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Policy Paper on Climate Action

Adopted by the participants of the Erasmus+ Support for policy Reform European Youth Together project 'YOU.th RO.und TRIP. For climate action project during the mobility in Aveiro Portugal in August 2021.

Hosting Organization: AEVA





Executive Summary

In the 2030 Agenda for Sustainable Development, Member States express their commitment to protect the planet from degradation and take urgent action on climate change. At the same time Education and skills, and environmental protection and fighting climate change are considered priority topics by at least half of the respondents to European Youth Eurobarometer survey published in January 2018. President Juncker mentioned that European young people are less engaged in traditional forms of participation despite their interest in politics. The paradox which appears is that Member states must design policies to combat climate change which will affect youth's lives in a couple of years, while the latter do not seem to be very interested in voting and engaging with decision making. YOUROTRIP project (short for "YOU.th RO.und TRIP for climate action") aspires to foster youth participation in democratic procedures of decision making through discussions on the high priority topic of climate change.

Through YOUROTRIP project, young people from Greece, France, Spain, Portugal, United Kingdom, Denmark, Romania and Austria met, formed 'Local Youth Councils', discussed and came up with ideas which are recommending as solutions to climate change. In the context of YOUROTRIP project young people met in August 2021 in Portugal and discussed about the topic of "Green Transportation", and in this document, are their policy recommendations on this matter.

Introduction

Climate change is the long-term changes in Earth's climate and weather patterns. It took nearly a century of research and data to convince the majority of the scientific community that human activity can alter the climate of the entire planet. It was only in the early 19th century that ice ages and other natural changes in the paleontological environment were first suspected, and the natural greenhouse effect was first identified. The UN climate summit confirmed that "1.5" is the socially, economically, politically and scientifically safe limit for





global warming by the end of this century and has set a deadline for achieving net zero emissions by 2050.

On that note, humanity is considered to undergo one of the fastest alterations in our everyday life in order to even have a chance to sustain our environment. Climate change unfortunately can not be stopped, but with the proper measures, initiatives and education it can be slowed down enough for the earth to adapt to the temperature changes. Thus, it is imperative to take action concerning Climate change if humanity wants to stand a chance against it.

“Carbon dioxide (CO₂) is not a pollutant but a greenhouse gas which contributes mainly to global warming effects and which is associated climate change. Transportation is one of the sectors targeted where effective public interventions are being called for to reduce CO₂ emissions and where adaptation measures are needed to reduce the vulnerability to climatic changes. Currently, the CO₂ emissions in the transportation sector are about 30% in the case of developed countries and about 23% in the case of the total man-made CO₂ emissions worldwide. There is a widespread agreement to reduce CO₂ emissions from the transportation sector by a minimum of 50% at the latest by 2050” (United Nations Economic Commission for Europe, 2021)

Sustainable or green transportation is the term used to define all those strategies that aim to improve life in cities and guarantee the right to come and go with more practicality and without harming the environment. Although sustainable transportation is a great advantage for the environment, cities are not yet prepared to allow their citizens to make the most of it. The young people that participated in the YOUROTRIP Mobility in Portugal in August 2021, have thought of some ideas and solutions that they would wish to see become a reality both on a local and national level as well as on a European and International Level.





Analysis

Climate change is the defining crisis of our time and it is happening even more quickly than we feared. As the infinite cost of climate change reaches irreversible highs, now is the time for bold collective action. One of the most severe consequences of the climate change, is the extreme emission of the Carbon Dioxide (CO₂) emissions. These emissions have a great impact on the environment and on the humans as well.

More specifically, carbon dioxide is the primary greenhouse gas emitted through human activities. Carbon dioxide is naturally present in the atmosphere as part of the Earth's carbon cycle (the natural circulation of carbon among the atmosphere, oceans, soil, plants, and animals). Human activities are altering the carbon cycle—both by adding more CO₂ to the atmosphere and by influencing the ability of natural sinks, like forests and soils, to remove and store CO₂ from the atmosphere. While CO₂ emissions come from a variety of natural sources, human-related emissions are responsible for the increase that has occurred in the atmosphere since the industrial revolution.

‘On a European level, it is estimated that the European Union countries had produced approximately 2.73 billion metric tons of carbon dioxide emissions during the last year. This was an increase of over six percent, compared to the 2020 levels. More specifically, the combustion of fossil fuels such as gasoline and diesel to transport people and goods is the largest source of CO₂ emissions. This category includes domestic transportation sources such as highway and passenger vehicles, air travel, marine transportation, and rail.

While policymakers and business leaders are increasingly aware of the linkages through which industrial production can affect the natural environment, patterns of ‘environmental behaviour’ continue to differ widely across firms, even when those firms reside within the same industry and country. This happens mainly due to the lack of a strict and obligatory policy on a national and also on a European and international level, that sets boundaries and limitations to the industries.’ (University of Chicago Press Journals, 2021)

‘On a global level, it is estimated that carbon dioxide makes up 95% of all transportation-related greenhouse gas emissions. Cars, SUVs, and pickup trucks running on conventional gasoline, diesel, and other fuels emit carbon



dioxide. Combined, these vehicles account for roughly two-thirds of transportation-related emissions, ranking transportation as the second largest source of total U.S. greenhouse gas emissions.’ (U.S. Department of Transportation, Federal Transit Administration, 2010)

More specifically, the source of that problem is the fact that most of the countries don’t have strict environmental regulations and policies that set boundaries and limitations to industries that produce extreme carbon dioxide emissions. Moreover, car industries that are mostly responsible for the production of carbon dioxide, have difficulty in accepting the limitations and the environmental laws due to the cost that they have. Carbon dioxide limitations prevent the specific industries from gaining extra profit, due to the fact that they need to make expenditures for special equipment. However, there are many countries that have paved the way towards a greener and more environmentally friendly future, by taking drastic actions.

Good practices

Many countries have already taken measures and actions in order to reduce the emission of the Carbon dioxide gasses, through green transportation. Some of them are great examples from which we can exemplify. More specifically:

Bike-Sharing Systems

In Taipei, The Taipei City government used the BOT (Build-Operate-Transfer) approach to work with world-renowned bicycle manufacturer Giant in establishing a bike-sharing project, the YouBike project, in eastern Taipei in 2009. Project organizers have expanded service coverage, simplified registration, adjusted fares, and worked to make the riding environment safer. To make registration easier, organizers have made it possible to use a smart card (bus/MRT) and a cellphone number to become a member at any YouBike station self-service kiosk, on the official YouBike Website, or at a YouBike service center. Bike rental fares have been eliminated for trips of 30 minutes or less. Finally, bicycle signs and safer riding spaces have contributed to a better, more secure riding environment.





Fast Transportation: High Speed Rail

The main effects of introducing high-speed rail (HSR) are to alleviate intercity traffic congestion, to reduce travel time, to increase the share of intercity public transportation ridership, to promote and restructure the regional development, and to improve environmental quality and energy saving along the high-speed rail corridor. Many countries like Japan, France, Germany, Spain, South Korea, Taiwan, and China already provide HSR operational service, while HSR planning is underway in other countries. The United States is one country where debates on high-speed rail are ongoing, but there are also new emerging movements to build high-speed rail systems in Asia.

Seamless Transportation

Taiwan: Seamless intermodality is a key vision for transportation mobility. The ideas of requiring only one ticket per journey, ensuring easy transfer between modes, and providing real-time and dynamic information for changing modes are just a few components of this goal. The “one ticket per journey” concept relies on an integrated smartcard or intermodal e-ticketing. To bring this vision to fruition, it will be necessary to standardize data and systems, coordinate different modes and transportation companies, and integrate fares and product channels.

Innovative Transportation Financing

Value capture schemes can be easily justified in theory because they recapture the windfall gain created by public infrastructure but enjoyed by only a select group of landowners. In practice, though, a value capture scheme requires extensive negotiation among stakeholders and coordination among agencies. Tax increment financing (TIF) is an effective financing tool to implement a value capture scheme and help local governments finance infrastructure projects, especially when governments are under fiscal strain. TIF espouses the principle that the ones who benefit are the ones who pay. TIF has been widely used in the United States to fund portions of public transit infrastructure costs. TIF involves designating tax increment districts, specifying tax payment periods, and identifying tax items such as land tax and property tax.





Conclusion

Global warming is a serious threat for our environment and it needs to be faced. One of the main and most severe aspects of this phenomenon is the emission of the greenhouse gases, and most specifically, the emission of the Carbon dioxide (CO₂). The repercussions of this phenomenon are extremely severe and harmful not only for the environment, but also for the humans, as well. A comprehensive and thorough analysis is necessary in order to study the CO₂ emission mitigation measures in the transportation sector. Some European Union countries have taken actions towards the reduction of the Carbon dioxide emissions, and they have set a great example for the rest of the European countries for implementation. For a more sustainable future, it is extremely crucial to implement drastic actions and measures to reduce CO₂ emissions, to aid the fight in combating climate change. Furthermore, the EU Members should undertake serious and effective measures on a holistic level, through law enforcement and also, through educational and informative campaigns in order to face this phenomenon.

Recommendations

Investment in Public Transport to be more efficient and accessible

We propose investing in public transport, and especially the use of renewable energy resources for it, rather than fossil fuel. This way, CO₂ emissions will be reduced, thus reducing greenhouse gases. Furthermore, the investment should target to increased connectivity and frequency of the public transport services, so as the public prefers to use them, for them to be more reliable and safer for everyone to use rather than private cars. We also propose lower prices in ticket fares as to provide further incentives to use public transportation. Last but not least we propose for the EU to provide financial support for infrastructural projects that are promoting pedestrianized city centers and green spaces, and of course cycling roads.





Encourage and motivate people to choose public transport and/or green mobility

We recommend public transportation to be free for people with special needs and people under the age of 25. This will make green mobility more inclusive and will allow young people to become acquainted with the use of green transportation.

We also recommend completely or almost free public transportation, accessible, efficient and affordable for everyone. This could be achieved if it was run by the public sector, because of cost to profit ratio.

Another alternative could be to employ private companies/businesses but instead of the income coming from tickets, it could come from advertisements placed in the public means of transport. This way, there this practice can be financially sustainable, it leaves room for profit for the private businesses, and the people get incentives to use public transport rather than private cars and thus, reduce the use of fossil fuel and CO2 emissions.

Furthermore, we propose the implication of discounts and tax-breaks for people choosing green mobility, and investment in public infrastructure to have more free places for cycling.

No (private) cars allowed in European capital's city centers

In many European capitals, there is already a restriction for the use of private cars. There are either pedestrian streets, or the private cars are allowed specific hours during the day or for specific reasons.

With these restrictions to be implicated in all European capital city centers, the result will be a reduction in air and noise pollution in urban areas, whereas public transport will inevitably become more efficient due to less traffic. Furthermore, closing the city centers to private vehicles will allow cities to have the space and time they need to build the necessary infrastructure for bicycle lines and bus roads.





Reduce greenhouse gas emissions from imports and exports of agricultural products.

Avoidable transportation of goods, such as exporting nationally produced products that are then being imported from another country should be prevented. The production of goods should take place as locally as possible or in neighboring countries. This should be achieved by subsidizing small-scale local farming that meets social and environmental criteria.

Waste management at its source – avoid transportation of waste

The avoidance of waste should start at the level of produced design and local solutions for waste treatments should be found in order to avoid emissions through transport of waste.

Transparency

We propose that companies/businesses be obligated to publish the information about the production procedures (especially the negative aspects) of their products. Information such as the hazards of each product for the environment, the amount of energy needed in order to be produced, should be known to the public and consumers, so that when they purchase something, they make an informed decision.

Furthermore, we propose to make the process of investment in green mobility projects transparent, by providing information such as the amount of money each enterprise gains and also, which social ecological criteria are fulfilled to justify the investment, including exploratory definitions of key terms such as “sustainable”. This information should also be accessible to the public.

Education and information are the basic pillars to change people’s mindset

Environmental education in schools: Instead of focusing exclusively on the theoretical aspects, environmental education should be also practical. Furthermore, environmental education should be present at all levels of education, as a mandatory subject, from elementary to high-school students.





Taxes

Polluting transport industries should pay a mandatory percentage of their profit based on the amount of pollution. This will be invested in research and initiatives for green transport and green transition. In addition, Airlines should pay in EU-wide kerosene tax in order to balance their CO₂ emissions. Furthermore, we also recommend special legislation for tax imposition to countries with an excessive use of fossil fuels.

Politically Neutral and Independent Scientific Committees

Non-governmental and politically neutral scientific interstate committee that will supervise and validate decisions, policies and technologies, both on European and international level. More consistent environmental planning, with sustainability being the first priority of the EU. Research conducting regarding transport material that can be recycled (recycle, reduce, reuse what we already produce).

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