GFEI
GLOBAL FUEL ECONOMY INITIATIVE

GIZ Transport & Climate Change Week

Berlin, Germany

27th Sep 2018

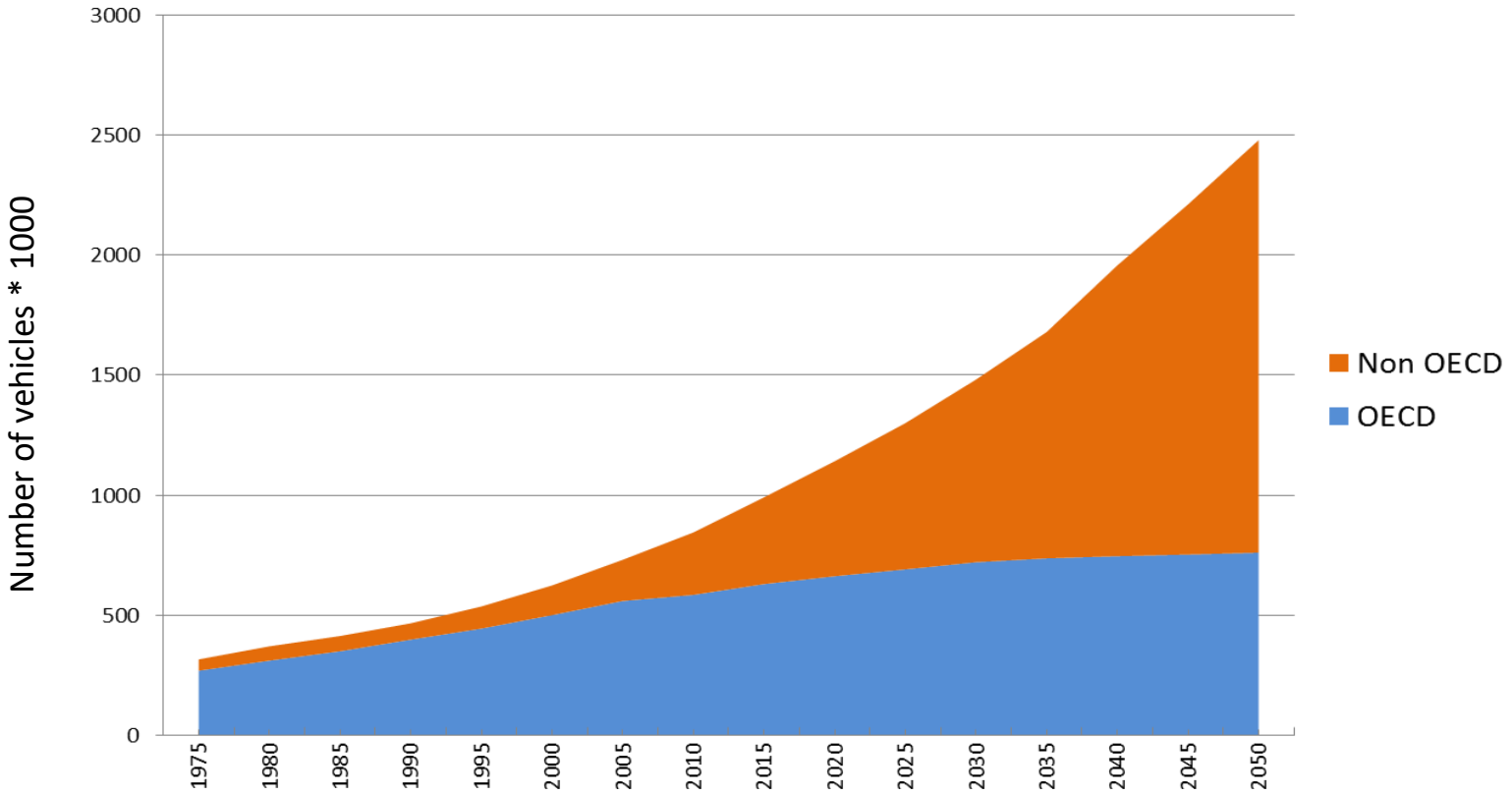
UN environment

David Rubia

UN Environment

Air Quality & Mobility Unit

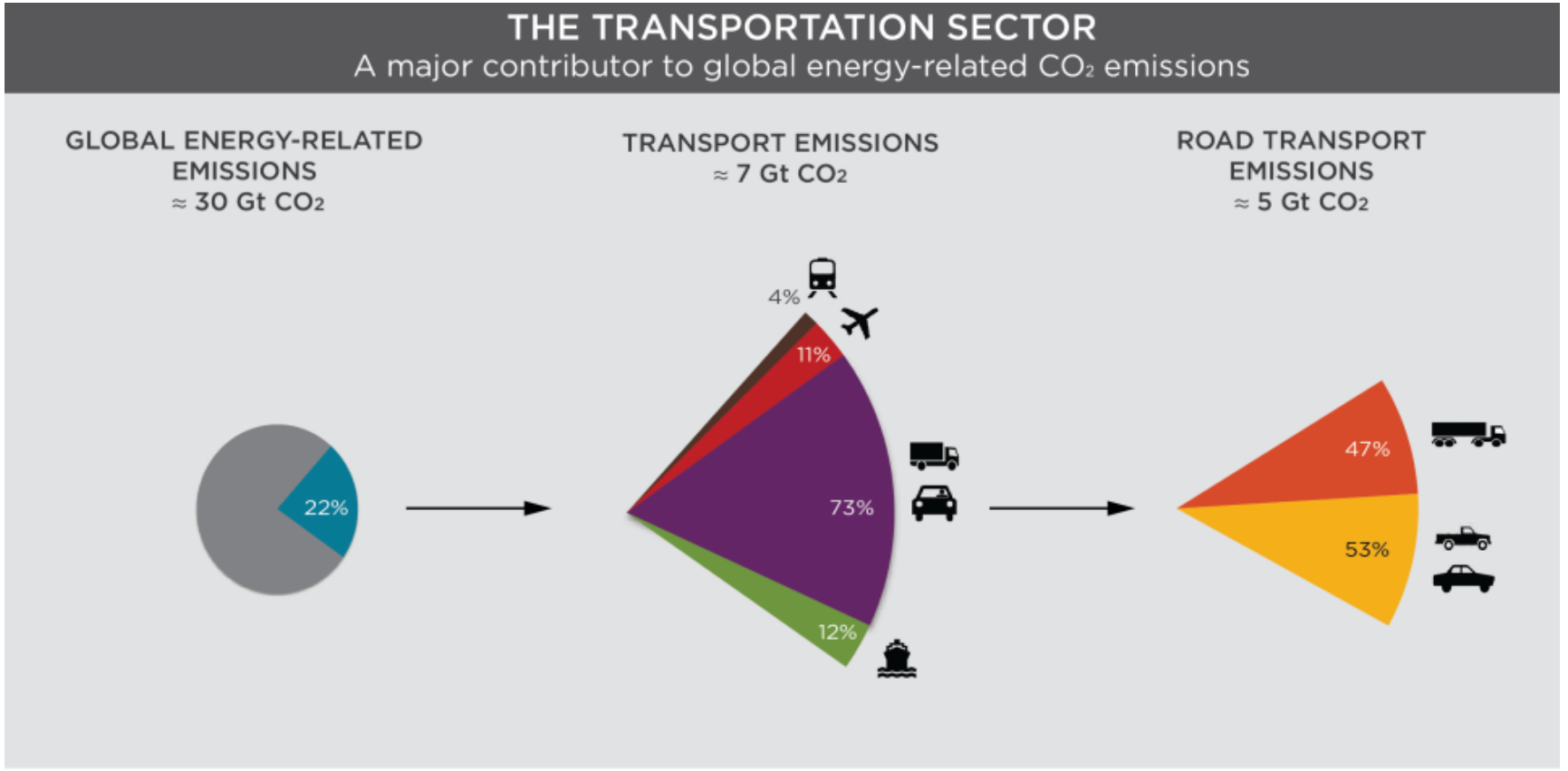
Motor vehicles ~ 1 billion today…
over 2.5 billion by 2050



- 90%+ of growth in developing, emerging economies
- Opportunity for energy efficiency, green economy innovation

Source: IEA

Increasing CO_2 emissions from transport



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.

THE GFEI FUEL ECONOMY TARGETS:

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

50% reduction
in L/100km by 2030 in **all new cars globally**

50% reduction
in L/100km by 2050 in **all cars globally**

FIA FOUNDATION

UN environment

icct
THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION

ITS UCDAVIS
INSTITUTE of TRANSPORTATION STUDIES

iea International Energy Agency

International Transport Forum

FIA FOUNDATION

gef

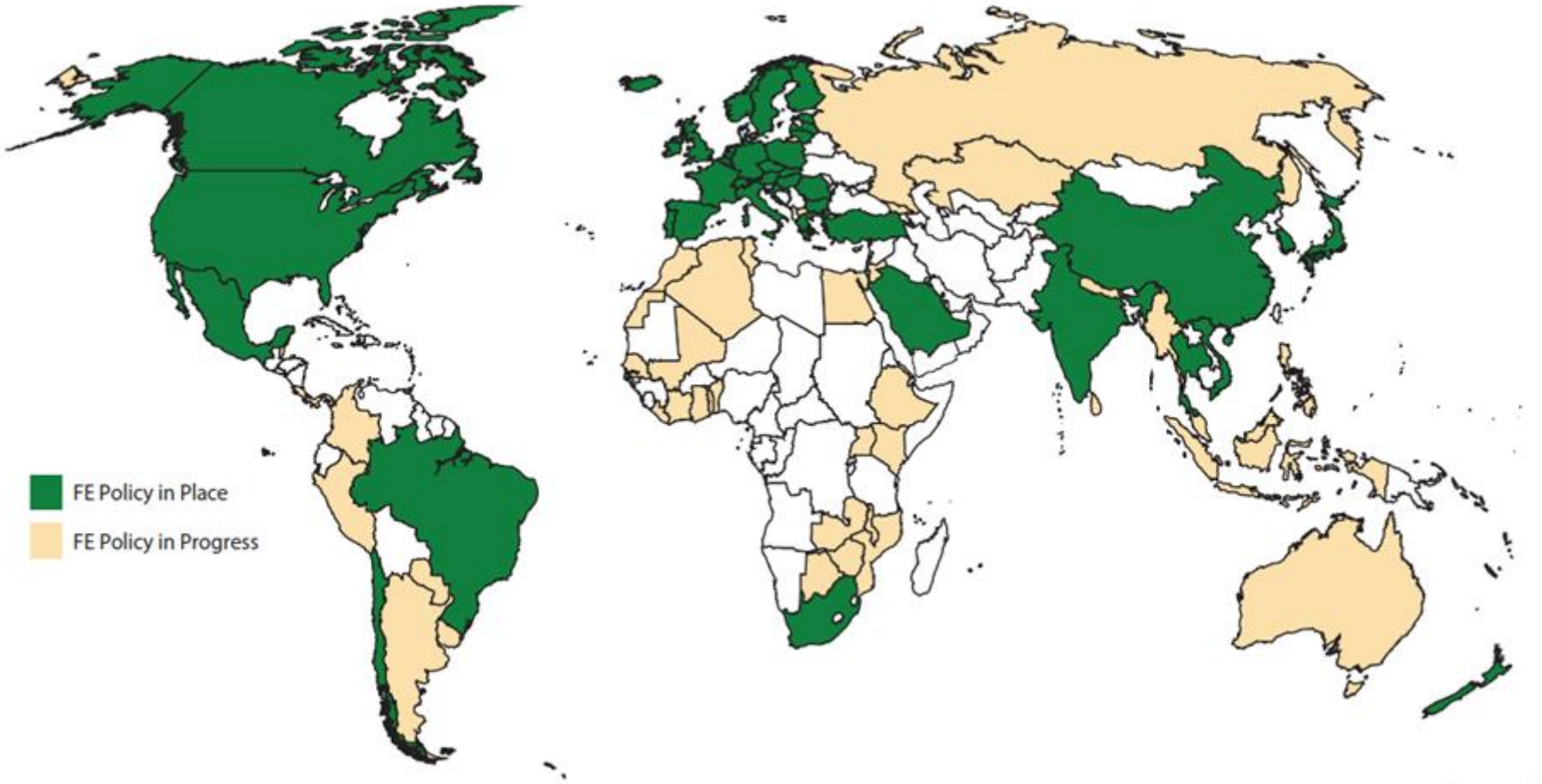
Doubling the efficiency of the global car fleet by 2050

			2005	2008	2010	2012	2014	2015	2030
OECD & EU average	average fuel economy (Lge/100km)		8.8	8.2	7.8	7.6	7.4	7.3	
	annual improvement rate (% per year)			-2.3%	-2.8%	-1.6%	-1.3%	-0.5%	
					-1.8%				
Non-OECD average	average fuel economy (Lge/100km)		8.5	8.5	8.4	8.2	8.0	7.9	
	annual improvement rate (% per year)			-0.1%	-0.3%	-1.4%	-1.2%	-1.6%	
					-0.8%				
Global average	average fuel economy (Lge/100km)		8.8	8.3	8.1	7.8	7.6	7.6	4.4
	annual improvement rate (% per year)			-1.8%	-1.6%	-1.3%	-1.3%	-1.1%	
					-1.5%				
GFEI target	required annual improvement rate (% per year)	2005 base year	**-2.8%**						
		2015 base year							**-3.7%**

- Slowing improvement in OECD countries
- Increasing improvement in non-OECD but not enough
- Still far from meeting the GFEI target

Source: IEA/ GFEI, 2017

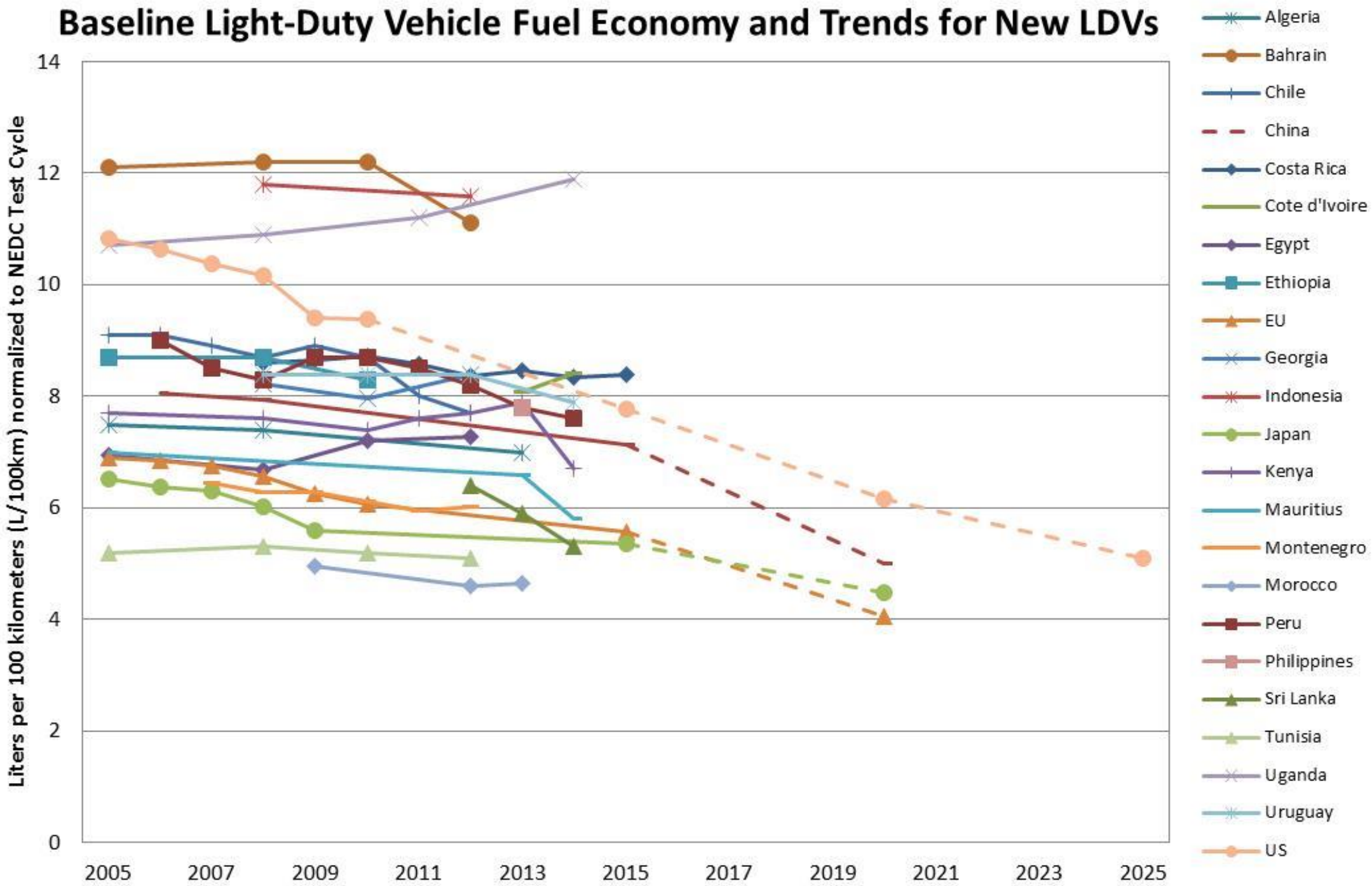
Global progress on fuel economy



We support developing and transitional countries

Phase 1 – Pilot countries and tool development	Phase 2 – Regional Rollout		Phase 3 – Global Rollout		Pending Resources	
Chile	Mauritius	Uganda	Nigeria	Honduras	Angola	Serbia
Ethiopia	Vietnam	Ukraine	Tanzania	Namibia	Bhutan	Solomon Islands
Indonesia	Thailand	Malaysia	Rwanda	El Salvador	Burkina Faso	Sierra Leone
Kenya	Georgia	Egypt	Argentina	Botswana	Cambodia	Albania
	Ivory Coast	Kazakhstan	Jordan	Mozambique	Cameroon	Brunei
	Costa Rica	Mali	Brazil	Liberia	Cape Verde	Afghanistan
	Peru	Togo	Colombia	Myanmar	D.R. Congo	Yemen
	Algeria		Panama	Bangladesh	Eritrea	Turkmenistan
	Montenegro		Belize	Burundi	Guinea	Samoa
	Russia		Dominican Republic	South Africa	Pakistan	Gambia
	Jamaica		Djibouti	Mongolia	Kyrgyzstan	Uzbekistan
	Macedonia		Guatemala	Fiji	Laos	Nicaragua
	Morocco		Moldova	Bolivia	Lesotho	
	Bahrain		Iran	Ecuador	Marshall Islands	
	Tunisia		Barbados	Senegal	Oman	
	Benin		St. Lucia	Lebanon	Kuwait	
	Uruguay		Zambia		Niger	
	Nepal		Ghana		Tajikistan	
	Philippines		Malawi		Armenia	
	Sri Lanka		Zimbabwe		Azerbaijan	

Baseline Light-Duty Vehicle Fuel Economy and Trends for New LDVs



Fiscal incentives for used EV imports present a huge opportunity in developing & transitional countries

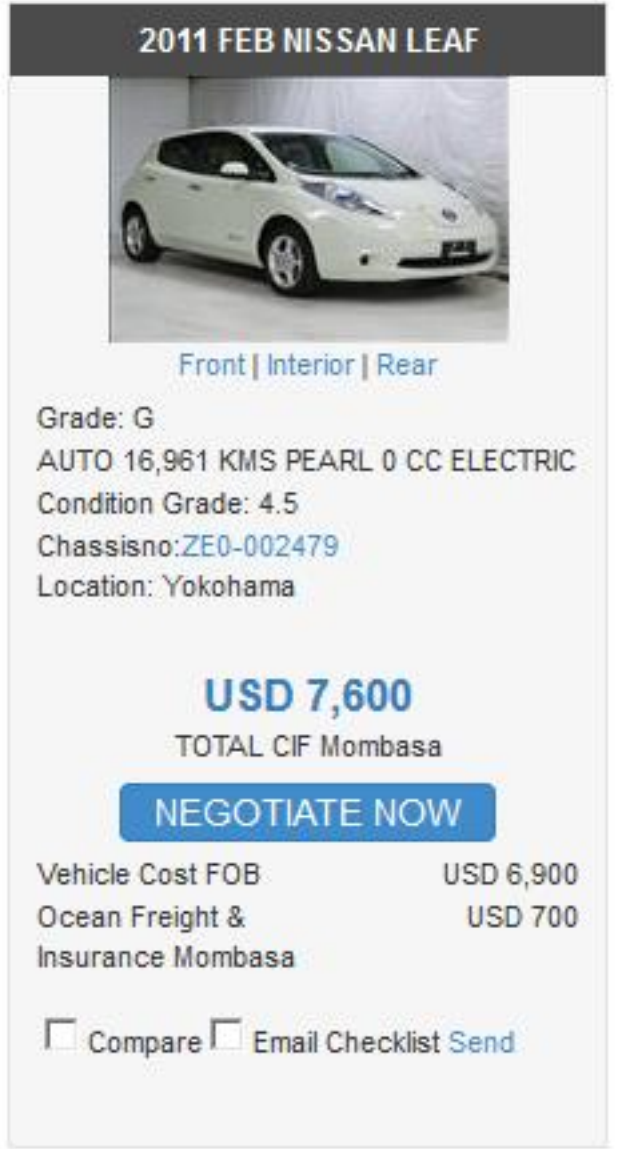
- Uptake of EVs will follow the pattern of conventional cars – import of used vehicles

- Many importing countries have high taxes on used cars

Kenya:

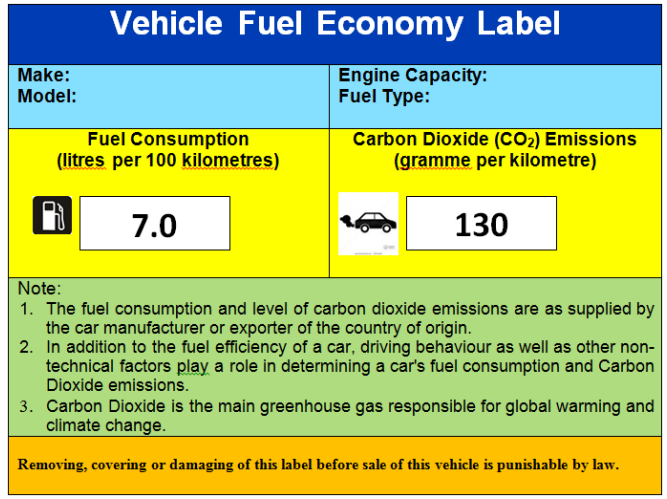
  - Import duty: 25% of CIF value of the car
  - Excise duty: 20% of CIF value + import duty
  - VAT: 16% of CIF value + import duty + excise duty
  - IDF: 2.25% of CIF value or USD 50 (whatever is higher)

→ There are plenty of opportunities to incentivise the purchase of used EVs through tax breaks



Incentivizing electric cars in **Mauritius** through the GFEI

- 2010: Work started with support to shift to low sulphur diesel
- 2011 Adoption of a CO_2 based feebate scheme
- 2011: 50 % excise duty & registration fee waived on electric & hybrid cars
- 2013 Amendment of the feebate scheme
- 2016: feebate scheme replaced by a taxation system with additional incentives to electric vehicles



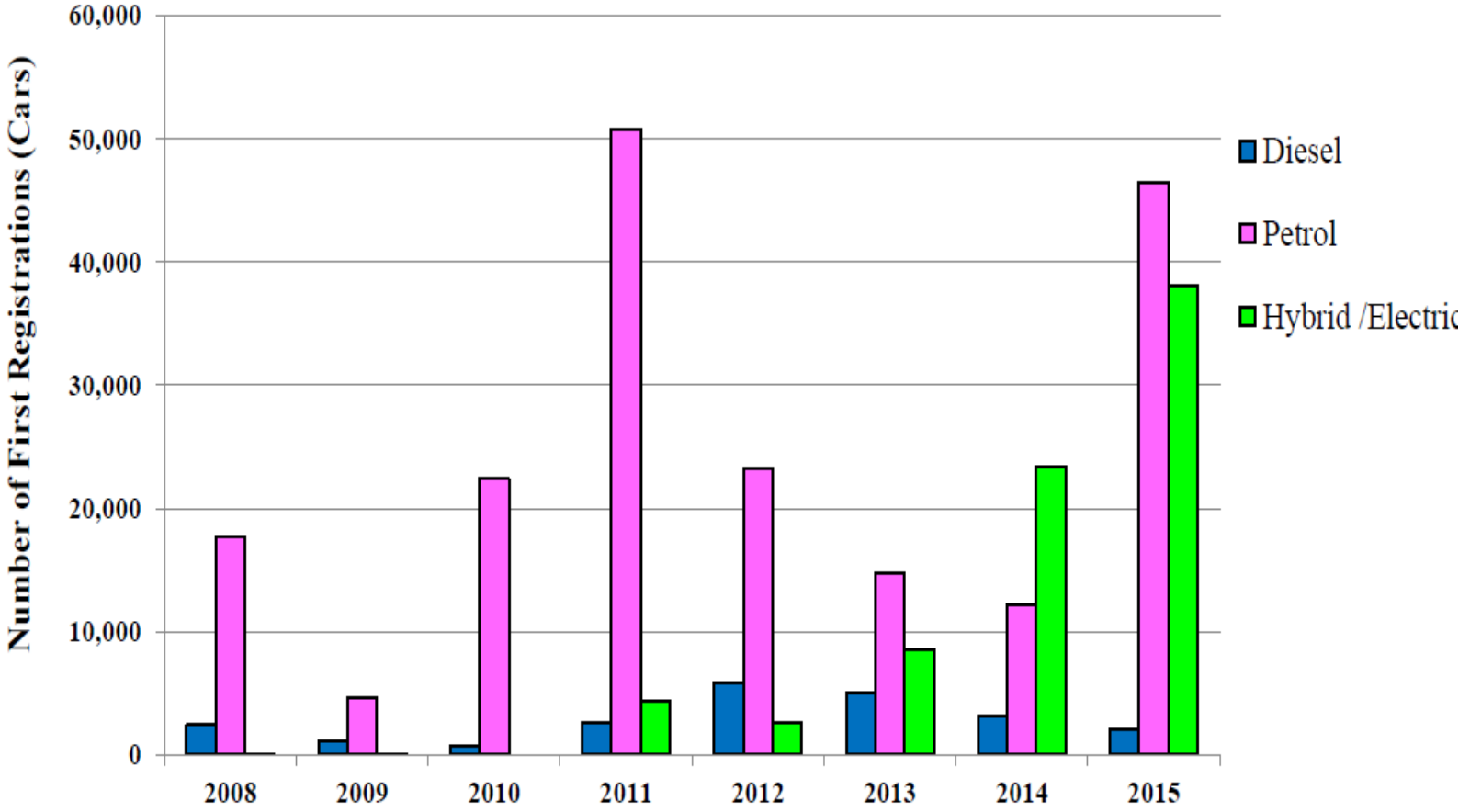
Next steps:

Introduce dedicated EV policies
Develop recharging infrastructure projects
Foster local manufacturing

GFEI
GLOBAL FUEL ECONOMY INITIATIVE

Changes to tax scheme in **Sri Lanka** has resulted in a spike in hybrids and EVs

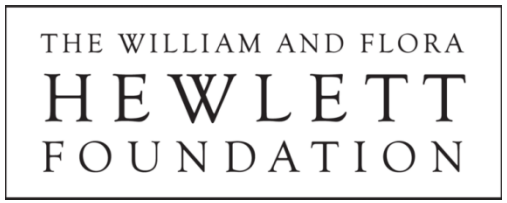
- Excise Tax: Hybrid-Petrol 58%; Petrol 253%; Diesel 345%
- Fully electric vehicles levied at 25%.
- Hybrid and electric cars in 2014 were 56% of new



GFEI Toolkit is a good resource for policymakers

http://www.globalfueleconomy.org/in-country/gfei-toolkit

Thank you!
david.rubia@un.org



Regional
Environment
Center