



**OECD/European Commission/Nordic Innovation Joint Workshop**

***THE FUTURE OF ECO-INNOVATION:  
The Role of Business Models in Green Transformation***

**19-20 January 2012**

**Danish Business Authority**

**Langelinie Allé 17, Copenhagen, Denmark**



**Hosted by FORA**

**Background and purposes**

Green growth means fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. However, existing production technology and consumer behaviour can only be expected to produce positive outcomes up to a point. Innovation pushes the frontier of green solutions outward and can help to decouple growth from natural capital depletion. Innovation will also lead to new ideas, new entrepreneurs and new business models, thus contributing to the establishment of new markets and eventually to the creation of new jobs and industrial transformation. Leading firms and entrepreneurs are exploring green business opportunities, sometimes based on systemic thinking and radical innovations, aiming to capture and create value from new business models. Policy makers are also increasingly paying attention to the need for radical and systemic eco-innovations as a powerful lever in enabling a long-term transition and transformation towards a greener economy. The forthcoming EU Eco-Innovation Action Plan refers to “business model eco-innovation” as a new important area to be taken into account for promoting eco-innovation, while the EU Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan is under review with a consideration of integrating this new development.

Since eco-innovation and the resulting new business models are still relatively new to industry and policy makers alike, a better knowledge and understanding of emerging practices is needed to enable government to elaborate appropriate policies and to encourage industry to take up new opportunities. Therefore, both the OECD and the Nordic Innovation (NI) are currently conducting business case studies in this area. This workshop aims to showcase good practices of radical and systemic eco-innovations and enhance understanding of the role that new business models can play, and will also draw lessons for industry and policy makers to accelerate the deployment and diffusion of promising environmental technologies and solutions. The workshop will also serve to establish a network of experts and innovators and identify potential future work for the OECD and the EU. The outcomes from the workshop will be fed into the OECD and the NI studies, both of which will be completed in the first half of 2012.

## DRAFT AGENDA

(Please check [www.oecd.org/innovation/green](http://www.oecd.org/innovation/green) for the latest update.)

**DAY 1: 19 January 2012**

**Chair: Chair: Jens Lundsgaard**

**(Deputy Permanent Secretary, Danish Ministry of Business and Growth)**

12.00-13.00	<i>Registration and refreshments</i>
13.00-13.15	<p><b>WELCOME AND OPENING</b></p> <p><i>Betina Hagerup, Director General, Danish Business Authority (5mn)</i></p> <p><i>Patrick O’Riordan, Sustainable Industrial Policy Unit, DG Enterprise and Industry, European Commission (5mn)</i></p> <p><i>Dirk Pilat, Head, Structural Policy Division, OECD Directorate for Science, Technology and Industry (5mn)</i></p>
<p><b>SESSION I: SETTING THE SCENE</b></p> <p>This first session will set the scene for the workshop in reviewing the latest perspectives on green growth and the critical role of eco-innovation from the perspective of academic and industry experts. The preliminary findings from the OECD project will also be presented to provide a framework for understanding new developments in eco-innovation and to share the objectives of the workshop with participants.</p>	
13.15-14.00	<p><b>KEYNOTES: Green growth and the role of innovation and business</b></p> <p><i>The role of radical and systemic changes for green transformation (20mn)</i> <i>Fred Steward, Policy Studies Institute and University of Westminster, United Kingdom</i></p> <p><i>The role of business models for greening industry (20mn)</i> <i>Josh Suskewicz, Principal, Innosight, United States</i></p>
14.00-14.30	<p><b>FRAMING DISCUSSIONS: OECD work on green growth and eco-innovation</b></p>

	<p><i>Overview of the OECD project and objectives of the workshop (10mn)</i>  <b>Tomoo Machiba, Project Manager, Green Growth &amp; Eco-Innovation, OECD</b></p> <p><i>Preliminary findings and analysis from OECD case studies (15mn)</i>  <b>Michal Miedzinski, Technopolis Belgium (consultant for the OECD project)</b></p>
<p><b>SESSION II: SHOWCASING GOOD INDUSTRY PRACTICES (1)</b></p> <p>Following the plenary talks, the workshop will turn to actual practices, experiences and messages from leading eco-innovators which were involved in the OECD and NI case studies. Each case study will highlight the main characteristics of the relevant business model, the potential impacts on eco-innovation and for scaling up, the obstacles that had to be addressed, and any other lessons that could have implications for policy. The session will explore some of the key areas of eco-innovation explored in the OECD and NI studies. The showcasing session will continue in the morning of Day 2.</p>	
14.30-15.30	<p><b>NEW BUSINESS MODELS 1: Transport and mobility</b></p> <p><b>Presentation from innovators (40mn)</b></p> <p><b><u>Better Place, Israel/US</u></b>  <i>Speaker tbd</i></p> <p><b><u>Velib'/Autolib', City of Paris, France (tbc)</u></b></p> <p><b>Comments from experts (10mn)</b>  Vassilios Kefalas, National Technical University of Athens, Greece  Samira Jabet, Environment-driven Markets, International Affairs, Tillväxtverket (Agency for Economic and Regional Growth), Sweden (OECD expert)</p> <p><b>Discussion with the floor (10mn)</b></p>
15.30-15.50	<i>Coffee break</i>
15.50-16.50	<p><b>NEW BUSINESS MODELS 2: ICT-based facilitation and optimisation</b></p> <p><b>Presentation from innovators (45mn)</b></p> <p><b><u>Intelen (Energy monitoring through social network), Greece</u></b>  Vasillis Nikolopoulos, CEO and Co-founder</p> <p><b><u>TaKaDu (Water infrastructure monitoring), Israel</u></b>  Hagai Scolnicov, Chief Technical Officer</p> <p><b><u>CartaSense (Food supply chain monitoring), Israel</u></b>  Yael Leshem, Vice President, Products Management</p> <p><b>Comments from experts (10mn)</b>  Martin Charter, Centre for Sustainable Design, University of Creative Arts, UK  Soren Cajus, Danish ICT and Electronics Federation (tbc)</p> <p><b>Discussion with the floor (5mn)</b></p>
16.50-17.50	<p><b>NEW BUSINESS MODELS 3: Eco-housing and cities</b></p> <p><b>Presentation from innovators (40mn)</b></p> <p><b><u>Hammerby Sjöstad, Sweden</u></b></p>

	<p>Erik Freudenthal, Communication Manager, GlashusEtt (Information Centre for Hammerby Sjöstad)</p> <p><b><u>DigiEcoCity, Finland/China</u></b> Juha Lipiainen, COO</p> <p><b>Comments from experts (10mn)</b> Dimitris Raidis, Architect &amp; Urban Planner, Greece Jacob Korreborg Andersen, Sustainable Development and Green Growth Department, City of Copenhagen (<i>tbc</i>)</p> <p><b>Discussion with the floor (10mn)</b></p>
17.50-18.00	<p><b>Conclusions from Day 1</b> <b>Dirk Pilat, OECD</b></p>
18.00-19.30	<i>Cocktail and networking opportunity</i>

**DAY 2: 20 January 2012**

**Chair: Dirk Pilat (OECD)**

8.30-9.00	<i>Refreshments</i>
<p><b>SESSION III: SHOWCASING GOOD INDUSTRY PRACTICES (2)</b></p> <p>The first session in Day 2 will explore some further practices from eco-innovators. The findings and cases from the NI and EU projects will also be presented to provide additional contexts and examples for understanding developments in eco-innovation.</p>	
9:00-9:30	<p><b>MAKING THE CASE FOR BUSINESS: Work from the EU and Nordic countries</b> <i>Examples from CIP Eco-innovation Market Replication projects</i> <b>Maciej Szymanowicz, DG Environment, European Commission (15mn)</b> <i>Preliminary findings from NI project on green business model innovation</i> <b>Kristian Henriksen, FORA (15mn)</b></p>
9.30-10.30	<p><b>NEW BUSINESS MODELS 4: Functional sales and innovative financing</b></p> <p><b>Presentation from innovators (40mn)</b> <b><u>SAFE CHEM Europe (Dow Chemical), Germany</u></b> Steffen Saecker, Marketing Manager <b><u>Danfoss Solutions (ESCO), Denmark</u></b> <i>Speaker tbd</i></p> <p><b>Comments from experts (10mn)</b> Arnold Tukker, TNO/NTNU, Netherlands/Norway (<i>tbc</i>) Cecilia Bengtsson, Director of Environment and Quality, Business Office, Volvo Group Real Estate, Sweden (<i>tbc</i>)</p>

	<b>Discussion with the floor (10mn)</b>
10.30-11.30	<p><b>NEW BUSINESS MODELS 5: Industrial symbiosis and cradle to cradle</b></p> <p><b>Presentation from innovators (45mn)</b></p> <p><b><u>Maersk Line, Denmark</u></b> Jacob Sterling, Head of Climate and Environment</p> <p><b><u>Kwinana Regional Synergies, Australia (tbc)</u></b> Michele Rosano, Director, Sustainable Engineering Group, Curtin University, Australia (OECD expert)</p> <p><b><u>Humo Olea, Greece</u></b> Apostolo Vlyssides, Professor, National Technical University of Athens</p> <p><b>Comments from experts (10mn)</b> Con Sheahan, Department of Design and Manufacturing Technology, University of Limerick, Ireland Jonas Engberg, Sustainability Manager, IKEA, Sweden (tbc)</p> <p><b>Discussion with the floor (5mn)</b></p>
11.30-11.40	<i>Brief coffee break for changing the format</i>
<p><b>SESSION IV: EXTRACTING LESSONS FOR INDUSTRY</b></p> <p>This session aims to extract and synthesise lessons from the new eco-innovation practices which have been presented in earlier sessions with a particular focus on how good practices could be scaled up and what industry could do to capture opportunities from new business models and turn these into mainstream businesses.</p>	
11.40-12.40	<p><b>SYNTHESISING LESSONS FOR INDUSTRY: Panel discussion</b></p> <p><b>Discussion with panellists from experts and innovators (60mn)</b></p> <p><b><i>Dax Lovegrove, Head of Business and Industry, WWF-UK</i></b> <b><i>Yoram Krozer, Sustainable Innovations Academy, University of Twente, Netherlands</i></b> <b><i>Paul Linzmeyer, General Partner, ISO International LLC, United States</i></b> <b><i>Jason Donohue, i-Propeller, Belgium</i></b> <b><i>Novozymes, Denmark (speaker tbd)</i></b> <b><i>Dick Toet, Vice President, European External Affairs, Unilever</i></b> <b><i>Rick Johnson, BIAC, United States</i></b> <b><i>Hans Jakob Eriksen, Director, Copenhagen Office, Global Green Growth Institute (GGGI) (tbc)</i></b></p> <p><b><i>Facilitator: Karin Kiltgaard, Director, Environmental Policy, Confederation of Danish Industry</i></b></p>
12.40-13.30	<i>Lunch and networking opportunity</i>
<p><b>SESSION V: EXTRACTING POLICY LESSONS</b></p> <p>Through dialogue between industry, experts and policy makers, the final session will discuss what</p>	

<p>government could do to extend the scale and depth of eco-innovation and to accelerate radical and systemic shifts towards a green transformation. The discussion will also include the identification of gaps in the current understanding of industry and policy practices and the exploration of further work that the OECD, the EC and countries might undertake to strengthen eco-innovation and to disseminate knowledge and good practices.</p>			
13.30-14.00	<p><b>ADVANCING STRATEGIES: The integration of business model innovation in policies</b></p> <p><i>Europe 2020, Industrial Policy and the revision of the EU SCP/SIP Action Plan</i>  <b>Patrick O’Riordan , DG Enterprise and Industry, European Commission (15mn)</b></p> <p><i>The launch of the EU Eco-Innovation Action Plan</i>  <b>Aurelio Politano, DG Environment, European Commission (15mn)</b></p>		
14.00-15.15	<p><b>IDENTIFYING EFFECTIVE POLICIES: Two policy roundtables</b></p> <table border="1"> <tr> <td> <p><b>Group A: Discuss policy implications of changing multi-sectoral dynamism</b> (mainly based on lessons from the first three sessions - mobility, ICT and eco-housing)</p> <p><i>Preliminary findings on policy implication from the OECD work</i>  <b>Asel Doranova, Technopolis Belgium (10mn)</b></p> <p><i>Interactive discussions with panelists (kick-off speakers) (60mn)</i></p> <p><i>Panellists:</i>  <b>Magnus Emfel, WWF Sweden</b>  <b>Takayuki Sumita, Director General, Japan Machinery Centre for Trade and Investment, Japan/Belgium</b>  <b>Loredana Ghinea, Manager, Innovation Policy, European Chemical Industry Council (CEFIC), Belgium (tbc)</b>  <b>António Victor Carreira de Oliveira, Senior Adviser, Sustainable Development, Ministry of Economy, Innovation and Development, Portugal (OECD expert)</b>  <b>Jesper Jerlang, Director of Standardization, Danish Standards Foundation (tbc)</b>  <b>Micheal Persson, General Manager, Regulatory Affairs, Power New Bio Solutions, Dong Energy, Denmark</b></p> </td> <td> <p><b>Group B: Discuss policy implications of changing value chains</b> (mainly based on lessons from the last two sessions -functional sales and cradle to cradle)</p> <p><i>Preliminary findings on policy implication from the NI work</i>  <b>Jakob Øster, FORA (10mn)</b></p> <p><i>Interactive discussions with panellists (kick-off speakers) (60mn)</i></p> <p><i>Panellists:</i>  <b>Arnold Tukker, TNO/NTNU, Netherlands/Norway</b>  <b>Peter Laybourn, International Synergies, UK</b>  <b>David McAndrew, Federal Energy Management Program (FEMP), Department of Energy, United States (tbc)</b>  <b>Robert Droop, Sustainability Division, Ministry of Infrastructure and Environment, Netherlands (tbc)</b>  <b>Panagiotis Panagiotakopoulos, Managing Director, Close the Loop Managing &amp; Consulting, Greece (OECD expert) (tbc)</b></p> <p><i>Facilitator: Eili Vigestad Berge, Senior Advisor, Nordic Innovation</i></p> <p><b>Rapporteur: Lars Wärngård, VINNOVA (Swedish Governmental Agency for Innovation Systems) (tbc)</b></p> </td> </tr> </table>	<p><b>Group A: Discuss policy implications of changing multi-sectoral dynamism</b> (mainly based on lessons from the first three sessions - mobility, ICT and eco-housing)</p> <p><i>Preliminary findings on policy implication from the OECD work</i>  <b>Asel Doranova, Technopolis Belgium (10mn)</b></p> <p><i>Interactive discussions with panelists (kick-off speakers) (60mn)</i></p> <p><i>Panellists:</i>  <b>Magnus Emfel, WWF Sweden</b>  <b>Takayuki Sumita, Director General, Japan Machinery Centre for Trade and Investment, Japan/Belgium</b>  <b>Loredana Ghinea, Manager, Innovation Policy, European Chemical Industry Council (CEFIC), Belgium (tbc)</b>  <b>António Victor Carreira de Oliveira, Senior Adviser, Sustainable Development, Ministry of Economy, Innovation and Development, Portugal (OECD expert)</b>  <b>Jesper Jerlang, Director of Standardization, Danish Standards Foundation (tbc)</b>  <b>Micheal Persson, General Manager, Regulatory Affairs, Power New Bio Solutions, Dong Energy, Denmark</b></p>	<p><b>Group B: Discuss policy implications of changing value chains</b> (mainly based on lessons from the last two sessions -functional sales and cradle to cradle)</p> <p><i>Preliminary findings on policy implication from the NI work</i>  <b>Jakob Øster, FORA (10mn)</b></p> <p><i>Interactive discussions with panellists (kick-off speakers) (60mn)</i></p> <p><i>Panellists:</i>  <b>Arnold Tukker, TNO/NTNU, Netherlands/Norway</b>  <b>Peter Laybourn, International Synergies, UK</b>  <b>David McAndrew, Federal Energy Management Program (FEMP), Department of Energy, United States (tbc)</b>  <b>Robert Droop, Sustainability Division, Ministry of Infrastructure and Environment, Netherlands (tbc)</b>  <b>Panagiotis Panagiotakopoulos, Managing Director, Close the Loop Managing &amp; Consulting, Greece (OECD expert) (tbc)</b></p> <p><i>Facilitator: Eili Vigestad Berge, Senior Advisor, Nordic Innovation</i></p> <p><b>Rapporteur: Lars Wärngård, VINNOVA (Swedish Governmental Agency for Innovation Systems) (tbc)</b></p>
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15.15-15.45	<p><b>SYNTHESISING LESSONS FOR GOVERNMENT</b></p> <p><b><i>Report from rapporteurs (10mn)</i></b></p> <p><b><i>Discussions with the floor (20mn)</i></b></p> <p><b><i>Facilitator: Dirk Pilat, OECD</i></b></p>	
15.45-16.00	<p><b>CONCLUDING SESSION</b></p> <p><b><i>Finn Lauritzen, Chair, OECD Committee on Industry, Innovation and Entrepreneurship (CIIE)</i></b></p>	
16.00	<p><b>End of the Workshop</b></p>	

## **REGISTRATION**

If you would like to participate in this workshop, please contact [ecoinno@oecd.org](mailto:ecoinno@oecd.org) or register through your Permanent Delegation to the OECD (in case you are from government).

Enquiries should be addressed to:

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Website : [www.oecd.org/innovation/green](http://www.oecd.org/innovation/green)

## **BREAK-OUT SESSIONS**

In the afternoon of Day 2, we will have two parallel policy roundtables as indicated in the agenda. We will ask your preference (Group A or B) when you register at the venue on Day 1.

## **LOGISTICS**

Participants are responsible for making their own travel and, as applicable, visa arrangements. Hotel bookings should be made directly with the hotels. We are not in a position to provide any financial assistance to your travel expenses.

### **Workshop venue**

Erhvervsstyrelsen (Danish Business Authority)  
Room: Annekset og Rådssalen (4th floor)

Dahlerups Pakhus  
Langelinje Allé 17  
2100 København Ø  
Denmark

Reception phone: +45 (0)3546 6000

### **Hotels**

We recommend the following hotels for staying in Copenhagen:  
[www.scandichotels.com/en/Hotels/Countries/Denmark/Copenhagen/Hotels/Front/](http://www.scandichotels.com/en/Hotels/Countries/Denmark/Copenhagen/Hotels/Front/)  
[www.phoenixcopenhagen.dk](http://www.phoenixcopenhagen.dk)

### **How to get to the workshop venue from the Copenhagen Airport (Kastrup)**

*By public transport:* Take a Metro train to Central Station and change to any S-train and get off at Østerport station (Take approx. 20 minutes in total. Trains from the airport run every 20 minutes). Cost DKK 36 (EUR 5, USD 6.5). 10 minute walk from Østerport.

*By taxi:* Take approx. 20 minutes to the venue. Cost around DKK 250 (EUR 34, USD 45) All taxis accept payment by VISA and Mastercard (for American Express, check the driver first).

### **Local contact**

In the event you need assistance during the course of the workshop, the local contact is:

Kristian Henriksen, e-mail: [kh@ebst.dk](mailto:kh@ebst.dk); mobile: +45 (0)3160 2892



Map from Østerport station to the venue

