

S'MUN2030

SINGULARITY MODEL UNITED NATIONS

M E P

Climate change and
energy transition



SINGULARITY
FOUNDATION

 St PETER'S
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Climate change and energy transition

1. Introduction:

To pass a law within the EU there are three crucial organisms involved: the European Commission, which drafts the first version of the law, and the European Council and the European Parliament who discuss and approve reforms to it.

In this committee we will be addressing it the following way; the first two days we will be functioning as the European Commission (creating the proposal), and the last/third day as the European Parliament (reforming the proposal).

I. European Commission

The European Commission is part of the executive of the European Union together with the European Council. It proposes new laws, manages EU policies & allocates EU funding, enforces EU law and represents the EU internationally.

It promotes the general interest of the EU by proposing and enforcing legislation as well as by implementing policies and the EU budget.

· How does the Commission work?

The Commission operates as a cabinet government, with 27 members (also called Commissioners), headed by a President, who plans and defines the policy direction for the Commission. Afterwards decisions are made under collective responsibility. All members have equal decision-making power.

The Vice-Chairman acts on behalf of the Chairman and coordinates the work within his or her area of responsibility with a number of members. Priority projects are defined to ensure that all commissioners work together closely and flexibly. Commissioners assist the Vice President in submitting proposals to the whole cabinet.

In general decisions are taken by consensus, but voting is also possible. In the Commission it's by simple majority, with each member having one vote. The relevant Directorate General then deals with the matter. This usually takes the form of a legislative proposal that is then presented to commissioners for approval at weekly meetings. If approved they become official documents and are sent to the European Council and European Parliament for the next stage of the EU legislative process.

II. European Parliament

The European Parliament is part of the legislative, or law-making, process of the European Union. Along with the European Council, the European Parliament adopts new EU laws (both institutions must approve a law before it passes). Furthermore, the European Parliament is the one in charge of checking the work of all the organizations that help run the EU.

• *How the European Parliament works*

The European Parliament has 705 seats, and elections to fill these seats are held in all member states every 5 years. Those elected are called Members of the European Parliament (MEPs) and come from the different parties from each of the country members. Since each country has a set number of seats according to its population, its MEPs would represent the general percentage of each ideology. Most national parties would then be associated to a European Party. Within the European party all MEPs with a similar ideology create a front with common aims.

Generally speaking, MEPs are brought together in plenary sessions where the whole Parliament votes on new laws. Plenaries bring all MEPs together to debate and vote on new laws. Here, the European Parliament President, who MEPs elect, would be important as chairs plenary sessions. Once elected, the president would represent the EP for two and a half years.

Adding on, the European Parliament also has committees (which won't be simulated during this MUN). Committees come up with reports on proposed new EU laws, propose improvements to laws and vote on these proposals.

2. Current situation:

Russia not only has the largest proven reserves of natural gas in the world but, as of 2020, it was also the largest importer (surpassing the USA, the next largest, by 130%). Regarding how many of those imports were to the European Union, Italy for example imported almost a quarter of all Russian exports in 2019. For this reason, it's no wonder why the reduction of imports from Russia after the invasion of Ukraine has pushed the European Union, along with many other countries, into an energy crisis: the European Union has been heavily dependent on Russian natural gas.

Before the Ukrainian invasion, the EU had already implemented sanctions in 2014 from the Russian annexation of Crimea. However, the severity of the sanctions set in 2022 were still completely unprecedented. Therefore, currently imports from Russia gas aren't only capped by the sanction but also restricted by Russia as a response to sanctions all together. In June 2022 Russia started to limit the supply, until September when it was completely stopped. Furthermore, by the end of September, the two biggest pipelines connecting Russia to Europe ruptured with no genuine explanation but sabotage.

According to the International Energy Agency (IEA, <https://www.iea.org/>), Russia's supply of internationally traded energy "will fall to 13 percent by 2030 from about 20 percent in 2021". However, while reduced supplies of Russian oil, natural gas and coal have hit the economy, the IAE still doesn't predict investments in new fossil fuel projects. Natural gas prices "have reached levels never seen before," regularly exceeding \$250 for a barrel of gas and \$100 for a barrel of oil.

Some countries are trying to secure alternative fuel supplies and adequate gas storage, while others have increased oil and coal-fired electricity generation "extending the lifetimes of some nuclear power plants, and accelerating the flow of new renewables projects".

However, some argue that now a green transition is the only option. To complete this transition to green energy (and reach net zero emissions by 2050) it's needed an increase in investments from \$1.3 trillion per year today to \$2 trillion by 2030. If this happened global emissions of fossil fuels could peak by 2025, as coal could fall over several years, natural gas demand would plateau by 2030, and oil demand levels would peak in the middle of the next decade before dropping.

While the transition towards green energy seems ideal, it also brings many difficulties (further developed in the "what to tackle" section) and the EU needs an answer now. The current energy crisis has created "a looming risk of recession". Higher prices have triggered food insecurity across the world, and poorer households are worried about

affording energy and food. The IEA said about 75 million people who recently gained access to electricity were at risk of losing it because of difficulties in paying for it.

Taking all into account and the urgency to find a solution, we also believe important to remark what are the current EU compromises and goals regarding climate. During the debate these must be assessed and all solutions must keep in mind how, if possible, can they be reached.

• *European Green Deal*

Included within one of the six priorities that the EU wants to achieve from 2019 to 2024 this is considered one of the biggest commitments and plans in climate ever legislated. Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Green Deal is said to transform the EU into a modern, resource-efficient, and competitive economy, ensuring: no net emissions of greenhouse gasses by 2050, economic growth decoupled from resource use and no person and no place left behind.

The European Green Deal was also a lifeline out of the COVID-19 pandemic. One third of the €1.8 trillion investments from the NextGenerationEU Recovery Plan, and the EU's seven-year budget will finance the European Green Deal.

The European Commission has adopted a set of proposals to make the EU's climate, energy, transport, and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

• *Climate-neutral EU by 2050*

In December 2019, EU leaders, meeting within the European Council, agreed that the EU should achieve climate-neutrality by 2050. Such goal means that, by 2050, EU countries will have to drastically reduce their greenhouse gas emissions and find ways of compensating for the remaining and unavoidable emissions to reach a net-zero emissions balance.

In its conclusions, the European Council underlined that the transition to climate neutrality brings significant opportunities for: economic growth, markets and jobs, technological development, EU leaders asked the Commission to take forward work on the European Green Deal.

They also recognised the need to ensure that the green transition is cost-effective, as well as socially balanced and fair.

· ***-55% fewer emissions by 2030***

Exactly a year later, in December 2020, EU leaders took a further step towards climate neutrality. As an intermediate step towards the 2050 goal, they agreed to reduce by 55% the EU's greenhouse gas emissions by 2030 (compared to 1990 levels).

This goal was a major step up from the EU's previous 2030 target of cutting emissions by 40% agreed in 2014. Leaders called on the European Commission to put forward proposals so that countries could reach the 2030 goal including: improving green finance standards, strengthening the EU emission trading system, spurring climate-friendly innovation, ensuring fairness and cost-effectiveness.

3. What to tackle

Energy transition is one of the most important and divided topics currently for the European union. Objectives such as climate neutrality and the reduction of emissions are a central piece for this legislation but it can't be forgotten that Europe is currently going through a current energy crisis that is severely affecting households, small and medium enterprises, big corporations and risks the impoverishment of thousands and thousands of people.

The invasion of Russia (whose imports accounted for 40% of EU's energy in 2021) forces the EU to find other energy sources. This scarcity of Russian gas use wasn't expected and therefore finding other options has been difficult. The final goal of this debate would be to try to find the solution for transitioning to a safe, sustainable, affordable and secure energy system for the EU, from present times to the future.

I. Alternative sources of energy

The first question to tackle is what can replace the Russian gas, for which numerous options have been tried as of now. The goal is to decide which of them are the best options (being or a combination of many) and regulate them so the EU can take a unified stance in its promotion and implementation:

· Renewables sources

While this option is the one most in line with the climate objectives of the EU, the potential for short term growth is limited and storing sufficient energy from these methods is still not viable at scale.

Politics to take into account: the EU has been taking steps towards prioritizing these energy sources for a long time. These steps not only incentivise and invest in green energy but help making the transition with projects such as the Just Transition Fund (JTF) within the Just Transition Mechanism.

· LNG - Substituting with gas from other regions

When sourcing gas for other regions the first problem presented is transportation. Currently, the gas imported comes mainly from Argelia and the United States, both clearly further away from Russia and with a harder connection to the European continent. This has popularized the import of LNG (liquified natural gas) which in general is transported by boats that then have to arrive at ports specifically prepared for them. As of today, the EU still doesn't have enough of these ports to supply its demand. Furthermore, the price of using this gas is very high in comparison with Russian gas and the EU has seen the toll it's taken on its economy.

Politics to take into account: Access to LNG infrastructure is uneven across the EU, meaning that for example Spain has 7 ports and the rest of coastal countries barely reach 3. To reach the rest of Europe, transportation is needed which increases costs even more. Furthermore, it can't be ignored that the level of imports currently at place is having a big economic impact. For the EU areas such as production are having to decrease output for lack of profitability but the US not only is profiting highly from exports but leaving behind the EU in competition for areas such as the automobilistic sector.

· Nuclear energy

The general balance of using or not nuclear energy has been a pivotal debate in the EU for the last couple of years, especially around specifications on whether to label it as green or not. While there's no production of planet-warming emissions, the resulting radioactive waste can be very contaminating if not properly disposed of.

Politics to take into account: the country's opinion on nuclear use is often dependant on its relation to it. For example, France, who has a wide network of nuclear plants, is a very strong supporter but many others are worried about radioactive leaks.

· Other sources

Due to the sudden cut on gas some countries such as Germany have gone back to using very polluting fuels like coal to ensure that the country and the economy doesn't freeze. To calm climate concerns for the revival of over 20 coal power-plants, the government stated that the earnings from burning more coal will go into constructing more wind turbines and solar panels.

Politics to take into account: the environmental impact of these fuels will produce a major setback for the compromises on reduced pollution or carbon neutrality. If allowed, the resolutions must include compensatory clauses to reduce harm. Furthermore, its cost efficiency isn't positive either when the cost for a metric ton of coal has risen from 64\$ to 400\$ in Germany over the last two years.

II. Decoupling Natural Resource Use and Environmental Impacts from Economic Growth

After studying the lack of genuinely good alternatives to sourcing energy it's clear that any proposal should also dive into lowering energy needs for Europe. This can and has been done from two viewpoints:

· Increased efficiency

It is no secret that developments of technology have allowed communities to get more use from the same number of resources. An example within the EU could be the period of 1990-2019 where gas emissions were reduced by 24 % while the economy grew 60%. Searching for ways to increase the results of progressively less fuels will be a key stone to handle energy usage in the EU long term. However, the current crisis most likely won't be solved by developing of technologies (which take a long time to be created and perfected).

· Less consumption

Due to all the problems that sourcing energy has generated, the EU has also resorted to controlling consumption with policies such as limiting the temperature of AC and heating or the number of hours public lights (especially Christmas lights) can be turned on. These policies have been highly controversial for a great number of reasons. However, many may argue that taking into account the climate scenario worldwide, limiting consumption will be a necessity to balance how much humans take and how much the planet can produce. This topic also opens the debate on whether consistent economic growth is even viable considering that the world has limited resources so while many of the proposals will be short-term crisis solutions it'll also be interesting to develop a stance on the general topic.

4. Questions a resolution must answer

1. Is a complete cut of the energy bond with Russia realistic?
2. How and which climate goals can be maintained?
3. How should the EU handle not becoming overly dependent on the US?
4. How should the EU balance short term energy resources to greener long-term solutions?
5. To what extent is LNG a suitable option and therefore what type of investment in more infrastructure is logical?
6. Should resorting to energy such as coal be even allowed?
7. Should nuclear energy be counted as green?
8. To what extent can consumption be limited? Is it a long-term proposal?

5. Glossary

Renewable energy: energy derived from natural sources that are replenished at a higher rate than they are consumed. Some examples would be wind or sunlight.

Non-renewable energy: energy that in opposition to the definition above is replenished at a lower rate than consumed (its formation takes long periods of time). The main examples would be fossil fuels like coal, gas, oil and arguably nuclear energy.

Greenhouse gasses: gas that absorbs trap heat in the atmosphere, meaning that instead of reverting to space it stays in the Earth thereby increasing temperatures. If limited they aren't negative however, the spike in emission from human activity of carbon dioxide or methane is very dangerous for the climate.

Green energy: depending on the definition it'd be energy generated from natural resources or coming from resources that don't harm the environment through for example greenhouse gasses. Within the EU there has been a strong debate on which types of energies are included in this label (as otherwise their circulation is limited).

Liquefied Natural Gas LNG: natural gas that has been cooled down to liquid form for ease and safety of non-pressurized storage or transport. Due to the lack of direct infrastructure to transport gas directly through Europe it has become very popular.

6. Recommended Resources

I. Must reads

[EU Commission - Reducing dependency on imported fossil fuels](#)

[BBC News - The impact of sanctions on Russia](#)

[10-Point Plan to Reduce Reliance on Russian Natural Gas](#)

[Priorities for the EU 2019-2024](#)

II. Highly recommended

[The Guardian - Russo-German relations for energy](#)

[LNG Infrastructure in the EU](#)

[Climate change actions being taken by the EU](#)

[Global situation on climate change according to the UN](#)