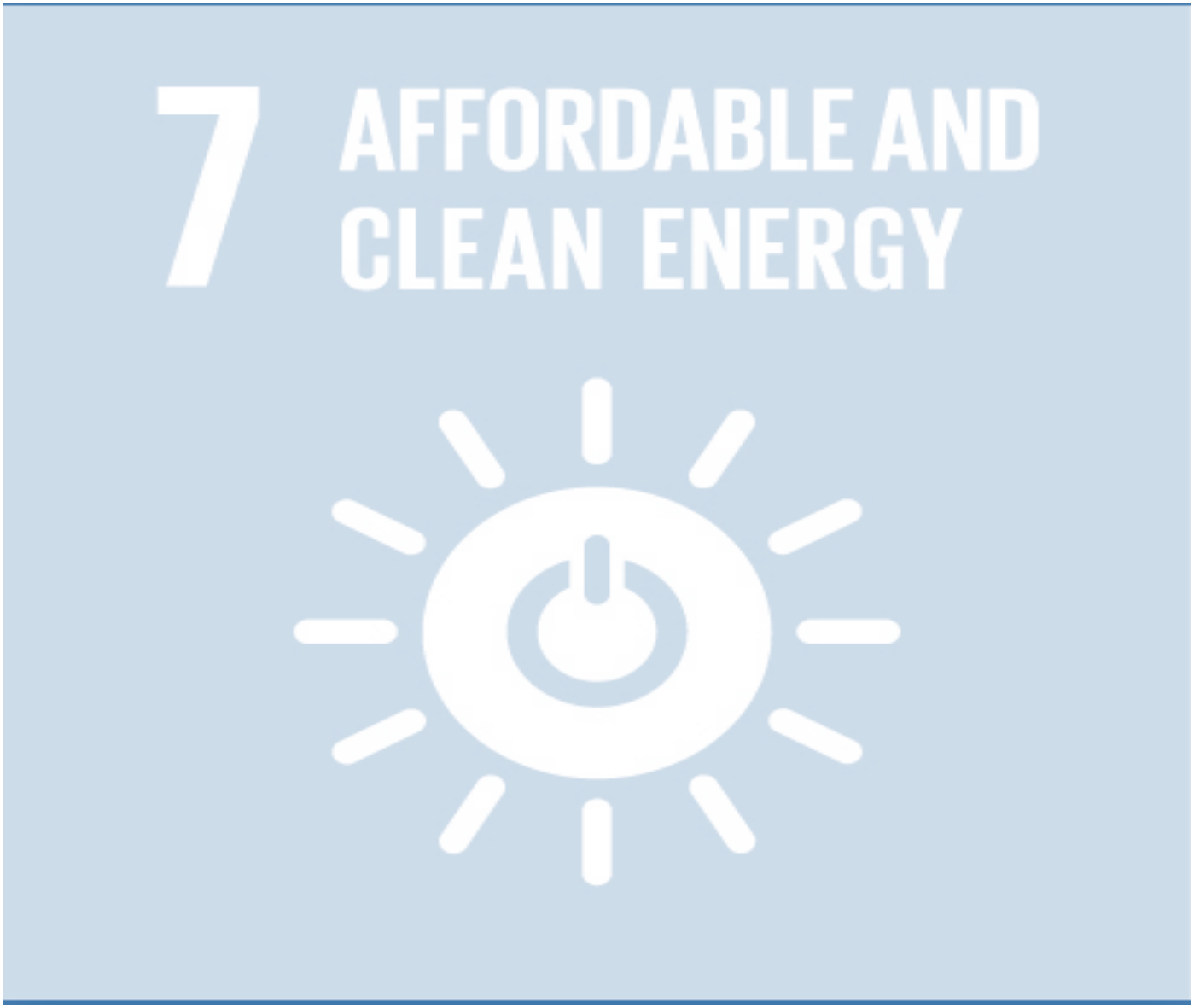

MODEL UNITED NATIONS

SOCOMUN XXXIII

FRESHMAN #7

TOPIC: ALTERNATIVE ENERGY SOURCES

SOCOMUN XXXIII

Freshman #7
Alternative Energy Sources

Hello delegates! My name is Catie Maroutsos, and I am so excited to be your Chair at SOCOMUN XXXIII for Freshman Committee #7. I am a senior at Santa Margarita, and this is my third year doing MUN. I play varsity lacrosse for the school as well as play club lacrosse as well! In my free time, I love hanging out with my friends, going to the beach, and cooking. I joined MUN to improve my speaking skills and over the past few years, I have been able to improve my writing skills and speaking on the spot because of MUN. I am looking forward to being your chair and leading the committee. Please feel free to reach out if you have any questions.

Hello, my name is Alina Mottiwala, and I am currently a sophomore at Santa Margarita Catholic High School. This is my second year in MUN, and I am so excited to be your vice-chair for SOCOMUN this year. So far, MUN has been a great experience because I think it is helping me to grow into a more well-rounded person as many skills can be taken away from MUN. For example, it has helped me feel more confident speaking in front of people, and it has helped me to problem solve. It has also taught me to realize that winning an award is not the most important thing but is to feel that you are growing and improving every conference.

Hi, I am Lauren Saint and I will be your rapporteur. I am currently a Sophomore at SMCHS and it is my second year in MUN. Outside of school, I enjoy dancing with the song team at SM, going to the beach, and spending time with my friends. I am looking forward to meeting you all at SOCOMUN!

A fantastic way to become familiar with the fundamentals of MUN and the standard operating procedures of a United Nations committee is through SOCOMUN. We will first go over our agenda, standard operating procedure, motions, and MUN jargon on the day of the conference. Since this will be the first conference for most of the delegates, please feel free to voice any concerns or ask questions at this or any other point throughout the committee. We will next address attendance, make a motion to create a speaker's list, and begin open discussion. Delegates are not obliged to speak, but committee involvement will improve scoring and performance significantly. Delegates should be participating and actively listening during speeches and moving to hold both formal and informal conversations. Delegates will group with nations that have comparable solutions as the committee works through the day to draft resolutions. Resolution papers will then be presented to committee and voted upon. Delegates must be completely aware of their nation's stance on this matter. We hope you now have a better understanding of MUN after reading our quick guide to committee. Please feel free to write the podium with any inquiries you may have regarding the committee or the conference at socomunfresh7@gmail.com. Good luck delegates!

Background:

Wind and sunshine are examples of renewable energy that is created through natural, clean processes. However, fossil fuels that harm the environment, such as coal, oil, and natural gas, are classified as nonrenewable energy. Humans have been mostly dependent on coal, oil, and other fossil fuels for around the last 150 years to power factories, cars, light bulbs, and other machinery. Because fossil fuels are ingrained in almost everything we do, the amount of greenhouse gases they produce when burned has increased to previously unheard-of levels. Renewable energy sources are growing in importance and already supply more than 12 percent of the energy generated in the United States. This is largely because the country has developed creative and affordable methods to absorb and store wind and solar energy.

There are many types of renewable energy sources, which include hydropower, solar, wind, and geothermal energy. Hydropower energy is the world's largest source of renewable energy. Cities where hydropower energy is largely used include China, Brazil, Canada, the U.S., and Russia. Utilizing the energy of flowing water through dams or turbines, hydropower continues to be a major source of electricity produced worldwide. According to estimates from the International Hydropower Association (IHA), hydropower produces 16% of the electricity produced worldwide. However, big dams have the potential to destroy local communities and river ecosystems, causing damage to wildlife and forced evictions. The production of hydropower is susceptible to silt accumulation, which can damage machinery and reduce capacity. Problems can also arise from drought. A 2018 study found that over a 15-year period in the western United States, carbon dioxide emissions were 100 megatons greater than they would have been otherwise because utilities replaced hydropower lost to drought with gas and coal. Methane released from decomposing organic material in reservoirs causes emissions that affect hydropower even when it is operating at maximum efficiency.

Next, solar energy is one of the most plentiful and easily obtained renewable energy sources. It is obtained by using photovoltaic cells or solar thermal systems to capture the energy of the sun. The International Energy Agency (IEA) reports that in 2020, solar photovoltaic capacity increased by 23% worldwide to a record 713 GW. This exponential rise highlights how solar energy is becoming a more viable and competitive source of energy in the world. The solar revolution is being led by China, Japan, and the United States, but there is still a long way to go. the world, solar thermal energy is also utilized for heating, cooling, and hot water. Wind power has become one of the most popular renewable energy sources. It is produced by wind turbines, which harness the kinetic energy of the wind. According to the Global Wind Energy Council (GWEC), with 93 GW more built in 2020, the total installed capacity of wind power surpassed 700 GW by the end of the year. The swift growth of wind energy underscores its significance as a primary catalyst for the shift toward sustainable energy. Between 2001 and 2017, the global cumulative wind capacity more than doubled—from 23,900 mw to over 539,000 mw. Although onshore turbines generate most of the wind power, offshore projects are now emerging, with the majority located in Germany and the United Kingdom. Other offshore projects are gaining traction, and the first offshore wind farm in the United States opened its doors in Rhode Island in 2016. Another issue with wind turbines is that they pose a threat to birds and bats, killing hundreds of thousands of them each year. This number is not as high as that of glass-break accidents and other dangers like habitat loss and invasive species, but it is still high enough that engineers are developing ways to make wind turbines safer for soaring fauna.

Geothermal power is a dependable and constant renewable energy source that draws heat from the Earth by extracting steam or hot water. According to the International Renewable Energy Agency (IRENA), the capacity of geothermal power reached about 15 GW worldwide in 2020. Geothermal energy has a large growth potential, especially in areas with geothermal resources, even though it is still underdeveloped in comparison to other renewable energy sources. While geothermal energy is constantly available, unlike solar and wind energy, it can have uncontrollable side effects, such as smell like rotten eggs when hydrogen sulfide is emitted.

Possible Solutions:

Goal 7 of the Sustainable Development Agenda (SDG 7) is to guarantee that everyone has access to modern, affordable, sustainable, and reliable energy. As delegates from respective countries, delegates must put forward practical ideas to further this objective and hasten the shift to renewable energy sources. This position paper outlines important tactics to encourage the uptake of renewable energy and accomplish universal access to clean energy.

Providing thorough legislative frameworks and implementing regulatory changes to establish a favorable climate for the use of renewable energy can aid the issue. This entails establishing aggressive goals for renewable energy, putting feed-in tariffs into place, offering financial assistance for renewable energy projects, and expediting the permitting procedure. Governments may attract investment and promote innovation in renewable energy technology by establishing a regulatory framework that is favorable to these efforts.

Encouraging public and private investment in renewable energy infrastructure by use of creative financing solutions and financial incentives is also crucial. Governments could provide low-interest loans, subsidies, and tax credits to investors and providers of renewable energy. Furthermore, the establishment of public-private partnerships and green investment funds can help finance renewable energy projects, especially in developing nations with limited financial resources.

Increasing public awareness and encouraging the adoption of renewable energy through focused outreach and education initiatives can be an additional solution. Engage stakeholders to emphasize the value of sustainable energy practices and the advantages of renewable energy, such as government agencies, civil society organizations, educational institutions, and the media. To rally support for clean energy efforts at the grassroots level, promote an energy-saving and renewable energy-friendly culture.

Questions to Consider:
Delegates do not need to answer these questions during committee but are good questions to consider with creating and presenting your solutions.

1. How can we guarantee that everyone, especially in underprivileged communities and rural areas, has fair access to inexpensive and clean energy?
2. What laws and rules may be put in place to encourage the development of infrastructure and technology related to renewable energy?
3. How can we solve the issues of intermittent and grid integration and encourage the use of renewable energy sources?
4. What tactics can be used to improve energy efficiency and encourage habits of sustainable energy consumption?
5. How can nations work together to support capacity building and technology transfer in the growth of renewable energy?
6. How can renewable energy projects, particularly those in developing nations, be financed, and carried out with the help of public-private partnerships?
7. How can issues with land use, permitting, and public opposition to renewable energy deployment be resolved?
8. What steps may be taken, especially in delicate ecosystems, to guarantee the environmental integrity and sustainability of renewable energy projects?
9. How can the social and economic effects of switching from fossil fuels to renewable energy be addressed, such as community involvement, energy affordability, and job creation?
10. What actions may be implemented to track the accomplishment of SDG 7 targets and provide accountability for the national and international implementation of renewable energy initiatives?

SDG 7 Targets:
The specific targets for Sustainable Development Goal (SDG) #7 Affordable and Clean Energy, noted on the United Nations' website, are listed below.
7.1 By 2030, ensure universal access to reliable, modern, and affordable energy services
7.2 By 2030, increase the share of renewable energy in the global energy mix substantially
7.3 By 2030, double the global rate of improvement in efficient energy
7.A By 2030, enhance international cooperation to facilitate access to clean energy technology, research, and renewable energy, increase energy efficiency, develop cleaner and advanced fossil fuel technology, and promote investment in clean energy technology and infrastructure
7.B By 2030, upgrade technology and expand infrastructure for supplying modern and sustainable energy services for all in developing nations such as land-locked developing countries and small island developing States, in accordance with their respective programs of support

MUN Impact
After SOCOMUN XXXIII, we hope that all delegates have a better understanding of MUN. We hope you can apply these ideas to our world today. If you are interested in staying up to date on topics that are important to the MUN community, we encourage you to connect with the MUN Impact Program http://munimpact.org/. If you want to know what MUN Impact is doing related to SDG #7, visit http://munimpact.org/sdg-page/sdg-7/.

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