



Committee: Environmental Commission (Sub-Commission 2)

Issue: Towards a green transportation infrastructure

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INTRODUCTION

Green Transportation or sustainable transportation is the broad subject that refers to ecologically friendly transportation. It impacts the climate, social life and the environment while supplying energy indefinitely. The components that are included consist of several means of transportation such as trains, cars and aeroplanes as well as infrastructure. Transport operations and logistics, as well as transit-oriented development, are also involved in the evaluation.

There are many ways for every country to reach a good level of green transportation, however, they can be unattainable for countries that do not have an evolved economy or the infrastructure necessary. More specifically, for green transportation to exist countries need batteries supplies for electric cars in every city and highways as electric cars run out of battery and most of them are not hybrids so that they run on fuel. Secondly, electric cars are expensive to import as well as for people to buy them, therefore in poor countries, it is a rarity for people to own them. Lastly, in underdeveloped countries, there may be no other means of transport like a metro train, therefore, they would need to start building infrastructure which would take a long time. However, if all the correct steps are taken it is possible to achieve and especially in More Economically Developed Countries (MEDCS) since the infrastructure is already there and they have the necessary funds in order to acquire all the means of transportation needed. As many scientists, as well as car designers and developers, claim green transportation is the future for every mean of transportation in the world. If this change were to happen the future generations would benefit immensely as their environment would be better than it currently is and the lifespan of humans could rise dramatically because of a decrease in the ozone hole and carbon dioxide in the earth.

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DEFINITION OF KEY TERMS

Infrastructure

The necessary objects such as buildings, roads and power supplies for a country to fully operate.

Transportation

The action of moving someone or something from one place to another.

Green Transportation

Ecologically friendly transportation.

Sustainable Mobility

Mobility which does not harshly impact the environment and territory.

Environmentally Friendly

Something not harmful to the environment

Environmental Pollution

The entrance of harmful gasses in the environment causing drastic change.

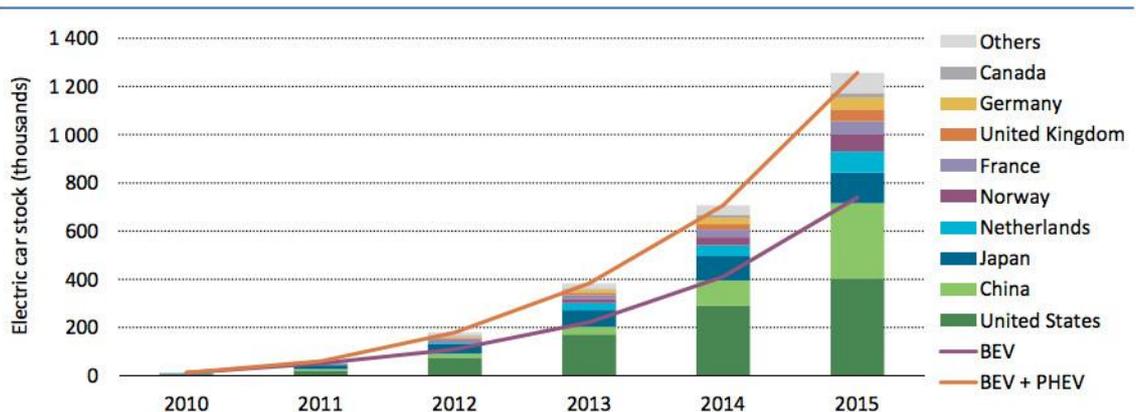
BACKGROUND INFORMATION

New technology that's environmentally friendly like electric powered automobiles have not existed for long. For that reason, making people aware of them is a difficult task. Additionally, them being highly-priced and out of the budget for most of the people does not contribute to the situation. Furthermore, there have been deficiencies through time which have decreased the possibilities for a person who has a petrol or diesel run vehicle. This makes cars steeply-priced and rarer as the technology is too advanced for the retail market. However, clients do exist. An amazing example that there are only some hybrid automobiles which can be found all over the world with them especially coming from Asian companies like Toyota and Honda with models

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including the Honda Civic and the Toyota Prius which can be cheap. Secondly, most countries in the world do not have the necessary funds to supply electric vehicles at a regular price but the manufacturing has developed in the last few years as clients are growing and the environmental budget in most countries has grown. A huge majority of countries do not have the infrastructure which is essential to support this overhaul consequently making this alteration not possible inside the coming years. Unless a drastic exchange happens most transportation methods will not be eco pleasant. Those include airplanes, trains and busses which constantly emit gases which might be dangerous to the environment. And a solution needs to be found right away if we are to have a sustainable future. Another issue is that the teens aren't aware of the issues that exist inside the earth and especially in the environment, however efforts have been made to make them aware. Finally, vehicle companies are discouraged to make electric vehicles as it would cost them a lot of money and the danger is higher than the reward. A good example is Nissan which in 2014 launched an electrical vehicle line which was not as successful as they might have hoped and that they lost hundreds of thousands of dollars.

Figure 1 • Evolution of the global electric car stock, 2010-15



Note: the EV stock shown here is primarily estimated on the basis of cumulative sales since 2005.

(The evolution of electric cars from 2010 to 2015.)

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MAJOR COUNTRIES AND ORGANISATIONS INVOLVED

U.S.A

The U.S.A is not environmentally friendly. This is due to the presence of many factories that are present throughout the United States as well as the lots of cars present in major countries and a lack of mass transportation services throughout the country with them being present only in the biggest cities like New York and San Francisco. In the past few years there have been efforts to improve the environment and the main one is the effort to enhance the use of electrical cars as well as through youth empowerment movement in the United States as the youth and teenagers are the ones that are going to be most affected by the environment. There has been a turn for the worse though after the recent elections, as the current President believes that global warming does not exist. Furthermore he has put extra taxes on products imported from outside the U.S.A and since most vehicles are not manufactured in the U.S this could be a turn for the worse and although they have the infrastructure needed as well as the funds they could all go to waste.

U.K.

The United Kingdom and more specifically London is known to have the first subway so everyone would imagine that their environment would not be in a difficult situation. This unfortunately though is not the case. One of the reasons for this are the countless factories in cities. The U.K is the country that the industrial revolution started in, so it is imaginable that many factories still exist thus harming the environment. Furthermore, the mining industry in the United Kingdom is also ever-present. These drawbacks though are starting to decline as the younger generations have urged the government to improve the environmental situation in the country and they have responded passing measures which have positively affected the environment. Furthermore the U.K have the infrastructure necessary as well as the funds for the rebuild that might be needed. Besides, in the U.K, in the past few years, 15% of drivers own electric cars or hybrids a number that will surely increase in the following years.

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Russian Federation

In the Russian Federation the environment in almost half the regions of the country is at a very high standard. That is in Siberia, while in the rest of Russia the environment is not that great as once again there are many factories. A reason for that is that Russia had an embargo inflicted on it by the rest of Europe which basically forced more factories to open thus harming the environment. The green transportation movement in Russia is nonexistent as most people still drive cars on a regular basis and choose not to use means of transport. Although Russia has the economic capability and also the infrastructure necessary their people are not yet up to par with technological advancements and have not yet created a sustainable transportation method of their own.

China

In China the environment is the worst in the world and that is because most products in the world are manufactured there. Furthermore most people use cars and not public means of transport. The Chinese government has reacted through making the price of brand new cars very expensive while also starting to manufacture their own hybrid cars in order to improve the environment. Once again China has all the necessary tools in order to have a successful rebuild but it is not certain it will happen. However, Chinese car companies do develop electric cars and they are currently the leaders in the research of cars which use hydrogen engine cars.

France

In France the environment is at a pretty good level and that is because they are one of the countries known for utilizing their nature. To begin France does not host many factories and its main energy source is nuclear energy which is the most dangerous energy but simultaneously the most ecologically friendly. Furthermore one of twelve drivers have a hybrid or an electric car which makes the environment safer and less polluted than the average country Lastly, France has been able to take full advantage of its infrastructure as well as its economic capabilities to enforce the ecologically friendly message that it has on every citizen there.

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Japan

The country that created the hybrid and the electric car sit on top in terms of electric and hybrid car usage as 30% of the population own electric cars. However, the climate is polluted to a high degree because Japan is host to many factories which eliminate harmful toxins to their environment. Japan though is one of the most forward thinking countries in the world and have a lot of space the necessary infrastructure and the funds to be able to have a successful rebuild with a safe and eco-friendly environment in the coming years. Furthermore the youth are very aware of the situation and have urged the government to improve it and they have responded to their best ability having passed very meaningful laws which have Japan on the right track.

Germany

Germany is the largest car manufacturing country in the world as well as the host to the most factories in the European Continent after the U.K. However, it seems that they have not been affected that much as their country is one of the most environmentally safe in the world. That can be attributed to many factors with the main one being that they have been to create great affordable hybrid cars as well as having a big focus on public transportation. This has helped them remain very ecologically friendly throughout the years. Furthermore their citizens are fully informed about the ecological harms that could be coming if they are not environmentally friendly to the highest degree. To add, the infrastructure in Germany has been developed in a way that is eco-friendly and they have invested correctly by having a fully electrical public transportation system. For the following reasons Germany has one of the best environments in Europe and in the world

United Arab Emirates

The United Arab Emirates' economy is based on the oil industry and tourism. If cars were to become electric a large part of the oil industry would be destroyed

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therefore majorly decreasing the country's wealth and industry. Furthermore the effect on the people who are used to a lavish lifestyle would be shocking as they would have to learn to adapt to this situation. To add, the countries affect to the world would decrease as their natural resources would not be useful anymore. Lastly, the country would have to reconsider their economic stance and focus on improving their economy in many other ways, which is a very difficult situation. The United Arab Emirates economy as shown in the graph below has decreased and the main reason is that petrol prices are reducing and a reason is that automobiles no longer require petrol and it has affected them terribly.



(The UAE's economies growth rate.)

UNDP

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The UNDP also known as the United Nations Development Program. It was founded in 1965 in New York City where it still holds its main offices. It was created by the ECOSOC and its goal is to connect countries and supply them with knowledge and resources in order for their people to have a better life. Furthermore it provides advice, training



and support to developing countries, with increasing emphasis on assistance to the least developed countries. It promotes technical and investment cooperation among nations. The status of UNDP is that of an executive board within the United Nations General Assembly. The UNDP was the organ that decided upon the 17 sustainable development goals shown in the picture below. The UNDP's influence on the world will be majorly proven in the future especially if they are successful in the worlds implementation of the 17 goals they and they improve the words climate

TIMELINE OF EVENTS

Date	Description of Event
1839	The first bicycle is created
1881	First electric tram is created in Germany
1885	First car is created
1890	First metro train runs in London
1972	The first electric concept car is released
1990	The idea of electric run engines arises
1996	Toyota presents the first hybrid car

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2003	Tesla is created by Elon Musk and becomes one of the most popular car companies in the world making only electric and hybrid cars
2006	The first Tesla car is created
2011	Launched Living Streets, an educational engagement program focusing on promoting walking in urban environments. Living Streets currently operates in the City of Surrey.
2016	Skanska begins work on American Geophysical Union Headquarters, the first renovation in Washington, DC to pursue net positive energy.

UN INVOLVEMENT: RELEVANT RESOLUTIONS, TREATIES AND EVENTS

- 2030 agenda for sustainable development
“This Agenda is a plan of action for people, planet and prosperity. It also seeks to strengthen universal peace in larger freedom. We recognise that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development.”¹
- 62nd session on economic growth and sustainable development
“At its sixty-second session, the General Assembly welcomed the contribution to the mobilization of additional and predictable resources for development by voluntary innovative financing initiatives; encouraged the World Health Organization and its member States, with the support of the parties to the Stockholm Convention, to continue to explore possible alternatives to DDT as a vector control agent; and requested the Secretary-General to report to the

¹ "Transforming Our World: The 2030 Agenda for Sustainable Development .. Sustainable Development Knowledge Platform." *United Nations*. United Nations, n.d. Web. 21 Oct. 2018. <<https://sustainabledevelopment.un.org/post2015/transformingourworld>>.

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Assembly at its sixty-third session on the implementation of the resolution (resolution 62/180).”²

- Security council adopt resolution 2250 (2015)
“Recognizing the threat to stability and development posed by the rise of radicalization among young people, the Security Council urged Member States to consider ways to give youth a greater voice in decision-making at the local, national, regional and international levels.”³

POSSIBLE SOLUTIONS

There are many ways to solve the issue and the first is directly intertwined with the U.N, as they would be able to economically enhance countries in order to make the change from ecologically harmful vehicles to eco-friendly vehicles. Except for this, the U.N could further fund countries for them to build infrastructure rebuilds so they are suited to the new mass transportation vehicles such as car chargers in cities and train tracks for electric trains Furthermore, countries should be urged to improve their infrastructure as this entire movement is based around having the infrastructure needed in order to be able to house these machines. For the following reasons it is proposed that all countries majorly improve their roads, facilities etc. Furthermore, countries should endorse their youth to attend seminars held by professionals in the environmental field as well as automobile makers in order to explain the positives that come with ecologically friendly cars and other automobiles as well as the impact that could come in the future with the upgrading in technology and how the environment will be affected positively or negatively. To add, it is proposed that more people start using bicycles or electric bicycles which are environmentally friendly as their main

² "United Nations, Main Body, Main Organs, General Assembly." *United Nations*. United Nations, n.d. Web. 21 Oct. 2018. <http://www.un.org/en/ga/63/plenary/B_malaria_decade.shtml>.

³ "United Nations, Main Body, Main Organs, General Assembly." *United Nations*. United Nations, n.d. Web. 21 Oct. 2018. <http://www.un.org/en/ga/63/plenary/B_malaria_decade.shtml>.

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transport mean as this is already happening in many countries in Northern Europe and the benefits are immense. Firstly the ecosphere in these places is not polluted as much as in every country in Southern European countries as well as Southern American and African ones where bicycles are not used as much. The pollution levels in these countries are also way less than Southern European and all the others countries thus showcasing the positive impact that bicycles have on the environment. Also, every country should follow the 17 sustainable development goals that were set by the U.N.D.P in order to drastically improve the situation of the environment. Lastly it should be promoted to many car developing companies and enterprises to develop affordable electric cars so that everyone is able to afford one in every continent with the price changing in every country depending on its economic situation where every company that does it will financially awarded.

However, it has recently been discovered that hydrogen engine cars may be the best solution for the environment. The problem is that no cars have already been developed that use these types of engines yet but companies have received funding and are already trying to develop these types of automobiles. I personally believe though that until this change does happen all means of transportation should become electrical and we should do the best we can to save the environment right now.

BIBLIOGRAPH

Green Transportation. N.p., n.d. Web. 21 Oct. 2018. <<http://www.newurbanism.org/transport.html>>.

Admin. "Green Transportation." *Ierek News*. N.p., 25 Oct. 2017. Web. 21 Oct. 2018. <<http://www.ierek.com/news/index.php/2017/10/25/green-transportation/>>.

"Empowering Youth." *UNDP*. N.p., n.d. Web. 21 Oct. 2018. <<http://www.undp.org/content/undp/en/home/democratic-governance-and-peacebuilding/empowering-youth.html>>.

"Green Infrastructure." *EPA*. Environmental Protection Agency, 28 Aug. 2018. Web. 21 Oct. 2018. <<https://www.epa.gov/green-infrastructure>>.

"Green Timeline." *Www.usa.skanska.com*. N.p., n.d. Web. 21 Oct. 2018. <<https://www.usa.skanska.com/who-we-are/sustainability/green/green-timeline/>>.

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"Home." *Sustainable Transportation Lab*. N.p., n.d. Web. 21 Oct. 2018. <<https://faculty.washington.edu/dwhm/>>.

"Modes and Benefits of Green Transportation." *Conserve Energy Future*. N.p., 15 Jan. 2017. Web. 21 Oct. 2018. <<https://www.conserve-energy-future.com/modes-and-benefits-of-green-transportation.php>>.

"Professional Practice." *Green Infrastructure*. N.p., n.d. Web. 21 Oct. 2018. <<https://www.asla.org/greeninfrastructure.aspx>>.

Schumacher, Georgia. "The Future of Green Transportation." *Argosy University*. N.p., 17 Apr. 2014. Web. 21 Oct. 2018. <<https://www.argosy.edu/our-community/blog/the-future-of-green-transportation>>.

"Study on Green Transportation System of International Metropolises." *Procedia Engineering*. Elsevier, 10 Feb. 2016. Web. 21 Oct. 2018. <<https://www.sciencedirect.com/science/article/pii/S1877705816003416>>.

"Study on Green Transportation System of International Metropolises." *Procedia Engineering*. Elsevier, 10 Feb. 2016. Web. 21 Oct. 2018. <<https://www.sciencedirect.com/science/article/pii/S1877705816003416>>.

"Transforming Our World: The 2030 Agenda for Sustainable Development .. Sustainable Development Knowledge Platform." *United Nations*. United Nations, n.d. Web. 21 Oct. 2018. <<https://sustainabledevelopment.un.org/post2015/transformingourworld>>.

"What Is Green Transportation and Why Is It Important?" *The New Ecologist*. N.p., 12 June 2014. Web. 21 Oct. 2018. <<http://www.thenewecologist.com/2014/06/green-transportation-and-its-improtance/>>.

"." *The Transportation Revolution Is Here and Heating Up*. N.p., n.d. Web. 21 Oct. 2018. <<https://www.greenstreetadvisors.com/insights/blog/the-transportation-revolution-is-here-and-heating-up>>.

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