The Global Commission on the Economy and Climate

New Climate Economy
15th April 2014

The New Climate Economy project aims to identify the biggest opportunities to strengthen both growth and climate performance

The focus is:

Disruptive, Transformational plays that meet **3 primary conditions:**

- Have **large impact**
- Are **adaptive** and **evolutionary**
- Drive **change** through **competition** rather than relying on cooperation

The approach is:

Evidence-based, helping policy-makers, business leaders and investors do their job better-informed

Decision-maker focused, providing real world recommendations on trade-offs

Objective, assessing the evidence on all sides

Open, inviting input and submissions from all sides

Near-term, focusing on the next 5-10 years

The global New Climate Economy Partnership

Global Commission
21 global leaders, chaired by former President of Mexico Felipe Calderón

Includes:

S. (Kris) Gopalakrishnan

Economic Advisory Panel
14 world leading economists, chaired by Professor Lord Nicholas Stern

Includes:

Isher Judge Ahluwalia

Two Nobel prize winners:
Daniel Kahneman and Michael Spence

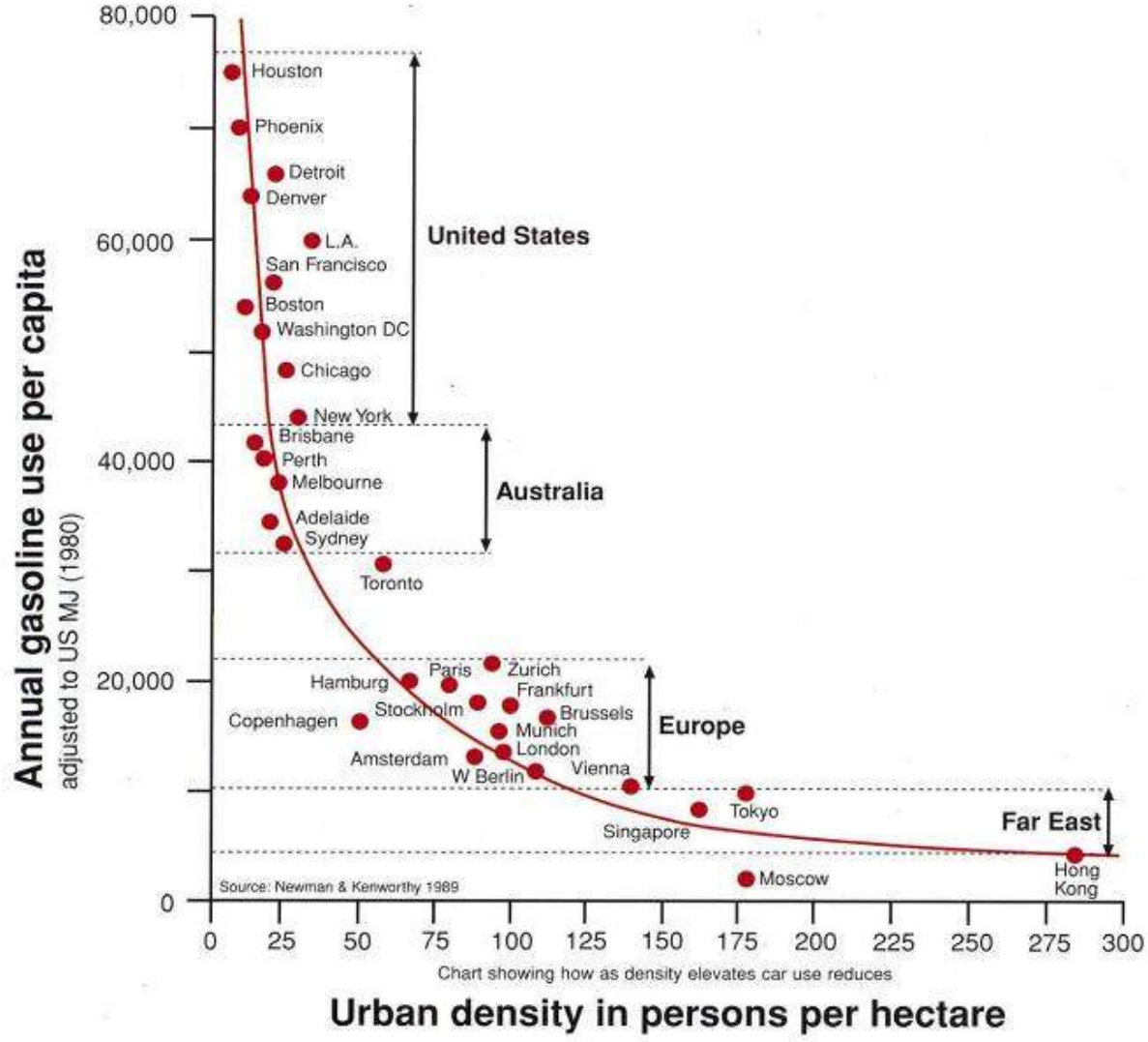
7 Commissioning Countries

Colombia
Ethiopia
Indonesia
Norway
Sweden
South Korea
United Kingdom

8 Partner Research Institutes

Climate Policy Initiative (USA)
Ethiopian Development and Research Institute
Indian Centre for Research on Economic Relations
Global Green Growth Institute (South Korea)
London School of Economics (UK)
Stockholm Environment Institute (Sweden)
Tsinghua University (China)
World Resource Institute (USA)

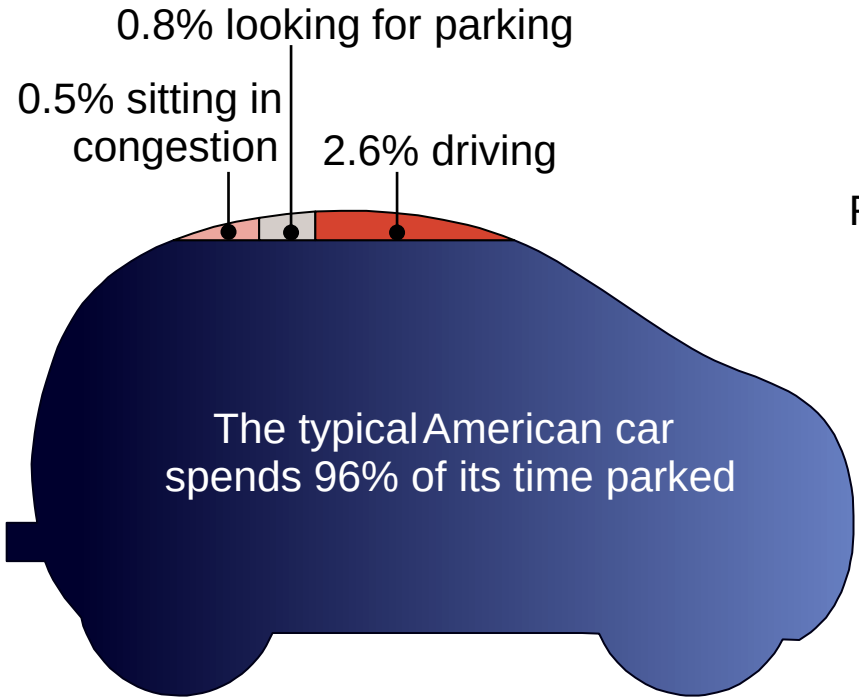
Well planned, compact cities are more economically efficient and have lower emissions



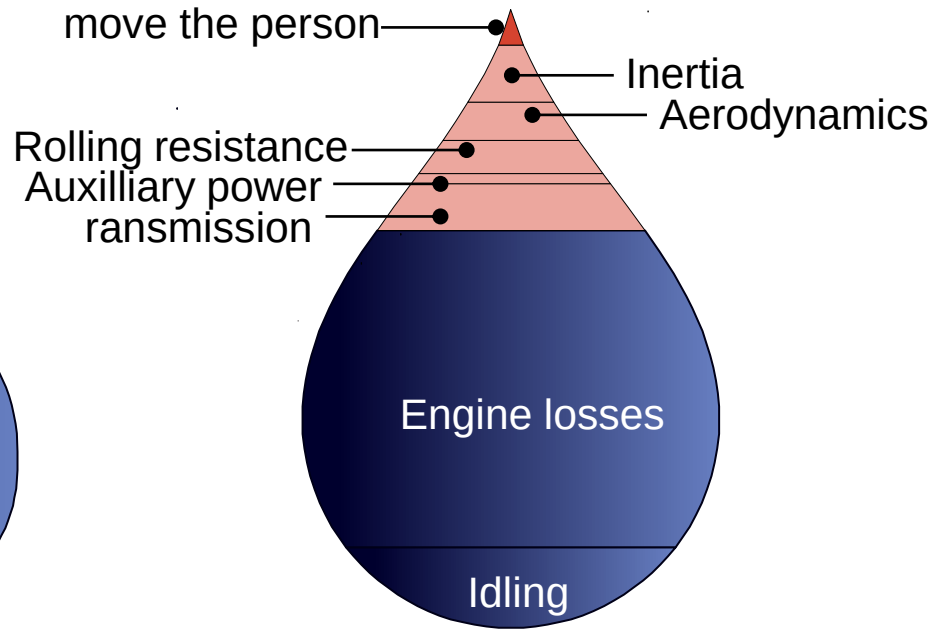
SOURCE: (1) LSE Cities; (2) Newman and Kenworthy 1989

Waste in fuel, cars, and roads remains

Productive use



Energy flow through a combustion engine



An American road reaches peak throughput only 5% of the time...
...and even then, it is only 10% covered with cars

Tesla motors is driving competition across the global auto industry, and creating huge wealth in the process

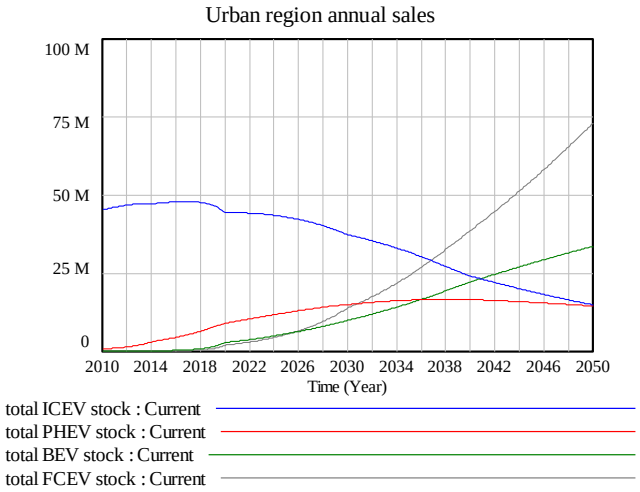
Tesla market cap: $30bn
25,000 cars sold in 2013

GM market cap: $55.8bn
9.7 million cars sold in 2013

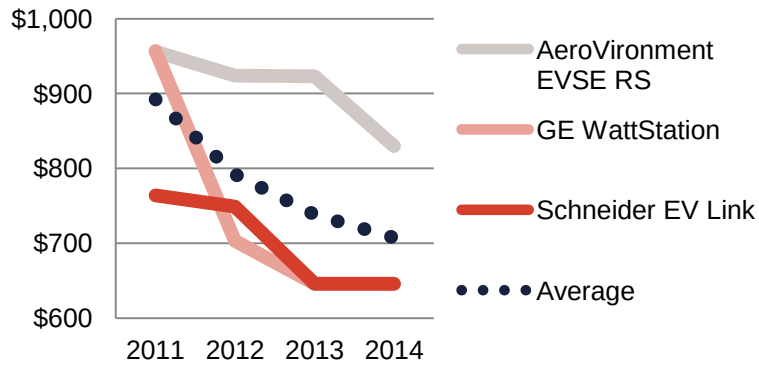
"All the geniuses here at General Motors kept saying lithium-ion technology is 10 years away, and Toyota agreed with us – and boom, along comes Tesla. So I said, 'How come some tiny little California startup, run by guys who know nothing about the car business, can do this, and we can't?' That was the crowbar that helped break up the log jam."

Four disruptive technologies in transportation

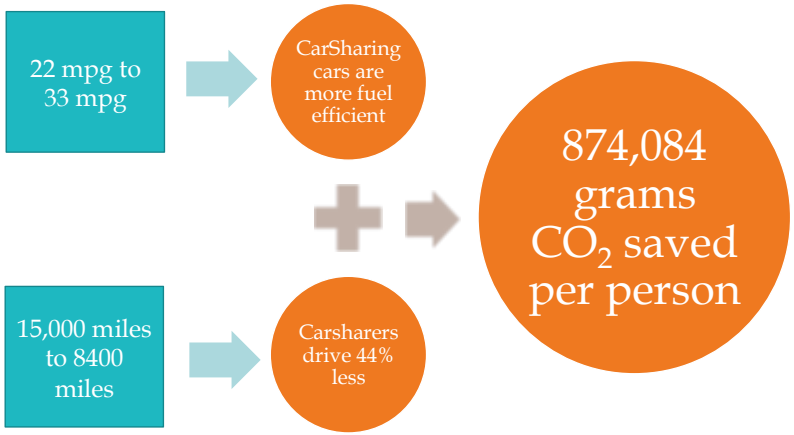
Electric Vehicles



Vehicle Charging Infrastructure



Car Sharing



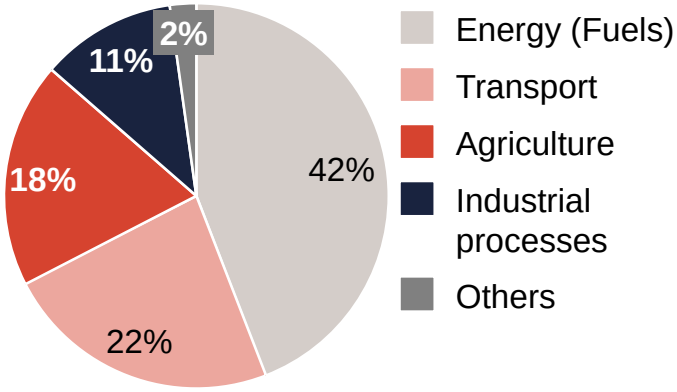
Autonomous Vehicles

Adoption Scenario	Economic Benefits	Avoided Carbon emissions
	($ / yr)	*(tonnes CO_2 / yr)*
50%	$97.5 B	1,998,080
90%	$189.0 B	6,458,080

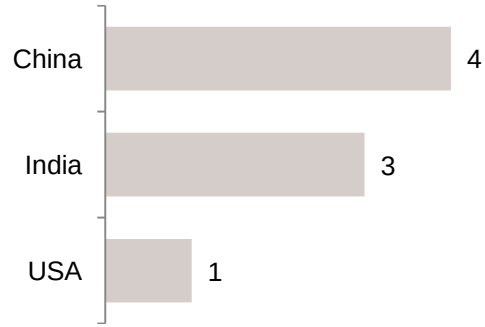
Benefits: Fuel Efficiency, Crash Savings, Congestion Reduction (Highway and Arterial), Parking Savings

Air pollution exposure caused ~7 million deaths worldwide in 2012, particularly in the East and South Asia

Sources of air pollution in Europe

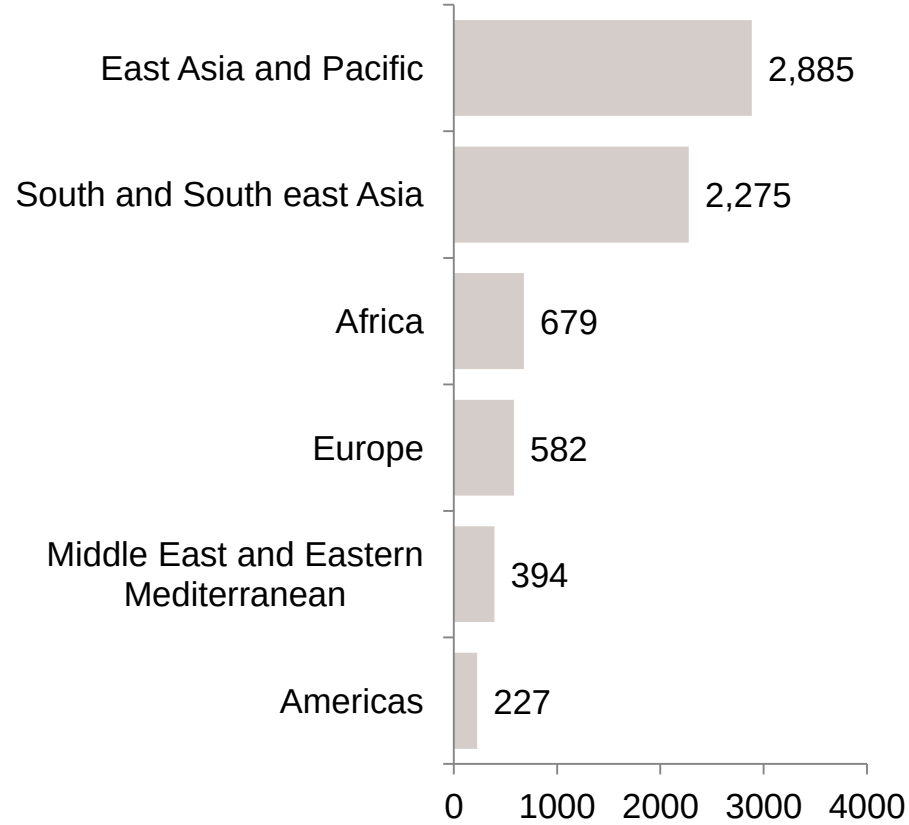


Costs of air pollution in selected countries, % of GDP



Deaths attributed to air pollution in 2012[1]

000s



1 Includes deaths attributed to ambient and household air pollution. China is included in the East Asia and Pacific region, India is included in South and South east Asia

SOURCE: Deaths from World Health Organisation, Costs from World Bank and IMF, sources of pollution from European Environment Agency

India is a critical piece of this story

Potential questions linked to global narrative:

1. Transforming the Indian real economy will require choices on nature and scale of change eg. patterns of urbanisation.
2. India may want to follow the approach taken by other countries of growing first and cleaning up later but is this in its own self-interest?
3. What are key decisions in the next 5-10 years which will shape India's future in the next 25 years?