

AGENDA

14 & 15 December 2015
OECD , Paris

GREEN GROWTH AND SUSTAINABLE DEVELOPMENT FORUM

Enabling the next industrial revolution:
Systems innovation for green growth

Forum Overview

Day 1
Monday, 14 December 2015

- 13:30 - 14:00 Welcome coffee
- 14:00 - 15:30 **Opening Session - Innovation and Green Growth Room CC9**
- 15:30 - 16:00 Coffee break
- 16:00 - 18:00 **Session 1 - Capturing Innovation Complementarities for Green Growth Room CC9**
- 18:00 - 19:30 Cocktail
Room Roger Ockrent, OECD Château
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Day 2
Tuesday, 15 December 2015

- 9:00 - 9:30 Welcome coffee
- 9:30 - 11:00 **Session 2 - Emerging Technologies & Firm Dynamics: Implications for Green Growth Room CC9**
- 11:00 - 11:30 Coffee break
- 11:30 - 13:00 **Session 3 - The Role of New Data Sources in Greening Growth Room CC9**
- 13:00 - 14:30 Catered Lunch **Room CC2**
- 13:15 - 14:15 **UNEP Side Event**
Technology Innovation for a
Green Economy in Developing Countries Room CC2
- 14:30 - 16:00 **Parallel Sessions**
- | Session A | Session B | Session C |
|--|---|--|
| Emerging technologies:
risk, trust and public
engagement | International cooperation in
research and technologies | Innovation measurement
and learning |
| Room CC9 | Room CC2 | Room CC18 |
- 16:00 - 16:30 Coffee break
- 16:30 - 18:00 **Reporting Back from Parallel Sessions and Closing Remarks Room CC9**

Day 1 – Monday, 14 December 2015

13:30 – 14:00 Welcome coffee

14:00 – 15:30 Opening Session: Innovation and Green Growth Room CC9

Moderator: **Kumi Kitamori**

Head of Division, Green Growth and Global Relations, OECD

Opening Remarks: **Angel Gurría**

Secretary General, OECD

Key Note Speaker: **Eric Beinhocker** (United Kingdom)

Executive Director, Institute for New Economic Thinking (INET),
Oxford Martin School, University of Oxford

Scene-setting Presentation: **Jong-Won Yoon**

Korean Ambassador to the OECD

15:30 - 16:00 Coffee break

Room CC9

16:00 – 18:00 Session 1: Capturing Innovation Complementarities for Green Growth
Joint Session with the Working Party on Innovation and Technology Policy (TIP)

Moderator: **Jerry Sheehan** (United States)

Assistant Director for Policy Development, National Library of Medicine and Chair
of the Working Party on Innovation and Technology Policy (TIP) under the
Committee on Scientific and Technological Policy (CSTP)

Maximising the benefits associated with the need to make the transition to a much more resource efficient and low carbon economy requires a co-ordinated strategy between policies for green growth and policies for innovation. This is particularly true in the context of urban development, where network externalities, sunk costs, and sectoral complementarity are rife. A significant issue here is how to ensure that innovations progress in a complementary manner, allowing for the exploitation of synergies. Technological, process or institutional innovations in any domain can be mutually reinforcing and support the economic transformation needed. Examples can be found in sectors such as agriculture (e.g. food-fibre production), water and energy (e.g. water, energy, food nexus) as well as more targeted areas such as SMART cities, urban transport systems, or energy for buildings. But innovation in one area, for example, gas extraction, can arguably delay innovation in other areas (e.g. cleaner energy). How can a more systematic approach be developed that breaks down path dependencies and effectively combines the objectives of green growth and innovation policies?

Keynote Presentation: **Jan Rotmans** (Netherlands)

Professor, Dutch Research Institute for Transitions, Erasmus University

Speakers:

- **Zhao Changwen** (China)
Director-General, Department of Industrial Economy, Development Research Center of the State Council (DRC)
- **Philippe Sajhau** (France)
Vice President of Smarter Cities, IBM France

Discussant:

- **Frank Geels** (United Kingdom)
Professor of System Innovation and Sustainability, Manchester Business School

18:00 - 19:30 Cocktail in the OECD Château, Room Roger Ockrent

Day 2 – Tuesday, 15 December 2015

9:00 - 9:30 Welcome Coffee

Room CC9

9:30 – 11:00 Session 2:

Emerging Technologies & Firm Dynamics: Implications for Green Growth

Moderator: **Erik Fahlbeck** (Sweden)

Chief Analyst, Swedish Ministry of Enterprise and Innovation and Chair of the OECD Committee on Industry, Innovation and Entrepreneurship (CIIE)

Responding to global challenges such as those associated with addressing climate change, preserving biodiversity, and increasing water scarcity will require continuous incremental improvements in existing technologies. However, this also needs to be supported by more radical innovation, particularly for pressing and potentially irreversible environmental outcomes. Unfortunately, relatively little is known about the policy conditions which lead to breakthrough innovations that in turn lead to a significant change in the trajectory of economies toward green growth. The balance in the use of supply-side measures which support research efforts and demand-side measures such as procurement, advance commitments, and prizes as well as the right policy mix to induce both incremental (i.e. short-run) and radical breakthrough innovations (i.e. long-run) need to be considered.

In addition, new firms are the vehicles through which many disruptive technological innovations and innovative business practices enter the market. Since the transition to a "greener" growth trajectory is likely to require such disruption, the role that policy conditions play in affecting firm entry and post-entry growth is particularly important in this domain. Similarly, some policy settings – including environmental policy settings – can unwittingly discourage the exit of less productive and more polluting incumbents.

Keynote Presentation: **Gregory Nemet** (United States)

Associate Professor, LaFollette School of Public Affairs
University of Wisconsin-Madison

Speakers:

- **Marjolein Helder** (Netherlands)
CEO, Plant-e
- **Paul Camuti** (United States)
Senior Vice President, Innovation and Chief Technology Officer, Ingersoll Rand
- **Nick Johnstone**
Head of Division,
Structural Policy, Directorate for Science, Technology and Innovation, OECD ; and
Florian Egli (Switzerland)
Mercator Fellow on International Affairs

11:00 - 11:30 Coffee break

Room CC9

11:30 – 13:00 Session 3: The Role of New Data Sources in Greening Growth

Moderator: **Vincent Champain** (France)
President, Long Terme Observatory

The growing number of unconventional data sources (“big data”, satellite images etc.) has opened up new possibilities to green our growth trajectories, both for market participants and for public authorities. Optimizing resource use and reducing environmental externalities can increasingly be pursued by using these new sources of data. However, there are technical, regulatory and policy implications that need to be considered in addition to the collection and confidentiality of the data.

Energy and transport sectors have seen growing “green” applications of such data and information technology in recent years (e.g. smart metering) and emerging lessons will be discussed. The session will also consider a case study on big data and the use of drones in greening agriculture. This case study will consider how a green agricultural revolution could be created based on more precise access and use of information that can be used to optimise the use of resources for food production. Consideration will be given to the technical and regulatory implications (e.g. regulation of drones), how data can affect how farming is done (e.g. impacts on farm size, growing role of data consultancy and software firms), as well as the role these innovations can play in policy design (e.g. monitoring farm practices, crop insurance – assessment of claims to estimate losses and thus indemnities).

Speakers:

- **Lammert Kooistra** (Netherlands)
Assistant Professor, Laboratory for Geo-information Science and Remote Sensing, Wageningen University
- **Sachiko Hayashida** (Japan)
Professor, Faculty of Science, Nara Women’s University
- **Ick Hoon Choi** (Korea)
Director of Korea Environmental Cooperation (KECO)
- **Luis Munuera**
Smart Grids Technology Lead, International Energy Agency (IEA)

13:00 - 14:30 Lunch (catered) Room CC2

Room CC2

13:15–14: 15 – UNEP Side Event “Technology Innovation for a Green Economy in Developing Countries”

This side-event organized by UNEP will present innovation policy for a green economy in several developing countries. In particular, the country case studies examine the issue of access to clean energy technology and how they contribute to the evolution of eco-innovation particularly for small and medium-sized enterprises (SMEs) in developing countries. In particular, the research investigates the barriers to the diffusion of clean technologies, the governance mechanisms that can help to unlock diffusion and improve clean energy access in developing countries and required policy environment which enables eco-innovation process of SMEs through green technology. The event builds on the results of a joint research project with the Graduate Institute of International and Development Studies in Geneva, Switzerland as well as UNEP's research project on eco-innovation and technology.

14:30 – 16:00 Parallel Sessions

Session A - Room CC9

Emerging technologies – risk, trust and public engagement:

Emerging technologies hold great promise for enabling more sustainable energy, transport, water and agricultural systems but they also present risks and unknowns for health, environmental safety, and livelihoods. Furthermore, different technological choices imply divergent visions of a greener society. Risks, unknowns, and value trade-offs have made the introduction of new technology controversial, and have presented governments difficult regulatory questions around, e.g., nuclear power, GM, and nanotechnology. This session will examine how governments and other actors might best manage the ethical, regulatory, and social questions surrounding emerging technologies. What have we learned about the challenges and pathways of assessing and managing technological risks? How should regulatory systems incorporate both robust evidence and social concerns as they seek to ensure health, safety, and public trust? How are new forms of governance being explored to guide governments, industry actors, and publics towards a better system of technological adoption?

Moderator: **Jim Dratwa** (Belgium)

European Commission, Directorate-General for Research and Innovation

Speakers:

- **René von Schomberg** (Netherlands)
Directorate-General for Research and Innovation, European Commission
- **Jeremy Ouedraogo** (Burkina Faso)
Head of Plant Genetics and Biotech Laboratory, INERA/CNRST Ouagadougou
- **Andy Stirling** (United Kingdom)
Professor of Science & Technology Policy, University of Sussex

Session B - Room CC2

International cooperation in research and technologies:

Just as the costs of many environmental damages cross borders, the benefits of innovation which mitigate such impacts are shared. This session would look at mechanisms and incentives for international research, cost and knowledge-sharing (e.g. international data and study repositories). The role of "open science" in the internationalization of research efforts related to international/global challenges would be addressed.

Moderator: **Roland Sommer** (Austria)

Vice-Chair of BIAC Committee on Innovation and Technology
Director of Public-Private Affairs, AVL

Speakers:

- **Pranab Baruah** (India)
Senior Knowledge Manager, Knowledge Solutions Division, Global Green Growth Institute
- **Marcos Alegre** (Peru)
Executive Director, Grupo GEA/CER, President RECPnet
- **Asaf Tzachor** (Israel)
Head of Strategy, Ministry of Environmental Protection

Session C - Room CC18

Innovation measurement and learning:

Assessing the benefits associated with the development and adoption of existing technologies is far from straight forward. Looking forward, the measurement issues become even more difficult. Moreover, while governments are actively supporting a number of technologies with a view to supporting green innovation, the links between emerging technologies and environmental outcomes are uncertain. How can green innovation be effectively measured? How can a stable policy environment be provided against a backdrop of changing information? How to design policy "exit" when evaluations indicate support measures should be removed (in cases of failure and success)?

Moderator: **Teimuraz Murgulia** (Georgia)

First Deputy Minister, Ministry of Environment and Natural Resources Protection

Speakers:

- **Lucas Porsch** (Germany)
Senior Fellow, Ecologic Institute, Project NETGREEN – Network for Green Economy Indicators
- **Jose Pineda** (Venezuela)
Adjunct Professor, Sauder School of Business, University of British Columbia (Venezuela)
- **Antoine Dechezleprêtre** (France)
Associate Professorial Research Fellow, Grantham Institute on Climate Change and the Environment, London School of Economics

16:00 - 16:30 Coffee break

Room CC9

16:30 – 18:00 Reporting Back From Parallel Sessions and Closing Remarks

Moderator:

- **Simon Upton**, Director, Environment Directorate, OECD

Reporting Back From Parallel Sessions: Moderators from Parallel Sessions A, B and C:

- **Jim Dratwa**, European Commission, Directorate-General for Research and Innovation
- **Roland Sommer**, Vice-Chair of BIAC Committee on Innovation and Technology
- **Teimuraz Murgulia**, First Deputy Minister, Ministry of Environment and Natural Resources

OECD Response and Next Steps:

- **Andrew Wyckoff**, Director, Science, Technology and Innovation, OECD

Closing Remarks

- **Rintaro Tamaki**, Deputy Secretary-General, OECD

16-18 December 2015 (OECD Conference Centre, Paris)

As a follow-up to the **2014 Green Growth and Sustainable Development Forum on “Addressing the social implications of green growth”** the OECD is supporting the following event:

1st Global Forum on Green Economy Learning (*By Invitation Only*)

Scaling up inclusive green economy learning and capacity development through institutional collaboration - In order to scale up inclusive green economy learning through collaboration of interested institutions from around the world, the Partnership for Action on Green Economy (PAGE) in collaboration with the Green Growth Knowledge Platform (GGKP), the Organisation for Economic Cooperation and Development (OECD) and the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training will organize the 1st Global Forum on Green Economy Learning.

The Forum is expected to bring together 60-70 professionals engaged in green economy learning and capacity development from national, regional and global institutions. In particular, the Global Forum targets:

- Policy-makers/public officials engaged in green economy policy and capacity development;
- Development partners active in green economy capacity development;
- Representatives from education and training institutions (including universities, technical and vocational education and training institutions, professional training centres, etc.); and
- Representatives of NGOs and business associations regularly delivering relevant trainings.

Contact

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