Topic Two: Promoting sustainable electric vehicle production and recycling

I. Topic Background

Promoting sustainable electric vehicle production and recycling is crucial for addressing environmental challenges, reducing greenhouse gas emissions, and ensuring the long-term viability of the transportation sector.

Electric vehicles often have a lower carbon footprint during operation compared to traditional internal combustion engine vehicles. However, the production phase can contribute significantly to carbon emissions. Sustainable practices in manufacturing, such as using renewable energy sources, implementing energy-efficient processes, and minimizing resource use, are essential. The production of lithium-ion batteries, a crucial component of electric vehicles, involves mining and processing materials such as lithium, cobalt, and nickel. Extracting these resources can have environmental and social impacts. Promoting sustainable mining practices and investing in continued research and development in battery technology, materials science, and manufacturing processes are essential to finding more sustainable solutions. Innovation can lead to breakthroughs that make electric vehicles more environmentally friendly throughout their life cycle.

Recycling of electric vehicle batteries is essential to minimize environmental impact and recover valuable materials. Developing efficient recycling processes for batteries and establishing a closed-loop system can reduce the need for raw materials, lower costs, and decrease waste. Ensuring that electric vehicles are properly disposed of at the end of their life cycle is crucial. This includes recycling or safely disposing of components to prevent environmental pollution and recover valuable materials. Embracing a circular economy approach involves designing products for longevity, repairability, and upgradability. Encouraging the reuse and remanufacturing of electric vehicle components can extend their life cycle and reduce overall environmental impact.

Governments can play a significant role in promoting sustainability in the electric vehicle industry by implementing and enforcing regulations that encourage eco-friendly practices. Financial incentives for manufacturers and consumers can drive the adoption of sustainable practices. These incentives may include tax breaks, subsidies, or grants for companies investing in green technologies. Collaboration among automakers, suppliers, governments, and environmental organizations is crucial for developing and adopting sustainable practices collectively. Establishing and adhering to industry-wide sustainability standards can ensure consistency and accountability across the electric vehicle supply chain.

II. United Nations Involvement

The UN has established a set of 17 Sustainable Development Goals (SDGs), and several of these goals are directly related to sustainable practices in the automotive industry. For instance, Goal 7 focuses on affordable and clean energy such as investing in solar, wind and thermal power and improving energy productivity, while Goal 12 emphasizes responsible consumption and production like the efficient management of shared natural resources, and the way of disposal of toxic waste and pollutants, whilst encouraging industries, businesses and consumers to recycle and reduce waste.

The United Nations Environment Programme (UNEP) plays a key role in promoting sustainable practices globally. It works on various initiatives related to reducing environmental impact, including those associated with the automotive sector such as the Global Electric Mobility Programme that helps 50 lower income countries to shift to electric mobility with cooperation with Banks and international Energy Agency (IEA).

The UN facilitates international collaboration and hosts conferences where member countries and stakeholders discuss and establish guidelines for sustainable practices. Forums like the United Nations Framework Convention on Climate Change (UNFCCC) often address issues related to reducing emissions and promoting cleaner technologies, including electric vehicles.

III. Bloc Positions

Various regional blocs and economic organizations have taken positions and initiatives to promote sustainable electric vehicle (EV) production and recycling. These positions may include policy frameworks, incentives, and collaborative efforts among member countries.

The European Union has been a leader in promoting sustainability in the automotive sector. The EU has set ambitious emissions reduction targets and promotes the adoption of electric vehicles as part of its efforts to combat climate change. The EU's Circular Economy Action Plan (CEAP) emphasizes the importance of sustainable product design, reuse, and recycling. This plan includes considerations for the automotive sector, including electric vehicles.

China has been a major player in the electric vehicle market. The government has implemented policies to support the production and adoption of electric vehicles, including subsidies and incentives for manufacturers and consumers. China has also implemented regulations to encourage the recycling of electric vehicle batteries and reduce environmental impact.

Policies and initiatives related to sustainable electric vehicle production and recycling vary among North American countries. The United States, for example, has introduced tax credits and incentives to promote electric vehicle adoption and production. Canada has also implemented measures to support electric vehicles, and discussions about sustainable practices in the automotive sector are ongoing in the region.

Association of Southeast Asian Nations (ASEAN) member countries are at different stages of adopting electric vehicles. Some countries have introduced policies and incentives to encourage the production and use of electric vehicles, while others are still in the early stages of development. Discussions within ASEAN often address the need for regional cooperation on sustainable practices in the automotive sector.

Various African countries are exploring opportunities for sustainable transportation, including electric vehicles. The African Union has been involved in discussions on adopting clean and sustainable technologies, and some countries have implemented policies to support electric mobility.

These positions and initiatives reflect the diverse approaches taken by regional blocs to address the environmental impact of the automotive industry, particularly with regard to electric vehicle production and recycling.

IV. Considerations when making Resolutions

- What is my country's official position on promoting sustainable electric vehicle production and recycling?
- Is my country successful in promoting sustainable electric vehicle production and recycling?
- Is my country providing or receiving financial relief?
- Are there UN actions that your country supported or opposed regarding the topic?
- How do other countries' positions affect your country's position on the topic?
- Which countries are your allies?
- Which countries do you usually disagree with regarding other global issues?
- How does your country (if they do) want to improve in promoting sustainable electric vehicle production and recycling?
- Is there evidence or statistics that help back your country's position?

V. Sources

United Nations. (n.d.). *The SDGs in action*. Sustainable Development Goals.

Sustainable Development Goals | United Nations Development Programme (undp.org)

United Nations. (n.d.). *UNEP's Global Electric Mobility Programme supports more than 50 low-and-middle-income countries with the shift from fossil fuel to electric vehicles.* UN environmental programme.

Global Electric Mobility Programme | UNEP - UN Environment Programme

United Nations. (n.d.). *What is technology development and transfer?*. United Nations Climate Change

What is technology development and transfer? | UNFCCC

European parliament. (n.d.). *Circular economy action plan*. European Commission Environment

Circular economy action plan (europa.eu)

Nabila Farhana Jamaludin, Haslenda Hashim, Wai Shin Ho, Lek Keng Lim, Nurul Syahirah binti Sulaiman, Alnie Demoral, Andy Tirta, M Rizki Kresnawan, Rika Safrina, Silvira Ayu Rosalia. (2021, December 15). *Electric Vehicle Adoption in ASEAN; Prospect and Challenges*. ASEAN Centre for Energy - One Community for Sustainable Energy.
Electric Vehicle Adoption in ASEAN; Prospect and Challenges - ASEAN Centre for Energy (aseanenergy.org)