

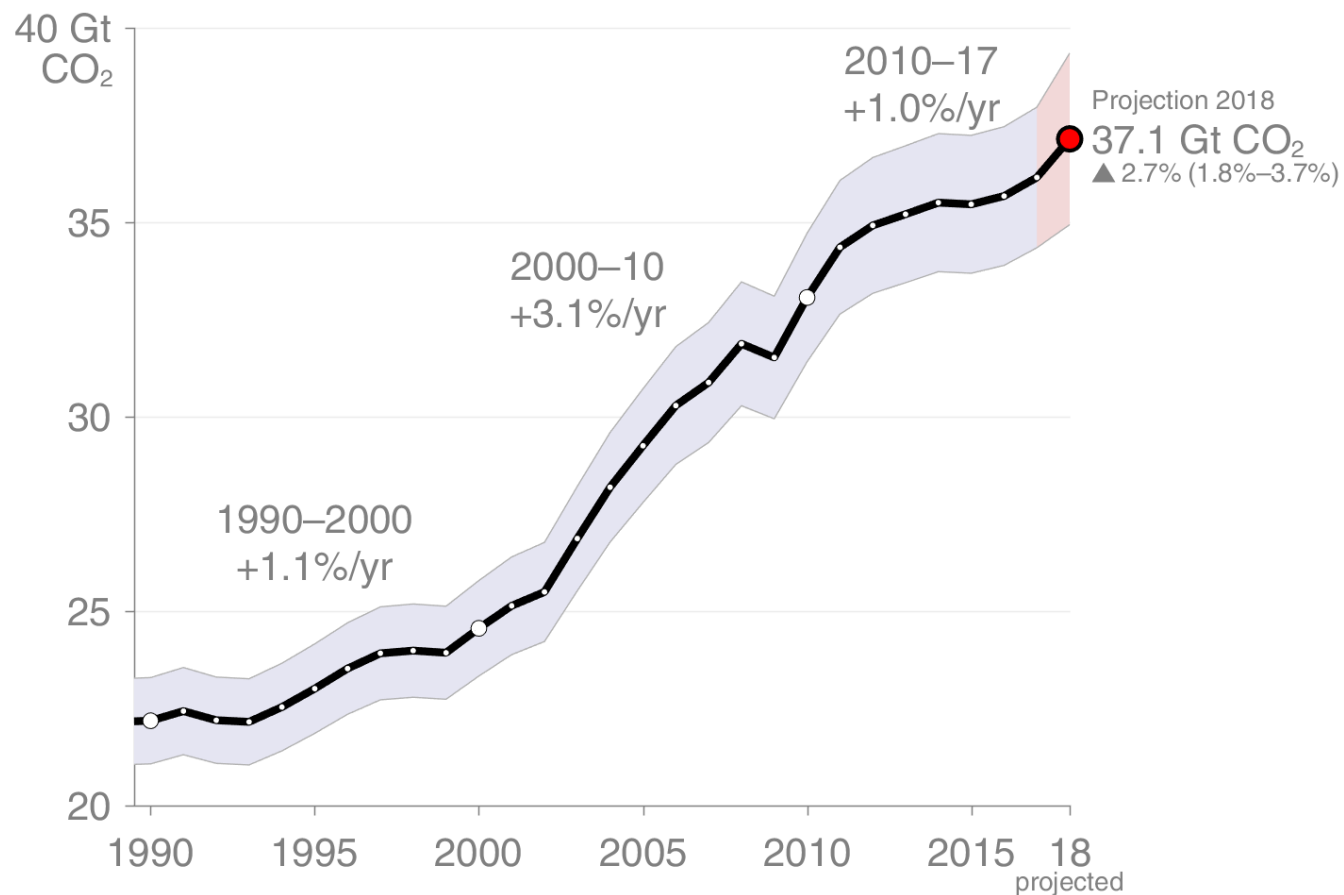
SKYWAY INNOVATIVE TRANSPORT SYSTEM

AS A POSSIBLE SOLUTION FOR GREEN MOBILITY INITIATIVE

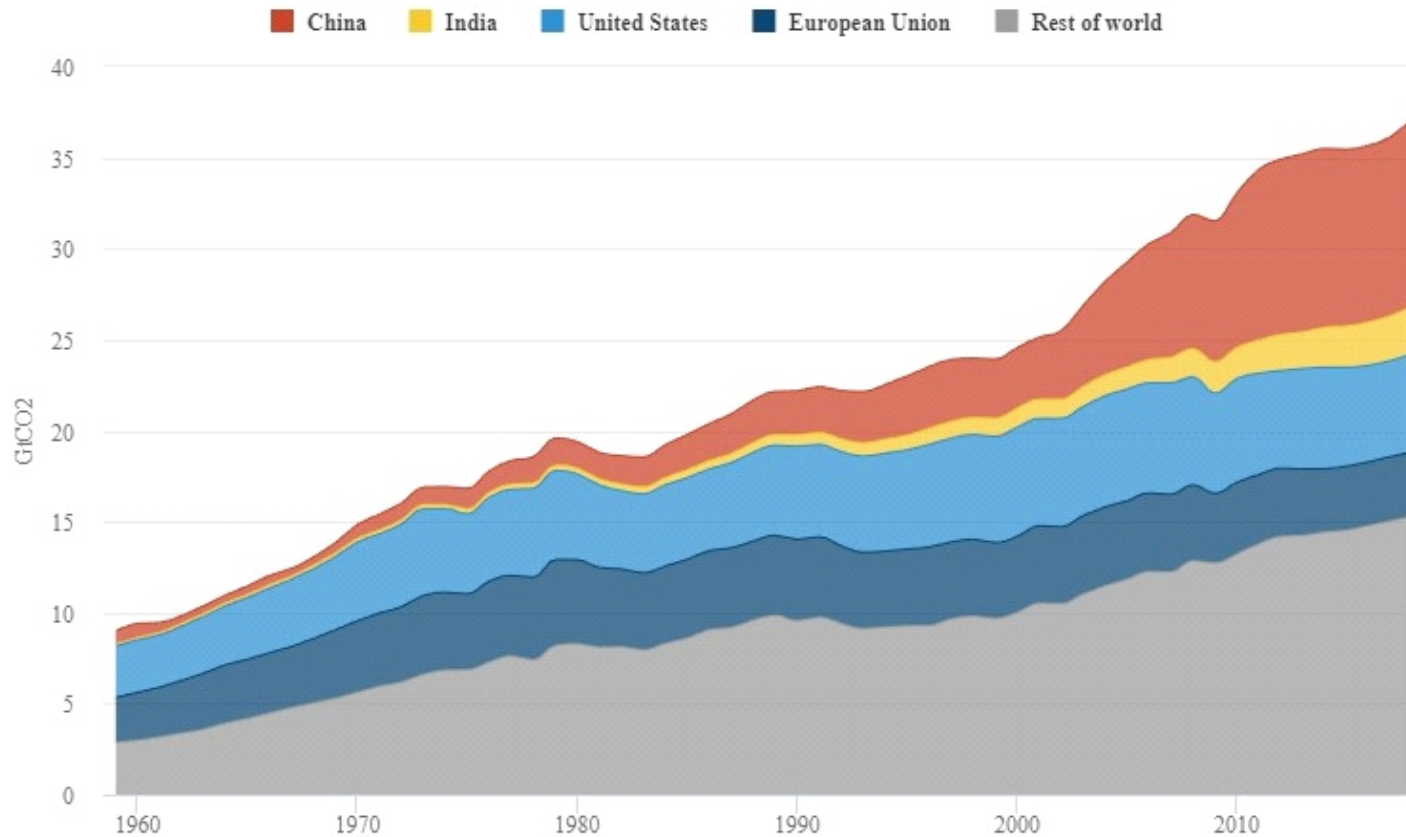


Kiryl Badulin,
SkyWay Technologies Co.

Global Fossil CO₂ Emissions



Trends in Global CO₂ Emissions Countrywise

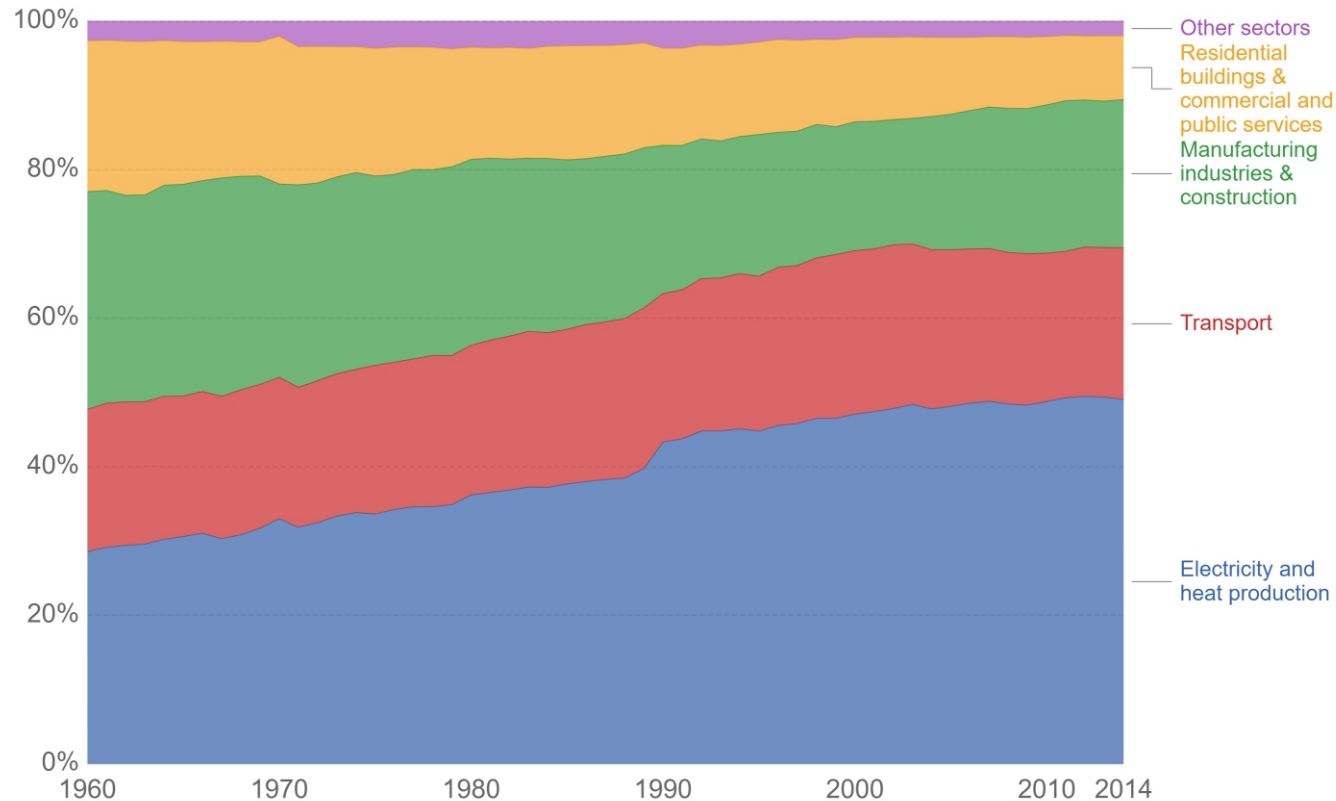


Transport is the 2nd Biggest Atmospheric Pollutant

Carbon dioxide (CO₂) emissions by sector or source, World

Share of carbon dioxide (CO₂) emissions from fuel combustion by sector or source.

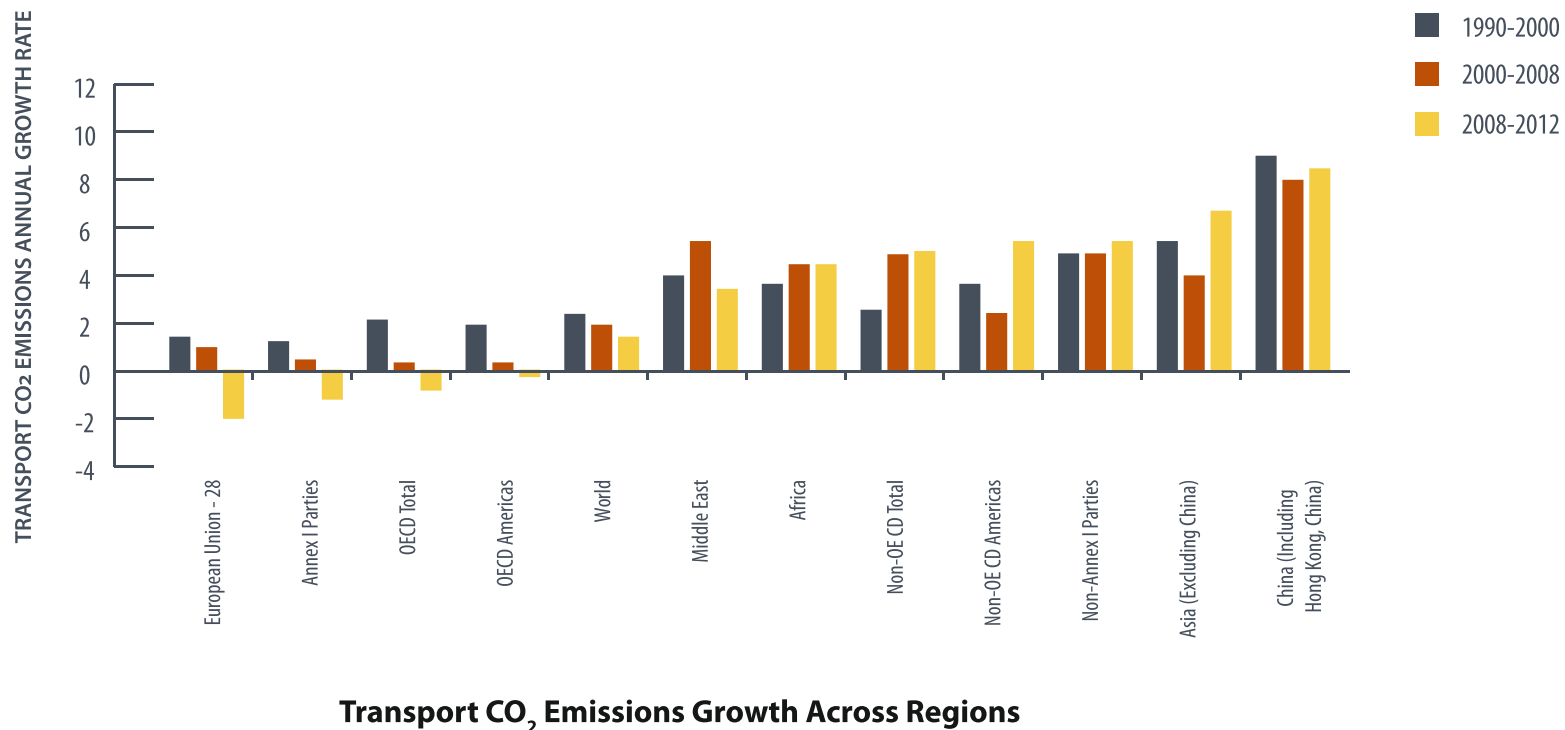
Our World
in Data



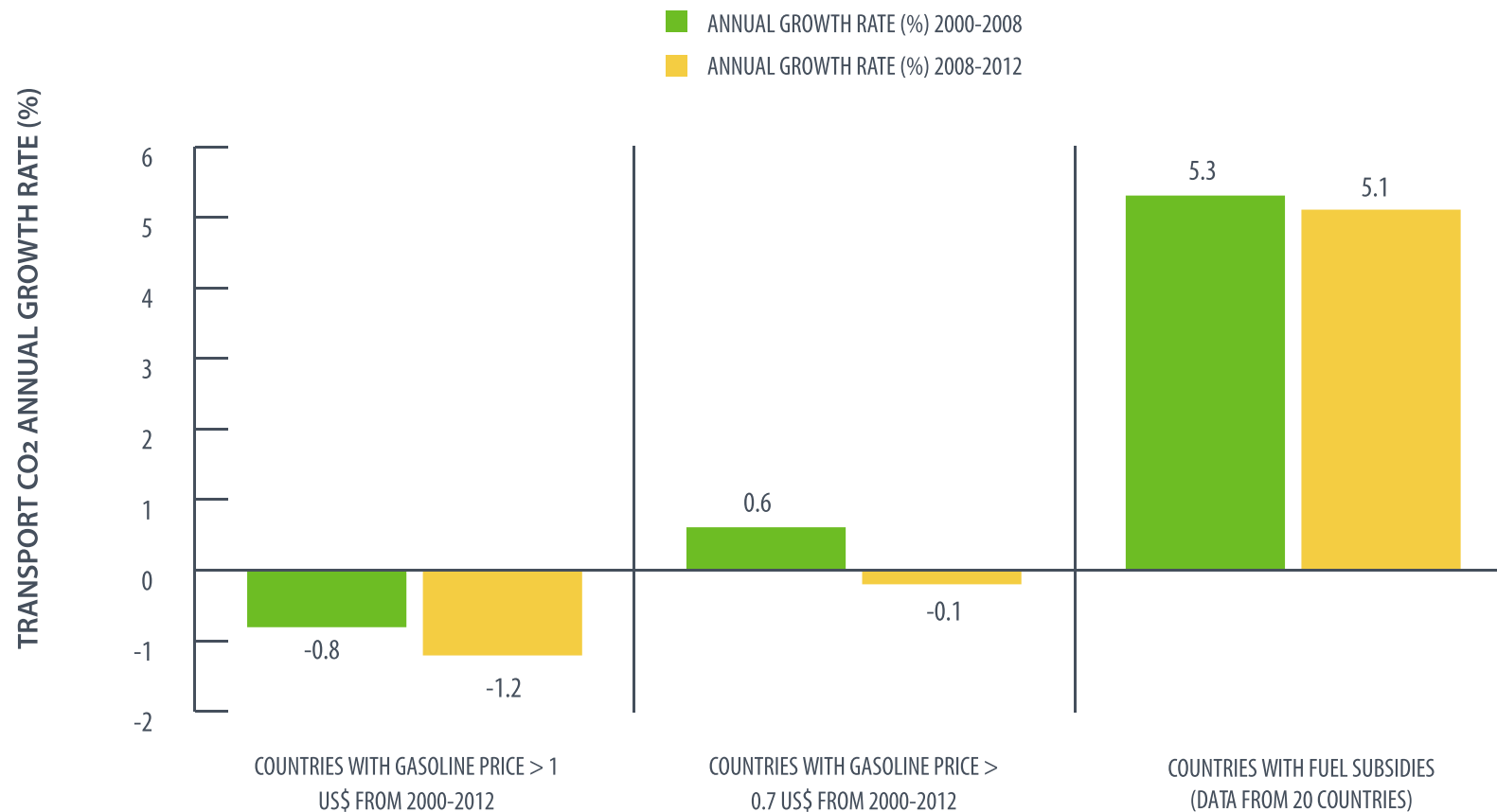
Source: International Energy Agency (IEA) via The World Bank

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions • CC BY

Transport CO₂ Emissions are Constantly Growing



Transport Emissions Growth Rates Relative to Fuel Prices

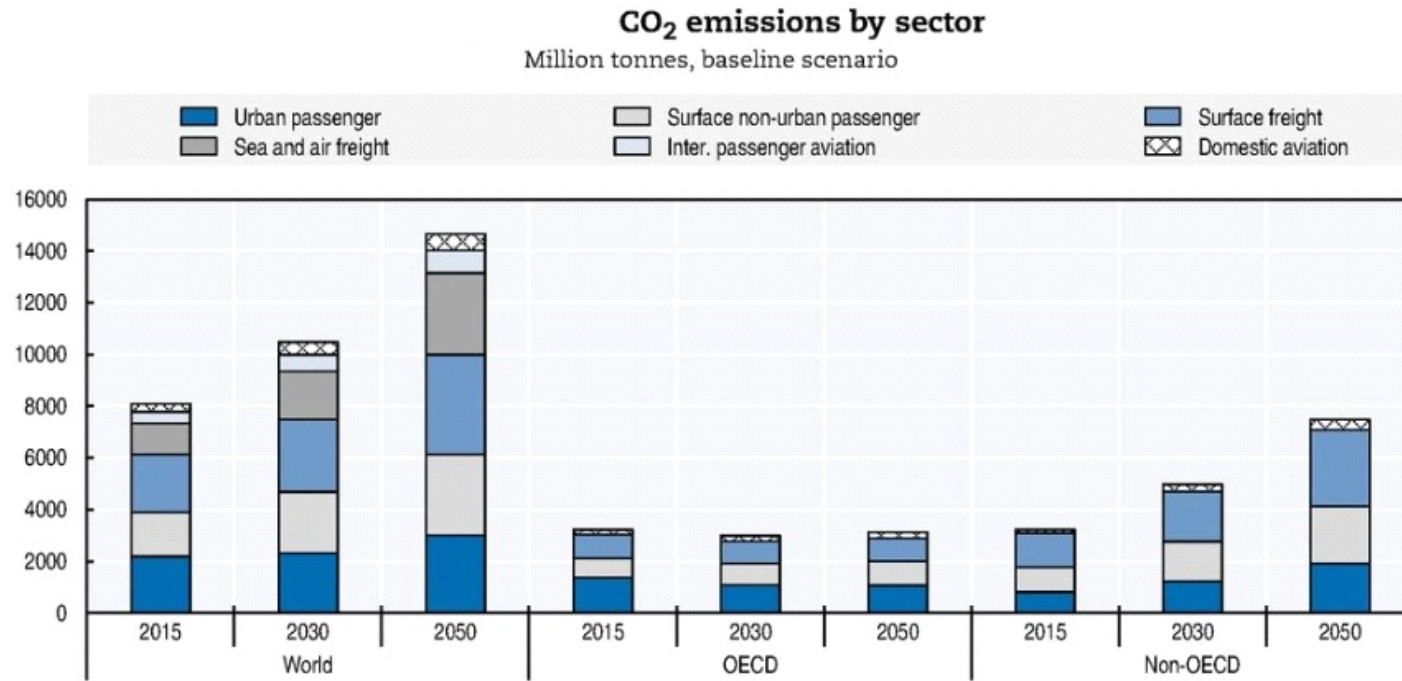


Transport Emissions Growth Relative to Fuel Prices


Green Mobility Initiative and SDG Goals



CO₂ Emissions Forecast till 2050



Emissions from international modes are not divided between OECD and non-OECD countries.

StatLink  <http://dx.doi.org/10.1787/888933442489>

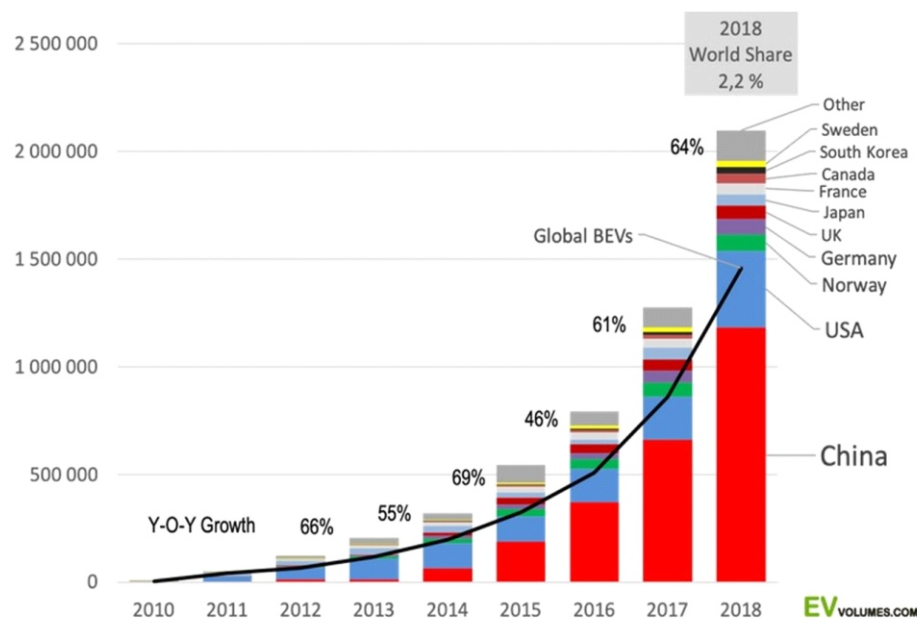
Passenger travel emits 60 g of CO₂ for passenger-kilometer in 2050 on average, compared to 100 g in 2015.

Many EU Countries Plan to Ban ICE Since 2025 till 2050

Country	Status of ICE Vehicle Phase-Out	Date of Action
Austria	Official target: No new ICE vehicles sold after 2020	April 2016
Britain	Official target: No new ICE vehicles sold after 2040 (will not include hybrids)	July 2017
Denmark	Official target: 5,000 EVs on road by 2019, tax incentive in place	Since 2008
France	Official target: No new ICE vehicles sold after 2040	July 2017
Germany	No registration of ICE vehicles by 2030 (passed by Legislature); cities can ban diesel cars; Federal court ruling supports law	October 2016
Ireland	Official target: No new ICE vehicles sold after 2030/ incentive program in place for EV sales	July 2017
Netherlands	Official target: No new ICE vehicles sold after 2030, phase-out begins 2015	October 2017
Norway	Incentive program in place for EV sales; Official target: only sell EVs by 2025	Since 1990
Portugal	Official target and incentive in place for EV sales	Since 2010
Scotland	Official target: No new ICE vehicles sold after 2032	September 2017
Spain	Official government program: the Movea 2017 Plan, an incentive package to promote sales of alternative energy vehicles	June 2017

EV Global Sales Demonstrate a Stable Growth

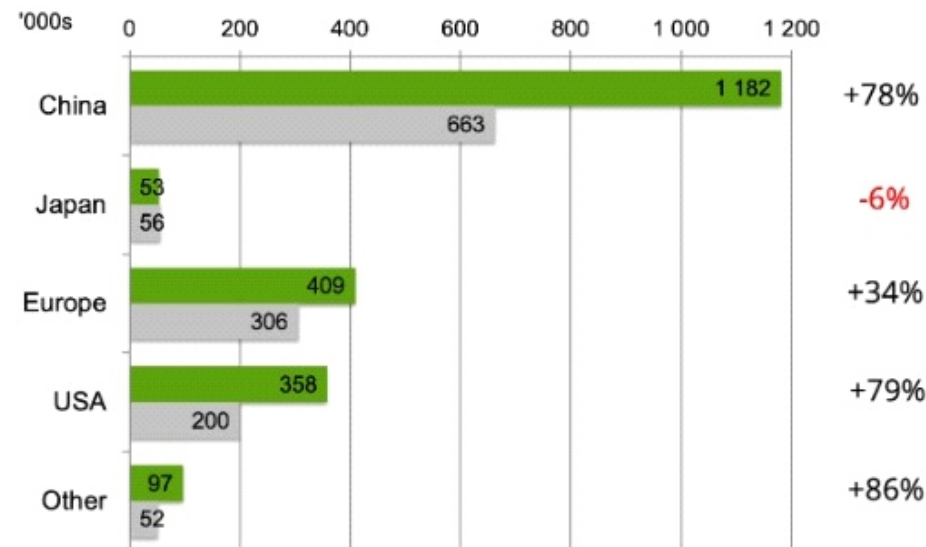
GLOBAL PLUG-IN DELIVERIES BEV&PHEV-Light Vehicles



EV SALES AND % GROWTH

■ 2018 ■ 2017

EV VOLUMES.COM



SkyWay – Elevated Transport Complex

Above the ground arrangement provides several global benefits:



High speed



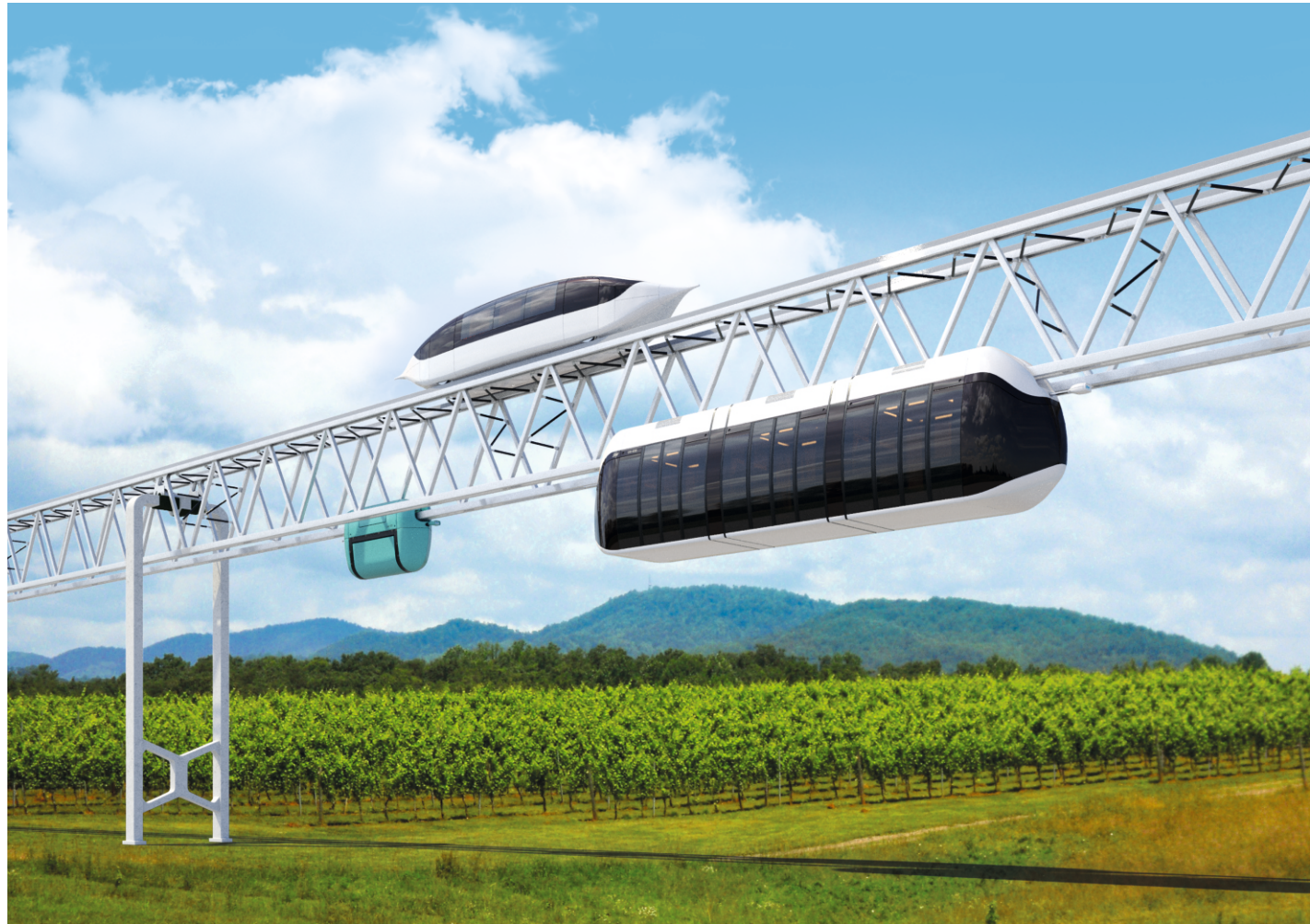
Safety



Sustainability



Low power consumption



SkyWay is an Innovative Solution with Zero-Emission

**SkyWay Rolling Stock –
electric vehicles
on steel wheels.**



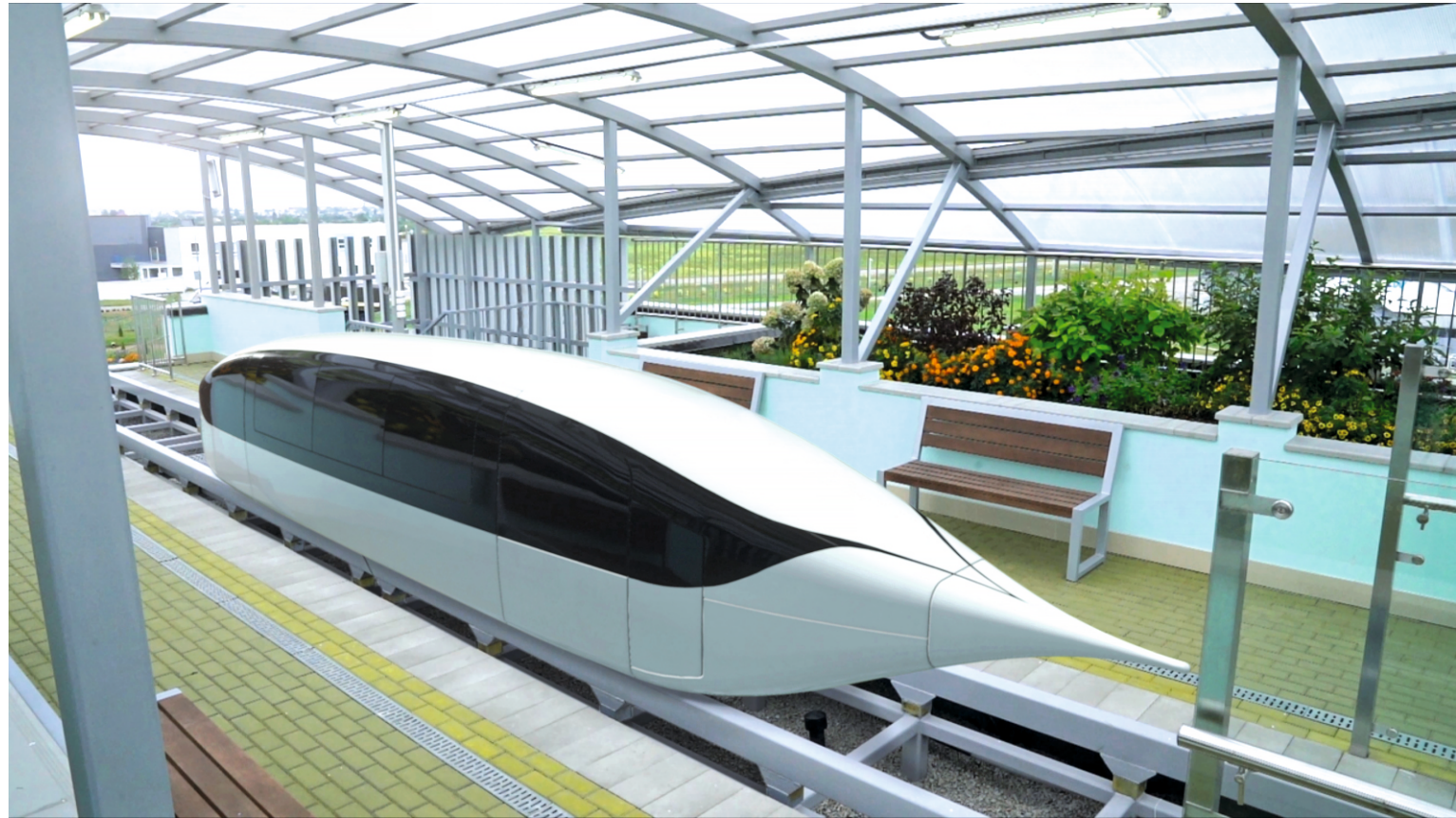
No tires



Use of renewable
power sources



High service life



SkyWay Direct Environmental Effect

SkyWay has unique characteristics, including ecological sustainability

The use of SkyWay transport systems will:

- reduce environmental pollution as a result of the low specific energy consumption (by 5–10 times less as compared with an automobile);
- drop noxious emissions;
- minimize the level of noise and vibration.



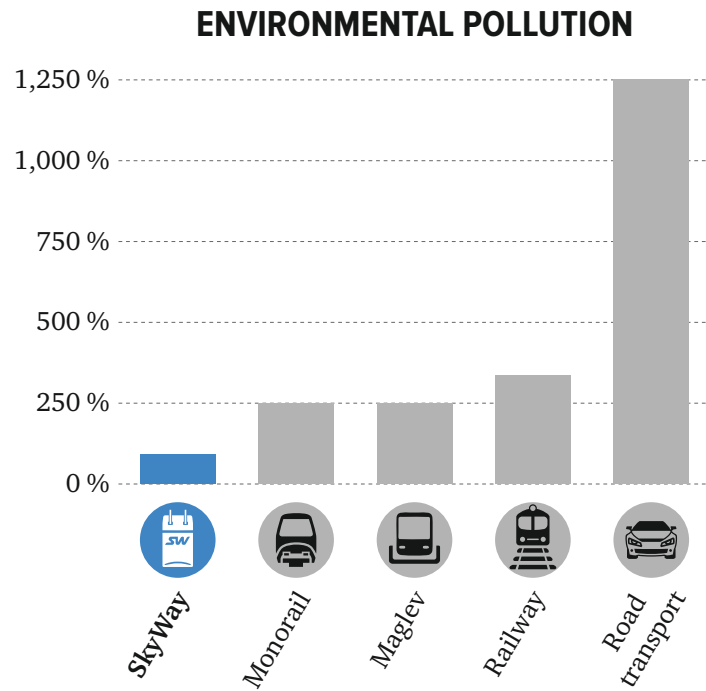
SkyWay Indirect Environmental Effect



The use of SkyWay transport systems will:

- drop the amount of fertile soil excluded from agriculture due to the minimal land allocation requirements for SkyWay transport system (less than 0.1 ha/km);
- preserve natural landscapes and biocenosis, as it goes above the ground

SkyWay is the Most Ecologically Sustainable Transport



Minimum land
allocation



Emissions
reduction



Resource
saving



Nature
preservation

Modern Transport Buries Fertile Soil in Asphalt

At present the global transport system consists of 1 mln km of railways and over 30 mln km of motor roads.

The soil under these roads (about 1 mln km²) is buried in asphalt and thus excluded from the agriculture and oxygen production.

Approximately 100 mln acres (1 mln km²) of soils "rolled into the asphalt" are not engaged in annual production of about 1.5 bln tons of oxygen, sufficient for breathing of 1 bln people.



Possible Impact of SkyWay Implementation Worldwide

Let's assume that the length of SkyWay high-speed tracks has reached 25 mln km worldwide.

Complete combustion of 1 kg of gasoline requires 3.4 kg of oxygen, or about 15 kg (12 m³) of air.

SkyWay rolling stock can save annually 31.2 bln tons of fuel for 25 mln km of tracks (while global annual oil production is just about 6 bln tons).

106 bln tons of oxygen will not be further withdrawn from the atmosphere for burning that quantity of fuel. That is enough for breathing of 67 bln people.

When burning this fuel, about 1.7 bln tons of harmful substances will be emitted into the atmosphere.



Summary

All the described trends explain the necessity of recent green mobility and green transportation initiatives.

SkyWay is an innovative transport system, which can significantly contribute to green transportation initiatives and realization of the UN SDG.

SkyWay has a great potential for future implementation worldwide, especially in the countries supporting green technologies.





CONTACT DETAILS

SkyWay Group of Companies
104 bldg B, Dzerzhinskogo ave.
Minsk 220116, Republic of Belarus

Tel.: +375 (17) 388 20 20
Fax: +375 (17) 388 06 06

info@sw-tech.by
www.sw-tech.by



SKYWAY
THE FUTURE IS NOW