

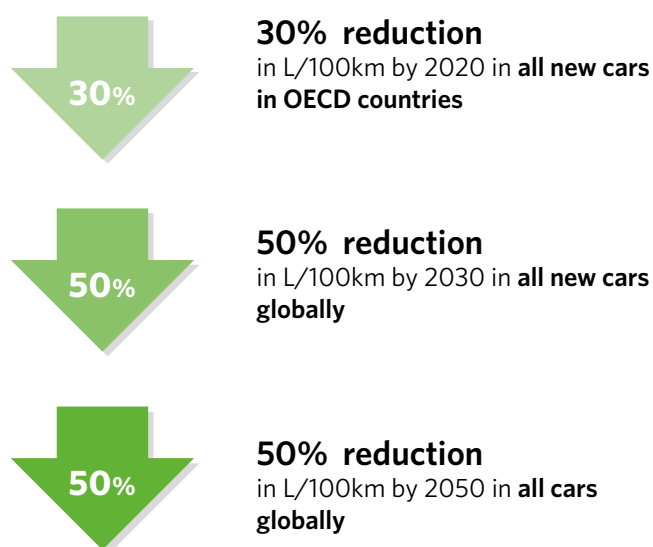
FACT SHEET

FUEL ECONOMY

The global fleet of light duty vehicles is set to increase massively by 2050, from around 850 million passenger cars in 2013 to over 2 billion by 2050, with nearly 90% of this growth in non-OECD countries. While there are huge benefits to greater personal mobility, such a growth in the vehicle fleet is unsustainable in terms of climate change, congestion, and air quality.

The Global Fuel Economy Initiative (GFEI) has shown that by using existing cost-effective technologies, such as more efficient engines, light weighting and improved aerodynamics, it is possible to reduce average vehicle fuel consumption (Litres of gasoline equivalent per 100km travelled - Lge/100km) by 50% by 2050 - GFEI's '50by50' target. GFEI also has set an interim target of doubling the average fuel economy of new vehicles globally by 2030. Improving vehicle efficiency can have significant climate, economic, financial and air quality benefits, as part of a wider set of sustainable transport measures.

THE GFEI FUEL ECONOMY TARGETS:



1 IMPROVED FUEL ECONOMY CAN HELP TACKLE CLIMATE CHANGE

Transport currently makes up 23% of energy related CO2 emissions. More efficient vehicles are vital if the world is to have any chance of limiting global temperature rises to 1.5 degrees, as agreed at the global climate change talks in Paris in 2015.

Achieving the GFEI target of doubling average vehicle fuel economy would save 0.5 Gt of CO2 a year by 2025 and 1.5Gt/year by 2050, a total of 33 Gt in total by 2050 – a massive impact, the same as closing 300 coal power stations.



2 IMPROVED FUEL ECONOMY IS GOOD FOR ENERGY SECURITY

Achieving the Global Fuel Economy Initiative targets would save 3 billion barrels of oil a year and 54 billion barrels of oil in total by 2050. For oil-importing

countries, fuel economy is one of the best ways to reduce economic vulnerability to oil shocks and improve energy security.

3 VEHICLE IMPROVEMENTS IMPROVE URBAN AIR QUALITY BY REDUCING CONVENTIONAL EMISSIONS, INCLUDING PARTICULATE MATTER AND BLACK CARBON

Improving vehicle fuel economy can help reduce harmful emissions of NO₂, PM and black carbon if introduced concurrently with cleaner fuels and stringent emission standards. The World Health Organisation estimates that 3.7 million people die a year from outdoor air pollution, and poor air quality from vehicle emissions can be a particular issues in crowded cities.

GFEI sees electrification technology as an important complement to fuel economy improvement in reaching both fuel economy and general sustainability goals. Reaching significant sales and infrastructure levels for EVs by 2030 will play a critical role in beginning the transition to these vehicles.



4 FUEL ECONOMY SAVES MONEY

Achieving the Global Fuel Economy Initiative's target to double average vehicle fuel economy globally would save \$400 billion/year in 2050 and result in a total net saving of \$8 trillion. This is because any costs of improved technology in more fuel efficient cars are offset by the fuel saved in the first few years of car usage. These financial savings are often needed elsewhere. For national

governments, improved fuel economy can improve the balance of payments and make money available to spend on social sectors such as health or education.

GFEI has shown that one way of funding support for new technologies is by using financial savings from reaching the GFEI fuel economy target.

The Global Fuel Economy Initiative exists to assist governments and transport stakeholders improve vehicle fuel economy. GFEI is a partnership of six organisations: the FIA Foundation, which hosts the secretariat, UNEP, ICCT, IEA, ITF and UC Davis.

GFEI carries out analysis and research, in-country capacity building for national and regional policy, and outreach and awareness campaigns.



Additional information

FIA FOUNDATION

<http://www.fiafoundation.org/our-work/liveable-cities>

GLOBAL FUEL ECONOMY INITIATIVE

<http://www.globalfueleconomy.org>

State of the World Report 2016: Time for Global Action

<http://www.globalfueleconomy.org/media/203446/gfei-state-of-the-world-report-2016.pdf>