

Forum: Environmental Committee

Issue: Promoting the development of sustainable transportation infrastructure

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Position: Deputy President

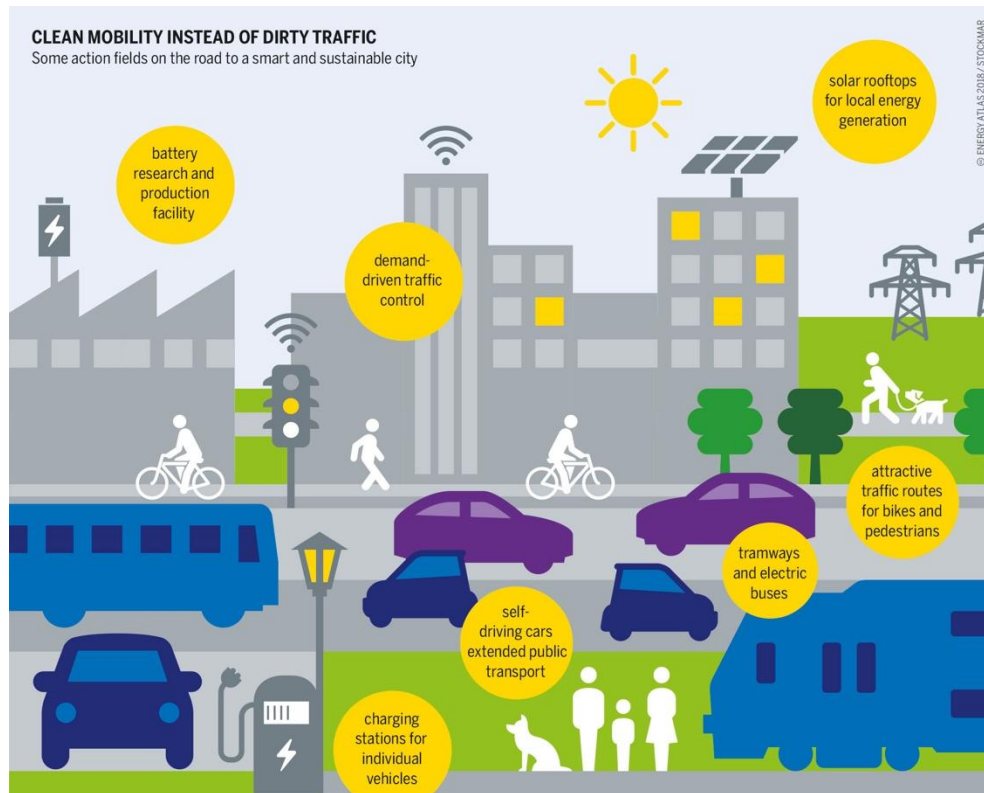
INTRODUCTION

Sustainability in transport infrastructure, which relies on technological developments and efficient transport facilities, is essential to protect the environment from the global challenges faced by people nowadays. Today, the development of sustainable transportation infrastructure is more important than ever as nearly one-fourth of global energy-related carbon dioxide emissions come from transport, and the number of vehicles on the road is expected to double, reaching two billion by 2035 according to a report from Navigant Research¹. Transport infrastructure is a dynamic network linking cities and people movements with socially, economically, and environmentally sound urbanization and population growth, contributing to socio-economic development and improved living standards. Two-thirds of the global population is projected to live in cities by 2050² and adequate transport development is critical to advancing economic development and fighting climate change.

¹ The Christian Science Monitor. "Two Billion Vehicles Projected to Be on Roads by 2035." *The Christian Science Monitor*, 29 July 2014, www.csmonitor.com/Business/In-Gear/2014/0729/Two-billion-vehicles-projected-to-be-on-roads-by-2035.

² Meredith, Sam. "Two-thirds of Global Population Will Live in Cities by 2050, UN Says." *CNBC*, 17 May 2018, www.cnn.com/2018/05/17/two-thirds-of-global-population-will-live-in-cities-by-2050-un-says.html.

The density of transport infrastructure in developing countries is much lower in developed countries even though transport infrastructure can play an integral role in the



economies of Less Economically Developed Countries (LEDCs). In Africa, deficiencies in transport connectivity infrastructure partly led to the low trade levels of the continent. In 2015, African exports only accounted for 2% of total worldwide merchandise exports. Likewise, intra-regional trade was also notably low at 18% compared to 52% in Asia³. The construction of the transport infrastructure is the essential sector of the domestic economy, supporting and guaranteeing economic and social development, and concerns all aspects of life including security, prosperity, equality, and freedom. When people lack vital transportation infrastructure, they lack the tools to succeed.

³ "Home." *OECD ILibrary*, www.oecd-ilibrary.org/sites/9789264304505-5-en/index.html?itemId=/content/component/9789264304505-5-en.

⁴Figure 2: Possible scenario of clean mobility

DEFINITION OF KEY-TERMS

Transport

Transport is a system for transferring people or goods from one place to another using means of transportation such as buses and trains.⁵

Infrastructure

“The infrastructure of a country, a society or an organization consists of the set of structural elements such as transport, communications, power supplies, and buildings which enable it to function.”⁶ However, when it comes to the issue of this topic about sustainable infrastructure, we refer to the designing, building, and operating these structural elements in ways that do not diminish the social, economic, and ecological processes required to maintain human equity, diversity, and the functionality of natural systems.

Sustainable Development

⁴ "Sustainable Transport." *Wikiwand*, www.wikiwand.com/en/Sustainable_transport. Accessed 11 June 2021.

⁵ Cambridge Dictionary. *UN Environment Document Repository Home*, wedocs.unep.org/bitstream/handle/20.500.11822/28470/English.pdf?sequence=3&isAllowed=y.

⁶ "Transport Infrastructure Definition and Meaning | Collins English Dictionary." *Collins Online Dictionary | Definitions, Thesaurus and Translations*, www.collinsdictionary.com/dictionary/english/transport-infrastructure.

“Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁷

Sustainable Transport

Sustainable Transport is used to describe modes of transport and systems of transport planning, which are consistent with wider concerns of sustainability. This term is a logical continuation of the term “ sustainable development ” and refers to the broad subject of transport that is sustainable in the sense of social, environmental, and economic impacts.

Sustainable Mobility

Sustainable Mobility is a term that refers to the better provision of infrastructures and services to support and improve the movement of goods and people. Mobility is sustainable when it is created in a way that respects the safety and the environment, ensures the provision of life’s material needs, and guarantees fairness among individuals.

Transport Mode

Transport mode refers to the different ways in which passengers and goods can be transported from one place to the other through land, air, and sea. Examples of transport modes are rail, tram, bus, good vehicles (e.g. trucks and vans) and passenger cars. Sustainable transport modes are public transport, bicycling, and walking, complemented by the use of clean technology-powered vehicles (e.g. electric mobility) for logistics and private passenger transport use in appropriate circumstances.

Renewable Resources

“Renewable resources are the resources that can be used repeatedly and do not run out because they are naturally replaced.”⁸

Urban Spawl

⁷ Catherine Morency. "Sustainable Mobility: Definitions, Concepts and Indicators." *Mobile Lives Forum - Preparing the Mobility Transition*, 12 Feb. 2013, en.forumviesmobiles.org/video/2013/02/12/sustainable-mobility-definitions-concepts-and-indicators-622.

⁸ CAROLINE BANTON and GORDON SCOTT. "Why Renewable Resources Are Becoming More Vital." *Investopedia*, 30 Apr. 2021, www.investopedia.com/terms/r/renewable_resource.asp.

Urban Sprawl is called the expansion of the geographic extent of cities and towns. It is often caused by the need to accommodate a rising urban population; however, in many metropolitan areas it results from a desire for increased living space and other residential amenities

BACKGROUND INFORMATION

Historical Background

Most of the tools and concepts of sustainable transport were developed before the term was created. Walking, which is the first mode of transport, is the most sustainable of all. It is believed that public transport dates back as far as the innovation of the public bus by Blaise Pascal in 1662. In 1807 the first passenger began its operation and a few years later, in 1825 the first passenger rail service started working. Pedal bicycles date from the 1860s. These four transport options were the only personal transport choices available to most people in Western countries prior to World War II and, unfortunately, they remain the basic options for most people in the developing world.

The post-war years brought an increased rise in population, wealth, and demand for greater mobility for goods and people. In Britain and other western countries, the number of road vehicles increased fivefold between 1950 to 1979. There were great investments by affluent countries in the field of better-designation of roads and motorways, which were considered a signal of growth and prosperity. Transport planning became a branch of Urban Planning and moved towards a sustainable approach incorporating land use planning and public transit. Nevertheless, in the United States, Great Britain, and Australia, a great decline in public investment in transit, walking, and cycling was observed. Concerns were voiced about the sustainability of this approach and became widespread during the 1973 oil crisis and the 1979 energy crisis. Consequently, the high cost and limited availability of fuel led to a resurgence of interest in alternatives to single-occupancy vehicle travel.

The oil crisis occurred when the Western world, particularly the United States, Canada, Western Europe, Australia, and New Zealand, faced substantial petroleum shortages as well as elevated prices. The two worst crises of this period were the 1973 oil crisis and the 1979 energy crisis when the Yom Kippur War and the Iranian Revolution triggered interruptions in Middle Eastern oil exports. The 1973 oil crisis began in October 1973 when the members of the Organization of Arab Petroleum Exporting Countries proclaimed an oil embargo. The embargo was targeted at nations perceived as supporting Israel during the Yom Kippur War. The initial nations targeted were Canada, Japan, the Netherlands, the United Kingdom, and the United

States with the embargo also later extended to Portugal, Rhodesia, and South Africa. By the end of the embargo in March 1974, the price of oil had risen dramatically with many short- and long-term effects on global politics and the global economy called later on as the "first oil shock". The "second oil shock" that proceeded the first one occurred by the 1979 oil crisis, which was an energy crisis caused by a drop in oil production in the wake of the Iranian Revolution.

However, during the 1980s and 1990s, the low and stable prices led to significant increases in vehicle travel from 1980 to 2000, both directly due to the fact people chose to travel by car more often and for greater distances, and indirectly because cities developed tracts of suburban housing, distant from shops and workplaces. This situation is now referred to as urban sprawl.

Scope of the problem

Transport infrastructure is one of the most vital determinants of a country's economic success bearing in mind that without some form of transport infrastructure, individuals cannot move anywhere besides their location. The results of weak transport infrastructure can be seen in multiple aspects of life.

Climate and Environmental impacts

Transport systems are major emitters of greenhouse gases, responsible for 23% of world energy-related GHG emissions in 2004, with about three-quarters coming from road vehicles. Currently, 95% of transport energy comes from petroleum.⁹ Energy is consumed in the manufacture as well as the use of vehicles and is embodied in transport infrastructure including roads, bridges, and railways. As a result of this problem, green vehicles were invented with the view to having a less environmental impact than equivalent standard vehicles, while electric vehicle technology has the potential to reduce transport CO₂ emissions, depending on the embodied energy of the vehicle and the source of the electricity. Also, nowadays infrastructures, such as roads, mines, and hydroelectric dams, are proliferating explosively, with serious direct and indirect environmental impacts. By mid-century, it is expected that there will be 25 million kilometers of newly paved roads globally, enough to encircle the Earth more than 600 times. Nine-tenths of these new roads will be in developing nations, which sustain many of the planet's most biologically rich and environmentally important ecosystems¹⁰. Unfortunately,

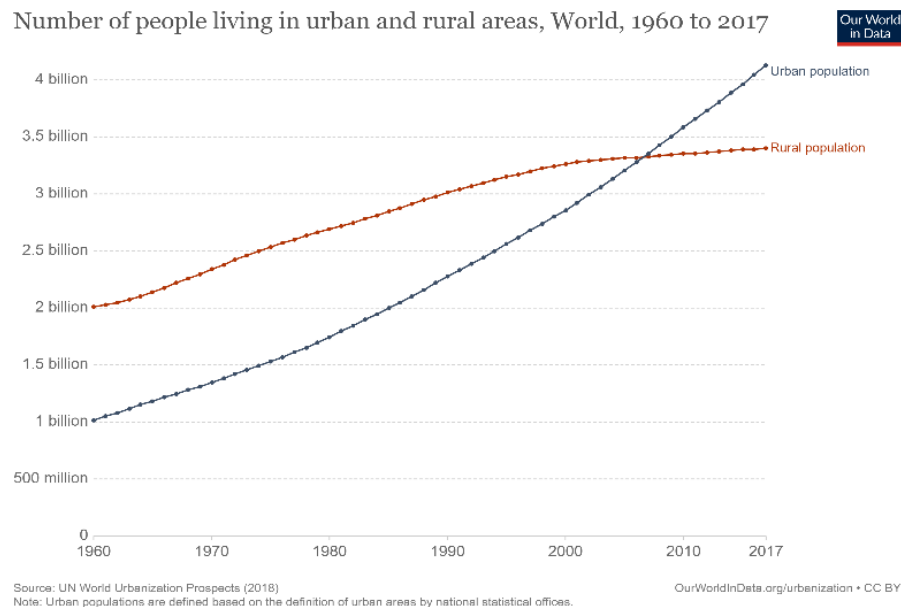
⁹ "Sustainable Transport." *Wikiwand*, www.wikiwand.com/en/Sustainable_transport#/History. Accessed 11 June 2021.

¹⁰ "Reducing the Global Environmental Impacts of Rapid Infrastructure Expansion." *ScienceDirect.com | Science, Health and Medical Journals, Full Text Articles and Books*, 30 Mar. 2015, www.sciencedirect.com/science/article/pii/S0960982215002195.

the contemporary avalanche of infrastructure expansion is having severe impacts on many ecosystems and species, such as promoting habitat conversion and fragmentation, poaching, illegal mining, wildfires, and land speculation.

Poverty and Access

Around the world, two-thirds of the people with low- income live in rural areas¹¹. Public investments in these areas have, over the past 30 years stagnated, or declined, so the infrastructure is often lacking or nonexistent. This problem is particularly evident in Africa, where economic development is impeded by limited transport infrastructure. Many Less Economically Developed Countries (LEDCs) are isolated due to poor transport infrastructure. The citizens of these countries are excluded from better opportunities and suffer from poor health, low productivity, and low school enrollment. This has as an inevitable result the reinforcement of cycles of poverty.



¹¹ "Ending Poverty and Hunger by Investing in Agriculture and Rural Areas |Policy Support and Governance| Food and Agriculture Organization of the United Nations." *Home | Food and Agriculture Organization of the United Nations*, 2017, www.fao.org/policy-support/tools-and-publications/resources-details/es/c/1027619/.

Figure 1: Number of people living in rural and urban areas from 1960 to 2017¹²

Safety and Healthcare

Recognizing the vast economic potential of transportation as well as its environmental benefit, we should promote the safety and sustainability of transport systems around the world. One of the key organizations that work through the development of sustainable transport infrastructure is World Bank. The World Bank leads the Global Road Safety Facility, which works with seven other development banks to harmonize road safety practices in client countries and promote safer roadways. Moreover, the transport sector is a major contributor to traffic accident and is a leading cause of deaths and injuries based on the World Health Organization. Due to the multifaceted nature of sustainable transport, a joint assessment of environmental impacts and safety concerns can yield a more comprehensive view of the status of the transport system. Although OECD countries are pioneers in sustainable transport infrastructure, they still bear substantial financial burdens related to environmental and safety problems in transport. By the estimate of OECD itself, the health impact of air pollution in OECD countries cost an astronomical 1.7 trillion US\$, and road transport was responsible for half of it (OECD, 2014). The direct and indirect financial costs of traffic accidents were also huge in OECD countries, estimated to be 1–3% of annual GDP (OECD, 2015).¹³

Infrastructure types

Roadways

Roads and highways are often the dominant forms of land transport, and they can be critical to connecting rural areas. Every day, more than a million people and vehicles run across roads all over the world.¹⁴ Among the most common examples of land transport through roads are buses, trucks, motorcycles, rickshaws, and scooters. Buses, particularly bus rapid transit, are highly used because they are cheap and easy to deploy and alter. Economists consider that they

¹² Hannah Ritchie and Max Rose. "Urbanization." *Our World in Data*, Nov. 2019, ourworldindata.org/urbanization.

¹³ "Assessing Road Transport Sustainability by Combining Environmental Impacts and Safety Concerns." *ScienceDirect.com | Science, Health and Medical Journals, Full Text Articles and Books*, www.sciencedirect.com/science/article/abs/pii/S1361920919311186.

¹⁴ "Attention Required!" *Attention Required!* | *Cloudflare*, www.toppr.com/guides/evs/a-shelter-so-high/roadways/.

can be an integral part of urban economic growth in LEDCs (Less Economic Developed Countries).

Railways

Railways are often the most climate-smart form of transport and are of paramount importance in promoting economic growth. However, due to inefficiencies and poor integration, there is a limited number of railways in developing countries.

Airplanes

Air transport is an important enabler to achieving economic growth and development. Air transport facilitates integration into the global economy and provides vital connectivity on a national, regional, and international scale. It helps generate trade, promote tourism, and create employment opportunities. The World Bank has financed aviation-related projects for over sixty years. Also, airports are vast, capital-intensive projects that can transform regions and urban areas. Nevertheless, as they are really expensive options, they are difficult to be sustained by developing countries.

Waterways

Water transport is the process of transport a watercraft, such as a barge, boat, ship, or sailboat, over a body of water, such as a sea, ocean, lake, canal, or river. India is one of the countries that introduced waterway-based transport. The government is actively working to develop inland waterways as an alternative mode of transport in the country, for which they have designated 111 National Waterways in the country. These waterways are being developed to make them operational and usable for transportation. Inland waterways development can not only become a vital and cost-effective component of multimodal connectivity but also a means to sustain shared riverine ecology and ensure sustainable development

Sustainable Transport at the heart of Sustainable Development Goals

Sustainable infrastructure is a key component of sustainable development. There are several Sustainable Development Goals (SDGs) that are linked to transport, including SDG 3 about ensuring healthy lives and promote well-being for all at all ages (increased road safety), SDG 7 about ensuring access to affordable, reliable, sustainable, and modern energy for all, SDG 8 about promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, SDG 9 on building resilient infrastructure, promoting sustainable industrialization and fostering innovation infrastructure, SDG 11 on making cities and human settlements inclusive, safe, resilient and sustainable, SDG 12 about ensuring sustainable consumption and production patterns and SDG 14 about conserving and sustainably using the oceans, seas, and marine resources.

Belt and Road Initiative

The Belt and Road Initiative, reminiscent of the Silk Road, is a massive Chinese infrastructure project. Launched in 2013 by President Xi Jinping, the vast collection of development and investment initiatives would stretch from East Asia to Europe, significantly expanding China's economic and political influence. China's colossal infrastructure investments may usher in a new era of trade and growth for economies in Asia and beyond. Some analysts see the project as an unsettling extension of China's rising power, and as the costs of many of the projects have skyrocketed, the opposition has grown in some countries. The Belt and Road still seem to be everything that China does abroad and nothing at all, and this vagueness makes it difficult for other countries and international firms to fully invest in it. The lack of defining precisely what the Belt and Road are led to Beijing losing control of its message.

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

Australia

Technology in the transport sector of Australia is undergoing rapid change, creating opportunities to improve many key areas including safety, accessibility, efficiency, and sustainability. The Australian government believes that supporting and enhancing the transport systems contributes to the prosperity of the economy and the wellbeing of all Australians. The operations, trains, and systems (OTS) component of the Sydney Metro Northwest project has received a "Leading" rating by the Infrastructure Sustainability Council of Australia (ISCA) for making sustainability a key deliverable in its design processes. In this way, Australia paves the way for sustainable transport infrastructure.

Canada

Transportation is the single largest source of air pollution and greenhouse gas emissions in Canada. Transportation accounts for about 25 percent of total emissions, and Environment Canada, whose purpose is to inform Canadians about ways to protect and preserve the natural heritage, has estimated that for every 2,000 liters of gasoline consumed, the average car produces 4,720 kg of carbon dioxide, 186.6 kg of carbon monoxide, 28 kg of volatile organic compounds, and 25.6 kg of nitrogen oxides.¹⁵ 80 percent of Canadians now live in urban areas, even though fast reliable public transit and active, shared transportation options have never been highly invested. The David Suzuki Foundation is a leading voice in advocating for sustainable transportation options throughout Canada, focusing on electric vehicles, public transportation, active transportation, and clean fuel standards.

¹⁵ Sustainable Transportation."
www.vaughan.ca/projects/projects_and_studies/sustainable_transportation/Pages/def

China

Since the founding of the People's Republic of China in 1949, and particularly since the beginning of reform and opening up in 1978, under the leadership of the Communist Party of China (CPC), China has followed a strategy of coordinating the development of its transport industry with its economy and society, and ensuring harmony between the transport system and the natural environment. China leads the world in terms of the scale of its transport infrastructure. Its transport service and support capacity has steadily improved, its capacity for technological innovation has markedly strengthened, and the modernization of management has made huge steps forward in this sector. China is committed to implementing the United Nations 2030 Agenda for Sustainable Development and makes great efforts to promote land, sea, air, and cyber connectivity, and coordination of policies, rules, and standards, focusing to promote cooperation under the Belt and Road Initiative.

European Union

Transport currently accounts for a quarter of the EU's greenhouse gas emissions and this figure continues to rise as demand grows.¹⁶ The European Green Deal seeks a 90% reduction in these emissions by 2050. Moving to more sustainable transport means putting users first and providing them with more affordable, accessible, healthier, and cleaner alternatives. The objectives of this deal are to boost considerably the uptake of clean vehicles and alternative fuels, achieve the ambitious climate goals and improve efficiency across the whole transport system with the help of digital technologies.

India

The population of India's six major metropolises increased by about 1.9 times from 1981 to 2001 while the number of motor vehicles went up by over 7.75 times¹⁷ during the same period. India is the second-largest in terms of total road network in the world. Its road network constitutes around 3.34 million km. The country lacks adequate infrastructure, transport, and other public services while it has a limited network of roads. India is associated with extremely high levels of transport-related pollution, noise, and other environmental impacts, especially in metropolises.

Nigeria

A case in point is the transport infrastructure in Nigeria. The United Nations Development Program (UNDP) described Nigeria's road networks as one of the poorest and

¹⁶ "Sustainable Transport." *Mobility and Transport - European Commission*, 15 Apr. 2020, ec.europa.eu/transport/themes/sustainable_en.

¹⁷ *United Nations Centre for Regional Development (UNCRD)*, www.uncrd.or.jp/content/documents/3EST-B2G602.pdf.

deadliest transportation infrastructural systems in the world. Data from the UNDP and the World Bank (WB) show that Nigeria has suffered transportation infrastructure deficits. We should also draw our attention to the fact that Nigeria is one of the lowest indices in economic development in the last decade demonstrating the interconnected relationship between infrastructure development and economic development. Findings reveal that this issue is mainly caused due to corruption in awarding road contracts, lack of contracts monitoring, and inefficient governance hindering economic development in Nigeria.

World Bank

The World Bank's mission is to end extreme global poverty and promote shared prosperity. In the past half-century, it has facilitated billions of dollars of investments in developing countries to alleviate poverty and foster growth. The World Bank Group technically comprises five institutions, several of which are critical in transport investments. The World Bank has identified the transportation sector as critical to its sustainable development goals and it has a four-pronged approach to promote sustainable mobility around the world by improving: access, efficiency, safety, and climate-friendliness. For example, in Tanzania, the World Bank used a \$450 million grant to help fund the creation of a bus rapid transport system.

Organization for Economic Co-operation and Development (OECD)

The Organization for Economic Co-operation and Development is an intergovernmental economic organization with 37 member countries, founded in 1961 to stimulate economic progress and world trade. One of its main goals is to invest in transport infrastructure and achieve its sustainability. OECD supports that extensive and efficient transport infrastructure is essential for well-functioning economies and the development of regions and cities and it has taken major steps to improve the transport infrastructure within its 37 member countries. Assuming that no activity can be sustainable if it surpasses the environment's long-term capacity to support it, the OECD initiated in 1994 an international effort to define and chart a path towards Environmentally Sustainable Transport (EST). Also, recognizing the essential role that long-term financing for investment plays in supporting strong, sustainable, balanced and inclusive growth, G20 Finance and Central Bank Deputies established a Study Group on Financing for Investment in 2013, which was transformed into the Infrastructure Investment Working Group (IIWG) in 2014 and then into the Infrastructure Working Group (IWG) at the end of 2017 by the support of OECD.

TIMELINE OF EVENTS

DATE	DESCRIPTION OF EVENT
1662	The invention of the public bus by Blaise Pascal
1807	The first passenger tram began operation
1825	The first passenger rail service came into operation.
1944	The creation of the International Bank for Reconstruction and Development
1961	Foundation of the Organization for Economic Co-operation and Development (OECD)
1973	Oil Crisis
1979	Energy Crisis
1987	Establishment of the Africa Transport Policy Program (SSATP)
1994	OECD's initiative to define and chart a path towards Environmentally Sustainable Transport (EST)
21 March 1994	United Nations Framework Convention on Climate Change came into force
2006	Establishment of the Global Road Safety Facility by the World Bank
June 2009	The signing of the Green Growth Declaration by OECD
2013	Foundation of the Bell and Road Initiative

2013	Establishment of a Study Group on Financing for Investment by G20 Finance and Central Bank Deputies
26 September 2014	Establishment of the Protocol on Sustainable Transport
2014	Establishment of the Infrastructure Investment Working Group (IIWG) in 2014
2015	Installation of the 2030 Agenda of the Sustainable Development Goals
4 November 2016	Paris Agreement came into force
26 to 27 November 2016	First Global Sustainable Transport Conference at Ashgabat, Turkmenistan
2017	Establishment of the Infrastructure Working Group (IWG)
15 March 2019	Resolution adopted by the United Nations Environment Assembly on Sustainable Mobility
15 March 2019	Resolution adopted by the United Nations Environment Assembly on Sustainable Transport
5 to 7 May 2020	Second Global Sustainable Transport Conference at Beijing, China

RELEVANT UN RESOLUTIONS, TREATIES AND EVENTS

Africa Transport Policy Program (SSATP)

The Africa Transport Policy Program (SSATP) is an international partnership to facilitate policy development and related capacity building in the transport sector in Africa. It comprises 38 countries, eight Regional Economic Communities, public and private sector organizations, and international development agencies and organizations. Since its inception, SSATP has become well recognized and respected as the foremost transport policy development forum in

Africa, bringing together key decision-makers, while developing networks of specialists (researchers, operators, and consultants) in most transport-related fields in Africa. SSATP is financed by development partners' contributions to a trust fund administered by the World Bank.

Global Road Safety Facility (GRSF)

GRSF is a global partnership program administered by the World Bank, which was established in 2006 with a mission to help address the growing crisis of road traffic deaths and injuries in low and middle-income countries. GRSF provides funding, knowledge, and technical assistance designed to scale up the efforts of low- and middle-income countries to build their scientific, technological, managerial, and delivery capacities for road safety.

Declaration on Green Growth

The Declaration on Green Growth was adopted at the Meeting of the Council at Ministerial Level on 25 June 2009 by the Organization for Economic Co-operation and Development (OECD). This treaty was signed with the view to advance the move towards sustainable low-carbon economies and international cooperation in areas such as the development and diffusion of clean technologies. Examples include carbon capture and storage, renewable energy technologies, the application of green Information and Communications Technology (ICT) for raising energy efficiency, and the development of an international market for environmental goods and services.

UNEP/EA.4/Res.3

This resolution was adopted on 15 March 2019 by the United Nations Environment Assembly on the issue of Sustainable Mobility. It presents possible solutions by which member states can achieve sustainable mobility by collaboration, exchanging of knowledge, technical and financial support, and many others.

UNEP/EA.4/Res.5

This resolution was adopted on 15 March 2019 by the United Nations Environment Assembly on the issue of Sustainable Infrastructure. It suggests possible solutions members states can adopt in order to achieve sustainability in their transportation infrastructure by means such as support of LEDC's, promotion of mobilization, and application of appropriate sustainability criteria.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

Organizations and nations all around the world have often attempted to solve the issue of harmful transportation and to achieve sustainable transport infrastructure.

The World Bank Initiative

In the past half-century, the World Bank has facilitated billions of dollars of investments in developing countries to alleviate poverty and foster growth. World Bank consists of five institutions, several of which are critical in the transport infrastructure. The International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA) function by providing loans, guarantees, risk management products, and advisory services to developing countries. They differ only in that the IBRD has often supported middle-income countries, and the IDA has focused on low-income countries. They together make up the world's largest development bank, and they aid the missions of the World Bank by providing capital access to growing countries. For capital-intensive projects like transportation investments, this is essential.

The UN Initiative

Moreover, the global commitment to sustainable transport was spotlighted in the first-ever Global Sustainable Transport Conference, convened by the former UN Secretary-General Ban Ki-Moon, on the 26th and 27th of November 2016 in Ashgabat, Turkmenistan. The Global Conference brought together key stakeholders from Governments, the UN system and other international organizations, the private sector, and civil society to engage in a dialogue that emphasized the integrated and cross-cutting nature of sustainable transport and its multiple roles in supporting the achievement of the SDGs. The urgent need for the creation of sustainable transport infrastructure had as a consequence a Second Global Sustainable Transport Conference to take place from 14-16 October 2021 in Beijing, China. It provided an opportunity to focus attention on the opportunities, challenges, and solutions towards achieving sustainable transport objectives. It worked as a follow-up on the first Global Sustainable Transport Conference, held in 2016 in Ashgabat, Turkmenistan, and is expected to indicate a way forward for sustainable transport to help achieve the objectives of the 2030 Agenda for Sustainable Development.

The OECD Initiative

The International Transport Forum at the OECD is an intergovernmental organization with 57 member countries. It acts as a think tank for transport policy and organizes the Annual Summit of transport ministers. ITF is the only global body that covers all transport modes. It fosters a deeper understanding of the role of transport in economic growth, environmental sustainability and social inclusion and tries to raise the public profile of transport policy.

POSSIBLE SOLUTIONS

By enabling mobility and enhanced economic access, transport facilitates economic development. It fosters improvements in health, education, and labor standards. It can improve

human rights and disaster response. Consequently, delegates need to take everything into consideration and find solutions so as to achieve sustainable transportation infrastructure.

Better decision-making tools

Financial institutions need to integrate long-term environmental protection into country-level planning and into the business case of individual projects. To achieve this, those involved in planning, promoting and evaluating infrastructure projects need better and more accessible tools to aid their efforts.

Greater NGO and public engagement

Those working in the major development banks often face great pressures from governments and project proponents with vested financial interests to approve infrastructure proposals. Input from non-governmental environmental and social-welfare groups and the general public, especially those directly impacted by the project, are direly needed to help balance these pressures. A key strategy in many situations is to emphasize that lenders need to be more conservative in their decision-making, adopting the precautionary principle in cases where conflicts are possible or relevant information is lacking.

Achieve Sustainable Development Goal 9

Members States need to take steps to achieve Sustainable Development Goal 9, always taking into account their national capabilities and priorities. Measures to apply this goal is by applying appropriate sustainability criteria to all infrastructure, promoting the mobilization of investments, supporting LEDCs in order to strengthen scientific knowledge as well as developing regional systems-level strategic approaches to infrastructure planning.

Climate Focused Development

The development and use of appropriate sustainability criteria for infrastructure is a key factor for attaining sustainable development and production while protecting the environment. Member states need to apply the existing guidelines and legislations while creating dialogue platforms that will contribute to the generation and share of knowledge about sustainable infrastructure.

BIBLIOGRAPHY

United Nations Environment Assembly of the United Nations Environment Programme. "Resolution adopted by the United Nations Environment Assembly on 15 March 2019." *UN Environment Document Repository Home*, wedocs.unep.org/bitstream/handle/20.500.11822/28470/English.pdf?sequence=3&isAllowed=y. Accessed 15 Mar. 2019.

United Nations. "Sustainable Transport at the Heart of the Sustainable Development Goals (SDGs): Sustainable Development Knowledge Platform." *Home: Sustainable Development Knowledge Platform*, 26 Nov. 2016, sustainabledevelopment.un.org/index.php?page=view&type=20000&nr=802&menu=2993.

United Nations. "Sustainable Transport at the Heart of the Sustainable Development Goals (SDGs) : Sustainable Development Knowledge Platform." *Home : Sustainable Development Knowledge Platform*, 26 Nov. 2016, sustainabledevelopment.un.org/index.php?page=view&type=20000&nr=802&menu=2993.

Agbigbe, William A. "The Impact of Transportation Infrastructure on Nigeria's Economic Development." *ScholarWorks*, scholarworks.waldenu.edu/dissertations/2778/. Accessed 2016.

Agbigbe, William A. "The Impact of Transportation Infrastructure on Nigeria's Economic Development." *ScholarWorks*, scholarworks.waldenu.edu/dissertations/2778/. Accessed 2016.

Catherine Morency. "Sustainable Mobility: Definitions, Concepts and Indicators." *Mobile Lives Forum - Preparing the Mobility Transition*, 12 Feb. 2013, en.forumviesmobiles.org/video/2013/02/12/sustainable-mobility-definitions-concepts-and-indicators-622.

David Suzuki Foundation. "Sustainable Transportation." *David Suzuki Foundation*, 23 Oct. 2020, david Suzuki.org/project/sustainable-transportation/.

Ministry of Surface Transport Surface Transport Government of India. *United Nations Centre for Regional Development (UNCRD)*, 17 Mar. 2008, www.uncrd.or.jp/content/documents/3EST-B2G602.pdf.

The State Council Information Office of the People's Republic of China. "Full Text : Sustainable Development of Transport in China." *中华人民共和国国务院新闻办公室*, Dec. 2020, www.scio.gov.cn/zfbps/32832/Document/1695320/1695320.htm.

Australia Government-Department of Infrastructure, Transport, Regional Development and Communications. "Transport." *Infrastructure, Regional Development and Cities*, 29 Jan. 2021, www.infrastructure.gov.au/transport/.

"ISCA - Australia's Largest Public Transport Project Recognised for Sustainability." *ISCA*, 21 Aug. 2019, www.isca.org.au/australia_s_largest_public_transport_project_recognised_for_sustainability.

"1. Transport Infrastructure Trends and Regional Development | Transport Bridging Divides | OECD iLibrary." *OECD iLibrary*, www.oecd-ilibrary.org/sites/512e786f-en/index.html?itemId=/content/component/512e786f-en.

"China's Massive Belt and Road Initiative." *Council on Foreign Relations*, 21 Feb. 2019, www.cfr.org/backgrounders/chinas-massive-belt-and-road-initiative.

"4.4 – Transportation, Sustainability and Decarbonization." *The Geography of Transport Systems*, transportgeography.org/contents/chapter4/transportation-sustainability-decarbonization/.

Meredith, Sam. "Two-thirds of Global Population Will Live in Cities by 2050, UN Says." *CNBC*, 17 May 2018, www.cnbc.com/2018/05/17/two-thirds-of-global-population-will-live-in-cities-by-2050-un-says.html.

"Infrastructure - Organisation for Economic Co-operation and Development." *OECD*, www.oecd.org/g20/topics/infrastructure/.

World Bank Group. Nov. 2016, documents1.worldbank.org/curated/en/821621478094511356/pdf/WPS7876.pdf.

Environment and Climate Change Canada. "Environment and Climate Change Canada." *Canada.ca*, 18 Nov. 2020, www.canada.ca/en/environment-climate-change.html.

"Environmental Criteria for Sustainable Transport." *OECD*, www.oecd.org/env/greening-transport/environmentalcriteriaforsustainabletransport.htm.

"The Paris Agreement | UNFCCC." unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement.

---. *UN Environment Document Repository Home*, 15 Mar. 2019, wedocs.unep.org/bitstream/handle/20.500.11822/28469/K1901060.pdf?sequence=3&isAllowed=y.

"Inland Waterways." *Investment in India: Best Opportunities to Invest in India* | IIG, indiainvestmentgrid.gov.in/sectors/transport/inland-waterways.

Whade Shepard. *Forbes*, 28 Feb. 2020, www.forbes.com/sites/wadeshepard/2020/02/28/how-beijing-is-losing-support-for-its-belt-and-road-initiative/?sh=17a44bae2199.

"About the International Transport Forum." *International Transport Forum/OECD Joint Transport Research Centre*, www.internationaltransportforum.org/about/about.html.