

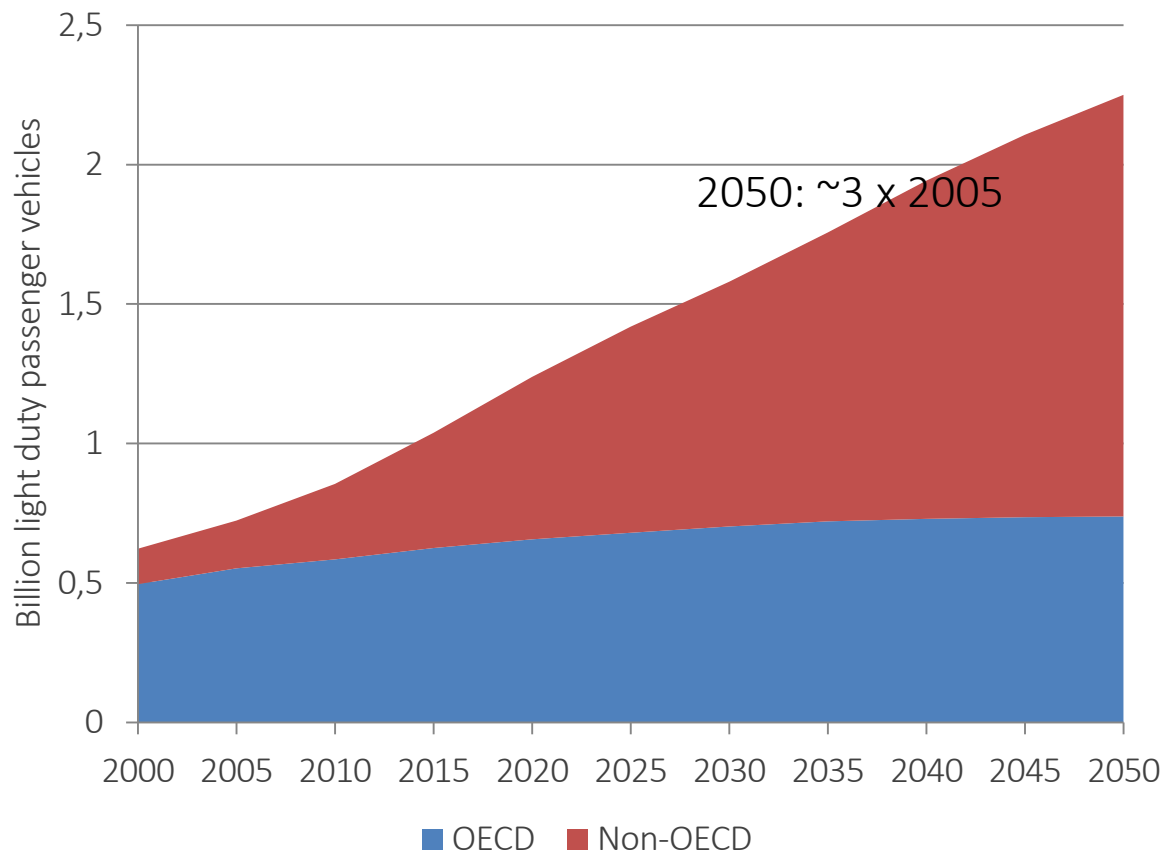
Global Fuel Economy Initiative

Iniciativa Mundial para el Ahorro de Combustibles



Flota global de vehículos se triplicará en 2050

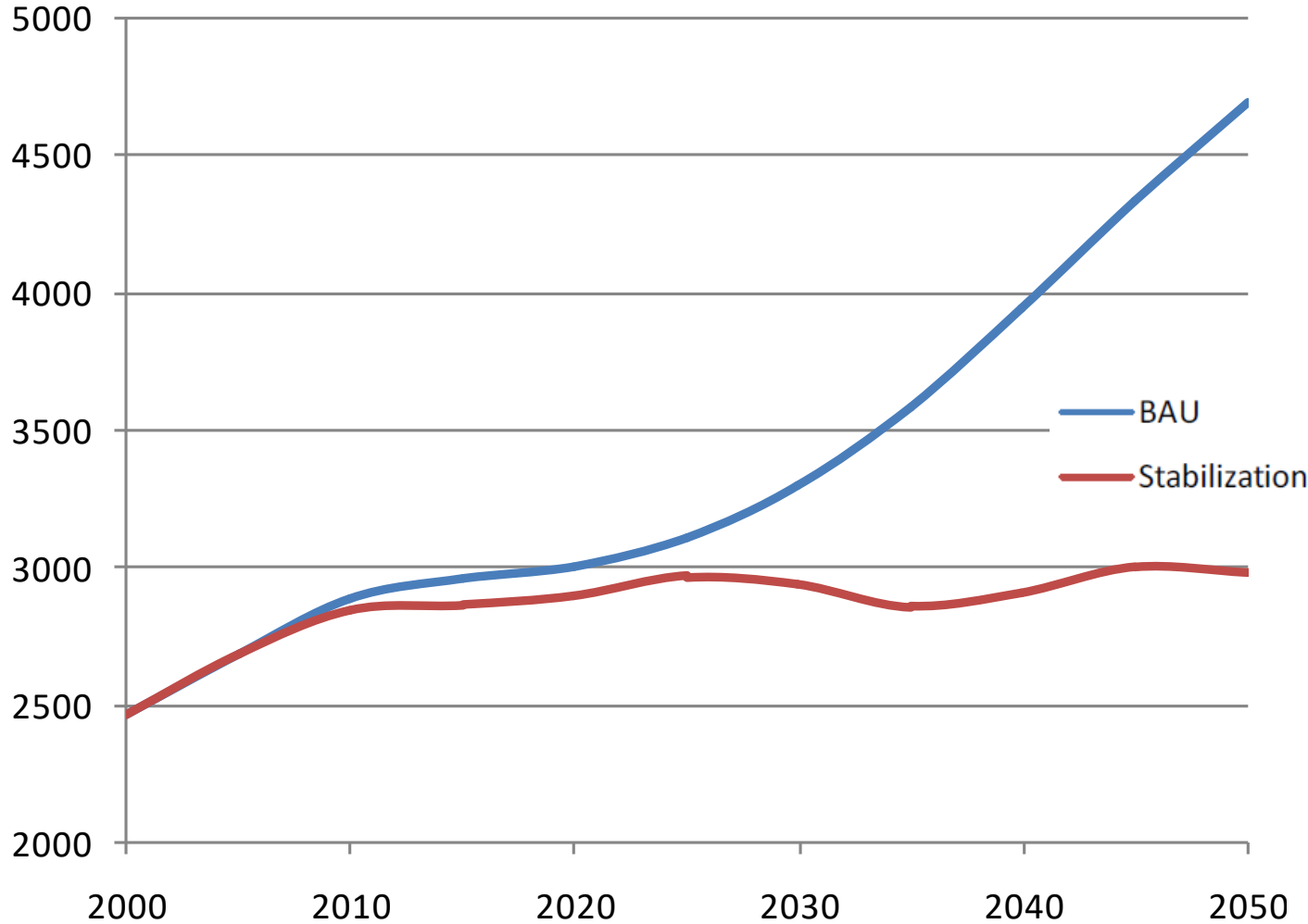
- 890 millones hoy... más de 2,500 millones en 2050
- 90% del crecimiento en **países emergentes y en desarrollo**
- Oportunidad para la promover **innovación**



- América Latina entre los continentes con mayor aumento de motorización
- Pocos países tienen estrategias para preparar este escenario



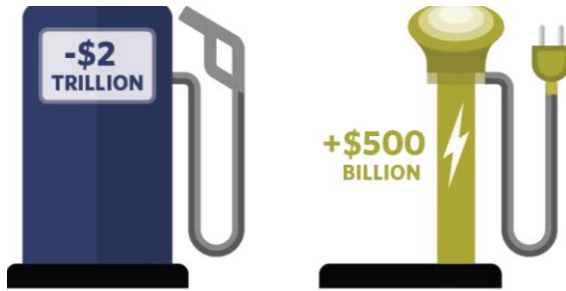
Tendencia Actual vs Escenario con GFEI: consumo de combustible, CO₂ de vehículos se duplica 2000-2050 (IEA)



*Para limitar las emisiones:
Ahorro de combustibles
reduciendo el uso de combustibles para vehículos por 50% para el año 2050 + medidas complementarias*

QUÉ PUEDE OFRECER EL AHORRO DE COMBUSTIBLES?

AHORROS FINANCIEROS



\$ 2 trillones de ahorros

Un total de **\$2 trillones** se podría hacer en el ahorro de combustibles para 2025,

\$500 mil millones de los cuales financiaría los costos de iniciar una transición a vehículos eléctricos

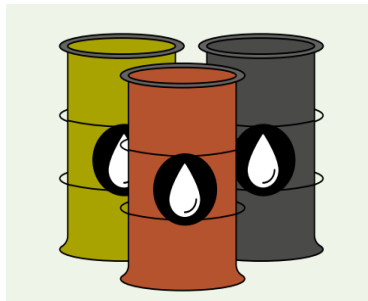
EMISIONES MAS BAJOS EN CARBONO



300 centrales eléctricas menos

El **33Gt** de CO₂ que se podría ahorrar entre 2015 y 2050 equivale aproximadamente al cierre de **300** centrales eléctricas de carbón durante el mismo período

DEPENDENCIA REDUCIDA DE PETRÓLEO



AHORROS FINANCIEROS



De asociadas mejoradas normas de emisiones vehiculares

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

Lanzado en 2009, con objetivo de duplicar la economía de combustible (50by50)

Seis socios principales: FIA Foundation, ONU Ambiente, ICCT, ITF, UC Davis, ITF

GFEI reconocido como la iniciativa líder en eficiencia de vehículos

Iniciativa Mundial para el Ahorro de Combustible (GFEI)

Misión: Facilitar grandes reducciones de las emisiones de gases de efecto invernadero y el uso de petróleo a través de mejoras en la economía de combustible automotriz frente al rápido crecimiento del uso del automóvil en todo el mundo, según las recomendaciones del IPCC y del G8.

Meta: mejora de la economía de combustible en toda la flota mundial de vehículos para 2050

Consumo de combustible promedio global de 2005: 8L / 100km

2050 objetivo: Flota mundial uso promedio de combustible: 4L / 100km (25km / L)



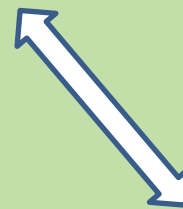
QUE HACE EL GFEI?



Sensibilización a nivel mundial



Apoyo a políticas de país



Investigación y Evidencia



COMPROMISO GLOBAL

El GFEI sensibiliza sobre la importancia de la economía de combustible y ayuda a dar forma a una serie de procesos globales sobre eficiencia energética.

Objetivos de Desarrollo Sostenible, Convención Marco de las Naciones Unidas sobre el Cambio Climático (UNFCCC) y el G20.

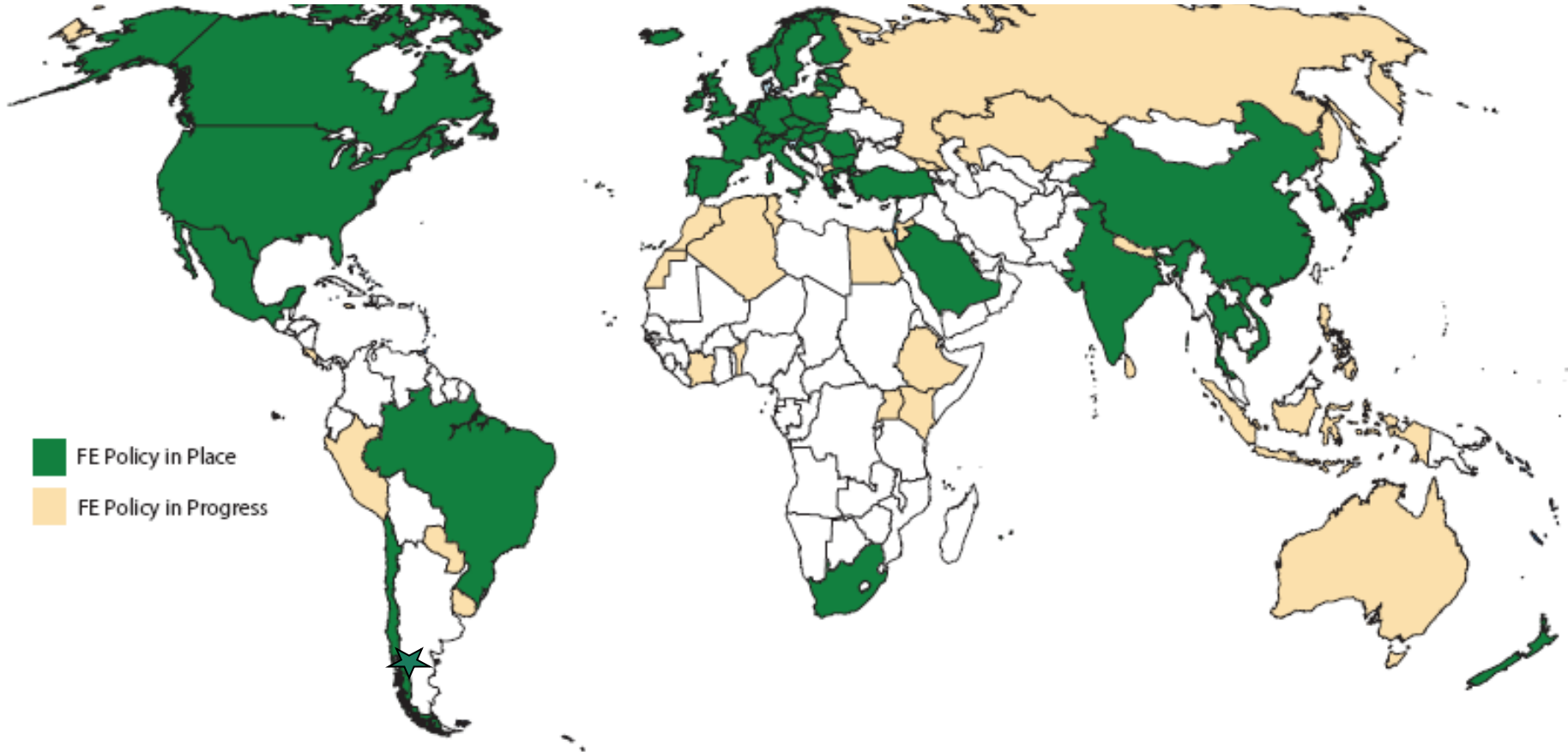
El GFEI es una parte importante del enfoque de la ONU en energía sostenible para todos y mitigación del cambio climático. El **objetivo de GFEI** de duplicar la tasa de mejora en la eficiencia energética ahorrará 33Gt de CO₂ para 2050.



TABLE 1 Table of key GFEI numbers

	Yearly	Cumulative
CO ₂ saved by achieving GFEI target	0.5 Gt/year by 2025, 1.5Gt/year by 2050	33 Gt in total by 2050
\$ saved by achieving GFEI target	\$400 billion/year in 2050	\$8 trillion net saving by 2050
Barrels of oil saved by achieving GFEI target	3 billion barrels of oil a year by 2050	54 billion barrels of oil in total by 2050

Avances a Nivel Mundial en Políticas ahorro combustibles (2016)



April 2016 - For more information visit www.globalfuelconomy.org

Global Fuel Economy Initiative (GFEI)

2010+: Chile, Perú, Uruguay, Jamaica, Costa Rica

2016+: Argentina, Brasil, Belice, Colombia, El Salvador, Guatemala, Honduras, Panamá, Santa Lucía, Nicaragua, Paraguay,



Proyectos Nacionales del GFEI Progreso 2016

Algeria				
Benin				
Botswana				
Burundi				
Djibouti				
Egypt				
Ethiopia				
Gambia				
Ghana				
Ivory Coast				
Kenya				
Liberia				
Malawi				
Mali				
Mauritius *				
Morocco				
Mozambique				
Nigeria				
Rwanda				
South Africa				
Tanzania				
Togo				
Tunisia				
Uganda				
Zambia				
Zimbabwe				

Indonesia				
Thailand *				
Vietnam *				
Bangladesh				
Malaysia				
Myanmar				
Nepal				
Philippines				
Samoa				
Sri Lanka				

KEY

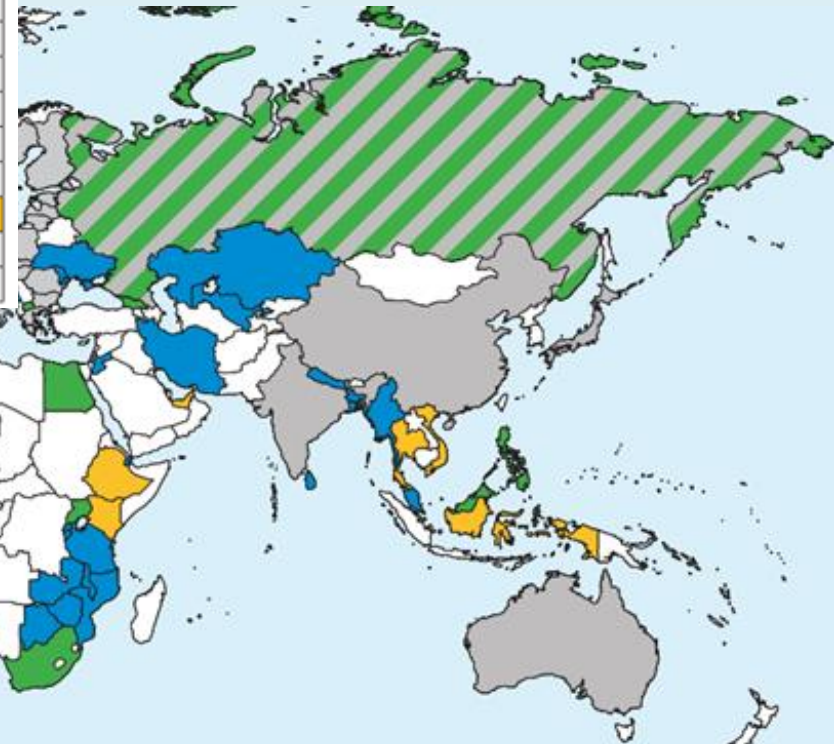
- New country
- Baseline completed
- Policy proposals developed
- G20 Transport group Participants: Australia, Brazil, Canada, China, the European Union, Germany, India, Italy, Japan, Mexico, Russia, United Kingdom and the United States.

* Policy Implemented

Georgia				
Macedonia				
Moldova				
Montenegro				
Russia				
Ukraine				

Bahrain				
Iran				
Jordan				
Kazakhstan				
Turkey				
UAE				
Uzbekistan				

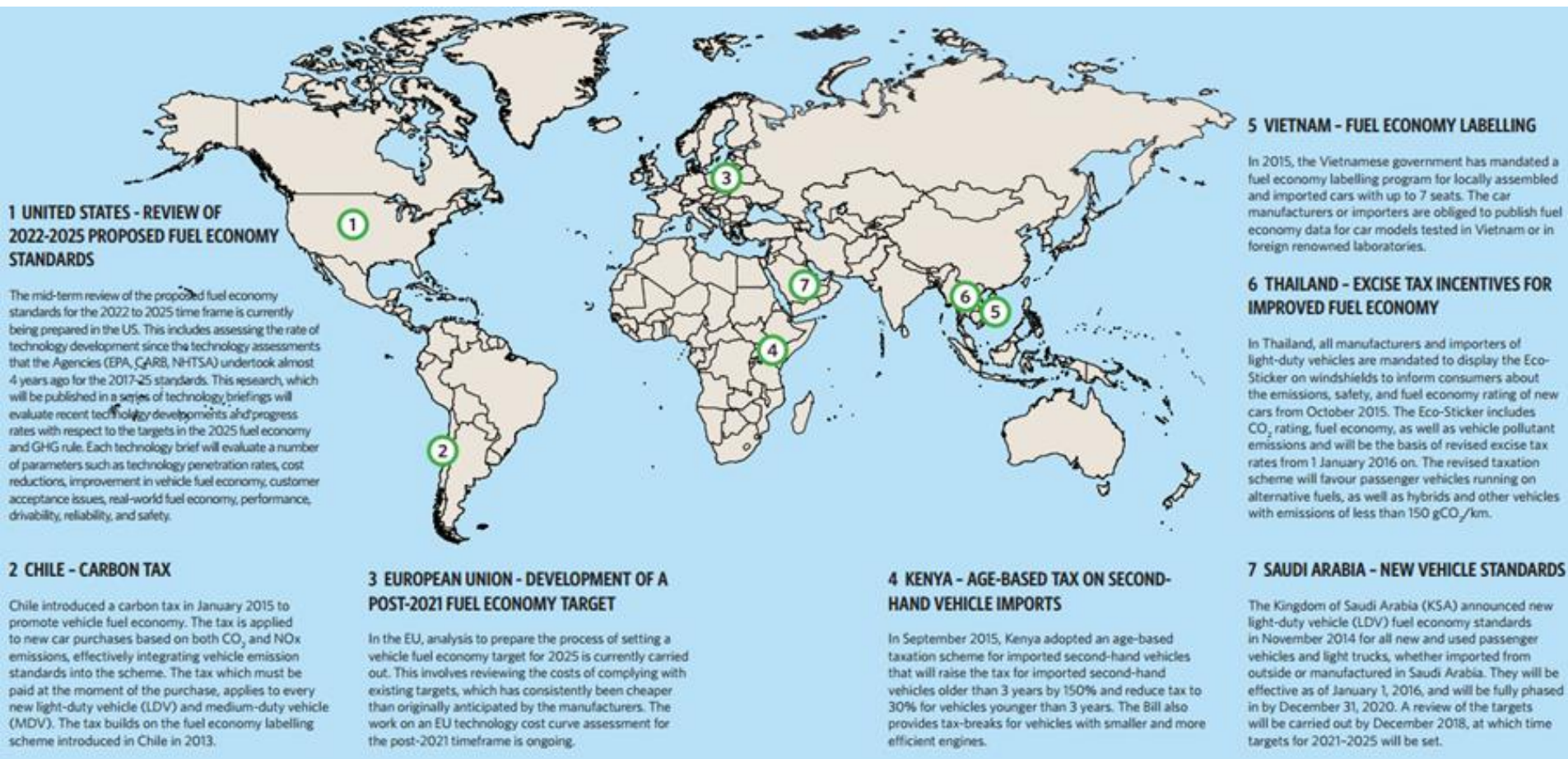
Argentina				
Belize				
Bolivia				
Chile *				
Colombia				
Costa Rica				
Dominican Republic				
Ecuador				
El Salvador				
Guatemala				
Honduras				
Jamaica				
Nicaragua				
Panama				
Paraguay				
Peru				
St Lucia				
Uruguay				



Country Progress: Summary

GFEI Proyectos Nacionales

Progreso 2016



1 UNITED STATES - REVIEW OF 2022-2025 PROPOSED FUEL ECONOMY STANDARDS

The mid-term review of the proposed fuel economy standards for the 2022 to 2025 time frame is currently being prepared in the US. This includes assessing the rate of technology development since the technology assessments that the Agencies (EPA, CARB, NHTSA) undertook almost 4 years ago for the 2017-25 standards. This research, which will be published in a series of technology briefings will evaluate recent technology developments and progress rates with respect to the targets in the 2025 fuel economy and GHG rule. Each technology brief will evaluate a number of parameters such as technology penetration rates, cost reductions, improvement in vehicle fuel economy, customer acceptance issues, real-world fuel economy, performance, drivability, reliability, and safety.

2 CHILE - CARBON TAX

Chile introduced a carbon tax in January 2015 to promote vehicle fuel economy. The tax is applied to new car purchases based on both CO₂ and NOx emissions, effectively integrating vehicle emission standards into the scheme. The tax which must be paid at the moment of the purchase, applies to every new light-duty vehicle (LDV) and medium-duty vehicle (MDV). The tax builds on the fuel economy labelling scheme introduced in Chile in 2013.

3 EUROPEAN UNION - DEVELOPMENT OF A POST-2021 FUEL ECONOMY TARGET

In the EU, analysis to prepare the process of setting a vehicle fuel economy target for 2025 is currently carried out. This involves reviewing the costs of complying with existing targets, which has consistently been cheaper than originally anticipated by the manufacturers. The work on an EU technology cost curve assessment for the post-2021 timeframe is ongoing.

4 KENYA - AGE-BASED TAX ON SECOND-HAND VEHICLE IMPORTS

In September 2015, Kenya adopted an age-based taxation scheme for imported second-hand vehicles that will raise the tax for imported second-hand vehicles older than 3 years by 150% and reduce tax to 30% for vehicles younger than 3 years. The Bill also provides tax-breaks for vehicles with smaller and more efficient engines.

5 VIETNAM - FUEL ECONOMY LABELLING

In 2015, the Vietnamese government has mandated a fuel economy labelling program for locally assembled and imported cars with up to 7 seats. The car manufacturers or importers are obliged to publish fuel economy data for car models tested in Vietnam or in foreign renowned laboratories.

6 THAILAND - EXCISE TAX INCENTIVES FOR IMPROVED FUEL ECONOMY

In Thailand, all manufacturers and importers of light-duty vehicles are mandated to display the Eco-Sticker on windshields to inform consumers about the emissions, safety, and fuel economy rating of new cars from October 2015. The Eco-Sticker includes CO₂ rating, fuel economy, as well as vehicle pollutant emissions and will be the basis of revised excise tax rates from 1 January 2016 on. The revised taxation scheme will favour passenger vehicles running on alternative fuels, as well as hybrids and other vehicles with emissions of less than 150 gCO₂/km.

7 SAUDI ARABIA - NEW VEHICLE STANDARDS

The Kingdom of Saudi Arabia (KSA) announced new light-duty vehicle (LDV) fuel economy standards in November 2014 for all new and used passenger vehicles and light trucks, whether imported from outside or manufactured in Saudi Arabia. They will be effective as of January 1, 2016, and will be fully phased in by December 31, 2020. A review of the targets will be carried out by December 2018, at which time targets for 2021-2025 will be set.

Progreso Global

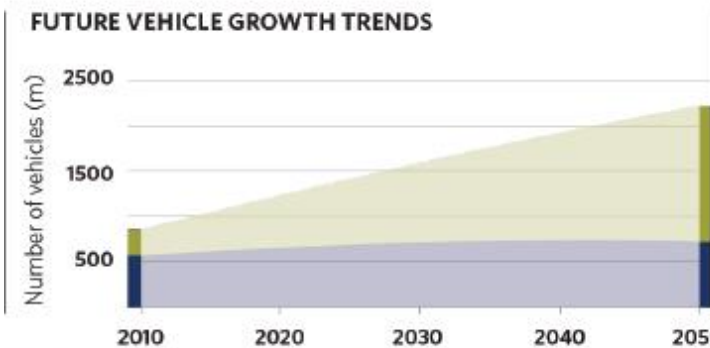
FUEL ECONOMY
Average LGE/100km



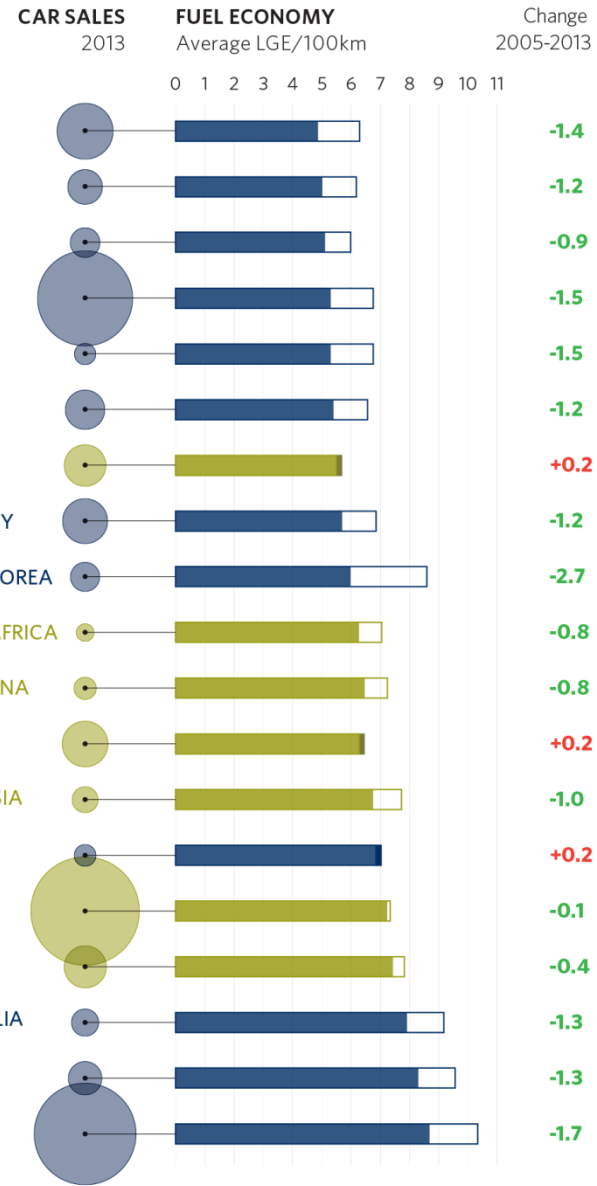
GFEI
Global Fuel Economy
An update for COP22



GFEI
Fuel Economy
State of the World 2016
Time for global action



OECD PASSENGER VEHICLES NON-OECD PASSENGER VEHICLES



POLICY OPTIONS



VEHICLE FUEL EFFICIENCY STANDARDS

- Introduce and regularly strengthen mandatory standards
- Establish and harmonize testing procedures for fuel efficiency measurement.

FISCAL MEASURES

- Fuel taxes and vehicle taxes to encourage the purchase of more fuel-efficient vehicles.
- Infrastructure support and incentive schemes for very fuel-efficient vehicles.

MARKET-BASED APPROACHES

- Voluntary programs such as U.S. SmartWay and other green freight programs



INFORMATION MEASURES

- Vehicle fuel economy labels
- Improving vehicle operational efficiency through eco-driving and other measures.

Apoyo del GFEI

- Herramientas Información
 - Línea Base
 - Herramienta GFEI
 - Impacto de Políticas
 - Feebate
- Red Expertos & Socios Regionales
- Compartiendo Buenas Practicas
- Apoyar desarrollo de políticas (etiquetado / fiscal, etc.)
- Difusión estudios State of the World Fuel Economy
- Financiero
 - GEF, EU, FIA, GFEI Socios,



Objetivo

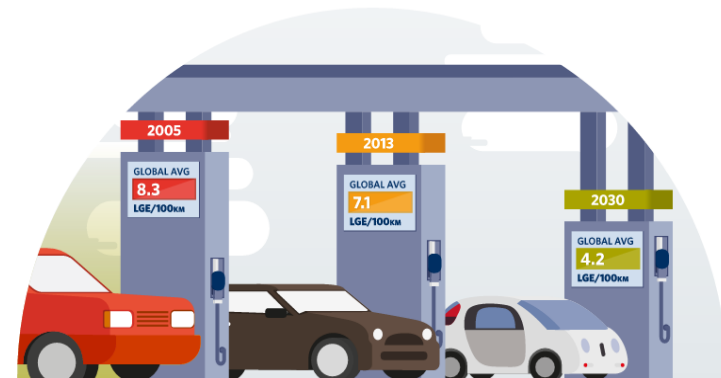
- Desarrollar políticas nacionales de economía de combustible en 100 países
- Con el fin de reducir las emisiones de CO₂ de los vehículos en línea con el objetivo GFEI de 50:50 (Reducción global medio del 50% de las emisiones (por km) para 2050)



THE GLOBAL GOALS:
FUEL ECONOMY

**DOUBLE
AVERAGE
FUEL
ECONOMY**

**OF NEW CARS BY 2030
AND ALL CARS BY 2050**



Actividades nacionales previstas 2017

- Taller inicial con entrenamiento Línea Base
- Creación de un Grupo de Trabajo Nacional sobre la Economía de Combustibles y Desarrollo de Políticas, estrategias nacionales para mejorar la economía de combustible de automóviles, reuniones de apoyo
- Cálculo de una línea de base nacional de la economía de combustible de automóviles y inventario de flota de vehículos

Incluye: Recolección de datos de la flota de vehículos livianos para el establecimiento de la línea de base (2005). Cálculo de la economía nacional de combustible para los años subsiguientes hasta 2016.

Análisis y informe de recomendaciones. Evaluación de impacto de políticas.

- Taller presentación análisis y recomendaciones

Electric mobility: Opportunities for Latin America

UN Environment Publication



- Sumarizes economic, social and climate benefits of electric mobility
- Analyses global and regional market
- Includes policies, incentives and experiences
- Proposes a roadmap to accelerate the transition to e-mobility in Latin America



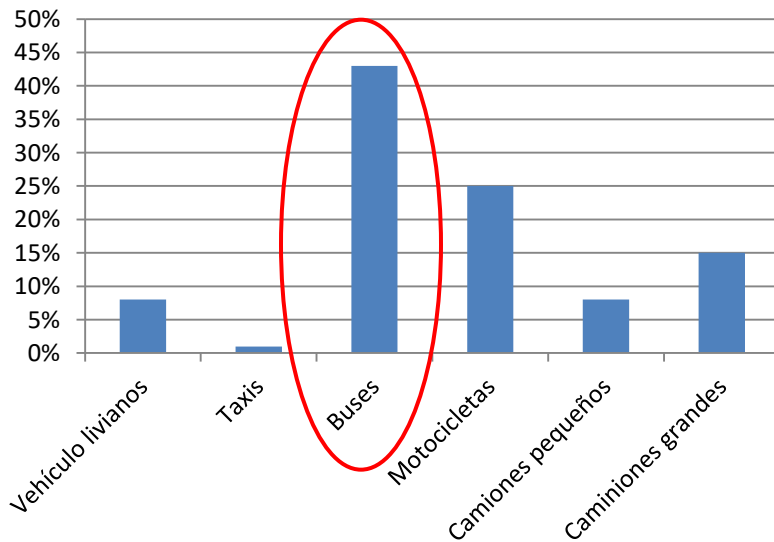
Electric public transport: a priority for Latin America



Benefits of electric buses

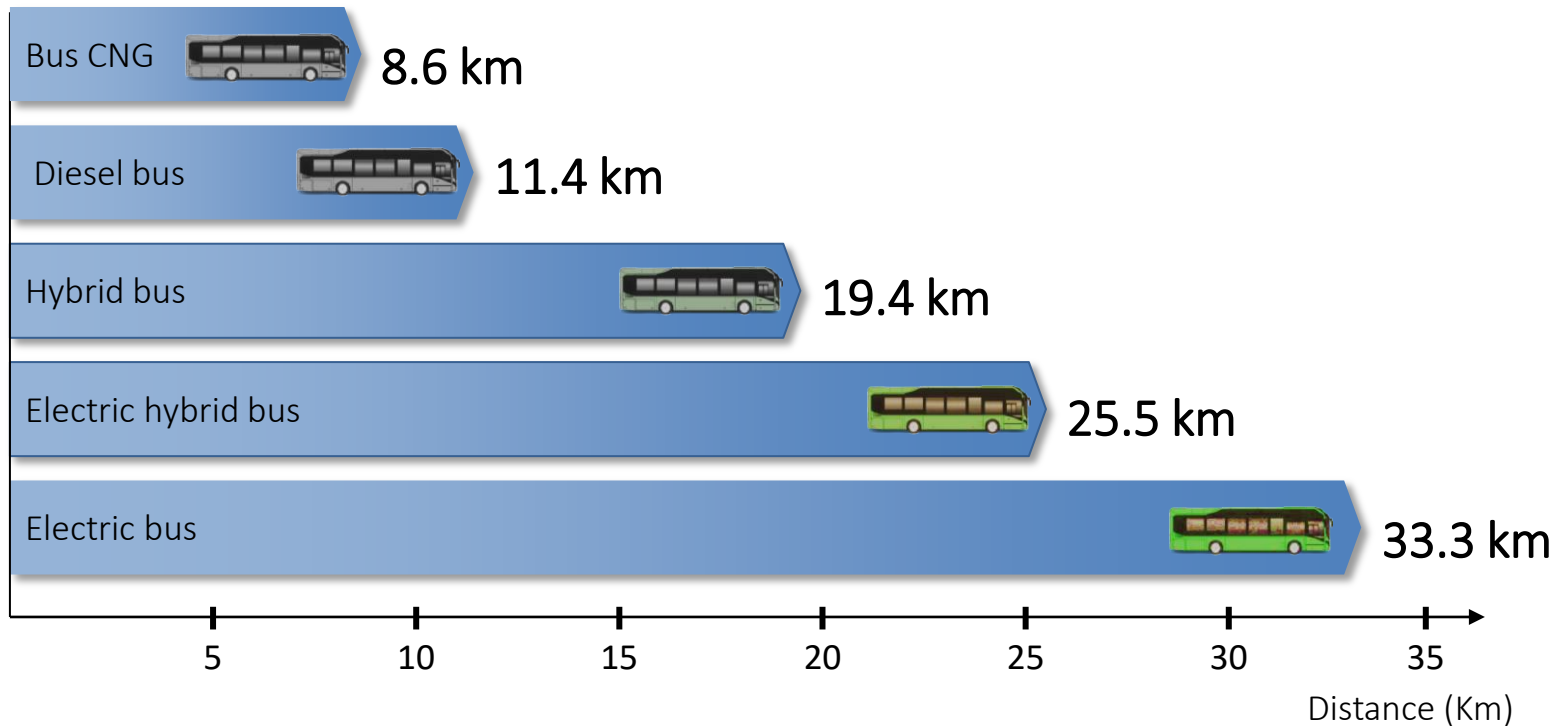
- Important amounts of pollution in cities are due to HDV & buses
- Price stability: electricity cost increases less than diesel cost
- Routes predictability, intensive use and closeness to people and zero noise
- It could drive electrification of all forms of transport

Particulate Matter 2.5



Bus efficiency scale: ...and the winner is?

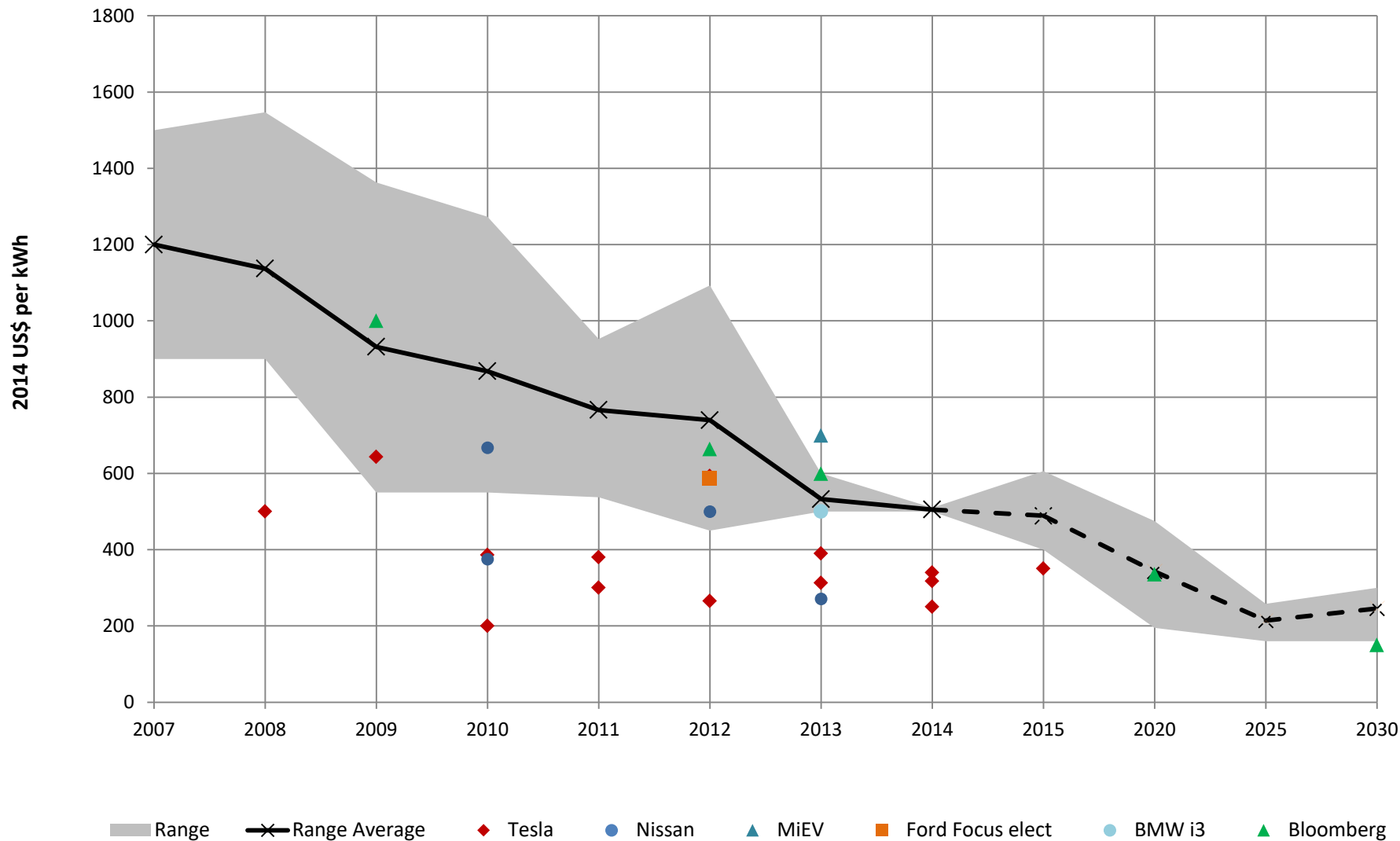
- Use of energy/ km traveled: What is the travel distance of 5 liters of diesel?
- Mexico City options



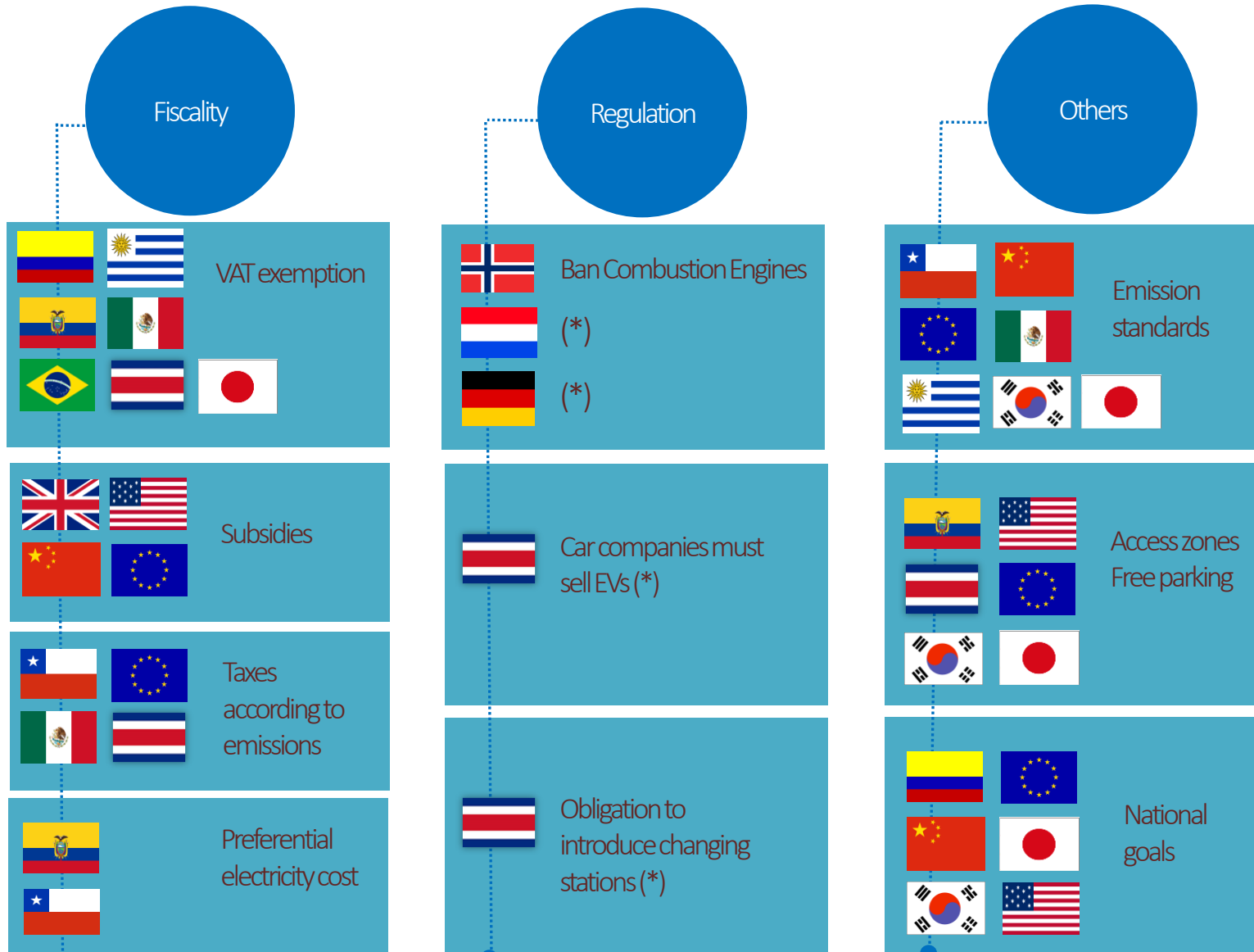
Fuente: Volvo, 2016



Constant reduction in battery cost: 14% annually



Key policies used to accelerate e-mobility



Fuentes: UNEP, 2016, IEA, 2016



Roadmap to accelerate e-Mobility in Latin America

From: *Opportunities to Accelerate Electric Mobility in Latin America, UN Environment, 2016*



Important gaps remain.
Status varies from country
to country ...

1 Accelerate energy efficiency

- Emissions & fuel standards
- Energy labelling
- Emission taxes
- Strengthen testing & enforcement

2 Eliminate market distortions

- Discourage fuel subsidies
- Regulate importation of used vehicles

3

Incentivize EVs

- Supporting policies/laws
- Fiscal incentives
- Tax breaks/ import breaks

4

Develop EV infrastructure

- Charging stations
- Differentiated tariffs
- Capacity-building
- Public-private innovation platforms
- Pilot projects

Need to focus in parallel to
steps 1 & 2 to create
market and regulatory
conditions



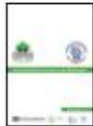
GFEI timeline

This timeline picks out a number of key events since GFEI was established in 2009, including major reports, political commitments, and new policies and standards to improve fuel economy.

GFEI is launched at Geneva Motorshow



GFEI launches report on fuel economy in South East Asia



2009

2010

President Obama's global climate initiative at the Major Economies Forum backs GFEI



Global Environment Facility supports GFEI



GFEI presents at Low Carbon Vehicle Conference, London



GFEI at COP16 in Cancun



GFEI launches report on car scrappage schemes in Europe



2011

GFEI publishes first international comparison of light-duty vehicle fuel economy - presented at Challenge Bibendum in Berlin



GFEI presents policy ideas to Chilean Minister of Environment



GFEI launched in Africa



GFEI part of commitments sustainable transport at Rio +20



2012

ICCT joins partnership



GFEI launches new work programme for 2012-2015



Updated international comparison of fuel economy published



Chile adopts fuel economy label



2013

UC Davis joins GFEI



GFEI presents at UN open working group on new Sustainable Development Goals for energy



GFEI identified as 'high impact opportunity for Sustainable Energy for All (SE4ALL)'



GFEI State of the World report launched



GFEI included in draft Sustainable Development Goals

GFEI 'Accelerator' meeting in Paris on fuel efficiency



2014

GEF awards support for fuel economy policies in 6 more countries

GFEI included in G20 Action Plan on Energy Efficiency



GFEI addresses UN General Assembly at New York Climate Summit



GFEI publishes latest update on fuel economy worldwide (2008-2013)



Government of Kenya announces plans for new fuel economy scheme



2015

GFEI launch 100 countries campaign at Sustainable Energy for All (SE4ALL) Forum in New York



GFEI Global Training, Paris



UN agrees energy efficiency and other SDGs in New York - September



Thailand introduces new fuel economy label



Paris Climate Change COP - December 2015





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