

## **Overview of the Council: Intermediate Council - UNEP**

### **History and Background of the UNEP**

Following the 1972 United Nations Conference on the Human Environment in Stockholm, Sweden, it became clear that the need for a global body to act as the environmental conscience for the UN was needed. The conference proposed that a UN body be established, and on 15 December 1972, the United Nations General Assembly adopted Resolution 2997, establishing the United Nations Environment Programme. This newly chartered body was composed of 58 member states elected to four year terms by the UN General Assembly for the purpose of discussing the global environment. The UNEP is financed by the voluntary Environment Fund and supplemented by the UN budget. The creation of the UNEP has marked the formal acceptance by the international community that development and the environment are perpetually intertwined. This notion has provided the base from which an ever growing research to understand and be aware of the environmental issues has flourished.

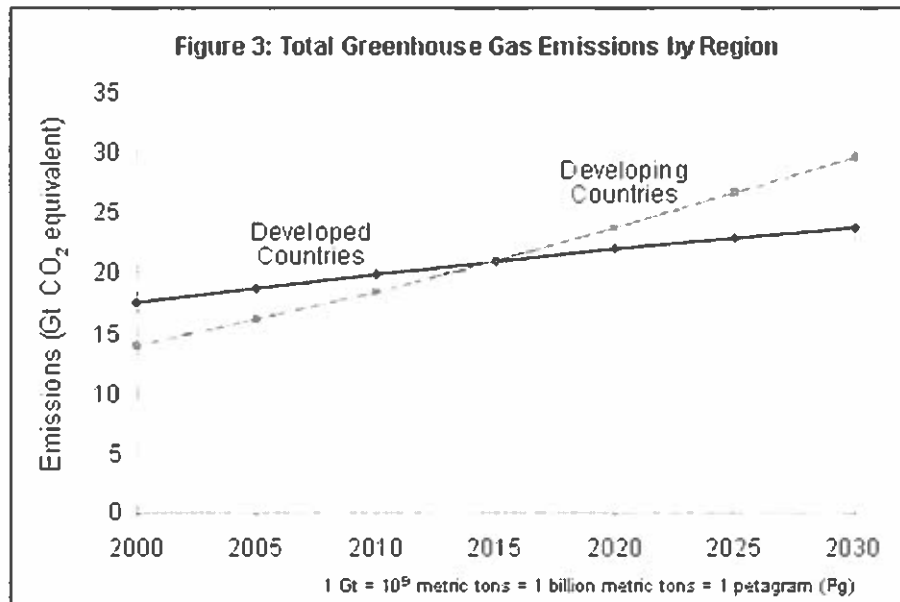
### **Core Functions of the UNEP**

With the start of the new millenium, sustainable development has been UNEP's top priority. UNEP's responsibilities include promoting international cooperation in the field of the environment and recommending appropriate policies, monitoring and collecting data about the environment, raising global awareness on environmental issues, implementing programs in countries around the globe for sustainability, and providing country-level support in sustainability. The UNEP works directly with regional governments and the UN to facilitate any global scaled environmental activities. UNEP's current five priorities are:

1. Environmental assessment and early warning.
2. Development of policy instruments.
3. Enhanced coordination with environmental conventions.
4. Technology transfer.
5. Support to Africa.

UNEP has taken tremendous action in the past to ensure environmental preservation. The UNEP is the voice, catalyst, advocator, and promoter of any environmental activities in the UN system and plays a crucial role in maintaining environmental balance.

### Topic 1: Reframing The Kyoto Protocol



### **The Kyoto Protocol:**

The Kyoto Protocol is an international treaty, which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC), that commits State Parties to reduce greenhouse gases emissions, based on the premise that (a) global warming exists and (b) man-made CO<sub>2</sub> emissions have caused it. The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. There are currently 192 Parties (Canada withdrew effective December 2012) to the Protocol. The Kyoto Protocol implemented the objective of the UNFCCC to fight global warming by reducing greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous anthropogenic interference with the climate system (Art. 2). The Protocol is based on the principle of common but differentiated responsibilities: it puts the obligation to reduce current emissions on developed countries on the basis that they are historically responsible for the current levels of greenhouse gases in the atmosphere.

The Protocol's first commitment period started in 2008 and ended in 2012. A second commitment period was proposed in 2012, known as the Doha Amendment, in which 37 countries have binding targets: Australia, the European Union (and its 28 member states), Belarus, Iceland, Kazakhstan, Liechtenstein, Norway, Switzerland, and Ukraine. Belarus, Kazakhstan and Ukraine have stated that they may withdraw from the Protocol or not put into legal force the Amendment with second round targets. Japan, New Zealand, and Russia have participated in Kyoto's first-round but have not taken on new targets in the second commitment period. Other developed countries without second-round targets are Canada (who withdrew from the Kyoto Protocol in 2012) and the United States (who has not ratified the Protocol). Only certain European states have committed to further CO<sub>2</sub> reductions than in the first period. These targets add up to an average five percent emissions reduction compared to 1990 levels over the five-year period from 2008 to 2012.

Negotiations were held in Paris in 2014 to agree on a post-Kyoto legal framework that would obligate all major polluters to pay for CO<sub>2</sub> emissions. China, India, and the United States have all signaled that they will not ratify any treaty that will commit them legally to reduce CO<sub>2</sub> emissions.

The view that human activities are likely responsible for most of the observed increase in global mean temperature ("global warming") since the mid-20th century is an accurate reflection of current scientific thinking. Human-induced warming of the climate is expected to continue throughout the 21st century and beyond.

The Intergovernmental Panel on Climate Change (IPCC, 2007) have produced a range of projections of what the future increase in global mean temperature might be. The IPCC's projections are "baseline" projections, meaning that they assume no future efforts are made to reduce greenhouse gas emissions. The IPCC projections cover the time period from the beginning of the 21st century to the end of the 21st century. The "likely" range (as assessed to have a greater than 66% probability of being correct, based on the IPCC's expert judgement) is a projected increases in global mean temperature over the 21st century of between 1.1 and 6.4 °C.

The range in temperature projections partly reflects different projections of future greenhouse gas emissions. Different projections contain different assumptions of future social and economic development (e.g., economic growth, population level, energy policies), which in turn affects projections of future greenhouse gas (GHG) emissions. The range also reflects uncertainty in the response of the climate system to past and future GHG emissions (measured by the climate sensitivity).

### **Chronology**

1992 The UN Conference on the Environment and Development is held in Rio de Janeiro. It results in the Framework Convention on Climate Change ("FCCC" or "UNFCCC") among other agreements.

1995 Parties to the UNFCCC meet in Berlin (the 1st Conference of Parties (COP) to the UNFCCC) to outline specific targets on emissions.

1997 In December the parties conclude the Kyoto Protocol in Kyoto, Japan, in which they agree to the broad outlines of emissions targets.

2002 Russia and Canada ratify the Kyoto Protocol to the UNFCCC bringing the treaty into effect on 16 February 2005.

2011 Canada became the first signatory to announce its withdrawal from the Kyoto Protocol.

2012 On 31 December 2012, the Protocol expired.

### **Article 2 of the UNFCCC**

Most countries are Parties to the United Nations Framework Convention on Climate Change (UNFCCC). Article 2 of the Convention states its ultimate objective, which is to stabilize the concentration of greenhouse gases in the atmosphere "at a level that would prevent dangerous anthropogenic (i.e., human) interference with the climate system." The natural, technical, and social sciences can provide information on decisions relating to this objective, e.g., the possible magnitude and rate of future climate changes. However, the IPCC has also concluded that the decision of what constitutes "dangerous" interference requires value judgements, which will vary between different regions of the world. Factors that might affect this

decision include the local consequences of climate change impacts, the ability of a particular region to adapt to climate change (adaptive capacity), and the ability of a region to reduce its GHG emissions (mitigative capacity).

### **Aims of the Council:**

Delegates will research and prepare themselves based on their country's viewpoints and stances on the environment, pair that with knowledge and understanding of the requirements and implications of the Kyoto Protocol and similar environmental actions in order to...

- Address the successes and failures of the Kyoto Protocol
- Effectively revisit and make necessary changes to the Kyoto Protocol in order to combat pollution and environmental harm.
- Determine to what extent changes need to be made to the second commitment period of the protocol.
- Discuss on the demands of member states in regard to participation and adherence to guidelines and requirements.
- Evaluate and decide on how the UNEP can continue to take steps towards reducing carbon emissions

### **Questions to Consider:**

- How has the presence of more effective and eco-friendly technologies made an impact in the evaluation and imposition of environmental standards?
- Which parts of the Kyoto Protocol were successful and which should be reformed?
- How can these new measures benefit both developed and less developed countries?

## **Topic 2: Researching and Developing Sources of Sustainable Energy**

### **Background Energy Research and Development:**



Sustainable energy is the form of energy obtained from non-exhaustible resources, such as wind, sun, and water. Technologies that promote sustainable energy include renewable energy sources, such as hydroelectricity, solar energy, wind energy, wave power, geothermal energy, bioenergy, tidal power and also technologies designed to improve energy efficiency. Costs have




fallen dramatically in recent years, and continue to fall. There has been considerable progress being made in the energy transition from fossil fuels to ecologically sustainable systems, to the point where many studies support 100% renewable energy. Renewable energy is derived from natural processes. Moving towards energy sustainability requires changes not only in the way energy is supplied, but also in the way it is used, and reducing the amount of energy required to deliver various goods or services is essential. There are significant benefits to using sustainable energy and the demand of this form of energy will be growing. Renewable energy and energy efficiency are sometimes said to be the “twin pillars” of sustainable energy policy. Both resources must be developed in order to stabilize and reduce carbon dioxide emissions. Efficiency slows down energy demand growth so that rising clean energy supplies can make deep cuts in fossil fuel use. If energy use grows too fast, renewable energy development will chase a receding target. The current issues revolving sustainable energy development and implementation are finding reliable sources of energy that can be used worldwide and implementing these sources into modern way of life.

*Finding and developing reliable and sustainable sources of energy:*


The first issue that must be considered when discussing energy development and research is considering which sources of renewable energy are to be researched and further than they already are. Each source of renewable energy that currently exists has its strengths and limitations. The main renewable sources of energy that exist are solar, wind, hydroelectric, geothermal, wave powered, bioenergy, and nuclear energy.

TYPE	ABOUT	STRENGTHS	LIMITATIONS
Solar Energy	Solar energy derives from energy captured from the sun in solar panels. The light from the sun gets captured in the cells in the panels which is	The sun is an unlimited supply of energy that can be harvested anywhere. The convenience of the sun being present almost anywhere in	The sun’s energy cannot be harvested when it is cloudy or light is limited. This makes it hard for cloudy regions or polar regions to enjoy

	then converted into electricity.	the world allows it to be used in both developed and non-developed countries.	the sun's energy full time.
<p>Wind Energy</p> 	Wind energy comes from wind energy collected by large turbines that then use mechanical energy to produce electricity.	The wind, like the sun, is an unlimited supply of energy that can be accessed from any part of the world. It doesn't produce any emissions and is a clean source of energy.	Like the sun, wind energy can fail if there is a lack of wind. In areas where wind is rare, this energy would not be able to sustain a population.
<p>Hydroelectric Energy</p> 	Hydroelectric energy is harvested from moving bodies of water. The moving water is used to spin turbines usually in dams or water mills which then create electricity.	Hydroelectric energy is already being used so research on the energy is not needed much. The energy provided from moving water in dams is reliable and clean.	Hydroelectric power can only be used where moving water is present and isn't easy to be used in countries with a lagging or underdeveloped infrastructure.

<p>Geothermal Energy</p> 	<p>Geothermal energy has many purposes and is collected from the Earth's heat. The heat can be used directly to heat homes or used to steam water which then spins turbines to create electricity.</p>	<p>Geothermal energy is highly versatile and stems from a long lasting source. The energy is mostly in the form of heat so it causes no pollution in the atmosphere.</p>	<p>Geothermal energy can only be easily accessible in regions where "vents" from the Earth exist. The energy is sustainable but not widely available.</p>
<p>Wave Powered Energy</p> 	<p>Wave powered energy is collected by turbines under the ocean which capture the ocean's current and use it to create electricity.</p>	<p>Ocean currents are renewable and therefore this energy source is long lasting. The energy does not emit toxins and is highly efficient.</p>	<p>Wave power is only available to countries with a neighboring ocean. Landlocked countries have no access to wave power.</p>
<p>Bioenergy</p> 	<p>Bioenergy is the energy that stems from using plant matter and other biological matter as a fuel source. This can be in the form of burning, oils from corn, or other gases derived from plants.</p>	<p>Bioenergy is renewable as it comes from plants and matter that is already accessible. It is a great alternative to fossil fuels and produces cleaner emissions into the air.</p>	<p>Arid regions or infertile soils cannot provide bioenergy. This poses problems for desert regions or highly urbanized areas. It isn't as clean as other sources.</p>



<p>Nuclear Energy</p> 	<p>Nuclear energy comes from the fusion of atoms or splitting of atoms in controlled environments. The energy that is released from these atoms is tremendous.</p>	<p>Nuclear energy produces the most energy in the shortest span of time. The energy produced is clean and powerful. Nuclear energy can last for centuries.</p>	<p>Nuclear energy that goes uncontrolled can be harmful. Radiation leaks and radioactive material can harm local populations and life in the area. Nuclear energy is only found in highly developed nations.</p>
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The options for renewable energy are large, with many sources yet to be found. However, not all countries and regions can access these sources equally. The challenge here is researching ways to collect these energies and further their use. It will also be a challenge to expand their use globally. With highly cheap fossil fuels in the world today, there is no pressure on the renewable energy industry to expand clean energy. There is also a lack of strong global cooperation in the field of renewable energy so implementation and development of these sources is a challenge. When trying to research and develop these sources, it is important to create an increased pressure and global awareness to expand these technologies, increase global cooperation in this field, and find a way to provide these sources of energy in all regions of the world where no nation complete controls the market.

*Implementing these sources into modern life on a global scale:*

As previously mentioned, there is no pressure on the global community to expand research and development of renewable energy. Fossil fuels such as coal are easily accessible in all regions and cheaper than installing renewable energy sources. Gathering global awareness on this issue is a major problem in this field. In addition, there is a lack of global cooperation on this issue. A form of governance on renewable energy should be established to attempt to create fair distribution and equal access to these energy sources. Another serious concern lies in the

differences in development. Research and development of renewable energy is easier in more developed countries (MDC's) than less developed countries (LDC's) as LDC's have a lack of funding and infrastructure to use and create ways of sustainability. This UNEP council must find ways to create new ways of sustainability and most importantly, spread sustainable energy to all regions of the world.

### **Aims of the Council:**

Delegates will prepare themselves by researching what their country has done in the field of sustainability and brainstorm methods of providing sustainable energy to the globe in order to...

- Raise global awareness on sustainable energy development by promoting use of cleaner and more reliable sources of energy.
- Create global cooperation in the field of research and development so that each region of the world has equal access to cleaner energy.
- Determine methods to correct flaws and limitations of renewable energy already being developed.
- Ensure that each region of the world can be benefited by the cooperation.
- Develop LDC's so that they can support sustainable methods of energy.

### **Questions to Consider:**

- How can these sources of energy be captured and used in all places of the world rather than specific regions?
- How can renewable energy use be expanded to less developed regions of the world?
- Which methods should be taken in order to create a global cooperation in this field?

### **Sources:**

<http://www.unep.org/PDF/UNEPOrganizationProfile.pdf>

<http://www.unep.org/resourceefficiency/>

<http://www.unep.org/energy/>

[http://unfccc.int/kyoto\\_protocol/items/2830.php](http://unfccc.int/kyoto_protocol/items/2830.php)

<http://www.globalization101.org/the-kyoto-protocols/>