Resource 2

Case Studies 1

The Kyoto Protocol was adopted on 11 December 1997. Owing to a complex ratification process, it entered into force on 16 February 2005. Currently, there are 192 Parties to the Kyoto Protocol. In short, the Kyoto Protocol operationalizes the United Nations Framework Convention on Climate Change by committing industrialized countries to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets. The Convention itself only asks those countries to adopt policies and measures on mitigation and to report periodically.

The Kyoto Protocol only binds developed countries, and places a heavier burden on them under the principle of "common but differentiated responsibility and respective capabilities", because it recognizes that they are largely responsible for the current high levels of GHG emissions in the atmosphere. The 6 greenhouse gases subjected to Kyoto-controlled limitations and reductions are:

- Carbon dioxide (CO)2
- Methane (CH)4
- Nitrous oxide (N O) 2
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF)

In its Annex B, the Kyoto Protocol sets binding emission reduction targets for 36 industrialized countries and the European Union. Overall, these targets add up to an average 5 per cent emission reduction compared to 1990 levels over the five year period 2008–2012 (the first commitment period).

Annex I Parties[a]	Emission limitation or reduction (expressed in relation to total GHG emissions in the base year or period inscribed in Annex B to the Kyoto Protocol)[b]
Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland	–8%
United States of America[c]	–7%
Canada, Hungary, Japan, Poland	–6%
Croatia	–5%
New Zealand, Russian Federation, Ukraine	0
Norway	+1%
Australia	+8%
Iceland	+10%

Source of emission mentioned by Protocol

Energy

- Fuel combustion
- Energy industries
- Manufacturing industries and construction
- Transport
- Fugitive emissions from fuels
- Solid fuels
- Oil and natural gas

Industrial processes

- Mineral products
- Chemical industry
- Metal production
- Other production
- halocarbons and sulphur hexafluoride

Agriculture

- Enteric fermentation
- Manure management
- Rice cultivation
- Agricultural soils
- Prescribed burning of savannas
- Burning of agricultural residues

- **Waste**
- Solid waste disposal on land
- Wastewater handling
- Waste incineration

List of Pros of Kyoto Protocol

1. Mitigates threat to mankind's future

A few scientists may say that there's no real evidence that surface temperature is rising, but there are vital signs that show otherwise — ice on lakes and rivers breaks up earlier, glaciers are getting smaller, and heat waves are becoming more intense. If the world continues to ignore these signs, it won't be long before the ecosystem, agriculture, fisheries and infrastructure are compromised due to heat waves, rising sea levels, heavy downpours, increased ocean acidity, and soil erosion. As wildfires increase, water supplies will decrease. So why not welcome a move to keep such threats under control?

2. Creates plenty of room for innovation

The Kyoto Protocol puts limitations in human activities, ensuring that they don't do anything that can further exacerbate the situation. So, in developing technologies that will help reduce greenhouse gases, scientists and engineers would have to find ways to create them without contributing to global warming. This would lead to innovation and creation of sustainable technologies.

3. Puts to mind future generations

Children will inherit whatever positive and negative impact that older generations have left behind. By ensuring that environmental destruction is kept under control, if not completely eradicated, the future generation might still have a place to live in. This is what exactly what the Kyoto Protocol can promise.

List of Cons of the Kyoto Protocol

1. Requires more participation

Considering that not all countries agree that climate change exists, very few of the world's nations have participated with the Kyoto Protocol. In fact, only six countries have signed on, according to some records. This explains why reduction of greenhouse gases is not followed and implemented in some parts of the globe. Unless everyone commits, problems of greenhouse gas emissions would persist. After all, the wind will carry whatever pollution one country has to another, effectively spreading its destruction.

2. Poor implementation

The idea behind the Kyoto Protocol has merits. Unfortunately, implementation is hitting a brick wall. Apart from the fact that very few countries made a commitment to the largest contributors of pollution and greenhouse gases, India and China, are not obliged to honor the protocol. So, regardless of the efforts of other countries, the protocol would not be as effective.

3. Big issues are associated with it

Say the entire world is committed to the Kyoto Protocol. The new challenge now will be in ensuring that the public will participate. How can governments and authorities ensure compliance? If the cleanup doesn't happen in the public sectors, the protocol would still be for naught.

Challenges

Although the Kyoto Protocol represented a landmark diplomatic accomplishment, its success was far from assured. Indeed, reports issued in the first two years after the treaty took effect indicated that most participants would fail to meet their emission targets. Even if the targets were met, however, the ultimate benefit to the environment would not be significant, according to some critics, since China, the world's leading emitter of greenhouse gases, and the United States, the world's second largest emitter, were not bound by the protocol (China because of its status as a developing country and the United States because it had not ratified the protocol). Other critics claimed that the emission reductions called for in the protocol were too modest to make a detectable difference in global temperatures in the subsequent several decades, even if fully achieved with U.S. participation. Meanwhile, some developing countries argued that improving adaptation to climate variability and change was just as important as reducing greenhouse gas emissions.

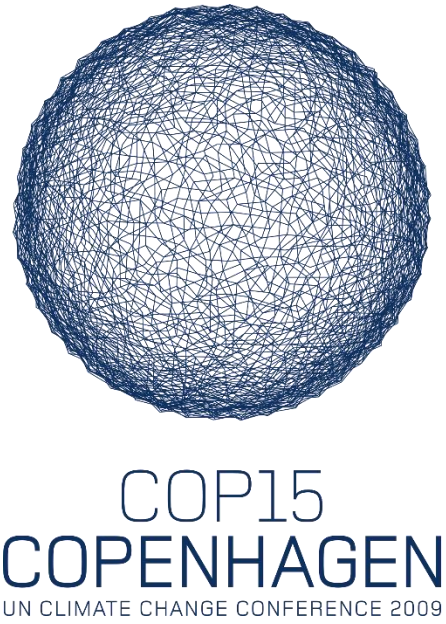
Treaty Extension and Replacement

At the 18th Conference of the Parties (COP18), held in Doha, Qatar, in 2012, delegates agreed to extend the Kyoto Protocol until 2020. They also reaffirmed their pledge from COP17, which had been held in Durban, South Africa, in 2011, to create a new, comprehensive, legally binding climate treaty by 2015 that would require greenhouse-gas-producing countries—including major carbon emitters not abiding by the Kyoto Protocol (such as China, India, and the United States)—to limit and reduce their emissions of carbon dioxide and other greenhouse gases. The new treaty, planned for implementation in 2020, would fully replace the Kyoto Protocol.

<u>Review Questions</u>

- What progress have we seen on a global agreement?
- What are the sources of emission mentioned by Protocol?
- What are the challenges faced by the Kyto protocol?

Case Studies 2
The Copenhagen Conference



The expectations for Copenhagen had risen very high, with a large number of high-level international meetings on climate change preceding the conference in the last quarter of 2009 — including the Alliance of Small Island States (AOSIS) Climate Change Summit, the Secretary-General's Summit on Climate Change, the UN General Assembly, and others. The Copenhagen conference was attended by over 45,000 participants, including observers and negotiators, and 119 Heads of State. According to the reports by the media, this conference was the largest one in the history of the United Nations, and certainly the largest political event ever focused on climate change. However, despite this high level of political attention to the issue, it was becoming already clear before the conference that reaching a comprehensive post-2012 agreement in Copenhagen would not be possible. While some progress had been made at the technical level in the various negotiating tracks under the Bali Road Map during 2008-9, high-level political guidance was required to resolve the main crunch issues — in particular, commitments by industrialised countries; mitigation actions by developing countries; financing and technology transfer, and measurement, reporting and verification (MRV) of actions and of support.

In Copenhagen both the AWG-KP and AWG-LCA presented the outcomes of their work as was requested by their mandates. The AWG-KP forwarded to the CMP 5 for its further consideration a set of draft decisions, including proposed draft amendments to the Kyoto Protocol, all of which still contained options and "brackets" of proposed text indicating a considerable number of unresolved issues. Similarly, the AWG-LCA presented to the COP 15 a set of unfinished draft decisions encompass-ing all building blocks of the Bali Action Plan. The COP and CMP launched contact groups in Copenhagen to advance the negotiations on the unresolved issues. While it was possible to make further progress on some issues in an informal setting, the negotiations in CMP and COP stalled due to disagreement over procedure and organisation of work.

As a result, no substantive decisions were finalised for adoption on the work done by the AWG-LCA and AWG-KP in the contact groups under the COP and CMP respectively. The progress made by the COP in the drafting groups in Copenhagen was reflected in the document issued by the UNFCCC Secretariat after the conference; which is referred to in this document as "the COP text".

At the same time, during the last two days in Copenhagen, a group of Heads of State representing the major GHG emitters and the main negotiating groups under the UNFCCC negotiated a Copenhagen Accord in a parallel informal setting — a document outlining a political compromise on the main elements of enhanced action on climate change by those countries. The COP neither authorised the formation of this parallel negotiation process, nor was it informed about the course of these negotiations as they progressed. The Copenhagen Accord was presented to all Parties to the Convention with an intention to further consult and gain support for its adoption through decisions by the COP and CMP This effort failed due to opposition

from several countries. As a result, both COP 15 and CMP 5 "took note" of the Copenhagen Accord in their final decisions. Parties were asked to formally communicate their association with the document to the UNFCCC Secretariat by 31 January 2010. It was also decided to extend the mandates of the AWG-LCA and AWG-KP by one more year and the bodies were asked to complete their work for adoption of the outcomes at the next climate change talks in December 2010 in Mexico, The AWG-LCA was asked in its future work to take into account the results of the work carried out by the COP in Copenhagen on the basis of the texts forwarded by the AWG-LCA in its report. The progress made by the COP, as noted earlier, is captured in the "COP text"?

The Copenhagen Accord

The Copenhagen Accord was not formally adopted as a decision under the UNFCCC but rather noted by the Conference of the Parties (both COP and CMP) as a political declaration. Parties were asked to communicate to the UNFCCC Secretariat by 31 January 2010 their support of the agreement through written submissions. Countries were further asked to submit by the same date their pledges for emission reduction targets (for industrialized countries) and for mitigation actions (for developing countries) for the period up to 2020, which would then be reflected in the Appendices to the Accord.

In the Accord, countries commit to keeping global temperature rise below 2°C through deep cuts in GHG emissions, achieving peaking of global emissions as soon as possible, while noting that emissions in developing countries will take longer to reach their peak. Annex I Parties commit to implement individually or jointly quantified economy-wide emissions targets for 2020. Non-Annex I Parties will implement nationally appropriate mitigation actions (NAMAs). Least Developed Countries (LDCs) and Small Island Developing States (SIDS) may undertake these actions voluntarily and on the basis of external financial support. Mitigation actions taken by non-Annex I Parties will be subject to domestic MRV procedures and reported on every two years through National Communications. However, internationally supported NAMAs will be subject to international MRV procedures. Furthermore, the Accord makes a reference to the Kyoto Protocol, requesting Parties to the Kyoto Protocol to "further strengthen the emission reductions initiated by the Kyoto Protocol" and notes the important role of markets in future climate change policy.

The Accord further notes that social and economic development and poverty eradication are the first and overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development.

The Accord also calls for the immediate establishment of a mechanism including so called REDD-plus, aimed at reducing deforestation, forest degradation and promoting forest conservation, to enable the mobilization of financial resources from developed countries. New and additional resources from developed countries in the amount of "approaching USD 30 billion" for the period 2010-12, with balanced allocation between adaptation and mitigation, is pledged, with USD 100 billion per annum envisaged from 2020 onward. Funding for adaptation will be prioritized for the most vulnerable developing countries, such as LDCs, SIDS, and Africa.

Even though the Copenhagen Accord does not have a legal standing within the UNFCCC process, it does represent a political consensus, albeit a fragile one, on the main elements of the future framework among the major emitters and representatives of the negotiating groups jointly accounting for more than 80% of the world's GHG emissions. It is being considered and supported by many Parties. As of 24 February 2010, more than 100 countries (including the 27-member European Union) representing over half of the Parties to the UNFCCC had officially communicated their support to, or association with, the Copenhagen Accord through written submissions, and many of these countries had further provided information on the mitigation commitments or actions that they would undertake."

Review Questions

- Why was there high expectation for the conference?
- What is the major output of the Conference?
- Was the Copenhagen Accord a failure or a success?

List of Acronyms

AWG-KP = Ad-Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol
AWG-LCA = Ad-Hoc Working Group on Long-term Cooperative Action under the Convention
CDM = Clean Development Mechanism
CM P = Conference of the Parties serving as the Meeting of the Parties
COP = Conference of the Parties

Case study 3

Paris Agreement

On the 12th of December 2015, the United Nations Framework Convention on Climate Change (UNFCCC) parties came to an historic agreement in Paris. On opening day, the summit welcomed 150 presidents and prime ministers from around the world. In addition, there was participation from mayors, governors and industry leaders from some of the world's biggest companies. The ''Breakthrough Energy Coalition'', consisting of more than 25 investors from 10 countries (including billionaires Bill Gates, Mark Zuckerberg, and Richard Branson), also launched in Paris as part of the UN talks.

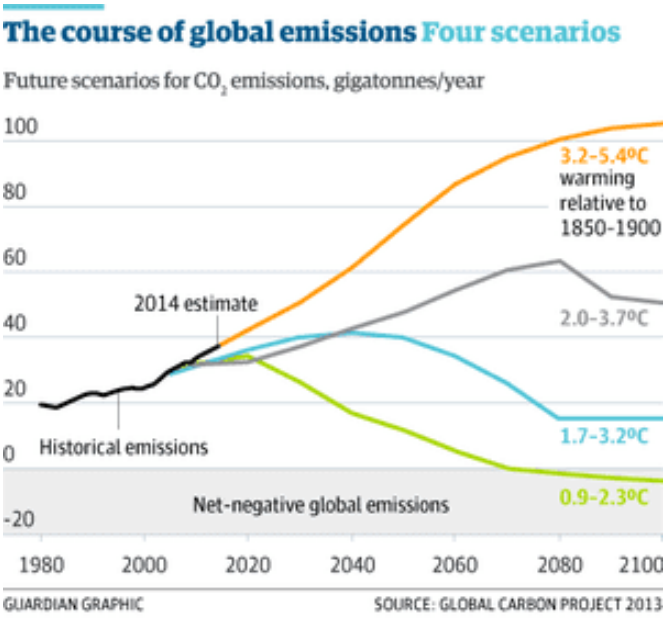
Overall, COP 21 and the Paris agreement was a success. A driving force behind this success were the Intended Nationally Determined Contributions (INDCs), which is a term used under the UNFCCC for reductions in greenhouse gas emissions submitted by all participating countries in the lead up to the conference. However, there are also grey areas that bring into question the level of success of COP 21.

Important outcomes of the Paris agreement

- Unlike the Kyoto Protocol, the Paris agreement aims to limit Global temperature increase to below 2 degrees Celsius by the year 2100, and encourages efforts to keep it around 1.5 degrees Celsius.
- For the first time, this agreement sets binding commitments (based on INDCs) to all countries, both developed and developing.
- While developed countries are expected to lead the efforts on climate change mitigation, developing countries are expected to increase their efforts. The agreement describes a set of commitments and procedures on how to;

"prepare, communicate and maintain" an INDC;
provide required information for transparency;
communicate and submit new INDCs every 5 years; and
''represent a progression'' beyond the previous INDC and show a party's ''highest possible ambition''

- COP 21 extends the existing goal of the mobilisation of $100 billion a year green climate fund by 2020 through 2025, with a new higher target to be set for beyond 2025.



The Paris agreement will be open for signature on the 22nd of April 2016. In order for the agreement to be enforceable, a minimum of 55 countries, or those responsible for at least 55% of global greenhouse gas emissions, will need to sign the agreement.

The good news is the Paris agreement can be seen as a milestone for building a low carbon economy. For parties (countries that sign the agreement) to implement their INDCs, each will need to invest in green technology and increase research and development. According to the study undertaken by E3G – independent experts on climate diplomacy and energy policy – renewables will form approximately 80% of the new power generation investment by 2030, which in turn

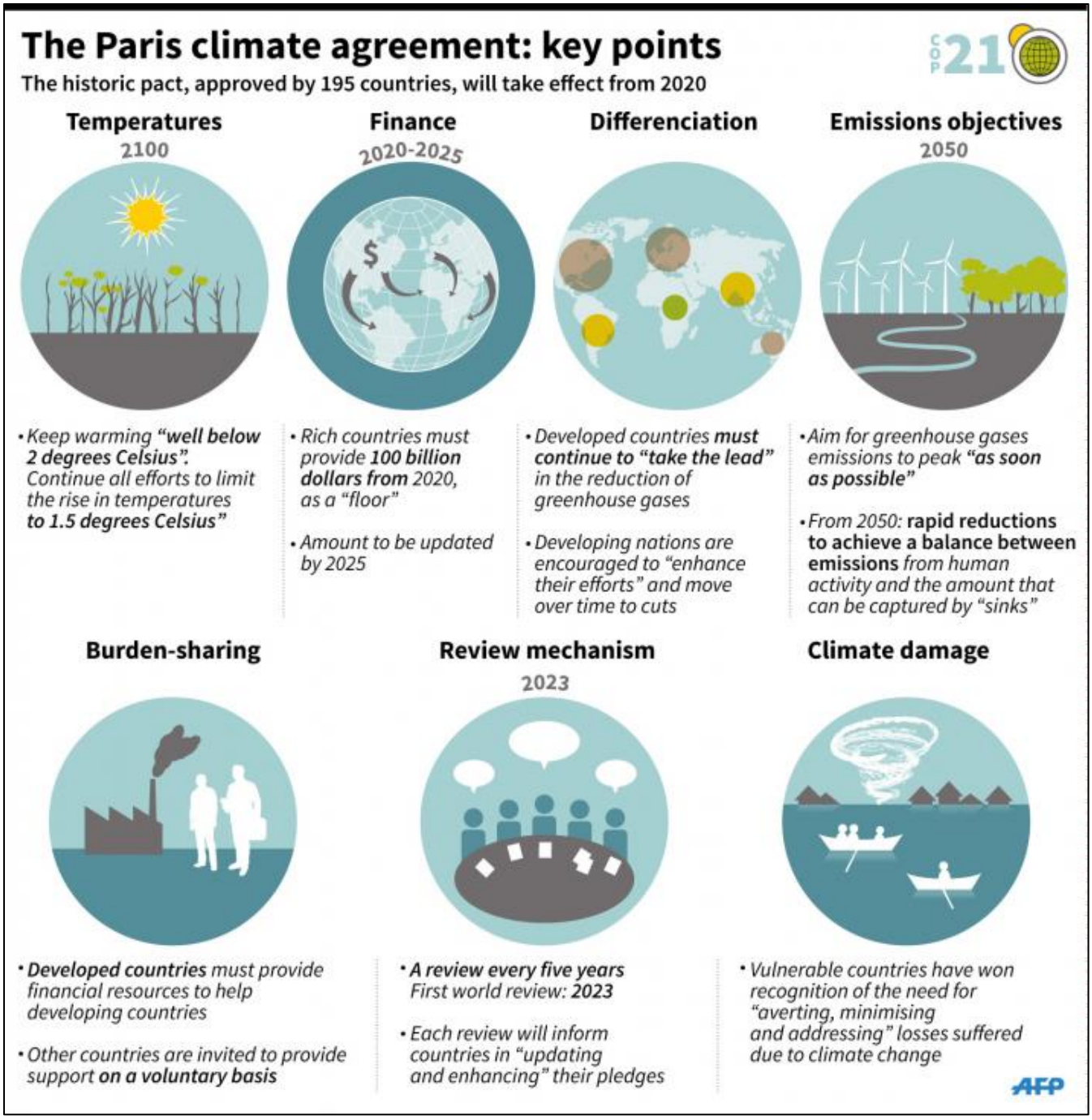
should equate to cheaper renewable energy. Other research suggests that within 15 years, solar will be one of the cheapest sources of energy globally.

Unfortunately, it is unclear what will happen next; how governments will respond; engagement and follow-up on the agreement; and how quickly the technology will be developed and implemented. What we do know is that the commitments of the Paris agreement alone will not help to achieve a limit of 2.0 degrees Celsius or 1.5 degrees increase. At this stage, existing INDCs will help to keep the increase to around 3.0 degrees Celsius.

One of the biggest concerns surrounding the Paris agreement is the fact that at this stage it is not a legally binding agreement. This brings about the key grey area – there is no legally binding structure surrounding the detailed implementation and achievement of INDCs and the agreement itself, even though in general the agreement is widely viewed as legally binding. Moreover, the agreement encourages rather than sets the requirement for parties to develop long-term emission reduction strategies.

It should be highlighted that most of the operational details for the new framework are left to be decided during subsequent COP summits. It is widely assumed that this will have a significant adverse impact on the process.

Finally, the plan to mobilize a $100 billion USD per year green climate fund by 2020 through 2025, with a new higher target to be set for beyond 2025, lacks detail as to the expansion of the donor pool.



In summary, the Paris agreement is an enormous leap forward. Still, there are various grey areas and it will take additional time to confirm the details. Although there is no legally binding structure, the success of the INDCs' implementation may hinge on the fear of reputational damage to a particular country if they do not keep their stated obligations, as INDCs and the evaluation of results will be widely publicised.

Review Questions

- What are the important outcomes of the Paris agreement?
- What will change post–agreement?

- What are the grey areas and the criticism about the Paris agreement?