SAFE CLEAN FAIR & GREEN

AN AGENDA FOR SUSTAINABLE MOBILITY POST-2015

LEIPZIG, GERMANY, WEDNESDAY 21 MAY 2014

FIA Foundation
www.fiafoundation.org

Saul Billingsley

Director General,

FIA Foundation

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SAFE

REDUCE DEATHS BY 50% BY 2030


SAFE
REDUCE DEATHS BY 50% BY 2030
CLEAN
IMPROVE URBAN AIR QUALITY


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ACCESS TO MOBILITY FOR ALL


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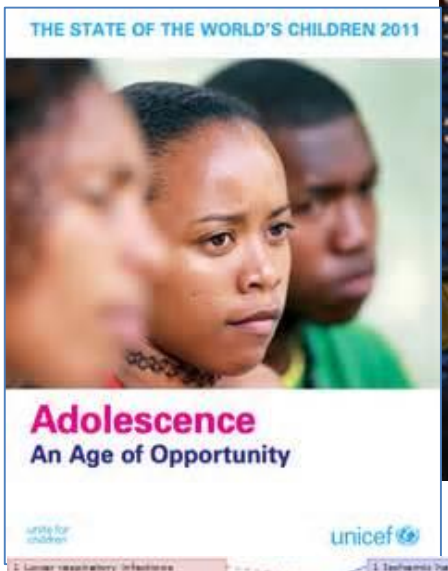
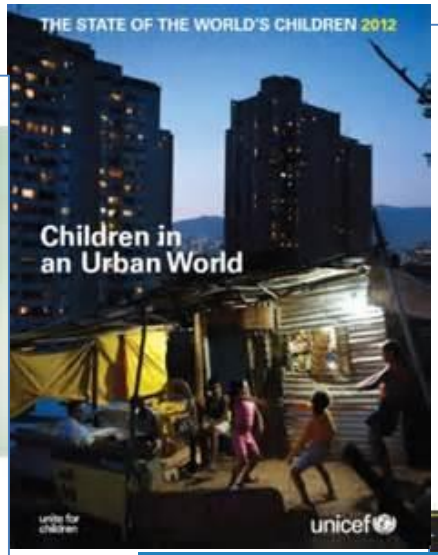
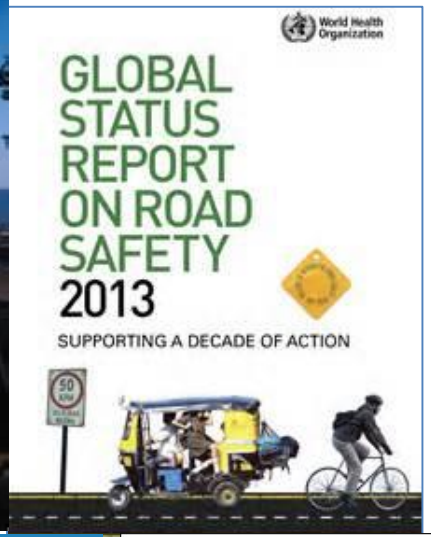
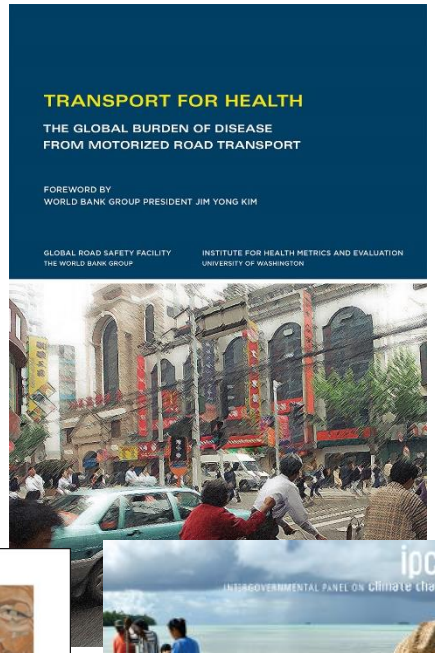
FAIR
ACCESS TO MOBILITY FOR ALL
GREEN
50% FUEL EFFICIENCY GAIN

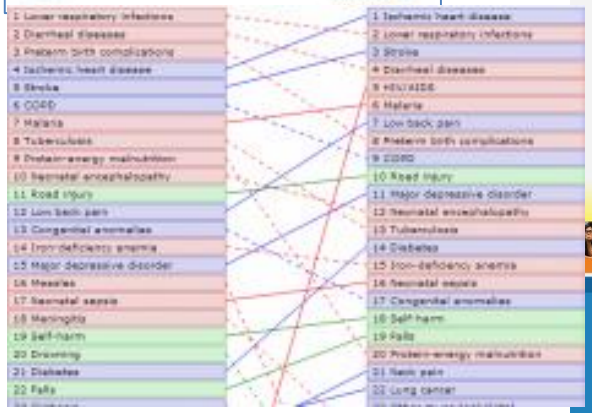
The case for Post-2015 action

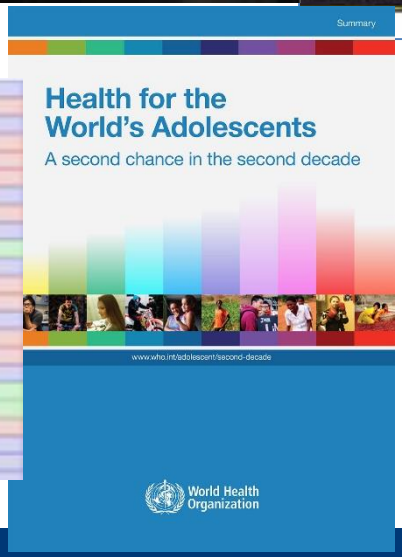


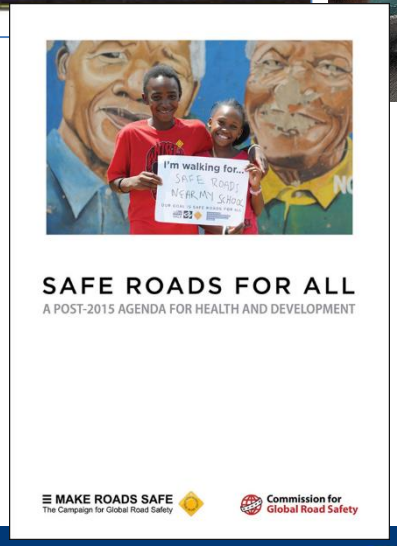












The case for Post-2015 action

SAFE CLEAN FAIR & GREEN

OUR POST-2015 MOBILITY AGENDA

The United Nations is currently consulting on the agenda for global development policy post-2015. The FIA Foundation is advocating for safe and sustainable transport to be recognised as a new priority in these 'Sustainable Development Goals'.

Addressing road safety, air quality, transport and fuel economy can play an important cross-cutting role in reducing health burdens; promoting green mobility; ensuring sustainable energy use; and improving quality of life and economic opportunities for millions. Safe, Clean, Fair & Green is our agenda for the post-2015 debate.

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Incubating innovation: road safety

Legislation, enforcement & mass action on motorcycle helmets

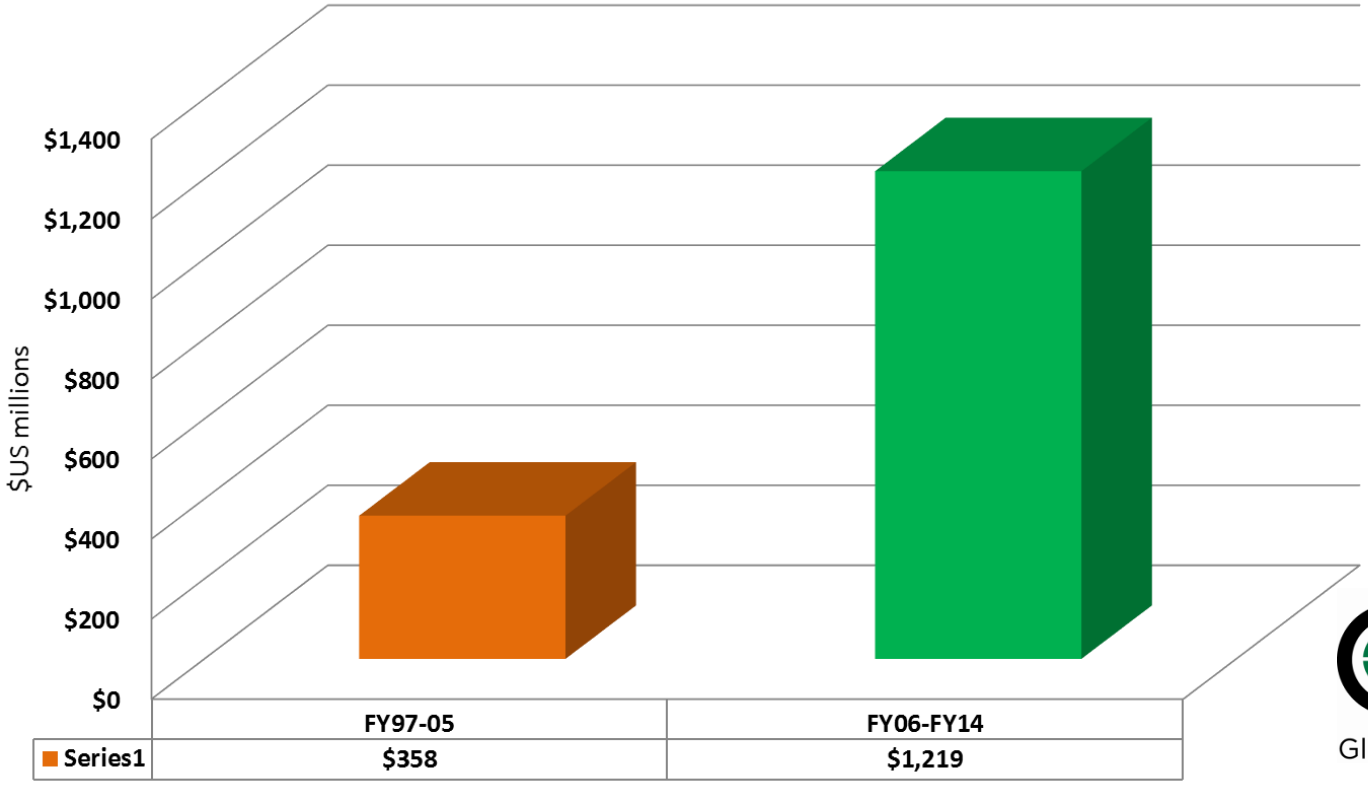
Independent car safety tests in LAC, India, ASEAN

International Road Assessment Programme

'Safe Schools': piloting road improvements & speed reduction

Catalysing funding, far more needed

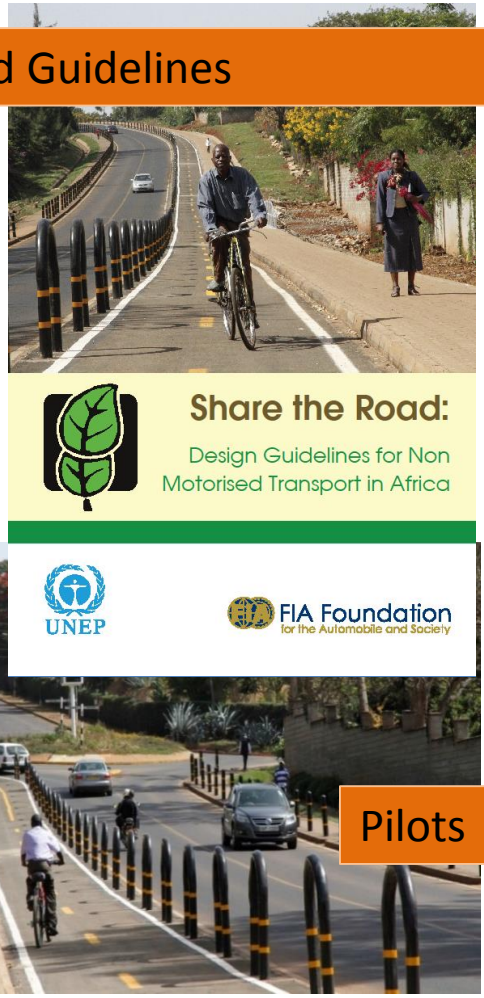
Increase in road safety lending since World Bank Global Road Safety Facility was established with FIA Foundation support



GRSF
Global Road Safety Facility

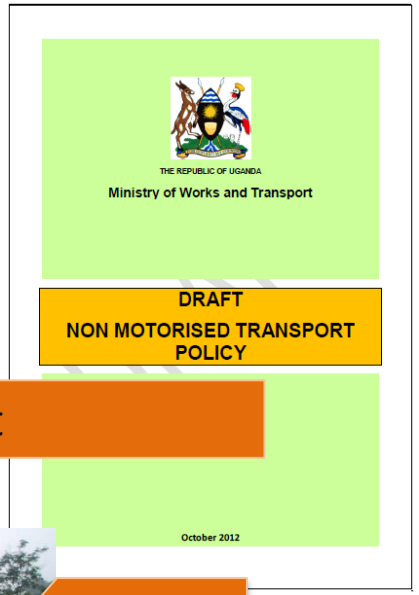
Incubating innovation: liveable cities

Tools and Guidelines



SHARE THE ROAD

UNEP



National policy support

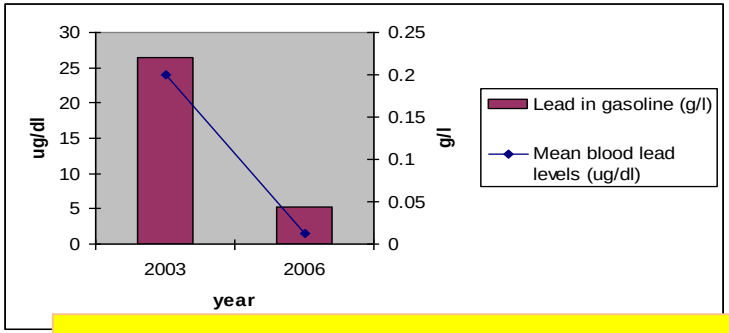
Before

Pilots

After

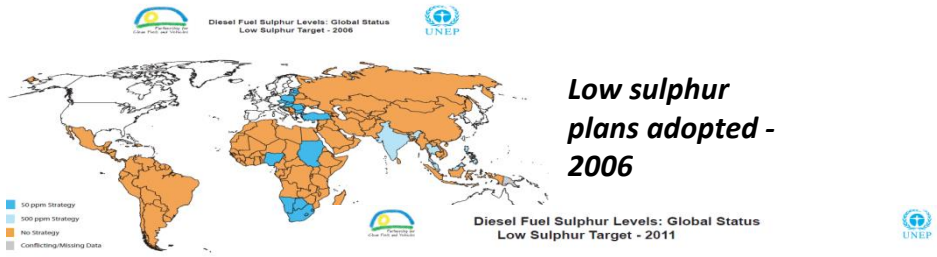
Partnering for impact: cleaner air

Ghana Blood lead levels

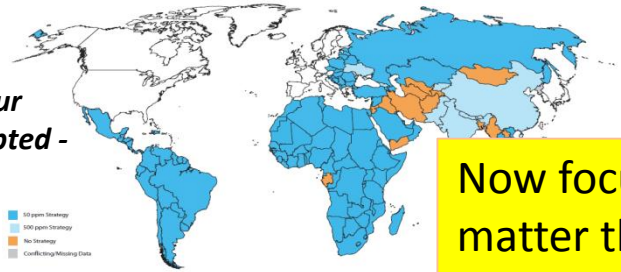


Use of leaded fuel eliminated (almost), with huge societal benefits

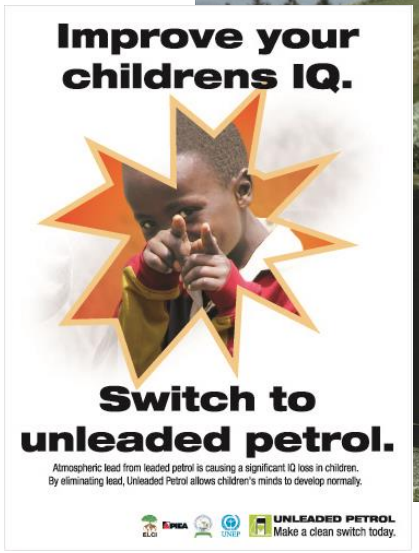
Supported over 100 countries



Low sulphur plans adopted - 2006



Low sulphur plans adopted - 2012



Now focusing on small particulate matter through low sulfur fuels and vehicles emissions standards

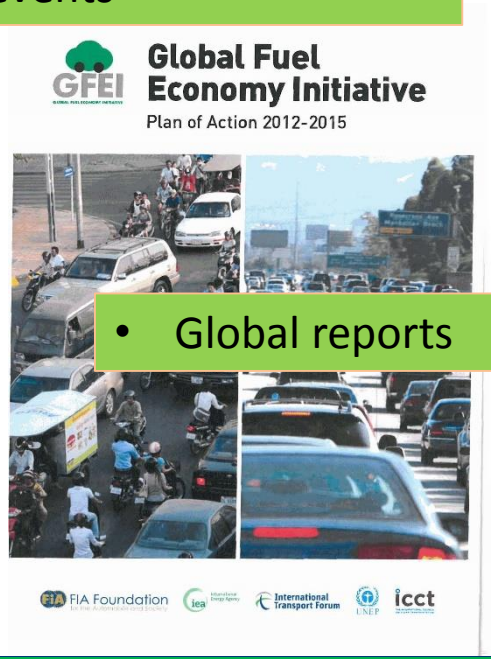
UNEP

Partnering for impact: fuel economy

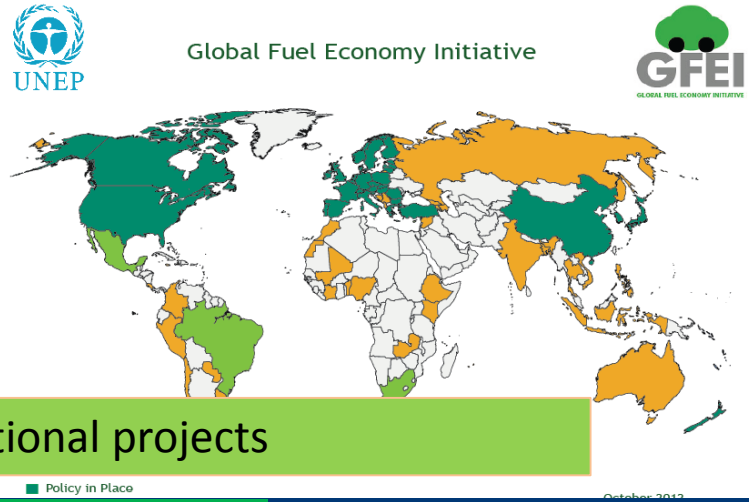
- Regional events

GFEI
GLOBAL FUEL ECONOMY INITIATIVE

- Products (Toolkit)



- Global reports



- National projects

FIA Foundation, UNEP, IEA, ITF, ICCT, UC Davis

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Post-2015: designing and delivering targets

- Applicable to all countries, all incomes
- e.g. road fatality target:
  - H.I. : 4 per 100,000
  - M.I. : 8 per 100,000
  - L.I. : 12 per 100,000

UN Open Working Group

Currently, road safety, air quality and fuel economy are all included in ‘Focus areas’ including health, sustainable cities and energy.

We all need to work to ensure they remain, and are translated into firm targets with political support and resourcing.

Fuel Economy in the Post-2015 Agenda

GFEI
GLOBAL FUEL ECONOMY INITIATIVE

GFEI is an Energy Efficiency Accelerator Initiative for UN Climate Summit 2014

SUSTAINABLE
ENERGY FOR ALL

Road Safety in the Post-2015 Agenda

"I call for more concerted action on **road safety** as part of the future development agenda. This will be a **vital component** of efforts to improve health and save lives in the years ahead."

Ban Ki-Moon, November 2013

April 2014, UN General Assembly Resolution:

Brazil offers to host **Global Ministerial** Conference on Road Safety in **2015**

Long Short Walk

MY World: UN Global Survey for Post-2015

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Cristian Bowen

Vice Minister, Minister of Transport and Communications, Chile

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Chile: Working with GFEI on Fuel economy policy

Conciliate increasing mobility with low emissions and energy consumption

Ministerio de Transportes y Telecomunicaciones

Gobierno de Chile

May 2013

Cristian Bowen
Vice Minister of Transport
@cristianbowen

Agenda

CONTEXT

- General status of Chile
- Empowered Citizenship
- Emission Control and Energy Consumption

WHAT ARE WE DOING?

- Citizen Participation
- Pollution and Energy Efficiency

FUTURE CHALLENGES

CONTEXT

General Status of Chile

General Status of Chile

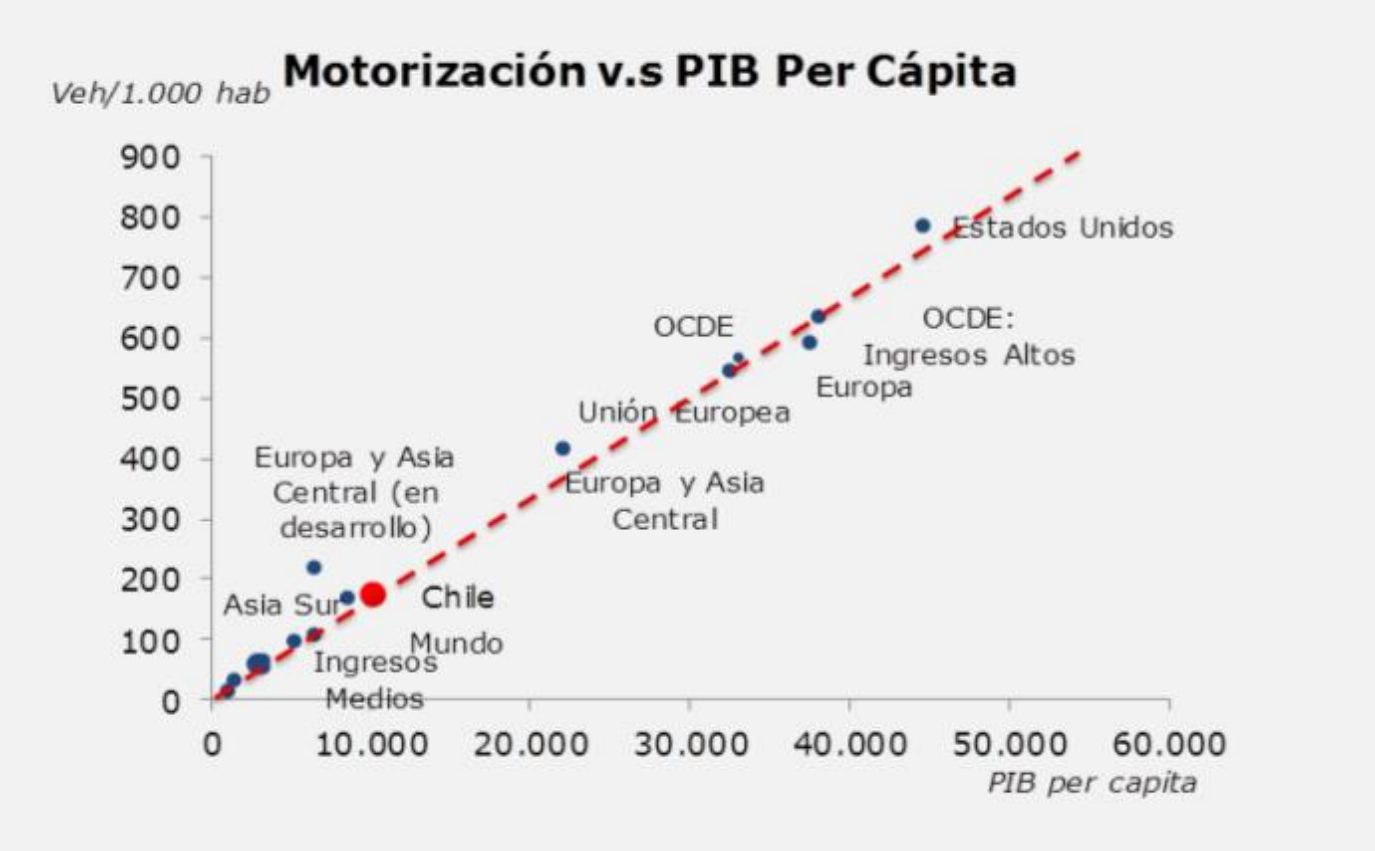
Chile

17.094.275 inhabitants

- Increasing population
- 2.8% extreme poverty*
- ~USD 20.000 GDP
- Santiago, Valparaiso and Concepción concentrate 62% of the population
- Privileged position for the Asia Pacific International Commerce

*Data from Casen Survey 2011

Trends show that in Chile the motorization rate will continue to grow



Source: Transport Outlook 2011, International Transport Forum

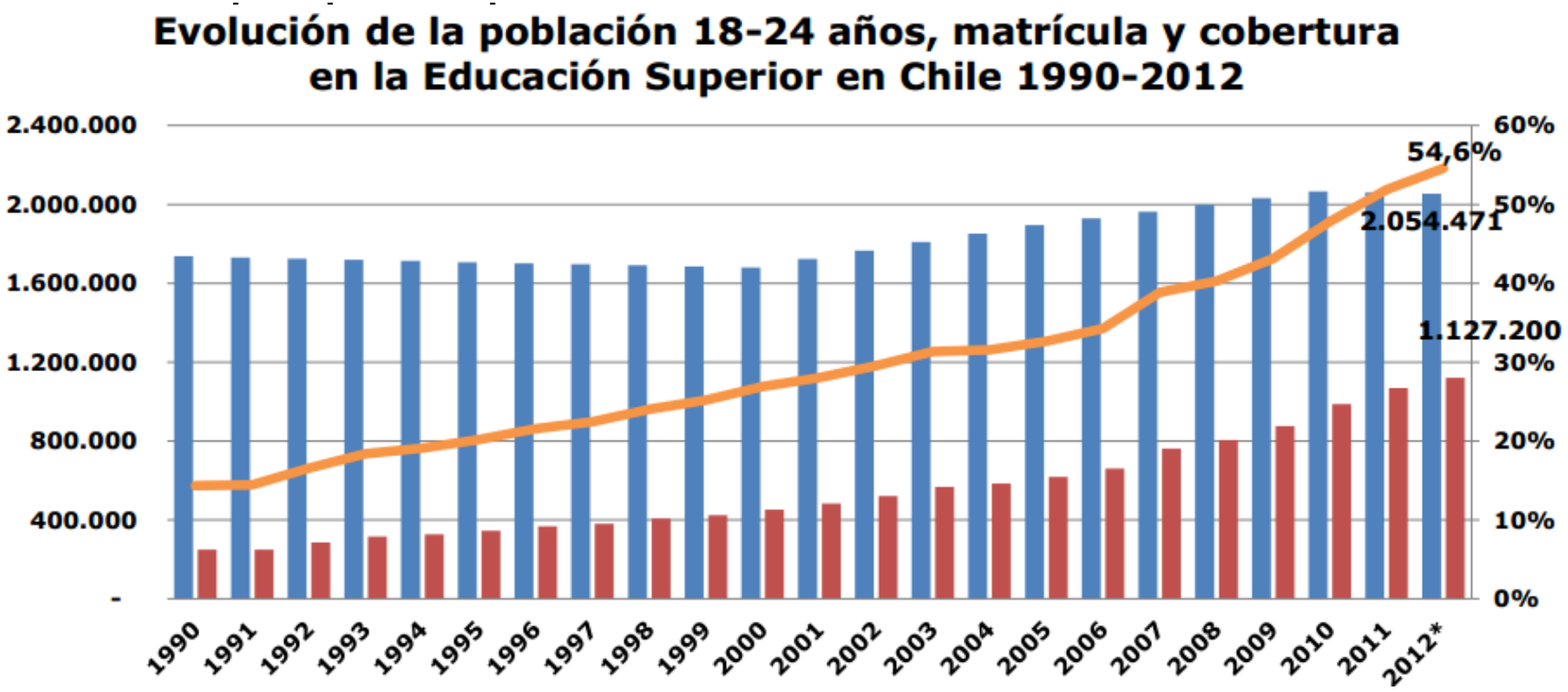
Empowered Citizenship

Ministerio de Transportes y Telecomunicaciones

Gobierno de Chile

New Conditions

- Each time more educated population



Emission Control and Energy Consumption

A little history

- We started (in the mid-90s) a program of **public policy focusing in improving air quality in cities**
- We established a schedule of emissions regulations for new vehicles, which has evolved since EURO III to EURO V
- We implemented a laboratory to certificate new vehicles entering the country
- We improved quality of the fuel (sulfur content less than 15 ppm)

But…turning to Energy Efficiency

- Transportation has the **highest energy consumption in Chile, with 33% of total energy use**, being land transport the most involved, with 80% of it*
- Transport accounts for **25% of total national energy** efficiency potential by 2020**
- Therefore is critical to achieve the development of **projects aimed to establish an efficient use of energy** resources in transportation

*According to the National Energy Balance 2010 (BNE)
** Source: Studies and Energy Program, Universidad de Chile (PRIEN)

Ministerio de Transportes y Telecomunicaciones

Gobierno de Chile

WHAT ARE WE DOING?

Citizen Participation

Citizen Participation

1. Participative Committee Pro Mobility, with proposals agreed with the community to improve mobility in our cities

2. Board of Civil Society, composed of civil non profit organizations

3. The first regional Hackathon (at Concepción City): The new age of big data, with the state as a information provider and encouraging the co-creation with citizens and companies

Pollution and Energy Efficiency

1. Evaluate and improve public transportation systems in the main cities of the country

2. **Efficientl** **elopment of transport s**

- Publi
- Subsi

	Eje Gran Avenida	
	Buses /hr	Partículas Ultrafinas PM 10-40
2006	83	42.898
2013	103	30.116
Variación		-30%

3. **Energy Consumption Labelling for Lightweight Motor Vehicles** to share parameters of vehicular consumption and carbon dioxide

4. Plan “Renew your Bus ” to **improve quality of buses, safer, better and cleaner technology**. Economic incentives to allow the destruction of old machines and replace them.
Subsidies: USD 30.000.000
2.500 buses nationwide
Age: Outgoing buses (20 years) VS Incoming buses (6 years)

Ministerio de Transportes y Telecomunicaciones

Gobierno de Chile

FUTURE CHALLENGES

Future challenges

- We need to face more organized communities: co-creating public policy

- We need to create policies that really promote public transportation and non-motorized modes, while people are increasing incomes

- In terms of energy efficiency, we are going to face technological non marginal changes (hydrogen, electric, hybrid, or another?). What are we going to do?

We are facing huge changes in our world and development of a more efficient system of transportation needs to be aware of that. Let´s work together because I´m sure we will pass the exam.

Thanks

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Date: May 2014

Jose-Luis Irigoyen

Transport Director,

World Bank

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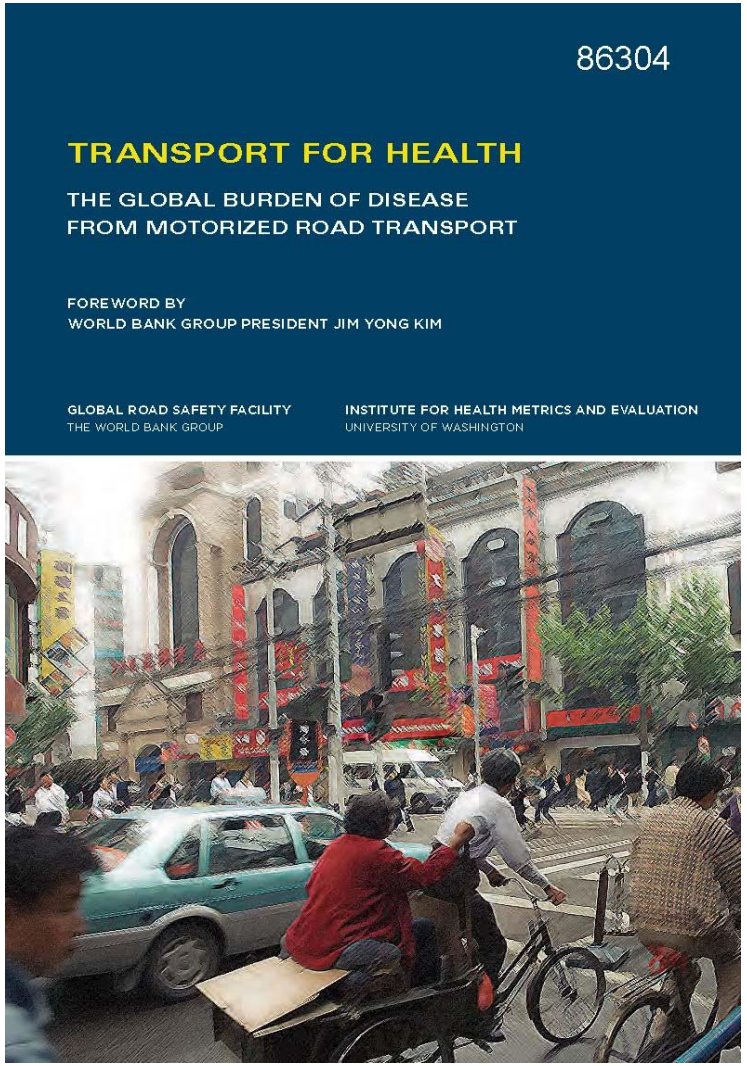
Transport for Health

The Global Burden of Disease from Motorized Road Transport

Jose Luis Irigoyen

Director, Transport, Water and Information & Communications Technology



THE WORLD BANK
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Global Road Safety Facility

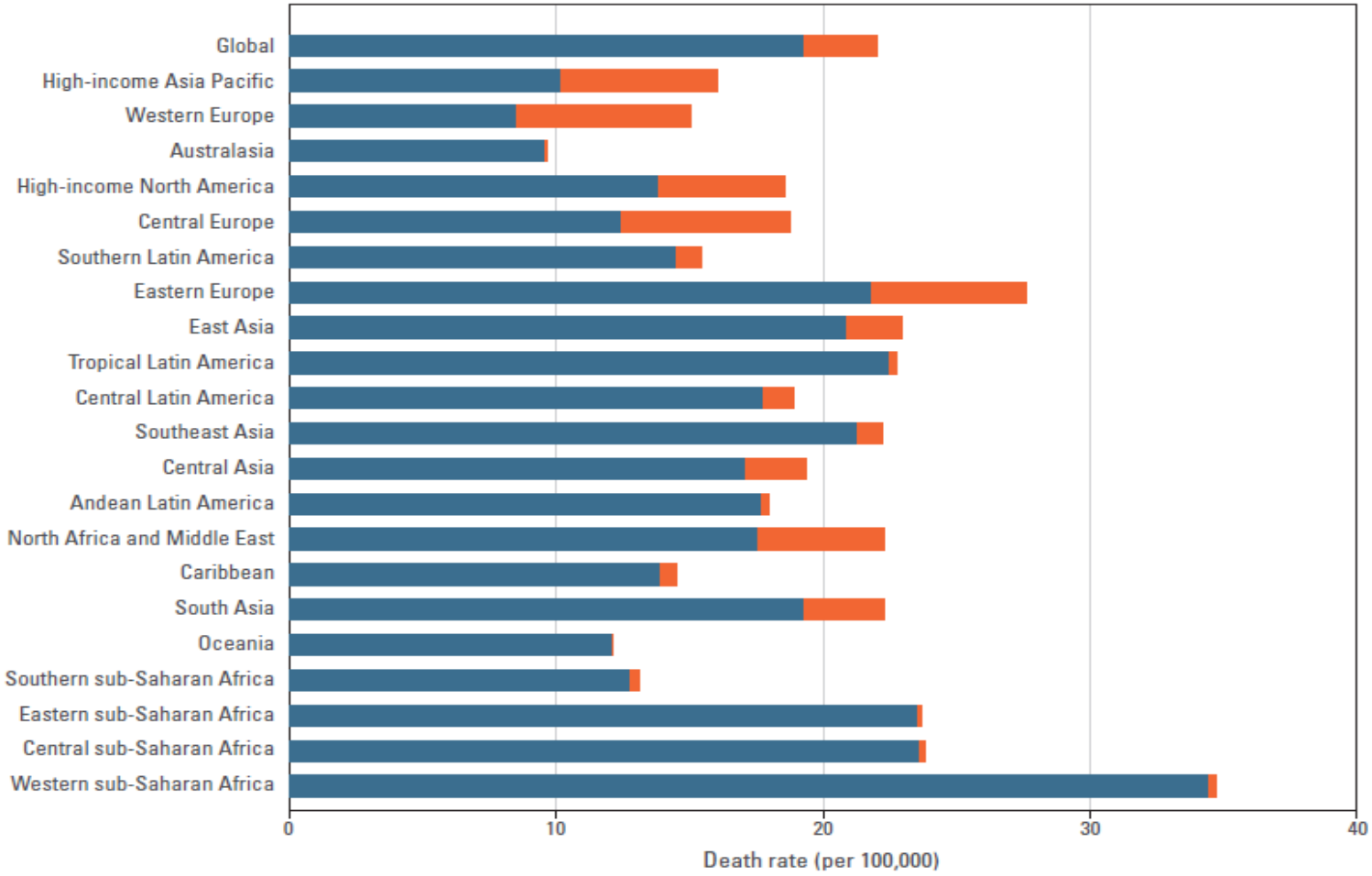
Transport contributes to 6 of the top 10 death causes

Table 1: Leading causes of death worldwide, associated DALYs, and burden attributable to motorized road transport, 2010

Rank	Cause	Global burden of disease		Burden attributable to motorized road transport	
		Deaths	DALYs	Deaths	DALYs
1	Ischemic heart disease	7,029,270	129,795,464	90,639	1,909,563
2	Stroke	5,874,181	102,238,999	58,827	1,148,699
3	COPD	2,899,941	76,778,819	17,266	346,376
4	Lower respiratory infections	2,814,379	115,227,062	5,670	489,540
5	Lung cancer	1,527,102	32,405,411	11,395	232,646
6	HIV/AIDS	1,465,369	81,549,177	–	–
7	Diarrheal diseases	1,445,798	89,523,909	–	–
8	Road injury	1,328,536	75,487,102	1,328,536	75,487,104
9	Diabetes mellitus	1,281,345	46,857,136	–	–
10	Tuberculosis	1,195,990	49,399,351	–	–
	All other causes	24,207,527	1,682,995,639	–	–
	Total	**52,769,676**	**2,482,258,070**	**1,512,333**	**79,613,928**

Road deaths (in blue) are dominant in all world regions

Figure 7: Death rates from injuries and air pollution due to motorized road transport, 2010



Report confirms under-reporting of road traffic deaths

China	India
Reported road death toll : 62,225	**Reported road death toll : 130,037**
GBD 2010 estimates: 283,000	**GBD 2010 estimates: 274,000**
WHO estimates: 275,983	WHO estimates: 231,027
Underreporting: 334%	Underreporting: 111%

Transport for Health: Recommendations

- Scale up road safety programs and crash reporting capacity
- Promote strong institutional development and multi-sectoral collaboration
- Commit resources to realize the health and economic gains from safe and clean transit systems
- Systematically account for the health impact of road projects
- http//:www.worldbank.org/grsf

GRSF
Global Road Safety Facility

Sheila Watson

Director of Environment,

FIA Foundation

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Global Fuel Economy Initiative – Next Steps

Sheila Watson

ITF - Leipzig

May 21st 2014

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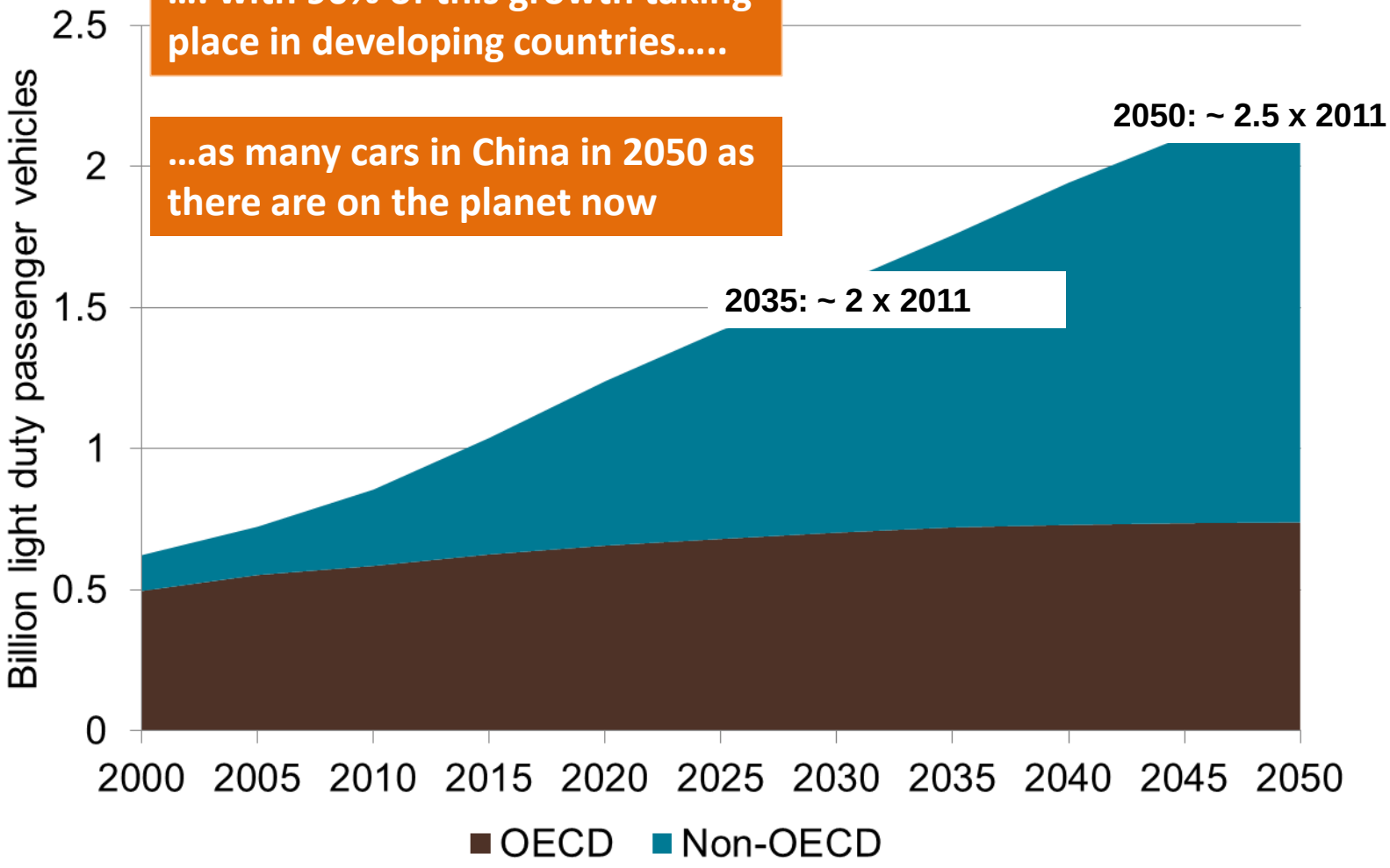
The Global Fleet…

… is set to increase by 2.5 times….
…. with 90% of this growth taking place in developing countries…..

…as many cars in China in 2050 as there are on the planet now



Source: IEA Energy Technology Perspectives, 2012

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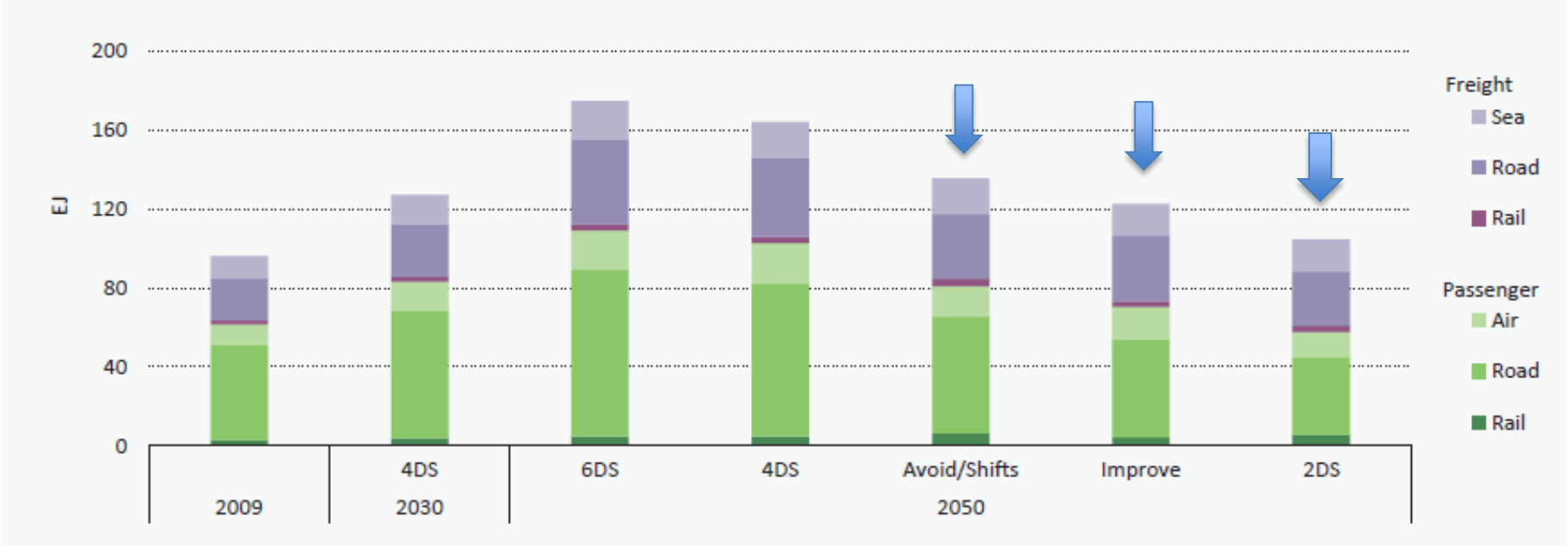
Energy Security



Source: IEA's – likely demand for oil-based fuels - ITP 2013

By 2050, in comparison with a scenario considering current policies (4DS) improved energy efficiency of transport vehicles can reduce transport energy demand by 25% (Improve)
20% energy savings can avoided/shifted transport to more efficient modes (Avoid/Shifts)
Combined, these two contributions lead to 35% lower energy demand (2DS)

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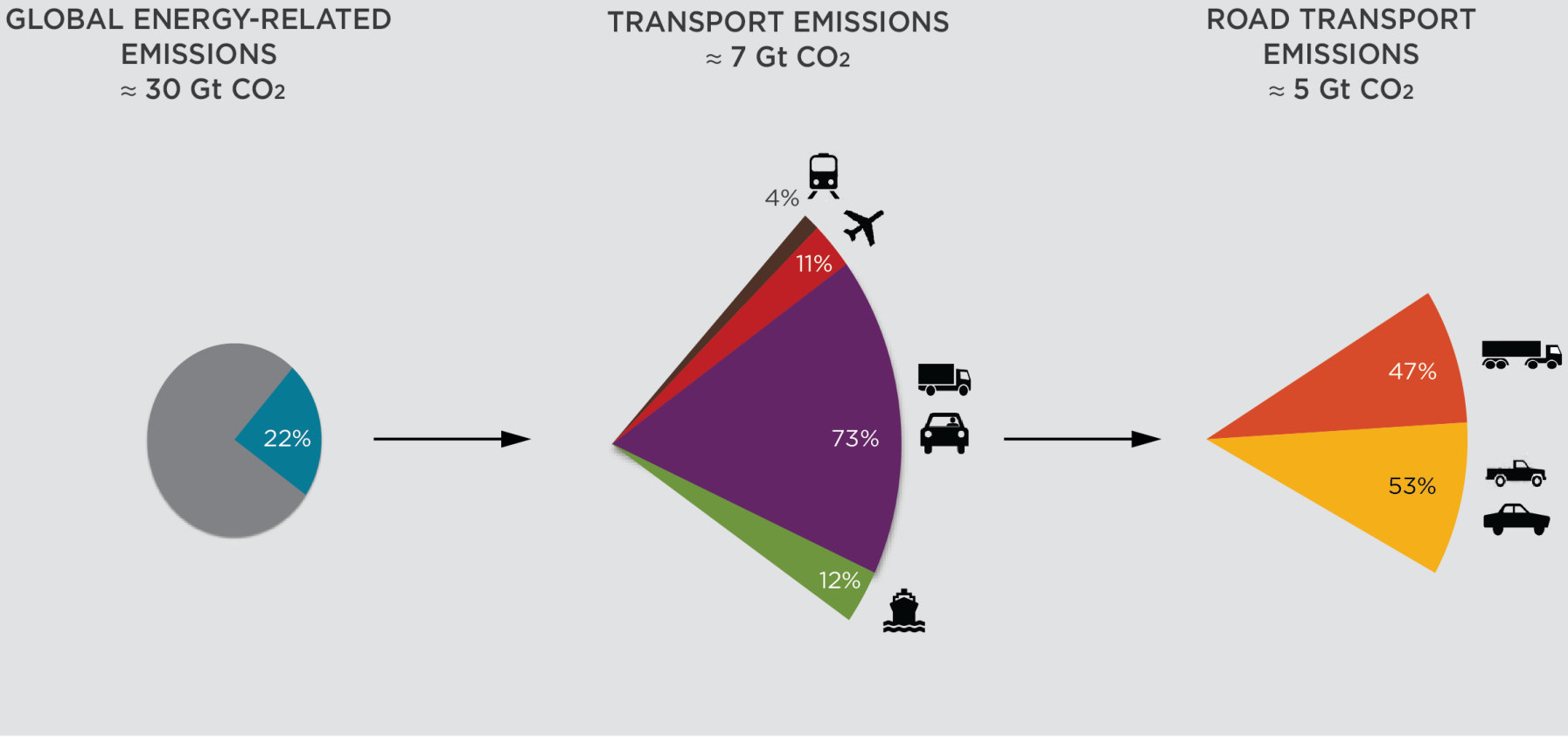
THE TRANSPORTATION SECTOR

A major contributor to global energy-related CO_2 emissions



LEGEND

RAIL | AIR | ROAD | SEA | HEAVY-DUTY VEHICLES | LIGHT-DUTY VEHICLES

Sources:
ICCT (2014). Global Transportation Roadmap Model. Version 2.0. More information available at http://www.theicct.org/global-transportation-roadmap-model.
IEA (2012). CO2 Emissions from Fuel Combustion: Highlights. 2012 edition. Retrieved from https://www.iea.org/co2highlights/co2highlights.pdf.

Air Pollution

World Health Organization: small PM is affecting more people than any other pollutant…

…with ~3.2 mln premature deaths annually….

…this is growing* problem, *with an 11% increase globally in deaths from air pollution in the past 20 years – as the Global Burden of Disease report released yesterday shows

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IEA estimates that the world will invest USD 400 trillion in fuels and vehicles by 2050…..

- **what personal mobility systems will we use?...**
- **what vehicles will we buy?...**
- **running on what fuels, and what kind of roads?…**
- **with what energy, health and climate impacts?...**
- **how can we influence this vast investment?**

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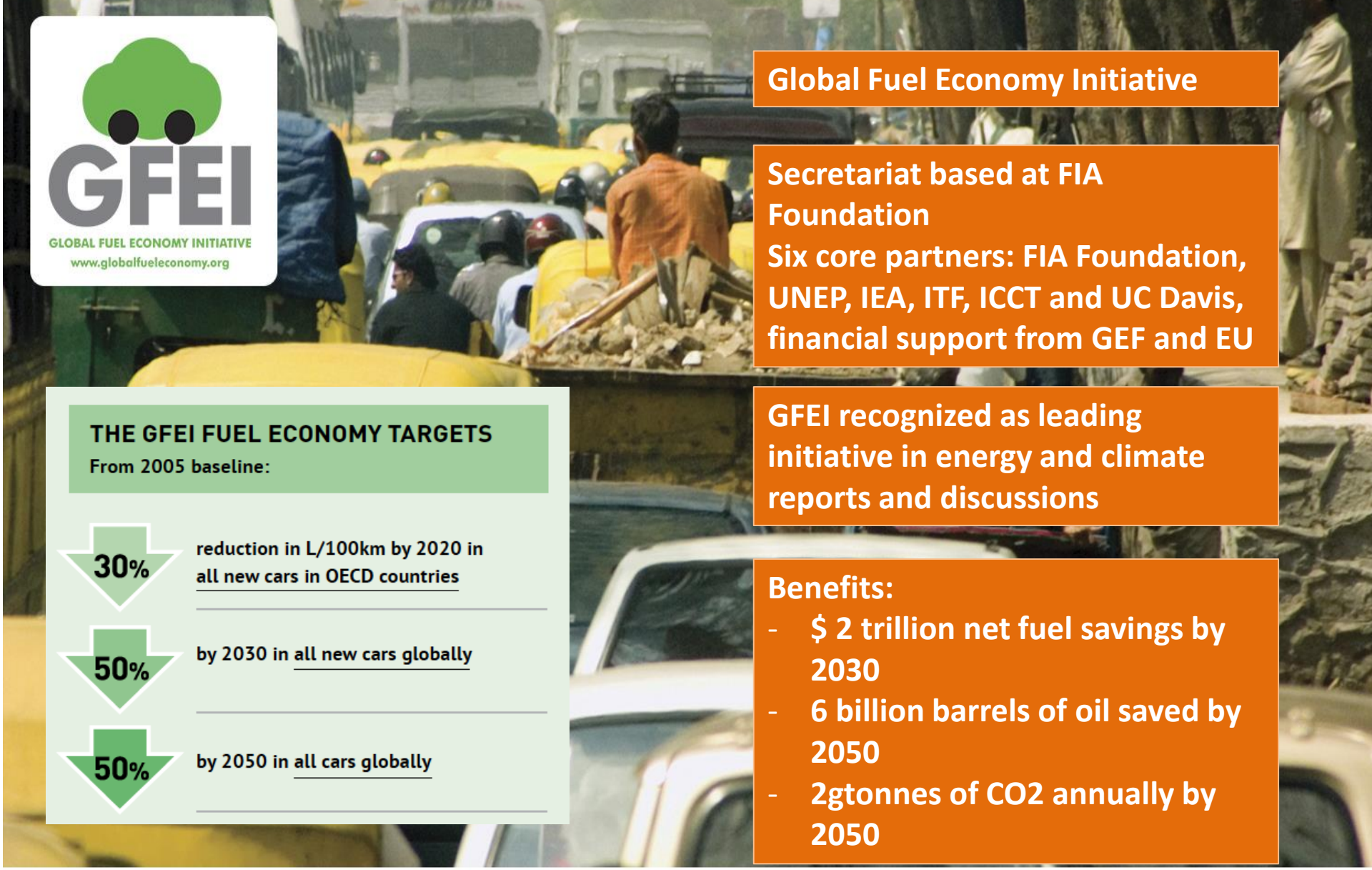

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www.globalfueleconomy.org

Global Fuel Economy Initiative

Secretariat based at FIA Foundation
Six core partners: FIA Foundation, UNEP, IEA, ITF, ICCT and UC Davis, financial support from GEF and EU

GFEI recognized as leading initiative in energy and climate reports and discussions

Benefits:
- $ 2 trillion net fuel savings by 2030
- 6 billion barrels of oil saved by 2050
- 2gtonnes of CO2 annually by 2050

THE GFEI FUEL ECONOMY TARGETS

From 2005 baseline:

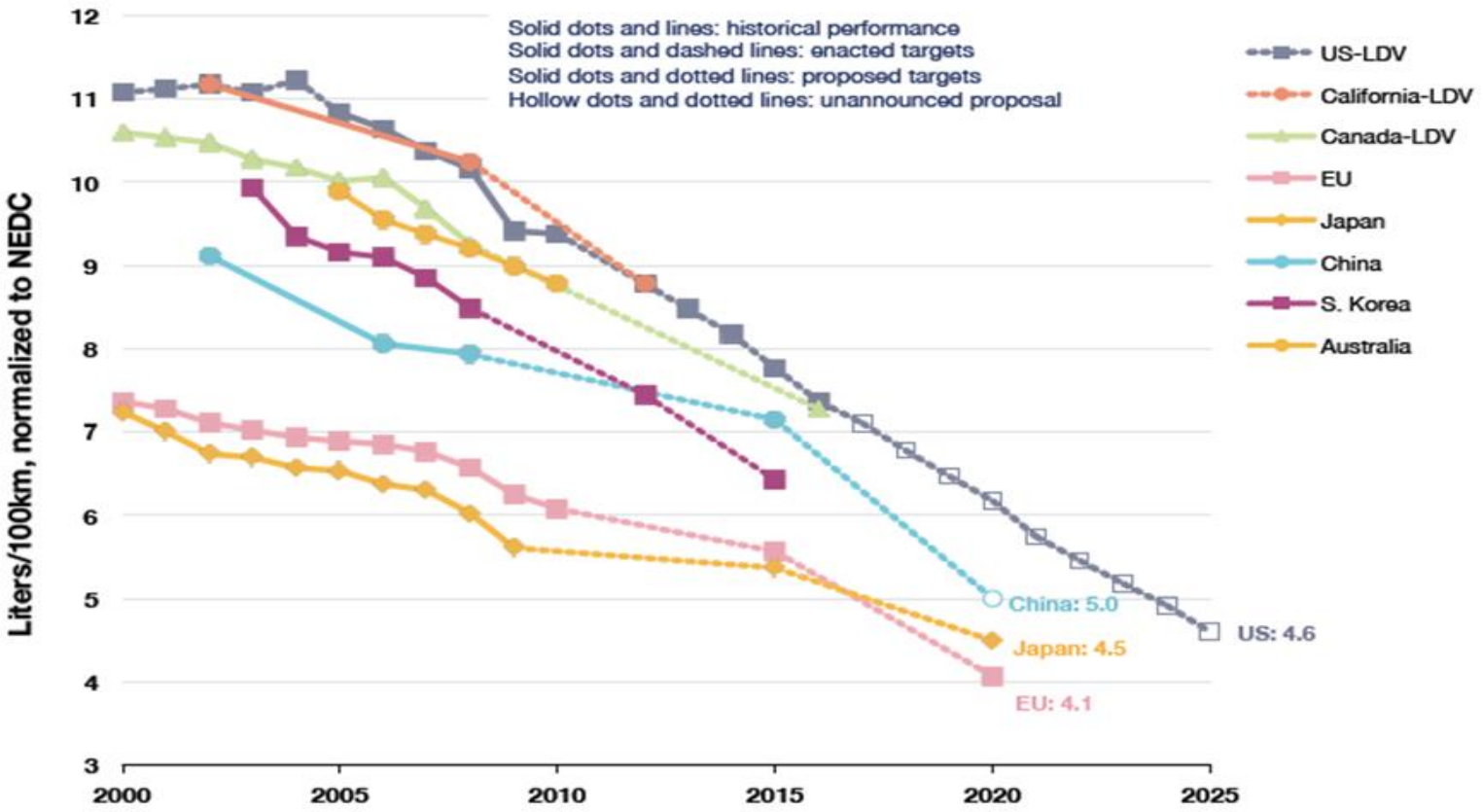
30% reduction in L/100km by 2020 in all new cars in OECD countries

50% by 2030 in all new cars globally

50% by 2050 in all cars globally

FIA Foundation for the Automobile and Society
UNEP
UCDAVIS INSTITUTE OF TRANSPORTATION STUDIES
iea International Energy Agency
icct THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION
International Transport Forum

Historical fleet fuel consumption performance and current or proposed standards



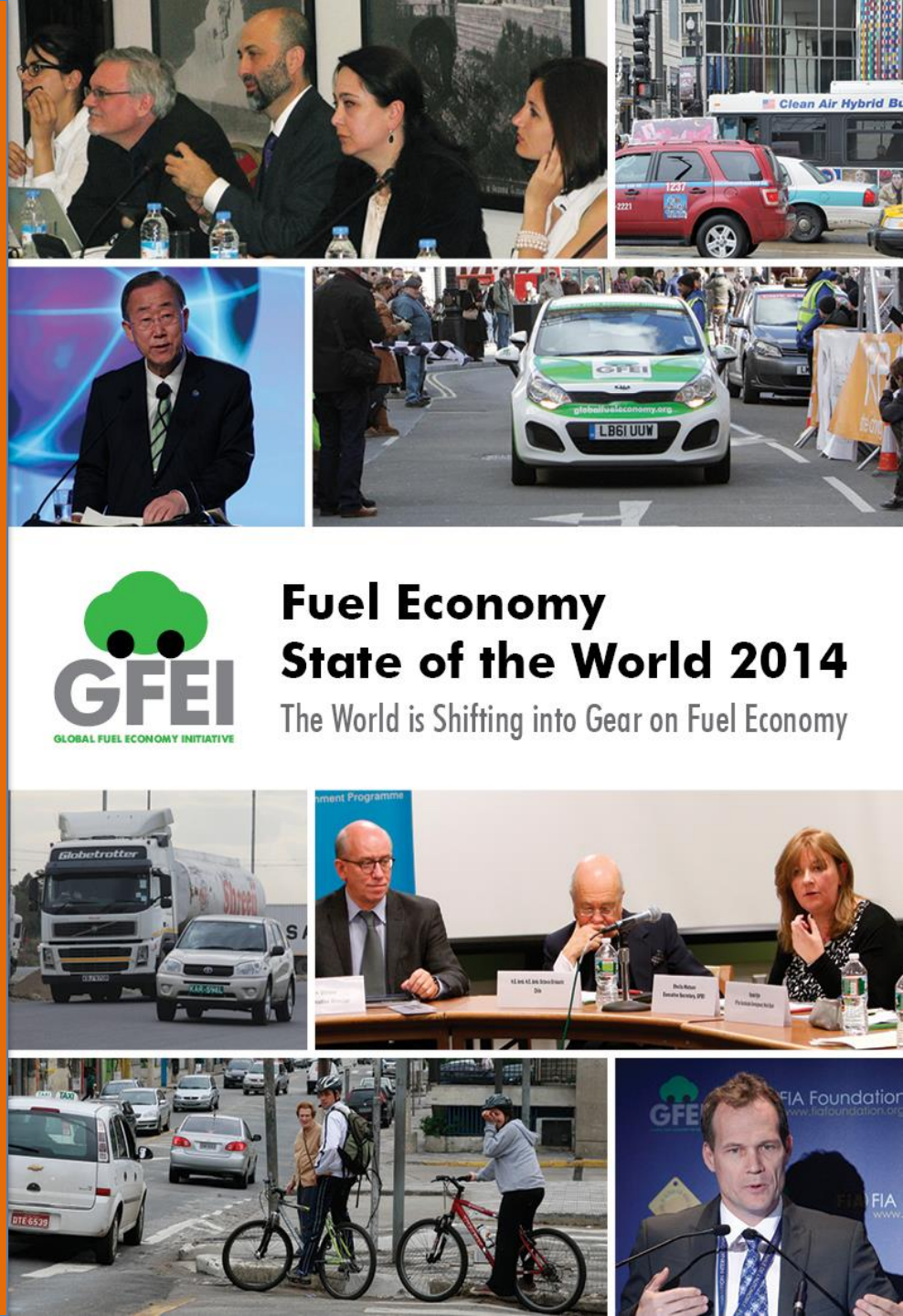
	2005	2008	2011	Trend%
OECD	8.1	7.6	7	-2.4
non-OECD	7.5	7.6	7.5	-0.1
Global	8	7.6	7.1	-1.8

Research

- *State of the World*
- *Cost-benefit of fuel economy policies ($2 trillion net savings by 2030)*

And in 2014……

- *IEA data analysis*
- *Green labelling*
- *On-road performance and off-road testing (clubs)*
- *FE for car importers*



In-country:

- ***Kenya***
- ***Chile***
- ***Georgia***

And in 2014……

- ***China***
- ***Russia***
- ***Mexico***
- ***Middles East***
- ***Caribbean***

Global Awareness Raising

Rio+20	GFEI made a commitment as part of SLoCat's transport group
G20	Energy Efficiency is a key component - Working with US Government/Australia
SE4ALL	GFEI is a High Impact Opportunity under the Se4ALL Initiative, and as such has had success as part of the SDG development process
Sec Gen's Climate Summit	GFEI is a potential accelerator at the Sec Gen's Climate Summite
POST 2015 Framework	GFEI is supporting an energy band transport target on fuel economy/efficiency

Sustainable Development Goals (SDGs)

'To double the global rate of improvement in energy efficiency in transport' **(High Level Panel – 2013)**

***There is a need for policy interventions that encourage….increased vehicle efficiency' (*UN Habitat – 2013)**

Air pollution

- **Double people living within WHO limits by 2030**

Climate & energy

- **Double the efficiency of the global fleet by 2050**

GFEI
GLOBAL FUEL ECONOMY INITIATIVE

Fuel Economy and the UN's Post 2015 Sustainable Development Goals

The Global Fuel Economy Initiative (GFEI) has shown that fuel economy improvements from conventional internal combustion engine cars can save a staggering $2 trillion in un-used fuel over the next decade, freeing up those valuable resources for other development priorities, such as education, health, infrastructure, or indeed the promotion of other transport technologies or modes such as electric vehicles.

Cost-effective technology improvements such as weight reduction, and stop-start hybridization, could keep fuel demand steady by 2050 – even with the predicted tripling of the global fleet – and thereby save close to half of the CO_2 emissions from cars by this date. But we need a global commitment to fuel economy if we are to see the policies put in place to achieve this.

gef

THE WORLD WE WANT

SUSTAINABLE ENERGY FOR ALL

CLIMATE
SUMMIT 2014
CATALYZING ACTION

May 4-5, Abu Dhabi Ascent

ITF Leipzig, May 21-23rd

SE4All Forum, New York, June 4-6, 2014

GFEI Accelerator Meeting Paris July 4th 2014

UN Secretary General Climate Summit, New York, September 23, 2014

G20 Annual Meeting, Brisbane, November 2014

COP, Paris 2015

SDGs, NYC 2015

GFEI's Accelerator Symposium July 4th 2014 - Quai D'Orsey, Paris.

Co-hosted by the French Government, *where we will be developing a Commitment at the US SG Summit in September 2014*

What can you do?

Participate and become part of the commitment

Show that your commitment to energy efficiency in transport is real!


THANK YOU
http://globalfueleconomy.org
@GlobalFuelEcon
#ITF2014 #Climate2014
#SE4ALL #SDGs
#post2015 #fuelecon2030
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