

S'MUN2030

SINGULARITY MODEL UNITED NATIONS

ECOSOC

Promoting sustainable
mobility
in urban areas



SINGULARITY
FOUNDATION



ST.PETER'S
SCHOOL
BARCELONA
INDEPENDENT EDUCATION

Economic and Social Council (ECOSOC)

Promoting sustainable mobility
in urban areas

S'MUN 2030

Singularity Model of United Nations

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1. Introduction:

- **What is The Economic and Social Council?**

The Economic and Social Council (from now on ECOSOC) is one of the main six organs that were established in the United Nations after its foundation in 1945. It consists of 54 members of the UN designated by the General Assembly. The ECOSOC committee truly serves as a central forum where different countries can discuss international economic and social matters; as well as formulating policy recommendations to tackle those matters. It is responsible for:

1. Promoting social and economic progress as well as higher standards of living and full employment of the countries members of the UN.
2. Identifying solutions to social, health and economic problems all around the world.
3. Coordinating efforts toward international cultural and educational cooperation
4. Encouraging universal respect for human rights and fundamental freedoms.

In order to carry out its mandate, the Social and Economic Council consults frequently with academics, different experts, business sector representatives and even 3200 registered ONG's. Those consultants are relevant in the daily functioning of the organisation, because they provide a wild perspective of the social and economic problems countries should address. In addition, the work of the ECOSOC committee is conducted through several sessions and preparatory meetings, and round tables, which

take place during the whole calendar year. Once a year, the committee congregates in a four-week session in July, alternating New York and Geneva.

- **What is the main concept to discuss during the committee?**

When addressing the concept of sustainability in the cities, we have to take into account several interactions between diverse activities conducted in urban areas and its impacts in the environment, society and in the economy of a particular place. At first, public authorities tend to focus their main concern on reducing environmental impacts, ignoring the fact that while minimising environmental problems they can have negative impacts on urban economies and population life conditions. That is why it is important to find solutions that not only reduce environmental problems but also maintain a reasonable urban economy. Regarding this aspect, the transport system is critical to promote a solid urban economy but can be the cause of a great deal of pollution. For that, it is important to associate a model of urban transportation –that brings development and progress to cities- with an adequate sustainable mobility –that provides eco-friendly repercussions.

Sustainable mobility should be analysed in three main dimensions: Environment, society and economy. It is important to mention that considering sustainable mobility in just one of these dimensions –independently of the others- is a mistake that results in empty solutions and negative impacts to society. That is why, we have to consider all three dimensions and the basic impacts transport systems have in each of them:

- In the environment context: the air, noise and water pollution as well as natural resources consumption;
- In the social context: Health, equality and justness of opportunities;
- In the economic context: regional and urban economy, transport cost, competitiveness and subsidies.

As has been mentioned, sustainable mobility implies not only an eco-friendly transportation system, but also it requires sustainability in terms of economy and society. Finding solutions than gather all three dimensions of the sustainable mobility is the key to addressing this matter.

2. Current situation:

It is clear that we have formed a great dependence on cars as a form of transportation, and the efforts of manufacturing more eco-friendly and hybrid vehicles have been noticeable and persistent in 2030. It is evident that the human population is increasing as of today it is 8.6 billion, which correlates with greater demand for vehicles. Households have been moving from villages to the city to get granted access for job opportunities. The moment a country's economy prospers, they demolish an agriculture led economy and begin with industrializations. This has caused overcrowding in big cities leading to this debate: *how can we promote sustainable mobility in urban areas?*



The non-creation of sustainable mobility has had a result on a global scale:

1.- Pollution. According to several studies by the WHO and the European Environment Agency, environmental pollution is the most important risk to global health.

90% of the European Union's urban population is exposed to harmful levels of pollution that lead to approximately **a million premature deaths**.

2.- Climate Change. In 2030 Traffic Mobility is responsible for **94% of greenhouse effect emissions today**.

3.- Public Health. Huge dependence on the motor vehicle leading to sedentary habits. A lack of activity associated with problems such as hypertension, diabetes and obesity. **Did you know that it is the fourth mortality risk factor in the world according to WHO?**

4.- Energy inefficiency. Current mobility depends 80% on oil and the combustion engine. However, it is highly inefficient: **only 20% of its energy potential is used**. Isn't it ironic that, in addition to an inefficient means of transport, we also use 1.5 tonne vehicles to transport one 70 kg person?

5.- Congestion. Did you know that we display angry behaviour in traffic jams for an average of 10 hours? But this loss of precious time translates into **an economic cost for companies of 840 million euros.**

6.- Soil consumption. The car owns the city even if we don't like it at all. We allocate **75% of the urban space** despite being parked 92% of the time. Imagine having all that space for other activities. The streets would look habitable again, the neighbours in the doorways of their homes, and we would regain much of that lost community of neighbours.

7.- Noise pollution. The main cause of noise pollution in urban areas: road traffic. According to the WHO, road traffic **involves being exposed to noise levels in excess of 55 decibels.** And that affects our daily life: sleep disturbances, discomfort, problems with work and school performance, etc.

8.- Accident rate. Commuter traffic accidents accounted **for 32% of all accidents at work in 2030.** We all know that we don't drive to work so relaxed during rush hour and always try to be on time. And that comes at a price with the risk of road accidents.

9.- Social and labour market exclusion. While it may seem a bit inappropriate at these times, the availability or not of a car can be a barrier to certain jobs. Keep in mind that many business parks do not yet have public transport options or alternatives from companies. Women, young people and immigrants are the groups most affected by this problem. Commuting to the workplace cannot be seen as an aspect where the sole responsible person is the individual.

10.- Loss of Competitiveness. The EU is estimated at **more than EUR 500,000 million,** or 4% of the Union's total GDP, the economic costs arising from the nine points mentioned above. In the end, the current mobility model reduces the competitiveness of the production system,

affects workers' health, deteriorates the natural and urban environment, and consumes vast amounts of non-renewable resources.

You may wonder if unsustainable mobility and the excessive use of fossil fuels is so damaging why are we persistent on using it, this is because

1- We live in constant economic competition

Generally speaking, businesses have one goal which is to maximise their profits, meaning how can we make the shift from fossil fuels to renewable energy profitable. This is done through making investment attractive. This is where the government plays a key role, if they manage to subsidise renewable energy it may be as cheap as oil (note that with the oil being a scarce resource its price is constantly rising). Vehicle manufacturers then begin innovating more eco-friendly transport methods since it is cheaper, and the business that makes the shift faster will be faced with higher earnings, driving other businesses to make the switch.

3. What has been done?

- The European Commission has put in place the Sustainable Urban Mobility Plan (SUMP). The implementation of the SUMP is intended for local authorities, urban transport, and mobility practitioners, as well as other stakeholders involved in the preparation of a SUMP. Each step of the plan development process is illustrated with good practice examples, tools and references to further information. Essentially, they aim to create a plan for each location depending on the available infrastructure.



- China has built the world's largest high-speed railway network, expressway network, and world-class port clusters, and opened air and sea routes that reach all parts of the world.
- The USA faces the greatest challenge into switching to sustainable mobility since the cities are made for cars and not for pedestrian, as of 2030 the USA has not contributed in any public transport initiatives
- Due to the lack of infrastructure in African countries most cities are made for pedestrians which puts them at an advantage yet with their economic growth they will implement sustainable mobility more easily than other countries.
- India's government adopted ITDP's Complete Streets Framework Toolkit that has assisted the 100 Smart Cities Mission cities and managed to transforming over 40,000 km of city streets into complete streets in 2030

4. What to tackle

After contemplating the current situation, it is important now to establish the main points you delegates should focus on. Before getting into that, we have to consider one fundamental premise: when tackling sustainable mobility, one must take into account all actors involved in the problem/situation; that is because the measures we take or the initiatives we promote will not affect all of them the same way. For example, a measure based on the prohibition of cars in the city; it may as well be a positive initiative environmentally speaking. However, this measure also brings several problems: difficulties for people to commute in the city, car companies economically broken, therefore, workers of those companies broken as well, etc. Making this measure unreasonable. Having that in mind, we will classify the bullet points of this study guide in the same dimensions we have been working on: socioeconomic dimension, environmental dimension and technological dimension.

1. Socioeconomic dimension:

On the socioeconomic side, we have to take into account concepts such as pricing, taxation and incentives; which are ways of promoting sustainable mobility. Pricing is normally linked to the use of road infrastructure (road pricing) and the parking of vehicles (parking pricing). In the first case, car drivers are charged for using a single infrastructure or for entering into a central area of the city. In the second case, car drivers are charged for parking in determined areas of the city. The main objective of these policies, from a sustainable mobility point of view, is to increase the cost of private transport; this way promoting other modes of transport such as cycling, walking, and others ().

On the other hand, the term taxation -referring to sustainable mobility- is closely linked to taxations applied to fuels or vehicle ownership. The aim is to induce people to consider

wisely the vehicle they want to buy, tending to penalise those individuals who buy vehicles with greater environmental impact. In some cases, the use of electric cars is a result of the increasing taxation policies some countries are imposing to fuel powered car owners.

Another economic instrument to support sustainable mobility are incentives, which can be of different nature: 1) incentives to buy low-polluting vehicles such as electric cars or alternative fuel cars, 2) incentives to buy a new car following the scrapping of a polluting car; and 3) incentives to convert a petrol car into a Liquefied petroleum gas (LPG) car.

One question we must consider –regarding all three economic instruments- is that these three can be implemented in a short-term period; so they could represent the first steps into a more sustainable world. Nevertheless, when implementing these instruments countries should consider the damage these instruments will certainly cause to their automobile industries, which are, in some cases, the heart or –at least- a key sector of its economic activity. This last consideration involves countries such as the USA, Germany, Japan, China; countries which are among the top 10 car manufacturers in the world.

In the long term, and in order to promote a long-lasting sustainable mobility; countries should consider improving public transport systems. In this sense, improving the quality and quantity of public transport services is one of the most efficient transport policies to decrease car use, producing positive impacts on emission (). Recent studies showed that the availability of rail infrastructure and the services associated with it has a positive and direct influence on gas emissions. It is clear that the competitor number one of public transport is private transport, which –by its own nature- has more quality and offers higher comfort. Therefore, in order to promote the use of collective transport, public administration must provide excellent transport services. However, these policies could come with a great cost –in terms of money- to governments that are exposed to the risk of seeing their public arcs being dried out.

2. Environmental dimension:

As mentioned before, most of the sustainable mobility policies that governments implement nowadays are very focused on environmental protection. In fact, the socioeconomic aspects explained before are, in big part, directed towards the realisation of environmental objectives. That is why; most of the policies reported in previous sections have an indirect impact on the environment. However, we can highlight two main policies here that have a direct influence on the environment.

The first one is the cycling and walking promotion. This policy, also known as “soft mobility”, is one of the most popular measures in urban areas. The use of non-motorized modes of transportation, clearly, has several positive effects on the environment: beginning with the fact that pedestrian trips are substitutes for trips otherwise done by cars. Moreover, cycling and walking are proven essential to one's health and well-being (8). In this sense, the main policies to promote pedestrian mobility and cycling are:

- Creation of pedestrian areas
- Creation of limited traffic zones
- Maintenance and renovation of sidewalks
- Construction of cycle paths
- Incentives for the purchase of bicycles

The downside of these measures can be summarised in two main points. First, non-motorized trips clearly have a distance limit. Normally, pedestrian trips can substitute cars

within a range between 1-2 kilometres, and bike trips increase the range up to 10 kilometres. From those ranges forward, cycling and walking become inviable. In fact, a recent study emitted by ISFORT (an Italian institute for research in the transport sector) showed that trips conducted within a range of 2km are made 58% on foot, 8.7% by bike, 1.7% by motorbike, 27% by car and 3.9% by public transport in Italy. When the distance increases beyond 10km, trips by bike or on foot are irrelevant. In the second place, creating an infrastructure that promotes cycling and walking is costly, and requires profound modifications in the urban architecture of a city.

On the other hand, it is important to consider Eco-driving as a very successful and notorious policy whenever promoting a sustainable environment. The main objective of this policy is to stimulate the use of energy-efficient driving styles to both public and private sectors, this way producing –for the same number of km travelled- a lower consumption of gas and lower emissions (). Some actions that can be identified as Eco-driving are: Anticipate traffic flow and signals, drive smoothly as possible, check tire pressure more frequently, limit the use of air conditioning when not needed, etc. The good thing about these measures is that they could be easily implemented; they only require to be taught. In this sense, these eco-driving lessons are much cheaper than other measures explained before.

- **Questions a resolution must answer (QARMA):**

1-How can we make the switch to sustainable mobility profitable?

2-How do we enhance participation from governments and businesses?

3-What economic incentives will help in switching to sustainable mobility?

4-How to evaluate the effectiveness of these measures?

5. Sources:

<https://webgate.ec.europa.eu/greencitytool/resources/docs/guidance/mobility.pdf>

<https://www.eltis.org/mobility-plans/sump-process>

<https://www.neste.com/media/sustainable-mobility/what-is-sustainable-mobility>

6. Vocabulary:

Alternative fuels: are any materials or substances that can be used as fuels, other than conventional fuels like; fossil fuels, as well as nuclear materials such as uranium

Pollution: the introduction of contaminants into the natural environment that cause adverse change.

Technocentrism: a value system that is centred on technology and its ability to control and protect the environment.

Profit maximisation: is the short run or long run process by which a firm may determine the price, input and output levels that lead to the highest profit

Ecofriendly: “not environmentally harmful.” When it comes to products, that means everything from production to packaging needs to be considered safe for the environment

Sustainable: to conserve natural resources, profitability and protect global ecosystems to support health and wellbeing, now and in the future.