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Background Guide

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Topic：Working Together for Clean Energy: Helping Developing Countries Build Green and Better Energy Systems

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Working Together for Clean Energy: Helping Developing Countries Build Green and Better Energy Systems

1. Background

As climate change becomes more serious and the world needs cleaner energy, many countries now agree that sustainable energy is very important. The *United Nations 2030 Agenda for Sustainable Development* clearly says that "sustainable energy is key to our future." It includes Goal 7 (Affordable and Clean Energy) and Goal 13 (Climate Action) as main goals. However, about 770 million people around the world still do not have access to electricity. Most of them live in Sub-Saharan Africa and parts of Asia. At the same time, using fossil fuels (like coal and oil) causes a lot of pollution and damages the environment. This makes it harder to protect the planet and grow in a sustainable way.

In this situation, working together on sustainable energy—called energy capacity cooperation—has become a good way to share resources and help countries switch to green energy. This kind of cooperation includes not just sending equipment and technology, but also investing money, training local people, and

supporting daily operation and maintenance. It focuses on win-win partnerships and building local skills, especially for countries that don’t yet have strong technology or resources. More and more people realize that traditional aid is not enough anymore. What we need is a new kind of cooperation based on sharing, trust, and working together.

In recent years, many international programs have been created to support sustainable energy. For example, SEforALL (Sustainable Energy for All), IRENA (International Renewable Energy Agency), the World Bank, and the Clean Energy Ministerial (CEM) all work to improve access to clean energy, make it easier to invest in, and spread new technology. Big groups like the G20 and APEC also talk about energy change, energy safety, and how countries can work together using new green technology.

Energy cooperation also connects with many other goals in the UN's plan. For example: Goal 8 (Decent Work and Economic Growth), Goal 9 (Industry, Innovation and Infrastructure), and Goal 17 (Partnerships for the Goals). When countries work together on energy, they don’t just fix electricity problems. They

also help factories grow, create jobs, and improve technology. This brings many benefits at the same time.

Today, the world is trying to move away from the old way of using lots of carbon (high-carbon economy) and go toward a green, low-carbon future. For developing countries, this is a big change. They need help from other countries—money, technology, good rules—but they also need to work harder themselves to build strong plans and skills. Sustainable energy cooperation is like a bridge. It connects the help, the ideas, and the actions all together.

So, during this Model United Nations meeting, students will think about how to build a fair, inclusive, and well-organized way for countries to work together on energy. How can we help developing countries lead in these efforts? How can we build a global green energy system that people can trust? These are the key questions. It’s not just about energy—it’s about fairness, climate justice, and how we can all work together to protect our shared planet.

2. Key Terms Explained

South–South Cooperation

This means countries in the Global South (developing countries) work together by sharing technology, money, knowledge, and experience. They help each other grow and build skills. This kind of cooperation is based on fairness, equal respect, and does not have political conditions. It is a good way for developing countries to become stronger on their own.

Triangular Cooperation

This is based on South–South Cooperation, but adds support from developed countries or international organizations. These partners may give money, technology, or training, while developing countries still take the lead. It brings together the strengths of all sides and helps make projects more effective.

Green Finance

Green finance means using money in ways that help the environment. It includes loans from banks, green bonds, special insurance, or green investment funds. It supports projects like clean energy, saving energy, or protecting nature. It tries to make both the planet and the economy better at the same time.

Climate Finance

This is money used to stop or deal with climate change. It comes

from both governments and private companies. According to the United Nations, rich countries should give “new and extra” support to help developing countries reduce pollution and prepare for climate impacts.

Green Bond

A green bond is a kind of loan used only for environment-friendly projects, like solar energy or clean transport. It can be made by governments, banks, or companies. The money raised must follow special green rules. Green bonds help bring more private investment into sustainability.

Sustainable Finance

This means using money in a way that cares for the environment, society, and good management (ESG: Environment, Social, Governance). It includes green finance and climate finance. The goal is to help the economy grow in a clean, fair, and long-lasting way.

Distributed Energy

This means small energy systems that are close to the people who use them—like rooftop solar panels or village microgrids. They give power locally and can work even where there is no

big power plant. This is especially helpful in faraway areas in developing countries.

Capacity Cooperation in Energy

This means countries and groups work together to help build clean energy in developing countries. It includes giving money, sharing technology, training workers, and helping run energy projects. It helps those countries build their own strong and clean energy systems.

Lucid Waters and Lush Mountains Are Invaluable Assets

This is a Chinese idea that says nature and the economy can both grow together. We should not harm the environment just to get more money. Clean rivers and green forests are just as valuable as gold and silver. This idea is used in international work to guide green investment and protect ecosystems.

Community of Shared Future for Mankind

This is a global idea from China. It means that all countries—big or small—should work together as equals. We all live on one Earth, so we must share responsibility and benefits. In this idea, clean energy and climate action are ways to build a fair, peaceful, and sustainable world together.

3. International Action

Today, solving energy problems and fighting climate change are big global goals. Countries around the world are working together to make energy more fair and to protect the planet. Under the United Nations system, the 2030 Agenda for Sustainable Development lists Goal 7 (Affordable and Clean Energy) and Goal 13 (Climate Action) as top priorities. Groups like SEforALL (Sustainable Energy for All) and IRENA (International Renewable Energy Agency) help countries plan and pay for clean energy projects. They also support developing countries in making national energy plans, building green power grids, and using small local energy systems (like solar panels in villages). The Paris Agreement and countries' NDCs (Nationally Determined Contributions) give a clear plan for moving toward low-carbon energy.

In different parts of the world, regional groups are building partnerships for energy cooperation. For example, the African Union leads the African Renewable Energy Initiative, working with the European Union and others to build new energy projects. In Southeast Asia, ASEAN is helping connect countries' power grids and share clean energy like wind and

solar. In Latin America, CELAC supports green electricity networks and actions to reduce carbon pollution. These efforts show the value of working together on energy across borders. Sharing energy and building infrastructure together can help a whole region go green.

Public and private groups are also working together. The Clean Energy Ministerial (CEM) brings together energy leaders from major countries every year to share ideas, make new rules, and help clean energy grow. Other groups like the Sustainable Development Investment Partnership (SDIP) and the Global Environment Facility (GEF) use “blended finance,” which means mixing government and private money to help green projects in developing countries. They also help bring in new green technologies and give more power to local communities.

One important group is the International Solar Alliance (ISA), which focuses on countries near the equator. It helps them use more solar power and set up small solar power systems. Now, over 120 countries have joined this group and are working together to build solar microgrids.

These international and regional actions give strong support to solving energy problems. But challenges still exist, especially

for developing countries. Many lack enough money, don't have strong project plans, have unstable policies, or depend too much on other countries for technology. According to Reuters, to triple clean energy by 2030, developing countries need to increase their energy investment by six times—up to 1.6 trillion U.S. dollars each year. Only with that kind of support can they fully use their green energy potential and catch up with richer countries.

In this situation, China's international action is especially important. At home, China has built the world's largest wind and solar power systems. China also announced its "dual carbon goals": to reach peak carbon emissions by 2030 and carbon neutrality by 2060. These goals show a strong commitment to clean energy. Internationally, China uses the "Belt and Road Initiative" (BRI) to support green energy projects in other countries. In 2024, the value of BRI energy contracts reached $7.07 billion, with $1.18 billion going to green energy—a 60% increase from the previous year. China also started the "Green BRI" plan, which checks overseas projects for environmental protection and follows local sustainability standards.

Together, global partnerships and China's actions are creating new ways to help developing countries go green. Still, there are problems to solve: some countries lack experts to study whether a project will work; others don't have good local rules or strong green finance systems. Climate money is often too expensive or hard to get. To fix this, countries should improve platforms that help plan projects, create better green investment policies, combine financial tools, and build systems that help local people benefit. These steps will help make sure all countries can share fairly in the success of green energy.

4. Achieving the Sustainable Development Goals (SDGs)

SDG 5 – Gender Equality

In many developing countries, women use the internet much less than men. There is a big "digital gap." For example, women are 21% less likely than men to own a mobile phone, and in the least developed countries, the gap can be as high as 43%. To fix this, global digital rules should include a focus on gender. By using technology to support women's rights (Target 5.b), we can help more women take part in the digital world, and improve fairness in education, jobs, and health.

SDG 9 – Industry, Innovation and Infrastructure

This goal talks about building strong, green, and fair infrastructure, including internet and communication systems. Making the internet available to everyone and connecting data systems across countries (Target 9.c) can help new technologies like AI, big data, and cloud computing grow. These tools can help small businesses join the global economy and support local science and innovation (Target 9.5). This leads to fair and smart industry development for all.

SDG 10 – Reduced Inequality

Right now, the digital gap and control of technology by a few countries or companies are making inequality worse—between countries and between communities. To reduce this, the world needs fair digital laws that recognize different countries' needs ("differentiated responsibilities") and let developing countries take part in making rules and using data. Sharing technology and knowledge in fair or low-cost ways can help Global South countries build their own digital skills. This matches Target 10.7, which supports giving developing countries more voice in global decision-making.

SDG 16 – Peace, Justice and Strong Institutions

This goal supports building fair, open, and responsible systems (Target 16.6) and making decisions that include everyone (Target 16.7). It also wants developing countries to be more involved in international organizations (Target 16.8). A global legal system for digital governance—with clear rules and ways to solve problems—can make governments, tech platforms, and users more honest and responsible. This can stop the misuse of AI and protect people's digital rights. It is also important to protect the public's right to know (Target 16.10), and to stop unfair algorithms or "deepfakes" that can hurt democracy.

SDG 17 – Partnerships for the Goals

This goal calls for sharing technology and knowledge to help developing countries grow stronger in science and technology. A good global digital governance system should include capacity-building tools, such as an "AI Capacity Network," an "AI Development Fund," or a "Global Standards Exchange." These kinds of partnerships—between the UN, governments, NGOs, and businesses—can support talks on digital rules, test new policies, and help developing countries build digital power. This shows the spirit of "sharing and win-win cooperation."

5. National Positions

European Union (EU)

The European Union (EU) supports sustainable development through clean energy cooperation and a “climate–energy” strategy. The EU believes that energy and climate issues are closely connected and must be addressed together. In international partnerships, the EU says countries should keep full control of their own energy policies and that cooperation should respect national choices. It also supports public–private partnerships and fair investments to make energy projects more inclusive and useful. Through its Global Gateway program, the EU has pledged €300 billion to help build green infrastructure and energy systems in Africa and the Asia–Pacific. The EU has also set up systems like the Just Transition Mechanism to make sure energy changes also protect jobs and support social fairness, showing its concern for people during the green transition.

China and the Group of 77 (G77)

China and the G77 stress the importance of development rights for the Global South and call for fair cooperation. They ask developed countries to keep their promise to provide Official Development Assistance (ODA) and use it for sustainable

infrastructure such as clean energy, transport, water, and health—key areas to end poverty and support sustainable growth. They support stronger connections between energy agencies and regional energy plans, like cross-border electricity grids, green technology centers, and South–South and Triangular Cooperation models. At major climate meetings like COP28 and COP29, China and the G77 said that climate finance should include grants and low-interest loans so developing countries can grow green without taking on new debt.

As a key partner of the G77, China is working to make energy cooperation part of its "Green Belt and Road" strategy. It builds clean energy projects in Asia, Africa, and Latin America to improve local infrastructure, increase incomes, and reduce poverty. China also supports projects through the UN South–South Cooperation Fund, the Asian Infrastructure Investment Bank (AIIB), and the Silk Road Fund, offering low-cost loans and green credit to help renewable energy and environmental protection projects. In all cooperation, China supports fairness and mutual respect and says projects must include environmental and community assessments. This reflects China's development idea: "Lucid waters and lush

mountains are invaluable assets," meaning green growth and ecological protection must go hand in hand.

Developed Countries (including the U.S.)

The U.S. and other developed countries support clean energy cooperation through platforms like the Clean Energy Ministerial (CEM). Their main focus is to spread clean technologies and improve energy efficiency. Competing with the EU's Global Gateway, the U.S. prefers Triangular Cooperation—working with both Global South countries and international groups to bring clean energy tools to middle- and low-income countries. Most U.S. support goes through development banks, and it emphasizes private-sector involvement and transparent governance. In climate talks, the U.S. supports market-based approaches like carbon pricing and green bonds.

Southeast Asia

Southeast Asian countries support building regional energy cooperation systems to meet fast-growing energy needs while cutting carbon emissions. Using ASEAN as a platform, they promote cross-border power grids (like the ASEAN Power Grid), shared natural gas pipelines, and joint solar and wind energy systems. This helps improve energy security and supports green,

low-carbon development. Countries in the region know that they need hundreds of billions of dollars in investment each year (around $180 billion yearly). But due to weak policies, uneven regulations, and difficulty in getting funds, they call on the global community to help set up clean energy financing systems and project coordination platforms. They also promote cooperation with international development banks and use joint training and standards to build regional skills. Energy change in the region should also care about social fairness and job protection.

Middle East

In the Gulf region, countries like the UAE, Saudi Arabia, and Oman are moving quickly to build more diverse energy systems. They are moving away from oil and toward renewable energy and hydrogen. These countries have made national green energy and hydrogen strategies, and they focus on setting up cooperation systems for technology sharing, international investment, and common standards. For example, Saudi Arabia aims to make at least 50% of its electricity from renewables by 2030 and build 130 gigawatts of new capacity, working with China on solar and wind energy. Gulf countries also work with international groups like Masdar and ACWA Power to invest in

clean energy projects around the world. They use green diplomacy and energy change to expand their global role. During this process, they ask for stronger environmental rules, shared technical standards, and better local training. They also want a voice in making green rules at the UN and in their region.

Latin America

Countries in Latin America have rich renewable energy resources and believe green change must also support social fairness and poverty reduction. According to the IEA and the Inter-American Development Bank, Latin America's renewable energy has grown fast—from 2015 to 2022 it increased by 51%, now making up 64% of total energy. Still, many people don't have fair access to new energy. Groups like OLADE (Latin American Energy Organization) are working to connect electricity networks, make common rules, and support green investment. Latin American countries also support South–South and Triangular Cooperation. They ask development banks and private investors to help fund green energy, and want green finance and bond markets to grow so poorer countries don't carry heavy debt. These countries say energy cooperation must

also support better public services, living standards, and real fairness in both the economy and the environment.

6. Challenges and Possible Solution Paths

Today, working together on clean energy faces many problems, especially in developing countries and in South–South or Triangular Cooperation. First, there is a big money gap, and the way money is given isn't right. Experts say developing countries need more than $1 trillion every year until 2030 to build renewable energy. But right now, they get less than one-tenth of that money. Traditional help from rich countries has dropped—places like the UK and the U.S. have cut aid to the UN, which leaves environmental projects short on funds. Some clean-energy financial tools exist, but many developing countries lack strong banks, rules, and credit systems. This makes it hard to get private money, costs are high, and few energy projects qualify as "bankable."

Second, many countries don't have the technology or skills they need. Although new tech is available, places like Sub- Saharan Africa and South Asia often do not have the right equipment or

infrastructure—things like smart electric grids, energy storage, and village power systems. When they do get technology, it's often old or incomplete. Usually, machines are shipped in, but local teams don't learn how to fix or upgrade them. For example, many solar or wind systems in Africa work only because engineers come from abroad, which costs more and doesn't build local knowledge.

Third, unstable rules and weak laws cause problems. Many developing countries change energy policies quickly, have long and unclear approval steps, and make rules that aren't open. This slows down projects and scares away investors. In parts of Southeast Asia, sudden changes to energy subsidies or auction rules can ruin a project's profit plan. In Africa, there often aren't clear energy agencies or enough skilled officials, so good laws are not put into practice.

Fourth, there is a lack of skilled people. Even if countries get money and equipment, there aren't enough local technicians to install or maintain them. For example, Africa needs many trained workers in clean energy, but schools and vocational training programs are still in early stages. This not only limits

how much energy is used, but it also hurts job creation and local growth.

Fifth, not enough attention is paid to the environment and fairness. Some big projects—like dams, solar farms, or wind parks—don't do environmental studies, or don’t ask local people if it’s okay. This can lead to unclear land rights, damage to nature, or protests. When people are left out of decisions, green energy projects can feel unfair and even harmful.

Sixth, regional cooperation and cross-border energy links remain weak. Even when groups like the African Union or ASEAN talk about connecting national grids, there are many obstacles. Different electric standards, unclear rules for electricity pricing, and a lack of regional planning make power-sharing difficult. Countries rich in solar or wind can’t easily send that power across borders.

Seventh, good Triangular Cooperation is rare. Though South–South and UN-linked help exists, it's not well coordinated with private companies or rich countries. There are few shared platforms for training, planning, or sharing results. This makes success hard to copy and grow.

To fix these problems, the world needs a bigger, more honest plan. First, we could build a Global Sustainable Energy Cooperation Platform. It would bring together UN agencies, governments, regional groups, development banks, and private companies. They would share information, funding plans, and project ideas to match countries that need help with those who can provide it.

Second, we need more regional demonstration centers for clean energy, using South–South and Triangular Cooperation. These would help connect energy regulations and technology standards across borders.

Third, public policy should encourage clean energy. Governments in developing countries could offer lower taxes, pay for green electricity, or support storage technology. That would make projects easier to fund.

Fourth, we need stronger green finance. Combining money from banks, governments, and countries like China and members of the Belt and Road Initiative would form a Green Energy Cooperation Fund. This fund could use loans, guarantees, carbon credits, green bonds, and insurance to reduce costs and attract private investment.

Fifth, we need more focus on training. Clean energy training centers and skill-building courses will help produce local engineers who can build and maintain solar panels, wind turbines, and related tools. That way countries do not rely only on outsiders.

Sixth, we could set up an International Clean- Energy Technology Transfer Commission. Working with groups like the International Solar Alliance and UNIDO, this would track which technologies need spreading, support joint innovation, and put green technology at the heart of South–South and triangular deals.

Seventh, green energy projects should measure their effect. There should be environmental and social checks that are open to the public, and local people should have a say. This keeps projects fair, clean, and trusted.

Eighth, countries should work together on cross-border power lines and energy trade. This means Africa, Southeast Asia, and Latin America all agreeing on electric standards and prices so wind, sun, and water power can reach different countries easily.

Finally, everyone should agree on project goals and track progress. They should use Key Performance Indicators (KPIs) for things like how many people get power, how much pollution is cut, how many jobs are created, and how much local business is happening. Annual reports would help governments and communities understand and judge results. This ensures clean energy cooperation is fair, effective, and part of building a shared future for all.

Only with these steps can clean energy partnerships really help developing countries go green. That way, green energy supports fairness, economic growth, and the fight against climate change.

Questions for Consideration

- In today's global energy transition, how can developing countries use energy cooperation to make affordable and clean energy (SDG 7) more fair and widely available? Which types of clean energy should be the main focus?
- How can capacity cooperation help developing countries get better at using and maintaining clean energy technology, instead of depending on foreign help? What cooperation systems work best for this?

- To make triangular cooperation work well, what roles should developed countries, international organizations, China, and private companies each play? How can we make sure all sides work together fairly, openly, and effectively?
- When building clean energy projects, how can we balance the idea that “green nature is as valuable as gold” with the need for development? What rules and community systems should we have to check and guide projects?
- Cross-border energy trade and regional connections are important ways to grow clean energy. How can countries fix problems like different technical standards, weak regional rules, or unclear pricing systems?
- As climate change (SDG 13) becomes more serious, how can clean energy cooperation help developing countries directly reduce carbon emissions? Should projects include clear emission reduction goals in their plans?
- Clean energy projects should create decent jobs (SDG 8). How can green energy projects support job growth in building, equipment production, and maintenance? What types of training or education are most important?

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