



THE GLOBAL COMMISSION ON THE ECONOMY AND CLIMATE

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www.newclimateeconomy.net

WRI'S POSITIONING

Environment

GREENPEACE

iisd

Action



WORLD
RESOURCES
INSTITUTE

Ideas



BROOKINGS

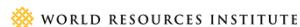
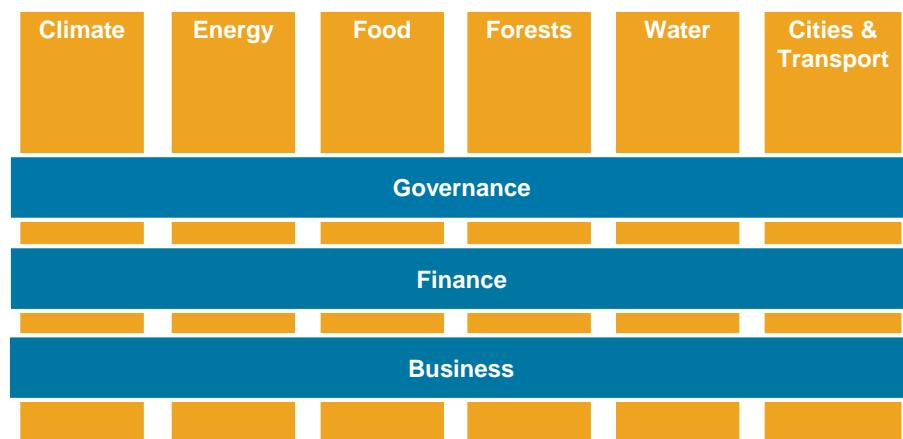
Development

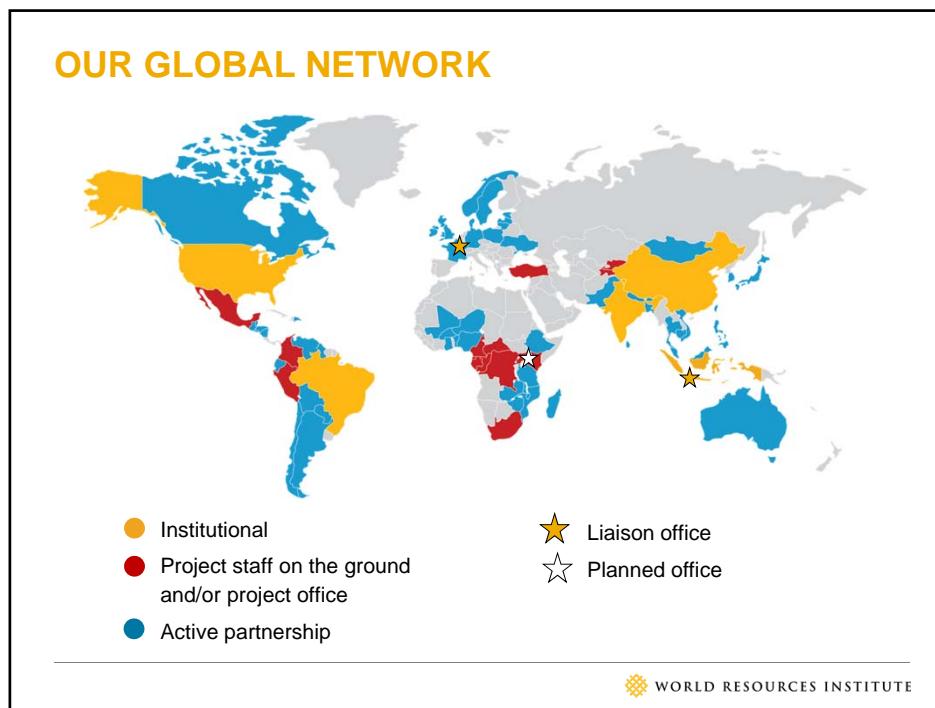
2013 GO TO THINK TANK (JAN 2014) TOP ENVIRONMENTAL THINK TANK

1. **World Resources Institute**
2. Stockholm Environment Institute (SEI)
3. Worldwatch Institute
4. Brookings Institution
5. Resources for the Future (RFF)
6. Center for Climate and Energy
7. Solutions (C2ES)
8. Earthwatch Institute
9. Chatham House
10. Ecologic Institute



SIX GOALS, THREE CROSS-CUTS





Better Growth, Better Climate; The New Climate Economy Report
was launched in September 2014

Online interactive report

Synthesis report in multiple languages

Commissioned by 7 countries:
Colombia, Ethiopia, Indonesia, Norway, Sweden, South Korea, United Kingdom

Led by a Global Commission: 23 former heads of state, CEOs and heads of international institutions. Chaired by Felipe Calderon, former President of Mexico

Overseen by an **Economic Advisory Panel** of 14 world leading economists, chaired by **Professor Lord Nicholas Stern**

Delivered by 8 research institutes:

WORLD RESOURCES INSTITUTE
(Managing Partner)

Included contributions from 120+ organisations

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Main findings of the Commission:

- Economic growth and climate mitigation can be achieved together. We do not need to choose.
- A growing number of businesses, cities and countries are demonstrating this. Recent technological and policy developments mean that even more opportunities are available today.
- About US\$ 90 trillion will be invested in infrastructure to 2030 – need to choose if it is low-carbon and climate resilient. Low-carbon would not cost much more, and fuel savings could fully offset additional investment costs.
- But if we lock-in the wrong path, we risk significant economic and social impacts of climate change. Need to act urgently.
- There are multiple economic benefits of action, e.g. reduced health costs from air pollution, less congestion & road deaths, enhanced energy, water and food security. In many cases these will outweigh the costs of action – and can get us 50-90% of the abatement by 2030 for a 2C path.

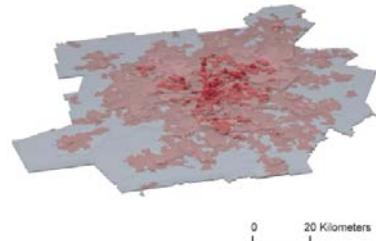
Key drivers of growth and climate performance



CITIES: Atlanta and Barcelona have similar populations and wealth levels but very different carbon productivities

ATLANTA

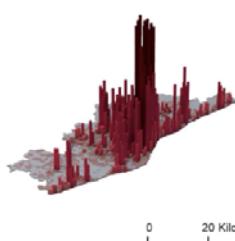
Atlanta's built-up area



Population: 5.26 million
Total area: 16,605 km²
Urban area: 7692 km²
Transport carbon emissions: 6.9 tonnes CO₂ p.c.

BARCELONA

Barcelona's built-up area



Population: 5 million
Total area: 3263 km²
Urban area: 648 km²
Transport carbon emissions: 1.2 tonnes CO₂ p.c.

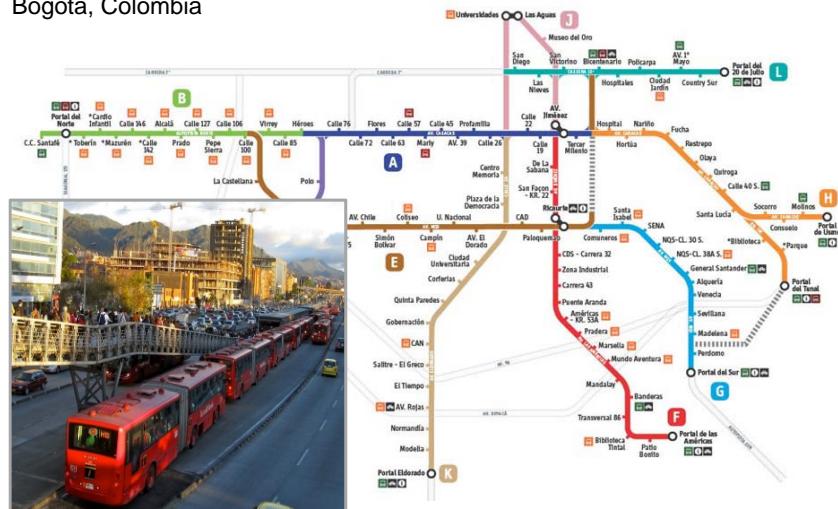
Source: LSE research drawing on data from Atlanta Regional Commission (2014), Autoritat del Transport Metropolità (Area de Barcelona) (2013), GenCat (2013), UCSB (2014), D'Onofrio (2014), based on latest data.

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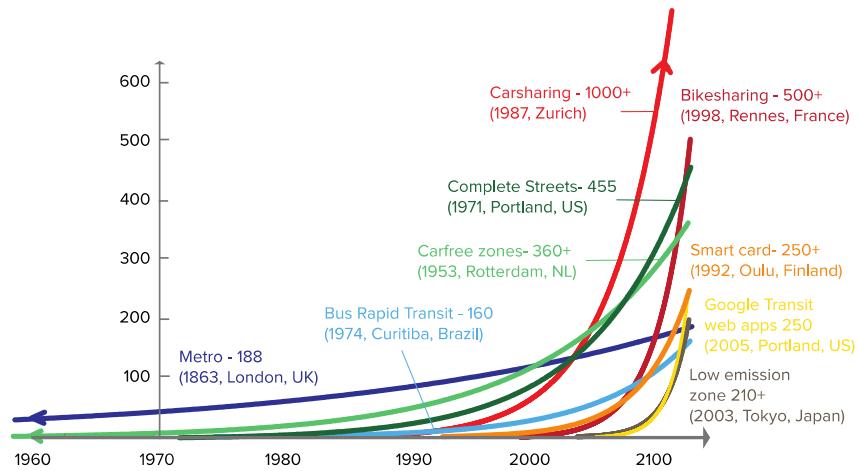
Bus rapid transit systems can carry up to 2 million passengers a day at less than 15% of the costs of a metro; travel times reduced 32%

Bogota, Colombia



Sources: Cityfix.com, NYTimes, LSE and NCE Cities - Paper 03 Accessibility in Cities: Transport and Urban Form, p 10-11
The Global Commission on the Economy and Climate

CITIES: A range of smart transport systems have taken off in numerous cities worldwide since 2000



Source: Sustainable Transport Adoption Curves, World Resources Institute, Embarq 2013

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LAND USE: Over 300 million ha of degraded land could be restored in Sub-Saharan Africa; the Niger case highlights the possibility



1980s



Present Day

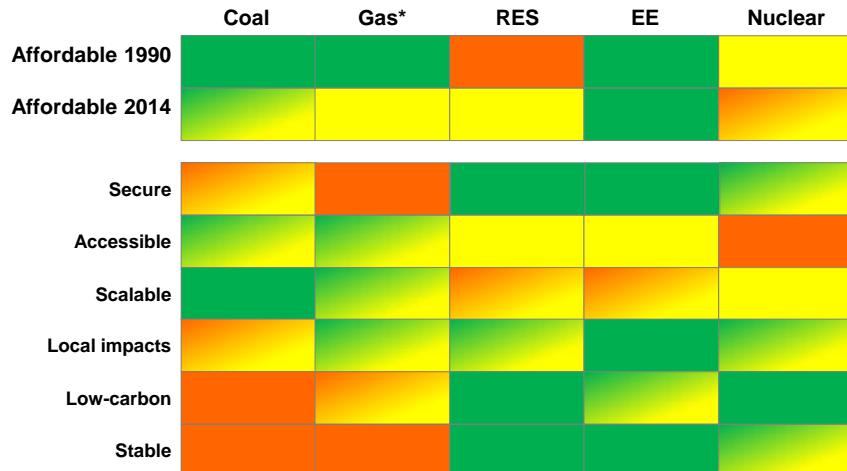
- Significantly improved agricultural productivity on 5 million HA and restored others
- Farmers produce at least 100 kg/ha more now than before
- More than doubled farm income for over a million households

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Energy: Low-carbon solutions improve in performance when considered against a richer set of decision criteria

Illustrative



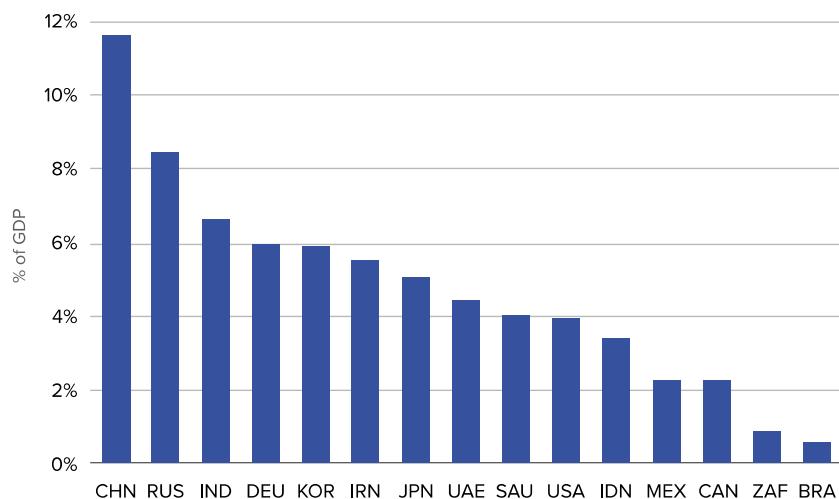
* Gas as substitute in current coal-rich countries

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ENERGY: Economic value of premature deaths from PM2.5 air pollution



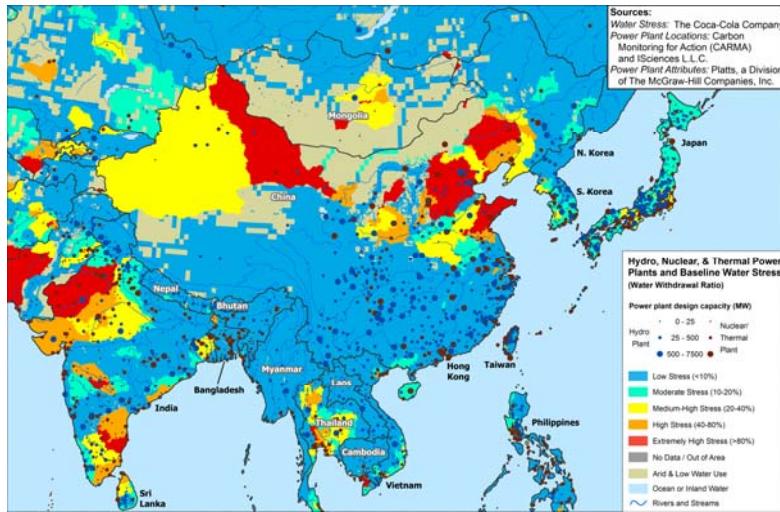
Source: NCE estimate, based on WHO mortality data

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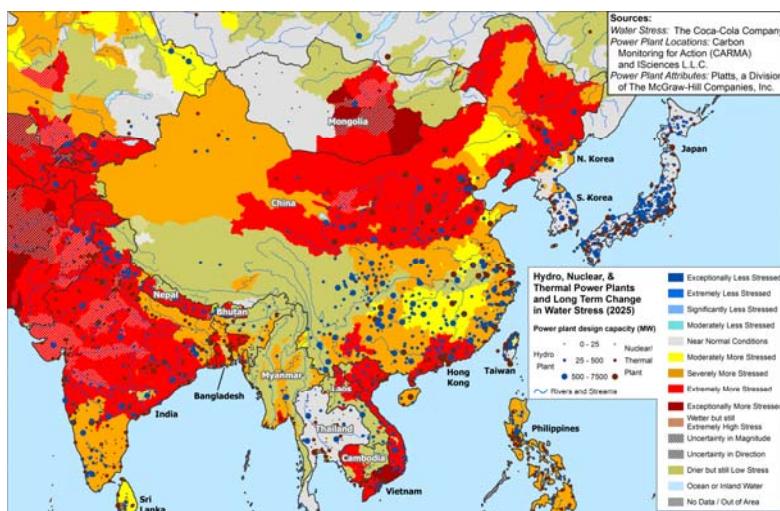
WATER STRESS AND POWER PLANT CAPACITY NOW



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WATER STRESS AND POWER PLANT CAPACITY 2025



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ENERGY: The cost of solar PV is dropping fast

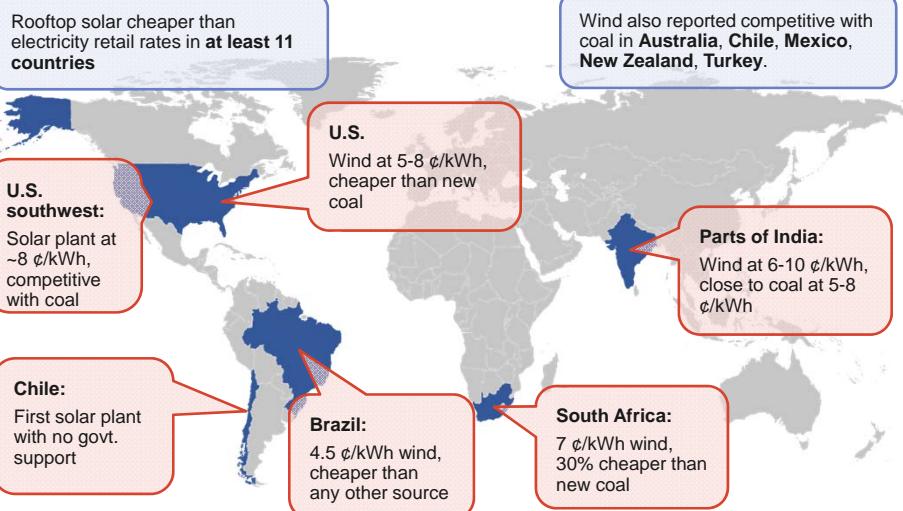


Sources: Citi Research 2012; G. F Nemet, "Beyond the learning curve", Energy Policy 34, 3218-3232 (2006)

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ENERGY: Wind and solar power have become cost-competitive in several markets, even without subsidies

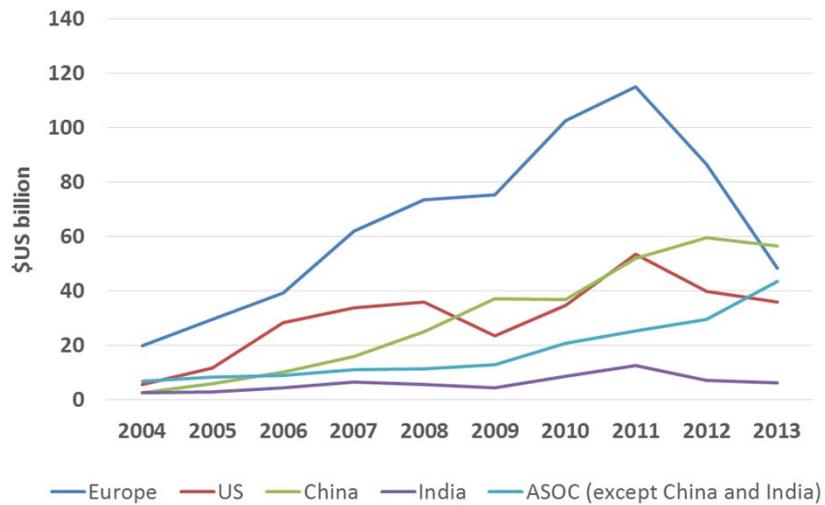


Source: REN21 Renewables 2014 Global Status Report; Deutsche Bank Markets Research; IEA 2013 Wind Roadmap.

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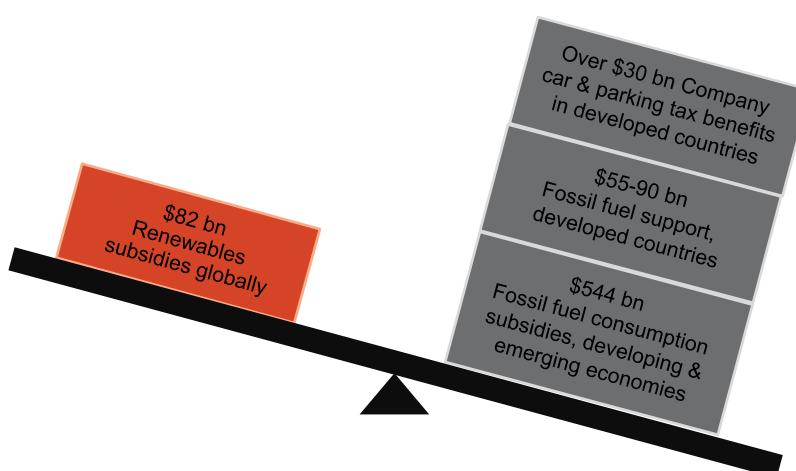
ENERGY: Renewable energy investments – by selected country/region 2004-2013



THE NEW CLIMATE ECONOMY BNEF/UNEP, 2014, Global trends in renewable energy investment 2014. Note: ASOC is Asia and Oceania.
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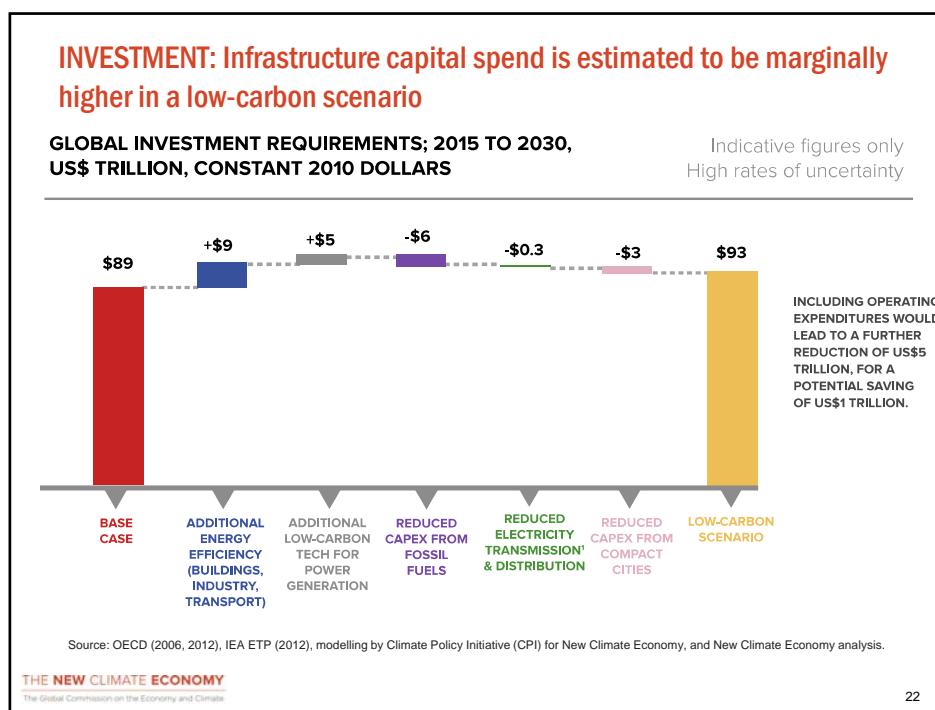
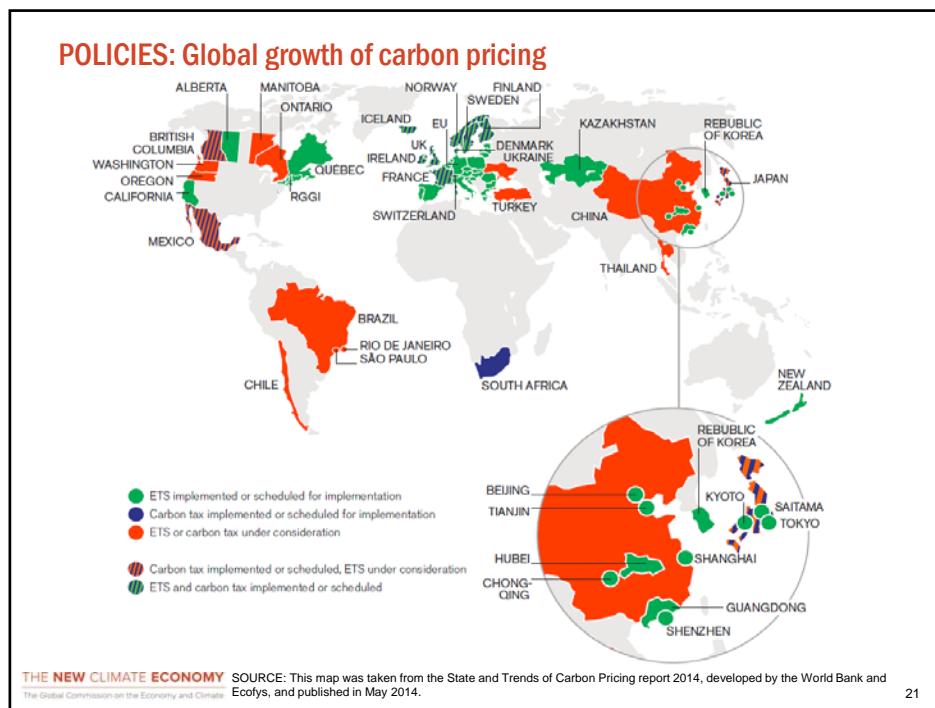
POLICIES: There are significant subsidies to the high-carbon economy



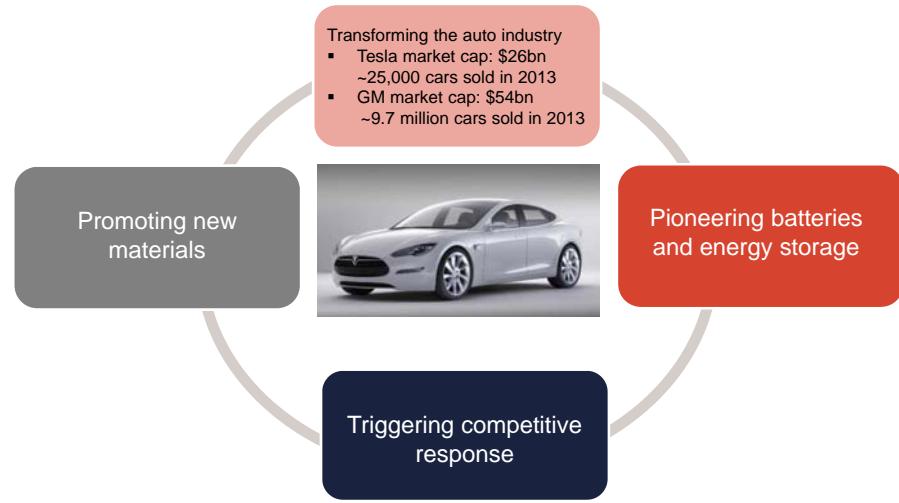
Sources: OECD (2013), Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuels; IEA (2013), World Energy Outlook; IEA (2013), OECD (2014, forthcoming)

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INNOVATION: Tesla motors is challenging the status quo in many industries, and creating huge wealth in the process

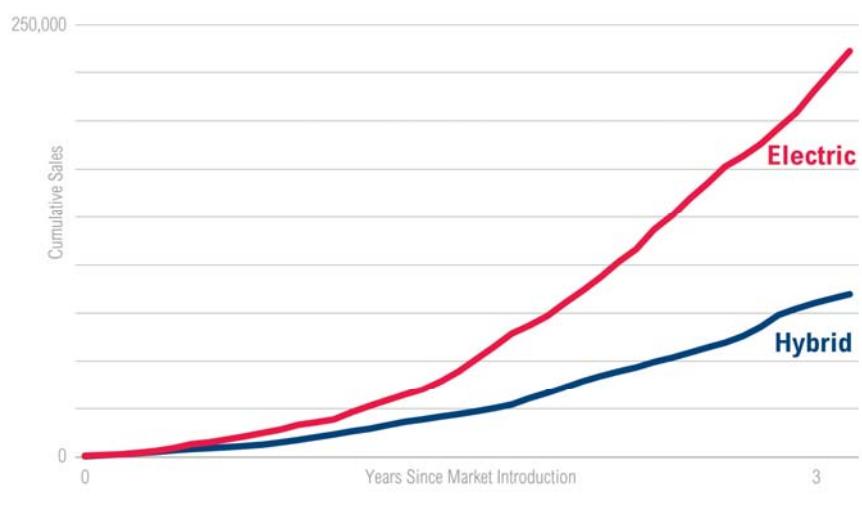


Source: Tesla motors website, scdigest.com, autonews.com

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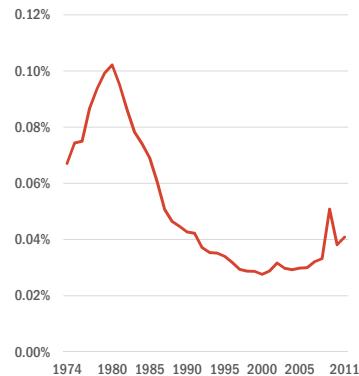
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INNOVATION: ELECTRIC VEHICLES ARE ENTERING THE MARKET MUCH FASTER THAN HYBRIDS DID

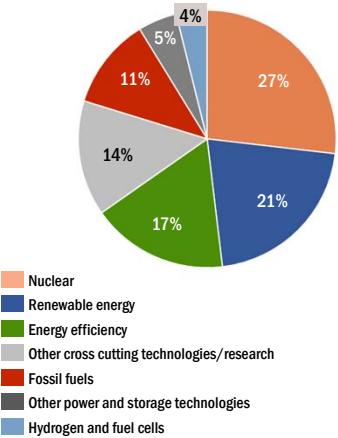


INNOVATION: Energy R&D as a percent of GDP has been falling in most developed countries since the 1980s

Energy R&D as % of GDP in IEA member countries¹



Energy R&D split in 2011



THE NEW CLIMATE ECONOMY Source: R&D figures and split from International Energy Agency (2013), Tracking Clean Energy Progress 2013, OECD/IEA, Paris, GDP figures from World Development Indicators 2014, adjusted for inflation from 2005 to 2010

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The Global Commission recommends 10 transformative actions

- 1** Integrate climate risk into strategic decisions
- 2** Secure a strong international climate agreement
- 3** End perverse subsidies
- 4** Price carbon to send a clear market signal
- 5** Scale-up low-carbon innovation
- 6** Reduce the cost of capital for low-carbon investment
- 7** Move toward connected and compact cities
- 8** End deforestation
- 9** Restore degraded lands
- 10** Phase out unabated coal fast

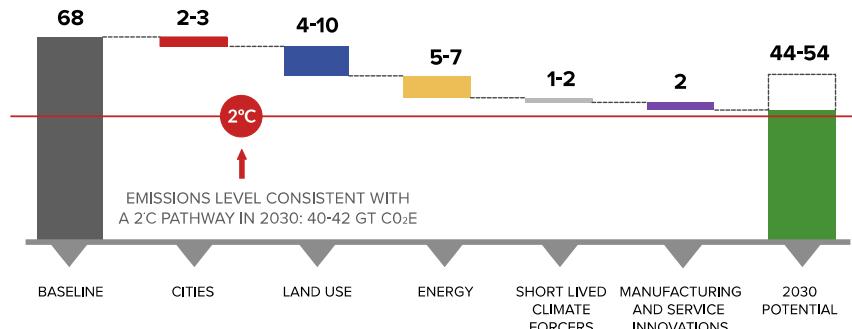
Source: NCE. For details please see the NCE Global Action Plan (2014)

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Actions with economic benefits could deliver most of the greenhouse gas abatement needed by 2030

GHG EMISSIONS AND ABATEMENT POTENTIAL FROM SELECTED MAJOR LEVERS: 2030



Source: Emissions estimates: IPCC AR5; New Climate Economy analysis based on expert input and multiple data sources

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The report was extensively covered by the global media, including by the most respected economic commentators



"If we ever get past the special interests and ideology that have blocked action to save the planet, we'll find that it's cheaper and easier than almost anyone imagines."
Paul Krugman, New York Times



"It is unnecessary to persist in making today's massive unhedged bets in the climate casino. It is possible instead to combine growth with a less environmentally risky future."
Martin Wolf, Financial Times



"Now, a team of the great and the good has a cannier pitch. In the lead-up to the New York climate-change summit they have issued a report arguing not that global warming will destroy the Earth, but that much of what is needed to reduce its risks would be a good idea anyway."
The Economist

"On paper, it would seem an impossible task. But the report does point out that there are opportunities in the near-term, mostly due to the rapid pace of technological changes and the boom in renewables that will result in the radical reshaping of the global economy".
Fortune



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World leaders picked up the core messages from the report

World leaders discussing climate and growth in September 2014



"...there does not have to be a conflict between a sound environment and strong economic growth."

President Barack Obama, USA



"There is no contradiction between climate action and economic stability and growth."

Ban Ki-Moon, UN Secretary-General



"If we get this right there need not be a trade-off between economic growth and reducing carbon emissions."

Prime Minister David Cameron, UK



"The growth of our economies is compatible with the reduction of emissions."

President Dilma Rousseff, Brazil



"We need government, businesses and society to choose low-carbon paths and to make those choices now."

Jeff Radebe, Minister in the Presidency, South Africa



"We need to see climate action not as a burden, but as an opportunity."

President Park Geun-hye, Republic of Korea



"We need to combat the perception that climate action is incompatible with economic growth."

Prime Minister Hailemariam Desalegn, Ethiopia



"This report made me optimistic about change"

Erna Solberg, Prime Minister of Norway



"The New Climate Economy report launched today is another milestone of climate economics."

Xie Zhenhua, Minister and Vice Chairman, NDRC

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GLOBAL AGREEMENT

