



Economic and Social Council

Junior Model UN 2018

Director- Spring Chenjp

Chair- Rithikaa Prakash

Assistant Director- Deveshi Thakur

A Letter from the Director

Dear Delegates,

Welcome to Junior Model United Nations 2018 United Nations Economic and Social Council (ECOSOC)! My name is Spring Chenjp, and I am delighted and honored to serve as your Director. Joining me are Rithikaa Prakash as Chair and Deveshi Thakur as Assistant Director.

ECOSOC is one of the six principal organs of the United Nations, and whose work is crucial in serving as a forum for discussion of economic and social issues and providing policy recommendations for member states. We will be discussing: Developing Renewable Energy and Decreasing Methane Emissions. These topics are extremely applicable to both developed and developing nations, but will give delegates cause to consider how their positions' economic and development situation play a part in forming their country position.

This background guide is written to give a brief introduction to the issues at hand, and I urge you to conduct as much research as needed to fully understand and develop your country's position. As always, my goal as Director, and our goal as a dais is to provide all delegates with the best experience possible. Please do not hesitate to email or reach out to us for any reason. We'd love to help out and answer any questions you have! I look forward to seeing all of you at JMUN 2018!

Sincerely,

Spring Chenjp

Committee Description

Established in 1945 by the UN Charter, the Economic and Social Council (ECOSOC) is one of the 6 principal organs of the United Nations, with its headquarters located in New York City, NY. The ECOSOC is comprised of 54 member states, elected to serve 3-year terms by the General Assembly (GA). Together, these nations oversee the economic, social, and environmental aspects of the UN, by promoting the UN Sustainable Development Goals, delivering humanitarian aid, and maintaining international peace and security. ECOSOC is focused on economic and social progress as well as protecting fundamental human rights. This committee is designed for countries to evaluate economic and social policies and discuss/compromise with other countries, while still remaining true to the core tenants of their foreign policy. While ECOSOC cannot enforce its resolutions, the respect it commands encourages many countries to adopt the policies that ECOSOC recommends.

Table of Contents

Topic A- Development of Renewable Energy

Topic Introductions	4
History	4
Bloc Positions	5
Possible Solutions	5-6
Guiding Questions	6

Topic B- Decreasing Methane Emissions

Topic Introductions	6
History	7
Bloc Positions	7-8
Possible Solutions	8
Guiding Questions	8
Further Links	8-9

Topic A: Development of Renewable Energy

Our first topic, Development of Renewable Energy, is incredibly crucial in both the present and the future, with impacts to be felt centuries from now. As fossil fuels exacerbate climate change, they are unsustainable and their use must be halted. However, our world runs on electricity, forcing us to find creative solutions. Renewable energy provides one such avenue. Renewable energy is electricity derived from sources that can be replenished, such as solar or wind energy, as opposed to finite resources such as coal and other fossil fuels. Development of renewable energy provides third-world countries flexibility in improving their electricity generation and infrastructure, aids in the halting of climate change, and ensures a reliable source of electricity. As such, the benefits of renewable energy are immeasurable.

History/Background

The first form of renewable energy was discovered in 4000 BC by the Mesopotamians who used a vertical water wheel to power their mills. The Persians followed by building the first windmills to grind grain and pump water in the 1st century. The world heavily relied on these forms of energy until shortly before the Industrial Revolution, when coal was discovered. Gradually, coal became the main source of energy in the world.

In the early 19th century, scientists discovered a correlation between the burning of fossil fuels and increased atmospheric temperature, which led to the climate change theory. It was not until the 1990s that the theory of climate change was seriously acknowledged. Since then we have seen the rise in new forms of renewable energy, specifically hydro and solar power.

The General Assembly, in order to slow climate change, has promoted the use of these alternative sources of energy. One example is the 2005 World Summit Resolution 60/1, in which the General Assembly officially recognized the importance of renewable energy sources in the reduction of greenhouse gasses and climate change. Additionally, in Resolution 64/206 (2011), the General Assembly declared the need for change in current energy infrastructure and requested that the Secretary General give a report on renewable sources of energy during its 66th session, showing a need for monitoring the state of renewable energy in the world. The report stated that “a transformation of the global energy system is needed to provide sustainable energy for all, to satisfy rapid growth in energy demand, particularly in developing countries, and to diminish the negative impacts of climate change.” Following this, the General Assembly decided to declare 2012 as the “International Year of Sustainable Energy for All” in its resolution 65/15. Soon after, the General Assembly also declared that 2014-2024 would be the “Decade of Sustainable Energy for all.” The resolution stressed the need to improve access to reliable, affordable, socially acceptable, and environmentally sound energy services and resources for sustainable development. To that end, it also highlighted the importance of improving energy efficiency, increasing the share of renewable energy and cleaner and energy-efficient technologies. The UN’s Economic and Social Council also made “affordable and clean energy” goal number seven in their 2015 Sustainable Development Goals, and has made significant progress since then, such as the Philippines 2015-2016 capacity increase of 920 milliwatts, as reported in the International Renewable Energy Agency’s (IRENA) Renewable Energy Statistics 2017.

Despite all the measures that the UN has taken so far to reduce our use of fossil fuels and advocate for the use of renewable energy, it continues to be a problem as not all member states have the funds necessary to transform their infrastructure and implement more sustainable solutions to their energy needs. Furthermore, a significant portion of the global population is still uneducated on the issue and does not understand the importance of decreasing our reliance on nonrenewable energy. It is the committee's task to come up with both practical and effective and solutions to this issue.

Bloc Positions

Countries can be divided into groups based on the extent of renewable energy infrastructure they have: significant, developing, or little to none. It is important to recognize the link between economic standing and production/development of renewable energy in that a country with a stable and growing economy is more likely and more able to develop and utilize renewable energy than a country with a stagnant or collapsing economy. Additionally, countries with adequate infrastructure already in place are able to allocate more of their funding towards the technologies required for renewable energy, putting less-developed countries at a disadvantage.

It is worth noting that within these blocs, there are other factors that influence the state of renewable energy in a nation, whether that be demand for energy, availability of natural resources, or others. Each country's position is different due to its unique circumstances, and it is important to consider how your country's position may differ from (or align with) that of your allies and neighbors when formulating your solutions.

Countries with a large amount of renewable energy production:

Most developed countries are in this bloc. These nations have been investing in renewable energy for a considerable amount of time, and some have begun to transition their energy use completely to renewable energy. For example, more than 80% of Iceland's total energy supply is derived from renewable resources, and China generates the most total renewable energy in the world. These nations are the most likely to keep developing renewable energy, due to both demand for it and also because they have the resources needed to take advantage of renewable energy. Nations that are in this bloc include China, the United Kingdom, Germany, Italy, Mexico, India, Brazil, Iceland, Ethiopia, and Kenya.

Countries with a middling amount of renewable energy production:

The countries in this bloc are either developed countries that have lacked a focus on renewable energy in the past, or developing countries who have begun to actively promote and use renewable energy but do not utilize it heavily as opposed to other forms of energy. For example, in 2016, 12.2% of all energy used in the United States was derived from renewable energy- a significant amount, but still considerably less than some other nations. Similarly, in Chile, 11.4% of all energy generated came from renewable sources as of 2016. Nations that are in this bloc include the United States, France, South Africa, Egypt, Greece, Chile, the Czech Republic, and Poland.

Countries with little to no renewable energy production:

The vast majority of countries in this bloc are developing nations who lack the resources to transition to renewable energy. These nations may face obstacles in funding, the environment, or availability of renewable energy technology. For example, Malta imports nearly all of its electricity due to its small size and relatively low energy needs, which lead to the island having little control over which sources its electricity comes from. Nations that are in this bloc include Belgium, Malta, Kazakhstan, Palestine, Chad, Togo, Niger, Mozambique, and the Central African Republic.

It is important to note that there are developed countries in the latter two blocs that rely heavily on nuclear energy, and as most forms of nuclear fuel are not renewable, they are not considered as deriving a large portion of their energy use from renewable energy. Additionally, many less-developed nations where a significant portion of their total energy production comes from renewable energies do not supply enough energy to provide for the needs of their population, so while their renewable energy production percentage may be higher than another nation, their nation ultimately still needs increased development of renewable energy.

Possible Solutions

There are several points to consider when developing the solutions that you will be outlining in your position paper and presenting during committee. One thing to keep in mind is that the ECOSOC is not responsible for the exact science behind different renewable energy methods. Instead, the ECOSOC should be making a general assessment of the feasibility of each method, and focusing more on the social and financial details of implementation. It is the responsibility of each delegate to suggest solutions that align with their country's best interest and move its goals forward, regardless of what their own view might be.

Additionally, although it's best to not be hindered by small details, delegates should recognize geographical factors that might keep their country from choosing one source of energy over another (e.g abundant natural gas reserves might deter Middle Eastern countries from using renewable energy, or being landlocked would keep countries such as Mongolia from using tidal power), and create solutions accordingly.

The most viable solutions are those that are economically beneficial and can be implemented in a short period of time, requiring less investment than other solutions. A good example are wind and solar plants, which are steadily becoming more cost-effective as time goes on. Most nations will be looking for a low-cost option when looking to utilize renewable energy. Additionally, most nations can utilize either wind or solar plants depending on environmental factors, making the promotion of these plants applicable to many countries.

Another facet to consider is the size of plants. For developed countries with dependable infrastructure, country-wide plants and policies would serve them best to ensure the whole nation is developing renewable energy at the same pace. However, many developing countries do not have a reliable energy grid or dependable methods for transporting electricity across the country. For these nations, a more decentralized method of energy generation would benefit them by allowing flexibility depending on environmental, fiscal, and other factors.

Guiding Questions

- Do developed countries have an obligation to aid developing countries? If so, how can developed countries benefit from this?
- How can developing countries ensure they have access to technologies and infrastructure they need to use renewable energy?
- Should countries where there is a severe need for electricity focus on developing renewable energy or use the most immediately available forms of energy even if they are not renewable?

Topic 2: Decreasing Methane

Emissions

Our second topic addresses reduction of waste and methane emissions, an issue which must be resolved for the health and well being of the planet as a whole. Every day, greenhouse gases such as methane are produced and released into the atmosphere, largely due to our harmful waste disposal habits. 20% of the methane generated in the U.S is the result of landfills. The problem with the presence of greenhouse gases is that they trap heat in our atmosphere, which results in global warming. And methane generates 86 times as much heat as CO₂. Despite the steps that are being taken to reduce the amount of methane in the atmosphere, the dilemma only continues to grow in size, and is prevalent in developed and developing countries alike. How can you come up with innovative solutions that are still easily implementable?

Topic History/Background

The existence of greenhouse gases such as methane, carbon dioxide, ozone, and nitrous oxide is not a new phenomenon, however greenhouse gases didn't pose a major threat until the Industrial Revolution when the discovery and usage of new forms of fuel caused greenhouse gases to be released into the atmosphere at a rapid rate. In the early 1990s, the harmful effects of these gases were identified and scientists encouraged the public to use more eco-friendly energy sources.

Though the usage of renewable energy has certainly increased over the years, the amount of methane in the atmosphere continues to increase as well, and landfills are one of the biggest culprits. Most of the waste that we produce ends up in landfills, even in instances when it can be recycled or composted. The occurrence of anaerobic decomposition in landfills (due to the compactness of the trash) causes bacteria to begin decomposing the waste, and the bacteria produce methane as a result. The methane traps heat and prevents it from escaping the atmosphere.

The United Nations has taken actions to manage and reduce waste production. The International Environment Technology Centre (created by the UN Environment Assembly) works with governments around the world to help them reduce waste and manage it effectively. The Environment Assembly also participates in "The Global Partnership on Waste Management". This partnership was launched in November 2010 to "enhance international cooperation among stakeholders, identify and fill information gaps, share information and strengthen awareness, political will, and capacity to promote resource conservation and resource efficiency." The Environment Assembly also wrote the "Greening the Blue Report" in 2017. The article includes sections on greenhouse gas emissions, waste, and environmental management. According to the article, 20 UN entities are implementing waste management plans across 75 different sites. Most entities have adopted plans to reduce their use of paper, while others have installed water fountains to reduce the use of plastic bottles.

Although many steps are being taken to reduce waste and minimize methane emissions, it is apparent that more needs to be done in order to mitigate the issue. Innovative solutions that involve both action and education must be created to ensure a safe and sustainable environment.

Bloc Positions

If not from landfills, methane emissions usually come from agricultural or industrial sources. Livestock farming and fossil fuel production in particular are some of the biggest contributors to methane emissions. Therefore, countries with a larger industrial agriculture and sector usually have higher methane emissions, and vice versa. Additionally, larger countries are more likely to have increased discharge due to the heightened need for agriculture and industrial products in their countries. More developed countries tend also to have higher methane emissions, as they often have more industrial farming and natural gas production, which in turn increases methane emissions.

Countries with high methane emissions

These countries often are very developed or have the resources needed to facilitate extremely intensive agricultural and industrial activities, which further promote the release of methane into the atmosphere. China, for example, emits the most methane of any country-enough to be equivalent to releasing 1,752,290 kilotons of carbon dioxide into the air, compared with Singapore's much smaller amount of 2,386 kilotons. However, due to the resources of many of these nations, they also have some of the largest capacities to develop technologies to slow or stop the rise of methane emissions in the atmosphere. Countries in this bloc include China, India, the United States, Russia, Brazil, Indonesia, Pakistan, Australia, Mexico, and Iran.

Countries with medium methane emissions:

These countries usually have some intensive agricultural or industrial activities, but their economies or nations are small-scale enough to not release large amounts of methane into the environment. However, they still have a significant contribution to the methane emissions in our atmosphere and ideally would take steps to curb their methane emissions- Norway produces an equivalent of 16,409 kilotons of carbon dioxide, much less than China or other larger nations, but still a significant amount. Countries in this bloc include Norway, Chile, Belarus, Ireland, Portugal, Syria, Morocco, Senegal, Mozambique, and Sweden.

Countries with little to no methane emissions:

These countries are primarily in this bloc because they lack an economy with large sectors that produce methane emissions. In most cases, these nations can do little to curb their methane emissions other than maintaining their current low emission rate. For example, Lebanon produces a carbon dioxide equivalent of 1,150 kilotons, Jamaica produces 1,316 kilotons, and Estonia produces 2,235 kilotons. Countries in this bloc include Montenegro, Malta, Iceland, Lebanon, Jamaica, Luxembourg, Singapore, Costa Rica, and Estonia.

It is important to recognize that there are specific sources of methane emissions that can alter the amount of a nation's methane emissions heavily. As mentioned in the Topic History/ Background, rice cultivation, cattle farming, and natural gas all contribute heavily to methane emissions. Nations that are primarily agricultural will have higher methane emissions than a nation of a similar level of development that has an economy that focuses more on other sectors. Ultimately, the vast majority of nations could control their methane emissions in one way or another, and it is often the more developed countries who are more able to do so that need to do so the most.

Possible Solutions

Waste reduction is an issue that requires effort on the part of both the private sector and the public for any progress to be made. The easiest method for the public to reduce methane emissions is to reduce the amount of trash they put into landfills. So the question then becomes, how do we push the people to actively reduce their waste production? There are two facets to the problem, lack of education, and lack of legislation. Perhaps people are simply not aware of how to recycle and compost properly, and of the problems caused by excessive waste production. It's also possible that people have no motivation to recycle/compost if their government doesn't seem to be promoting it in any fashion. These two factors tie into each other- effective education leads to a push for more legislation, and more legislation puts the need for decreasing methane emissions into the public eye, improving education. An effective resolution will discuss both sides of the issue and provide solutions for both.

Possible solutions to this issue include creating campaigns that educate the public on waste reduction (convenience of waste reduction, benefits to the environment, etc.). Another idea is to increase sales tax on certain items (e.g. plastic water bottles, disposable utensils) and incentivize the purchase of recycling and composting bins. Composting is also a very effective manner to dispose of organic waste that would otherwise end up in a landfill, and has added benefits of creating a free fertilizer source for gardens and yards- a tangible benefit for citizens who might not otherwise want to reduce their waste production.

However, it is important to keep in mind that any proposals made by the ECOSOC cannot be enforced and ECOSOC serves mostly as a body to recommend solutions, therefore, use of an incentive in a solution is highly recommended to ensure its implementation worldwide. Financial incentives are often very effective, such as a reduction in tax if a citizen recycles a certain amount of waste, or allowing citizens to receive money in return for recycling certain items.

Guiding Questions

- Are there any crises in your country currently (financially, politically, or otherwise) that would impede efforts to decrease waste production?
- How can you adapt your solutions to further your country's agenda and still being mindful of other member states' needs?
- How will your solution guarantee results, considering that ECOSOC does not have the jurisdiction to enforce any policies?

Further Links

- <https://climate.nasa.gov/>
- <http://research.un.org/en/climate-change/un>
- <https://www.epa.gov/lmop/basic-information-about-landfill-gas>
- <http://www.un.org/en/ecosoc/about/>
- Resources Used
- <http://www.iea.org/countries/>
- <http://www.reegle.info/countries>
- http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable_energy_statistics
- <https://data.worldbank.org/indicator/EG.FEC.RNEW.ZS>