

THE GLOBAL COMMISSION ON THE ECONOMY AND CLIMATE

NEW CLIMATE ECONOMY

Russell Bishop, Senior Economist, New Climate Economy 21st Century Energy Efficiency Standards and Labelling Programs 15th December 2015, IEA Headquarters, Paris

The Global Commission on the Economy and Climate

Commissioned in 2013 by 7 countries

Colombia, Ethiopia, Indonesia, Norway, Sweden, South Korea, United Kingdom

Led by a Global Commission

28 former heads of government, finance ministers, CEOs and heads of economic institutions.

The set-up of the project was overseen by an Economic Advisory Panel of 14 leading economists, chaired by Lord Nicholas Stern





Better Growth, Better Climate: the New Climate Economy report (September 2014) showed that economic growth and climate protection can be achieved together.

Seizing the Global Opportunity: Partnerships for Better Growth and a Better Climate (July 2015) focuses on how international and multi-stakeholder cooperation can catalyse better growth and a better climate.

33 supporting Working Papers released in 2014-15, including 4 country studies.

Members of the Global Commission on the Economy and Climate



Felipe Calderón (Chair) Former President. Mexico



Nicholas Stern (Co-Chair) IG Patel Professor at the London School of Economics and Political Science



Ingrid Bonde CFO and Deputy CEO. Vattenfall



Sharan Burrow General Secretary, International Trade Union Confederation



Suma Chakrabarti President, EBRD



Former Chairman.

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Helen Clark Administrator. UNDP



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Mavor. Rio de Janeiro



Dan Doctoroff Former President and CEO. Bloomberg

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Trevor Manuel Former Finance Minister, South Africa



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Sri Mulyani Indrawati Managing Director and COO. World Bank



Takehiko Nakao





Maria van der Hoeven Executive Director. International Energy Agency





Ngozi Okonjo-Iweala Former Minister of Finance, Nigeria



Zhu Levin Former CEO, China International Capital Corporation



Kristin Skogen Lund





NCE Partner Institutes



Over 120 organizations have provided input towards the project, including:



Main findings of the 2014 and 2015 Reports of the Global Commission

- Economic growth and climate mitigation can be achieved together. We do not need to choose. The global level of ambition on climate change can be raised in economically beneficial ways. National climate pledges ("INDCs") should therefore be "floors to ambition, not ceilings".
- Global momentum is building towards a low-carbon economy. 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.
- Cooperative, multi-stakeholder partnerships can catalyze further ambition and action and generate economic benefits.

Better Growth, Better Climate (2014) identifies 3 key systems and 3 key drivers of growth and climate performance



The Global Commission on the Economy and Climate

ENERGY: Global Commission Recommendations

- Accelerate the shift away from polluting coal-fired power generation. (NCE, 2014)
 - Governments should reverse the "burden of proof" for building new coal-fired power plants, building them only if alternatives are not economically feasible.
 - All countries should aim for a global phase-out of unabated fossil fuel power generation by 2050.
- Invest at least US\$1 trillion a year in clean energy. (NCE, 2015)
 - To bring down the costs of financing clean energy and catalyse private investment, multilateral and national development banks should scale up their collaboration with governments and the private sector, and their own capital commitments, with the aim of reaching a global total of at least US\$1 trillion of investment per year in low-carbon power supply and (non-transport) energy efficiency by 2030.

Raise energy efficiency standards to the global best. (NCE, 2015)

 G20 and other countries should converge their energy efficiency standards in key sectors and product fields to the global best by 2025, and the G20 should establish a global platform for greater alignment and continuous improvement of standards.

Energy use would have doubled without energy efficiency between 1974 and 2010 – standards played their role





NOTE: The figure shows the actual increase in annual final energy consumption, and the energy that would have been needed without energy efficiency improvements. Energy services doubled, but energy use went up by only 20%. The countires surveyed are Australia, Denmark, Finland, France, Germny, Italy, Japan, the Netherlands, Sweden, UK, and the US Energy efficiency was four times more important than any actual fuel source for enabling growth in energy services.

Source: IEA, 2013. Energy Efficiency Market Report 2013

Energy efficiency will also play a CRITICAL role for GHG emissions reduction



Source: IEA, 2015. Energy Technology Perspectives

Up to 2/3 of cost-effective energy efficiency potential in 2035 will remain untapped without action



Source: IEA, 2014. *Capturing the Multiple Benefits of Energy Efficiency*. International Energy Agency, Paris. Available at: http://www.iea.org/bookshop/475-Capturing_the_Multiple_Benefits_of_Energy_Efficiency.



A policy package is needed to deliver the savings from energy efficiency, one key pillar of which is standards – and their linkage is important for the workshops discussion



What is the scope of the standard? i.e. not everything and what definition of product Which standard? Distinguish between prescriptive, MEPS, and more "market based" What is the stringency? Should be "economically justified"

Is it Voluntary or Mandatory? And is there a link between them and how does labels complement **Test or real world performance?** Enforcement mechanisms crucial

There is an emerging field of best practice and experience from countries, with impressive progress to date

Appliances: 81 countries using labels and standards

Successful (e.g. energy star)

Industry Applied commonly to equipment

Wider industrial standard for energy management (IS50001)

Current state of standards across the world

Buildings Standards normally only applied to new buildings

Half of all current buildings still in 2050 means retrofitting important

Transport

All major economies except Aus and Rus in passenger vehicles

Limited progress for larger vehicles

Energy Efficiency Standards vary across countries with large scope for improvement both within and between countries



International cooperation on energy effciency: The GCEC recommends raising standards to global best in the G20



- G20 countries produce 94% of vehicles and have 80% of energy potential market shift with higher fuel efficiency standards. (NCE, 2015; based on OICA data)
 - Does not preclude other countries involvement

Four key principles for the convergence of energy efficiency standards

Principle 1: Standards should be economically feasible and limited in number, and reflect differing national circumstances.

Principle 2: Standards should aim for the "global best", and should incorporate continuous improvement over time to reflect technological progress. Four key principles for the convergence of energy efficiency standards Principle 3: The design process for convergence should include strong coordination between relevant governments, best practice networks, domestic and international regulators, and industry.

Principle 4: Convergence of standards should be complementary to other international efforts on energy efficiency.

10 recommendations can close the 2°C emissions gap by up to 96%



Source: New Climate Economy, 2015. Seizing the Global Opportunity: Partnerships for Better Growth and a Better Climate.

Thank you. For more information on the New Climate Economy

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