate process

The UN Framework Convention on Climate Change, which opened for signature in connection with the Rio summit in 1992, forms the basis of international cooperation within the area of climate. The overall aim of the Climate Convention is to stabilise concentrations of greenhouse gases in the atmosphere to a level that will prevent dangerous human interference with the climate system. The Kyoto Protocol, which contains binding commitments on quantified emission reductions for developed countries, was adopted at the third session of the Climate Convention in Kyoto, Japan, in 1997.1

The Kyoto Protocol means that the world’s developed countries have undertaken to reduce emissions of greenhouse gases by an average of 5.2 percent during the 2008-2012 period, compared to levels in 1990. Many countries will need to take strong measures in order to meet their commitments, while at the same time there is agreement that far more ambitious commitments need to be made in order to prevent dangerous human interference with the climate system. Alongside the implementation of the Kyoto Protocol, work is underway to achieve agreement on a new and more far-reaching climate agreement after 2012.

The challenge in a nutshell

The greatest challenge in the work on a future effective and global climate agreement is to agree on how commitments and responsibility in relation to emission reductions, adaptation to climate change and financing measures are to be shared between countries. The agreement must be accepted by both developed and developing countries, while resulting in a reduction in emissions that is compatible with scientific demands.

Historically it is the developed countries that account for the largest proportion of current levels of greenhouse gases in the atmosphere via industrialisation based on fossil fuels. Thus it is these countries that should take on the greater responsibility, according to the Climate Convention and the Kyoto Protocol. Many low and middle income countries are gradually increasing their emissions, but in terms of emissions per capita, they are still low compared with those of most developed countries.

1 The government’s climate bill.
Everyone has to participate – but how?

The ‘historical debt’ that one could say developed countries owe to developing countries in terms of climate change permeates the argument that many developing countries have put forward advocating milder emission requirements, investments in technology transfer, and considerable financial support to help them adapt to climate change.

At the same time, it is clear that those countries that now have quantitative commitments and that have ratified the Kyoto Protocol currently only account for 30 percent of global emissions, and are thus unable to resolve the climate problem by themselves.

The lack of quantitative commitments in terms of emission reductions for developing countries is one of the reasons behind the United States’ negative attitude towards the Kyoto Protocol. The fact that developing countries, particularly fast-growing economies, may be able to contribute to emission reductions is therefore a key factor, both for reducing global emissions as well as for achieving a broad consensus on the Earth’s climate. In recent years, international negotiations on a future climate agreement have been divided into two parallel tracks; a ‘Kyoto track’ and a ‘Convention track’, in part due to the fact that certain parties to the Climate Convention have chosen not to ratify the Kyoto Protocol.

The diagram below shows a comparison of total emissions and emissions per person for some of the key countries/regions. Emissions only relate to carbon dioxide, since there is no comparable data for all greenhouse gases. For the same reason, emissions are reported for the year 2004, which is the most recent year for which comparable data is available. According to several sources, China’s emissions have since overtaken those of the United States. For the EU, emissions are reported for EU15, i.e. the 15 EU countries that have a joint commitment according to the Kyoto Protocol. Although carbon dioxide emissions for EU15 increased during the 1990-2004 period, there is every chance that the EU will meet its commitment, which is to reduce total greenhouse gas emissions by 8 percent. Up until 2006, these emissions had fallen by 2.7 percent, and according to the EEA the target for 2008-2012 can be achieved with new planned measures and through the use of flexible mechanisms.

2 The United States has not ratified the Kyoto Protocol.
3 The figures for the United States, China and India have been taken from the database Globalis. The figures for EU15 have been taken from the European Environment Agency’s (EEA) database, and relate to total emissions of carbon dioxide, excluding LULUCF.
4 The Netherlands Environmental Assessment Agency (PBL)
5 European Environment Agency
Negotiations on a new international climate agreement

The international process to reduce climate-damaging emissions was launched at the beginning of the 1990s, when the UN Framework Convention on Climate Change (UNFCCC) was adopted in 1992 with the purpose of “preventing dangerous anthropogenic interference with Earth’s climate system”. A total of 191 countries have ratified the Convention.

In 1997, the commitments under the UNFCCC were agreed via the Kyoto Protocol, which came into force in 2005. The Kyoto Protocol has thus far been ratified by 184 countries (May 2009), and is the first legally binding agreement under the UNFCCC.

During the first commitment period within the Kyoto Protocol, 2008-2012, it was agreed that:

Developed nations will reduce emissions by a total of 5.2 percent compared with the year 1990. Commitments for each individual developed country (according to annex I of the Convention) are stated in appendix B of the Kyoto Protocol. The agreement also covers developing countries, however there are no binding emission targets for them. It also applies to countries like China and India that are undergoing rapid growth, thus leading to a sharp increase in their contribution to global emissions. Countries are entitled to credit themselves with certain emission reductions via investments in other countries, through what are known as flexible mechanisms, such as JI, CDM and international emissions trading. Those countries that do not meet their commitments may be required to carry out additional reductions in emissions during the next commitment period following 2012 (the amount of emissions that exceeds the nation’s commitment, plus a penalty of 30 percent). Other consequences include the country in question losing out on the right to trade in emissions.

Clean Development Mechanism (CDM):
Emission-reducing investments in countries without quantitative commitments according to the Kyoto Protocol (chiefly developing countries), that can also contribute towards technology transfer, capacity building and sustainable development in the country where the investment is being made.
Roadmap towards a new agreement

According to the Bali Roadmap, the climate agreement that is to take over when the commitments laid down in the Kyoto Protocol expire in 2012 will be decided on in December 2009, at the Climate Convention’s Conference of the Parties COP 15 in Copenhagen. All the parties of the Climate Convention are united on this. Intensive negotiations will be continuing throughout the autumn in order to keep to the timetable.

The roadmap towards the new agreement was decided on at COP 13 in Bali, 2007 (Bali Action Plan, see fact box, page 8). The decision meant that the parties initiated a negotiation process on a “shared vision”, cutting emissions, adaptation, technology and financial resources. According to the decision, all parties have undertaken to adopt measures in order to reduce or limit emissions of greenhouse gases. Developed countries will contribute with comparable commitments or measures, and provide support to developing countries in terms of technology, financing and capacity building. Developing countries will contribute by implementing measures to limit emissions that are appropriate for the individual country, within the framework of sustainable development.

Intensive negotiations underway
The decision from Bali in 2007 gave the go-ahead for speeding up negotiations within the framework of the Climate Convention. The work is being led by a special working group (AWG-LCA, Ad hoc Working Group on Long-term Cooperative Action under the Convention). The negotiations extend to all the parties of the Climate Convention, and are thus the main line of inquiry in the negotiations on a new climate agreement.

The working group that is looking at future commitments for developed countries under the Kyoto Protocol (AWG-KP) is continuing with its work, and intends to debrief at the climate conference in Copenhagen.

Several negotiating meetings involving senior officials are planned during the autumn in Bonn, Bangkok and Barcelona (see calendar) ahead of the conference in Copenhagen.
Negotiations along several tracks
The climate issue is being discussed within several parallel political processes alongside the UN-led negotiations, as well as at a number of informal meetings, several of which are top-level. However, there is a consensus that the results of these political fora must contribute to and be included in the UN process. One example is the Greenland dialogue, which is one of a series of informal meetings at ministerial level that was initiated in Greenland in 2005, and where Sweden hosted a meeting in Riksgränsen in 2007. The US President Barack Obama has launched the Major Economies Forum, MEF, which convenes 17 of the world’s largest economies. The first meeting was held in April 2009. The climate issue is also given a considerable amount of attention at G8 and G20 meetings, which convene the world’s 8 and 20 largest economies.

BALI ACTION PLAN

The Bali conference of the parties, COP 13, broke new ground on the issue of international climate cooperation, partly by creating a platform for negotiations where all the parties of the Climate Convention undertook to adopt measures to cut emissions of greenhouse gases, and partly by establishing a new balance between the contributions from developed and developing nations. The decision means that developed countries are agreeing to adopt comparable measures/commitments. For their part, the developing countries have agreed to take measurable steps, while receiving support in the form of new technology, financing and capacity building.

The Bali Action Plan also established a new basis for the discussion on a long-term target for emission reductions. It was initially observed that considerable reductions in global emissions of greenhouse gases are required in order to achieve the goal of the Climate Convention. The decision also emphasised the importance of taking up the task as it is described in the IPCC’s assessment report from 2007.

Five areas are identified as being particularly important to negotiate on in a future climate agreement:

- A shared vision including a long-term global target for emission reductions.
- Increased national and international contributions to limit climate change, including measures to reduce emissions, a programme to reduce emissions from deforestation in developing countries and cooperation around sector-specific measures to reduce climate change.
- Further initiatives with regard to adaptation, in part through international cooperation on adaptation measures in particularly vulnerable developing countries, strategies for risk management and risk reduction, including insurance solutions. Measures should also include support for economic diversification with the aim of reducing the vulnerability of individual countries.
- Increased measures with regard to technical development and technology transfer to reduce emissions and to aid adaptation.
- Increased measures to satisfy the need for financing and investments, in order to support steps to cut emissions, adaptation and technology transfer.

Read more about the Bali Action Plan at (BAP, Besluit 1/CP.13) http://unfccc.int
The UN climate panel and scientific data

The UN climate panel, the IPCC, was established in 1988 with the aim of providing objective scientific information on global climate change. The IPCC does not carry out any of its own research, but instead evaluates research that has already been done. The reports are based on data that has been examined in terms of quality and undergone a process of peer-review, and been published in international, scientific journals. The IPCC has presented four assessment reports to date – 1990, 1995, 2001 and 2007 – all of which have played an extremely important role in climate negotiations.

According to the IPCC’s fourth assessment report, which was presented in November 2007, the global warming that has been observed during the 20th century is now unequivocal. The IPCC maintains that there is a clear link between emissions of greenhouse gases resulting from human activity and the temperature increases that have been measured over the past fifty years. Between 1906 and 2005, the mean global temperature rose by around 0.74 degrees, and the temperature is rising at an increasingly faster rate. Current concentrations of carbon dioxide and methane exceed the natural level over the past 650,000 years, which is the period that can be studied using samples drilled from the ice in the Antarctic.

The IPCC’s assessments are based on a comprehensive examination of scientific articles relating to climate change that have been published in scientific journals. However, the IPCC works to a deadline with each synthesis, which is set for practical reasons. The deadline for the fourth assessment report was 2006. This means that later research results were not included in the IPCC’s fourth assessment. New research on changes in the Arctic and Antarctic in particular may be highly relevant.

Two-degree target

The starting point for the EU’s - and Sweden’s - climate policy is that global emissions must be reduced to the level that is required in order to limit the increase in the average global temperature to two degrees compared with pre-industrial levels. It is believed that this will limit the likelihood of extensive and irrevocable changes to the global ecosystem. The government’s Scientific Council on Climate Issues has determined that the two-degree target is a reasonable starting point for emission-reducing measures, but has also pointed out that it cannot be ruled out that even small increases in temperature may have a serious impact.

The least developed countries and low-lying island nations want the temperature increase to be limited to a maximum of 1.5 degrees. Their reasoning is that with an increase of two degrees, there is a risk that sea levels will rise and extreme weather conditions occur to an extent that will hit these countries particularly hard.

Uncertainties still remain about the level at which greenhouse gases in the atmosphere must be stabilised in order to limit the temperature increase to two degrees. According to the IPCC’s fourth assessment report, a stabilisation level of 445-490 ppm carbon dioxide equivalents would lead to a temperature increase of between 2.0 and 2.4 degrees with “the most likely value” for climate sensitivity. However, several scientific reports that have been issued since the IPCC’s assessment take things even further, and talk about levels of 350-400 ppm carbon dioxide equivalents in order to be able to meet the two-degree target.

Another uncertainty is the extent to which emissions must decrease in order to stabilise levels of greenhouse gases at a particular level. According to the IPCC, a stabilisation of 450 ppm carbon dioxide equivalents is possible if global emissions reach their maximum in 2015, to then fall considerably. This in turn means that developed countries must reduce emissions by 25-40 percent by the year 2020, and

\(^{6}\) KOM(2007) 2 final, To limit global climate change to 2 degrees Celsius
Negotiations on a new international climate agreement

by 80-95 percent by 2050 (compared to 1990). The scenario is also based on significant measures being taken in low and middle income countries in order to limit increases in emissions.

**Emission reduction targets – calculations from the IPCC 2007**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Region</th>
<th>Target year 2020</th>
<th>Target year 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stabilisation at 450 ppm CO₂ equiv.</td>
<td>Annex 1</td>
<td>-25% to -40%</td>
<td>-80% to -95%</td>
</tr>
<tr>
<td>Non-Annex 1</td>
<td>Latin America, Middle East, East Asia and Asian countries with planned economies: Limit emissions compared to calculated emissions increase (baseline).</td>
<td>Limit emissions compared to baseline in all regions.</td>
<td></td>
</tr>
</tbody>
</table>

**Key issues for negotiations**

The Bali action plan established a plan of action for continued cooperation, with the aim of reaching an agreement in 2009. Several interdependent key issues will be handled and resolved in the broadest possible international cooperation. However, there are conflicting interests between country groups when it comes to the structure of the future climate agreement, and target levels.

**Shared vision and a long-term global target**

A shared vision for the international climate cooperation and the long-term target for emission reductions are both fundamental to the new global climate agreement.

There is broad agreement that the long-term target should reflect the serious nature of the climate issue, and fulfil the overall goal of the Climate Convention of preventing dangerous human interference with the climate system. The target must have a scientific basis and be compatible with sustainable development. The parties are agreed that the long-term target should be aimed at the year 2050, but there are various proposals on how the target should be quantified.

The EU’s starting point is that the global average temperature should not increase by more than two degrees compared to pre-industrial levels, an increase that small, vulnerable island nations, for example, feel is too large. Other parties focus more on the level at which greenhouse gases in the atmosphere should be stabilised, and both 350 ppm and 450 ppm have been proposed as maximum levels. With regard to quantified global emission reductions by 2050, proposals have been submitted containing figures that vary from between 50 and 85 percent compared with levels in 1990.

Developing countries emphasise that the shared vision should not just extend to a temperature target or similar, but rather it should also include sustainable development and advances in relation to emission reduction, adaptation, technology and financing.

---

7 UNFCCC, Fulfilment of the Bali Action Plan and components of the agreed outcome. Note by the Chair. Part II, page 4
Emission reductions
There are many aspects to consider in the issue of emission reductions. The negotiations cover both the commitments and measures of various countries, as well as tools for achieving emission reductions and adaptation. It is a matter of technology transfer, financing and concrete measures, such as decreased deforestation and emissions markets.

The key political issues in the negotiations comprise the issue of total and individual emission reductions, and measures in developing countries to mitigate increases in emissions and assist with adaptation.

The developing countries are very keen for the developed nations to take on binding and far-reaching commitments in terms of reducing emissions. According to the IPCC, emissions from developed nations need to be reduced by 25-40 percent by the year 2020, and the Kyoto countries supported the IPCC’s assessment at the 2007 meeting in Bali. As recently as 2007, the EU took the decision to reduce emissions by 30 percent, given a broad international agreement in which the developed nations take on comparable commitments and advanced developing countries make a contribution. Additional developed countries have now put forward emissions targets for 2020, but the figures have not yet reached the range stated by the IPCC.

Other types of commitments and initiatives to limit emissions are being discussed for the developing countries, taking into account the countries’ level of development. The underlying principle here is for these commitments to contribute to sustainable development, and not constitute obstacles to economic growth.

Deforestation and land use
Deforestation initiated by human activity in developing countries corresponds to about 20 percent of global emissions of greenhouse gases. It is thus crucial as part of a new climate agreement to include measures to reduce deforestation and restore forests.

The issue is being pursued in particular by those developing countries with abundant forest resources, including Brazil and Indonesia. There is broad agreement among the parties that long-term cooperation is needed in order to limit deforestation. There are great hopes attached to the creation of a specific mechanism to reduce deforestation and promote sustainable forestry. It is essential that such a mechanism is able to show in a credible way that the reduction in emissions is real, and is not being replaced by emissions from other forest areas within the country.

There are also major technical and political difficulties that have yet to be resolved in relation to, for example, the reporting of emissions associated with deforestation, and reduced reservoirs in partly cleared forest areas. The negotiations also relate to the extent to which initiatives to reduce deforestation should be linked with the commitments of developed nations, and how this should occur.

Another key issue for the negotiations is how to measure, record and report on the uptake of carbon dioxide in what are known as carbon sinks (in which carbon is absorbed by plants through photosynthesis) in developed nations. It is important that the rules are agreed on before emissions targets are set, to ensure that the combined emission reductions are sufficient.

Flexible mechanisms and global emissions markets
Flexible mechanisms will remain a central element in a future climate agreement. Flexible mechanisms contribute to cost effectiveness in the fulfilment of commitments, thus facilitating more far-reaching commitments. The establishment of an international greenhouse gas market is one of the most important achievements of the Kyoto Protocol, and experience shows that such a market can function in practice. At present, specific discussions on emissions markets and flexible mechanisms are taking place within the framework of the negotiations on future commitments for the parties of the Kyoto Protocol (AWG KP).

Sectoral approaches
There are several possible reasons for advocating sectoral approaches as new instruments in a future climate agreement. Sectoral approaches involve the establishment of voluntary emission caps for certain sectors in developing countries with high emissions. If emissions from the sector fall short of the cap, then reduction units can be sold to developed nations. An important aspect of the EU’s position is that such approaches should complement, and not replace, other commitments or targets. The issue of sectoral approaches also includes the handling
Negotiations on a new international climate agreement

Negotiations on a new international climate agreement of emissions from international air travel and shipping. This is an important element for the EU in a future climate agreement.

Adaptation to climate change
It is important to boost countries’ and people’s ability to adapt, in view of the fact that climate change is already happening. Adaptation issues comprise one of the building blocks in a new agreement, and are of particular importance for many developing countries. The EU believes that adaptation strategies should be integrated into these countries’ planning processes, development programmes and strategies to tackle poverty.

Developed countries have a responsibility to assist developing nations, particularly the least developed countries, in implementing the necessary adaptation measures via needs analyses, financing, technology transfer and capacity building.

The developing countries say that adaptation should be financed according to the ‘polluter-pays’ principle, i.e. developed countries. The Special Climate Change Fund has been created to finance adaptation measures. The fund is principally financed via a fee linked to investments in CDM projects. However, the general perception is that with the current level of allocations, the Climate Convention’s funds and financial mechanisms can never completely cover the cost of developing nations’ adaptation requirements.

Technology – development, dissemination and transfer
The reduction in emissions that is needed, as well as adaptation to climate change, will require a major investment in the development and dissemination of existing and new technology.

The issue of access to new and climate-adapted technology is extremely important for developing countries in enabling them to combine growth with reduced emissions. According to the Climate Convention, these parties should take measures to promote and finance the dissemination of energy-saving technology to developing countries. Many developing countries feel that the developed countries are not fulfilling this commitment, and are therefore putting considerable effort into highlighting the issue of technology transfer during negotiations.

The discussions largely reflect two differing approaches. The first approach demands state investments and state support to developing countries to enable the transfer of technology from developed nations to developing countries. The second approach is more about creating conditions and incentives for private players to operate, and the problem here lies chiefly in how to achieve dissemination of existing, but sometimes not so well-established technology. According to the latter approach, there is a strong link between the policy instruments that are implemented, and technology transfer. It is thus clear that the tools of the future system have, and will have considerable significance in the climate negotiations.

Financing measures
The financing issue is one of the key issues for a future climate agreement. It is partly a question of how funds are to be generated, and partly of how they will be controlled and managed, as well as the type of financing that is needed for each of the various purposes (adaptation, capacity building, technology transfer and dissemination, and decreased deforestation).

As a rule, the developed countries accept that a certain increase in financing will be needed as part of a future climate agreement. Many developing countries have high expectations of new, considerable financial support from other states. A number of proposals have been presented, including proposals on auctioning...
Negotiations on a new international climate agreement

The countries’ emissions rights, AAUs, to finance adaptation (Norway), a global carbon dioxide tax to finance both emission reductions and adaptation (Switzerland), taxes on international air travel and shipping (Tuvalu), and funds (Mexico, G77).

The EU emphasises principles that should apply to sources of financing, and for the control and management of funds, namely suitability to the purpose, efficiency and equity. On the issue of management of the funds, the EU advocates the use of existing institutions such as the Global Environment Facility, GEF, and the World Bank, while many developing countries want new institutions to be set up. The EU is keen to see climate financing being integrated into the general development aid structure. This would enable financing of climate measures in relation to both emission restrictions and adaptation as an integrated aspect of national development plans.

The EU’s climate work and Sweden’s role

By working on new shared goals in the field of climate and energy, the EU is showing its determination to tackle the climate issue, while outlining the focus of future global climate cooperation. The goals that have been established will be achieved via an integrated climate and energy policy, in which the EU’s climate and energy package from 2008 is an important cornerstone.

The overall goal for the EU’s climate policy is based on the IPCC’s risk assessment for a dangerous change in climate, and states that the temperature should not increase by more than a maximum of two degrees Celsius compared with the pre-industrial level. During the spring summit in 2007, the EU’s heads of state and government agreed to reduce the EU’s emissions of greenhouse gases by 30 percent by the year 2020, on condition that other developed countries pledge to introduce comparable reductions, and the major developing economies make adequate contributions as part of an international agreement. Since the EU only accounts for 14 percent of global emissions of greenhouse gases, it is important that other countries support the agreement in order to reduce total emissions. Pending a global agreement, the EU undertakes to reduce emissions of greenhouse gases by at least 20 percent by 2020, compared with emissions in 1990 (EU 27).

The 2007 spring summit also adopted two binding targets on renewable energy: 20 percent of the EU’s energy use will be derived from renewable sources by 2020, and the proportion of biofuel used will be at least 10 percent by the same year. Furthermore, the EU will become 20 percent more energy-efficient by 2020.

Package allocates responsibility

The climate and energy package specifies the targets in the areas of climate and energy. The package allocates responsibility for achieving the overall goal of a 20 percent reduction in emissions of greenhouse gases by 2020. It also shares out responsibility between the member states for achieving the target on renewable energy, and proposals are offered on the development of the EU’s emissions trading scheme.

The package, which was adopted in December 2008, strengthens the EU’s credibility in the negotiations on a new climate agreement.

Sweden has an important role in 2009

Sweden has the EU Presidency during the second half of 2009, when a new climate
agreement will be negotiated on, and a decision made in Copenhagen. The EU – and thus Sweden – has an important role in bringing the negotiations to a successful conclusion.

The government has decided on a national target for 2020, which is intended as a strong contribution to a global and overall climate agreement. The target means that by 2020, emissions for Sweden should be 40 percent lower than emissions in 1990. The target applies for those activities that are not covered by the emissions trading system. The reduction will be achieved via emission reductions in Sweden, but also in the form of investments in other EU countries, or flexible mechanisms such as CDM.

As far as can be judged, Sweden, like the EU, will live up to its commitments according to the Kyoto Protocol. Sweden is one of the nations that can show that economic growth can be combined with reduced emissions – Swedish emissions as regulated by the Kyoto Protocol fell by 9 percent between 1990 and 2007, while economic growth was 48 percent.

THE EU’S ENERGY AND CLIMATE PACKAGE

The EU’s energy and climate package contains four main parts:

Distribution of responsibility for the EU’s climate targets for the non-trading sector
For those emissions that are not covered by the EU’s trading system (including emissions within the fields of construction, transport, agriculture and waste), the remaining emission reductions are allocated between the member states, based on the countries’ GDP per capita and year, with 2005 as the base year.

Directive on promoting the use of renewable energy
The directive includes binding national targets for renewable energy, including a binding minimum target for the transport sector (10 percent). Furthermore, a number of measures are proposed to reduce barriers and promote the use of renewable energy in the electricity, heating and the transport sectors. The member states are to present national targets for each sector, and the means for achieving them, in their national action plans.

Review of the EU’s emissions trading scheme (EU ETS) for the period following 2012
Emissions that are covered by the emissions trading scheme will be reduced by further restricting the allocation of emission rights, and by decisions being made centrally. Greater element of emission rights allocation against payment (auctioning). Linking to other emissions trading schemes will be regulated, as will the use of emission reductions in a third country. Rules for monitoring and control will also be harmonised.

Legal framework for carbon capture and storage
The package also includes a proposal on legal frameworks for the capture and storage of carbon dioxide.
History

As recently as the end of the 19th century, chemists Svante Arrhenius and Arvid Högström realised that humans were capable of affecting the climate through emissions of carbon dioxide and other greenhouse gases. But it was not until 60 years later, during the 1950s, that people understood the speed at which this impact could occur. These scientific assumptions were reinforced over the decades that followed with the advent of more advanced atmospheric calculation models. [8]

During the 1980s, the climate issue began to take up more space on the political agenda. Three explanations are usually given to explain why the climate issue gained greater attention at this point. The first is that there was increased concern among the general public about environmental problems, and growing opinion demanding action on deforestation, preserving biological diversity, the ozone problem, and not least, the climate issue. The second reason is that researchers and environmental organisations were actively working to make research more accessible, and to get the climate issue on the international political agenda. Finally, several incidences of abnormal weather conditions served to emphasise the message from opinion and researchers, not least the massive heat wave that hit North America in 1988.

A climate conference was held in Toronto in 1988, with the purpose of bridging the gap between science and politics. The conference managed to bring together a significant number of politicians, who issued a united statement on the seriousness of human impact on climate. In the same year, the UN General Assembly adopted a resolution, which underlined that the climate was a common issue for mankind. The World Meteorological Organization, WMO, and the UN Environment Program, UNEP, set up the UN climate panel, the IPCC (Intergovernmental Panel on Climate Change). The IPCC gathered together researchers and experts within the climate field in order to assess scientific data on the climate, effects and action strategies. A decision was made to initiate international climate negotiations, which would be held directly under the UN General Assembly, to ensure that the climate issue’s scope for development would not have a subordinate status.

In 1990, the IPCC presented its first assessment report, which contributed to the establishment of the United Nations Framework Convention for Climate Change, UNFCCC, at the UN conference on sustainable development in Rio de Janeiro in 1992. [9] The overall goal of the Climate Convention is to stabilise concentrations of greenhouse gases in the atmosphere to a level that will prevent dangerous human interference with the climate system. The Convention came into force in 1994, and has now been signed by 192 countries [10]. Perhaps the most important of the Climate Convention’s 26 articles is article 3, which establishes the principle on “common but differentiated responsibilities”. [11] This means that the developed countries should lead the work of limiting climate change and its negative effects.

In 1995, the IPCC presented its second assessment report, which contained strong scientific consensus around the fact that human behaviour is affecting the climate. The same year saw the first conference of the parties under the Climate

---

Constitution (COP i), which was held in Berlin. At this meeting, the parties of the Convention agreed to initiate a negotiation process on emission targets and commitments.

At the third conference of the parties (COP 3) in Kyoto in 1997, a decision was made on binding commitments for developed countries. The Kyoto Protocol means that developed countries will together reduce their emissions of greenhouse gases by at least 5.2 percent during the 2008-2012 period. The EU has a common target under the Protocol, which means that the combined emissions of member states are to be reduced by 8 percent. Read more about the Kyoto Protocol in the fact box.

At the seventh conference of the parties (COP 7) in Marrakesh in 2001, key detailed decisions were made on the implementation of the Kyoto Protocol. The decisions included clarification of the conditions and rules for how developed countries could fulfil their commitments via what are known as flexible mechanisms, how the uptake of carbon dioxide in forests and on land would be handled, and on sanctions in the event of inadequate measures. The Marrakesh Accords enabled countries to assess the consequences of a ratification.

The negotiations then entered a new stage, focusing chiefly on increasing political pressure in order to encourage more parties to ratify the Kyoto Protocol. If the Kyoto Protocol was to be valid, it required ratification by at least 55 countries, which together represented at least 55 percent of emissions of greenhouse gases from developed countries in 1990. When Russia ratified the Protocol in November 2004, it meant that both the criteria were fulfilled, and the Kyoto Protocol was able to come into force in February 2005.

The climate conference in Montreal in 2005 was the first one after the Kyoto Protocol came into force. The eleventh annual meeting under the Convention (COP 11) was therefore complemented by the first conference of the parties to the Kyoto Protocol (COP/MOP 1). The focus of both conferences was the continued work following the first commitment period of the Kyoto Protocol, 2008-2012.

2007 saw the release of the IPCC’s fourth assessment report, which came to play an extremely important role in the discussions on new emissions targets and commitments. The climate conference in Bali that same year (COP 13 and COP/MOP 3) broke new ground according to many observers, since all the parties of the Climate Convention said that they were prepared to adopt measures to reduce emissions. The parties agreed that a decision on a new agreement to take over when the first commitment period of the Kyoto Protocol expires in 2012 must be made by the conference in Copenhagen in 2009 (COP 15 and COP/MOP 5). The Bali Action Plan outlines the roadmap towards a new agreement. Read more about the Bali Action Plan in the fact box.

Negotiations continued at the climate conference in Poznan in 2008 (COP 14 and COP/MOP 4), focusing on enabling a decision to be made on a new agreement in Copenhagen. The conference was somewhat overshadowed by the global financial crisis that had begun a few months previously. It was also characterised by expectation and cautious optimism regarding what the newly-elected US President Barack Obama would contribute to the negotiations when he took over as president in January 2009.

12 Swedish Energy Agency
## CLIMATE PROCESS TERMINOLOGY

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAU</td>
<td>Assigned Amount Unit. In principle, the emissions allowance assigned to parties in accordance with the Kyoto Protocol.</td>
</tr>
<tr>
<td>Annex 1</td>
<td>Countries that are included in appendix 1 of the UN Framework Convention on Climate Change; essentially developed countries. Appendix B of the Kyoto Protocol specifies quantitative emission commitments for countries in Annex 1.</td>
</tr>
<tr>
<td>Base year</td>
<td>The starting year from which emission reductions are tracked. The base year for the Kyoto Protocol is 1990.</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean Development Mechanism – Mechanism for clean development, one of the Kyoto Protocol's flexible mechanisms.</td>
</tr>
<tr>
<td>CMP</td>
<td>Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol – Abbreviation of COP/MOP, see below.</td>
</tr>
<tr>
<td>COP</td>
<td>Conference of the Parties – The highest decision-making body of the UN Framework Convention on Climate Change. COP brings together the parties of the Convention at annual meetings.</td>
</tr>
<tr>
<td>COP/MOP</td>
<td>Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol – The highest decision-making body of the Kyoto Protocol. Meets at the same time as COP.</td>
</tr>
<tr>
<td>EU ETS</td>
<td>European Union Emission Trading System – The EU’s system for trading in emissions rights.</td>
</tr>
<tr>
<td>Flexible mechanisms</td>
<td>Mechanisms that according to the Kyoto Protocol may be used with the purpose of reducing emissions in other countries. The aim is to be able to achieve emission reductions in a cost effective manner.</td>
</tr>
<tr>
<td>G8</td>
<td>A group consisting of eight major industrialised economies, namely France, Italy, Japan, Canada, Russia, the UK, Germany and USA.</td>
</tr>
<tr>
<td>G20</td>
<td>A group consisting of nineteen of the world’s largest national economies and the European Union.</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change – The UN climate panel.</td>
</tr>
<tr>
<td>JI</td>
<td>Joint Implementation – One of the Kyoto Protocol’s flexible mechanisms.</td>
</tr>
<tr>
<td>Convention dialogue</td>
<td>Convention dialogue is the long-term work that has been passed to the working group AWG-LCA since 2007.</td>
</tr>
<tr>
<td>KP</td>
<td>The Kyoto Protocol.</td>
</tr>
<tr>
<td>Quantitative commitments</td>
<td>Specify the emission reduction commitments of each country.</td>
</tr>
<tr>
<td>MEF</td>
<td>Major Economies Forum</td>
</tr>
<tr>
<td>Non-annex 1</td>
<td>Countries that are not included in appendix 1 of the Convention, developing countries since the list was established in 1992. See also under “Annex 1”</td>
</tr>
<tr>
<td>Ratify</td>
<td>Approve an international agreement at national level (often in a national parliament or equivalent legislative body).</td>
</tr>
</tbody>
</table>
Further reading:
This report has been produced by the Swedish Ministry of the Environment. You can find current information on the government’s national and international climate policies at www.sweden.gov.se
Intergovernmental Panel on Climate Change (IPCC)
Website of the Climate Convention
The EU Commission’s website on climate policy
The website of the Swedish Environmental Protection Agency
The Swedish Energy Agency on international climate cooperation
The Swedish International Development Cooperation Agency (Sida) on climate-related development cooperation
UNA Sweden

Literature:
An eco-efficient future – an overview of Swedish climate and energy policy
A Scientific Basis for Climate Policy– The Scientific Council on Climate Issues
A New Diplomacy For Sustainable Development
This document provides an introduction to the extensive global cooperation within the United Nations Framework Convention on Climate Change (UNFCCC). The purpose of the Convention is to combat climate change. This document marks out the important milestones and gives a concise description of the key issues on the path towards a new global climate agreement that can enter into force when the Kyoto Protocol’s first commitment period for industrialised countries expires on 31 December 2012.

This brochure can be ordered or downloaded at: www.sweden.gov.se, or by contacting the Ministry of the Environment, tel: +46 8 405 10 00. Article No. M2009.45