

**BMZ**



Federal Ministry  
for Economic Cooperation  
and Development

Organised by:

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

**INTERNATIONAL POLICY FORUM**

# Eco-Innovation Systems in Developing Countries

Challenges and Opportunities for  
International Cooperation

**PROGRAMME**

27–28 JANUARY 2014  
SCANDIC HOTEL | BERLIN

As of January 22<sup>th</sup>, 2014

## INTRODUCTION

### Background

Decoupling economic growth from the consumption of natural resources, environmental degradation and adverse impacts on the global climate, is one of the greatest challenges of the 21st century. Eco-innovations (also known as green-innovations) that contribute to the long-term preservation of our global environment and to mitigating climate change are an essential precondition if we are to conquer these challenges.

Many obstacles stand in the way of the development and dissemination of eco-innovations. Some of these obstacles are even more pronounced in developing countries and emerging economies than in industrialised states. Education and research systems tend not to be sufficiently geared to the needs of the private sector, the vast majority of small and medium-sized enterprises do not have the capacity or the funding that would enable them to use new technologies, and the stable framework conditions that would be needed for higher-risk investment are often not in place.

Against this backdrop, the German Federal Ministry for Economic Cooperation and Development (BMZ) would like to discuss with you, at this international dialogue forum, how eco-innovation systems can be effectively promoted in the German development cooperation partner countries.

On the basis of the inputs delivered by experts from the fields of academia, politics and business, we will explore the relevance of the topic and possible promotion approaches through peer-to-peer discussions and interactive workshops with government representatives and business leaders from emerging economies and developing countries. Practical examples of businesses will be taken to illustrate the obstacles encountered and the preconditions for the success of eco-innovations in different contexts. We will also be looking at their business potential and the chances they offer to create jobs. Working groups will look in greater detail at resource efficiency in businesses and the recycling sector.

On the second day we would like to invite you to join us on a tour of Berlin. You will have the opportunity to enter into a dialogue with both organisations that promote innovations and with business leaders who have successfully put eco-innovations into practice in their own companies.

### Key questions addressed by the event

- **Relevance and effects:** How important are eco-innovations for meeting global environmental challenges, and which relevance do they have from the perspective of developing countries and emerging economies?
- **Potentials and challenges:** What business potential can companies derive from eco-innovations? What are the challenges involved in developing and diffusing eco-innovations?
- **Role of development cooperation:** How can development cooperation support cooperation countries in promoting eco-innovations?

## PROGRAMME

### MONDAY, 27 JANUARY 2014

Event Venue: Scandic Hotel | Gabriele-Tergit-Promenade 19 | 10785 Berlin

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08:45                      **Registration**

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#### Moderator

**Gerd Meier zu Köcker**, Head of Department, International Technology Co-operations and Clusters, Association of German Engineers / Association for Electrical, Electronic & Information Technologies – Innovation + Technology (VDI/VDE-IT), Germany

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09:15                      **Welcome and opening remarks**

**Christian Schmidt**, Parliamentary State Secretary to the Federal Minister for Economic Cooperation and Development (BMZ), Germany

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09:30                      **An urgent concern: eco-innovations and its far-reaching effects**

**Klaus Töpfer**, Executive Director, Institute for Advanced Sustainability Studies (IASS), Germany; former Executive Director of the United Nations Environment Programme (UNEP) and Under-Secretary General of the United Nations

10:00                      **Eco-innovation in developing and emerging countries:  
a luxury or an opportunity?**

Eco-innovation is playing an increasingly important role in the face of global challenges such as climate change and the rising consumption of raw materials. While large sums are already being invested in eco-innovations in OECD countries, where these innovations also receive state subsidies, things are very different in emerging economies and partner countries. Yet local challenges faced by partner countries, such as desertification or harmful industrial waste, call for innovative solutions at a local level. Furthermore, these countries can also benefit from the potential effects of eco-innovation on employment and competitiveness. This session will therefore focus on the importance and effects of eco-innovation for countries in general, and for emerging economies and partner countries in particular.

## Key questions

- What types of innovation are required to meet global environmental challenges?
- How relevant is eco-innovation in emerging economies and partner countries? To what extent is it a priority there?
- What approaches have been adopted by our partner countries to strengthen eco-innovations?

Interview with the moderator

**María Gisella Orjeda**, President, National Council of Science, Technology and Technological Innovation (CONCYTEC), Peru

**Kevin Chika Urama**, Executive Director, African Technology Policy Studies (ATPS) Network, Kenya

10:30

## Discussion with participants

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11:00

## COFFEE BREAK

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## Eco-innovation: opportunities and challenges for entrepreneurs

The private sector is the key driver of eco-innovation. Companies develop and market innovation to make money. At the same time, innovation helps to reduce resource consumption, which may also cut company costs. However, this kind of innovation does not come out of thin air. Successful innovators are faced with many challenges in the shape of market and system failures. This session will examine successful business models from selected eco-innovators, and look into the factors that have contributed to their success.

## Key questions

- What challenges must companies launching eco-innovations meet to be successful?
- Which business model underlies the innovations described here?
- To what extent do the business models described depend on public contributions?
- What role should the state play in promoting eco-innovation?

- 11:30 **Eco-innovation in emerging economies and developing countries: strategies for and challenges to promotion**
- René Kemp**, Professorial fellow at UNU-MERIT; Professor of Innovation and Sustainable Development at ICIS, Maastricht University, Netherlands
- 11:45 **Eco-innovation: three countries, three business models, three minutes each**
- Brief presentation of innovations by the following companies
- Plastic recycling in Peru: Life out of Plastic (LOOP)
  - Biogas plants in Tanzania: SimGas BV
  - Waste recycling in India: Lets Recycle
- 12:05 **Fishbowl discussion**
- Sanne Castro**, Chief Executive Officer (CEO), SimGas BV, Netherlands
- Irene Hofmeijer**, Chief Executive Officer (CEO), LOOP, Peru
- Sandeep Patel**, Chief Executive Officer (CEO), Let's Recycle, India
- María Virginia Vilarino**, Climate & Energy Coordinator, Argentine Business Council for Sustainable Development (CEADS), Argentina
- 12:50 **Summing up: the current state of play**
- Andreas Stamm**, Senior Project Manager, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Addis Abeba; Author of the study "Promoting Eco-Innovation. Challenges and potential solutions for private sector development"
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- 13:00 **LUNCH BREAK**
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## Parallel working groups on (a) Resource efficiency and (b) Recycling

Resource efficiency and recycling are among the areas where environmental challenges can rapidly be turned into new business models with positive effects on employment. Resource efficiency is a particularly promising field of action because investment here often pays off quickly for the companies concerned, enabling them to reduce their environmental impacts at low cost. Recycling creates new markets for companies, saves raw materials and cuts disposal costs, while preventing harmful environmental impacts. Nevertheless, experience shows that investments of this kind are often only made when state incentives are offered.

Like other donors, German development cooperation actors have been involved in both fields for over twenty years, and have amassed a wealth of experience in adapting internationally proven concepts to the conditions that prevail in specific countries. We will discuss success factors using selected examples

## Key questions for discussion based on specific examples of programme approaches

- What are the objectives of the programme? What challenges does it face?
- Which policy mix does it use?
- What results has it achieved, especially in the field of eco-innovation?
- What role has development cooperation played in the programme?

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14:00

## Working group (a) Resource and energy efficiency

### Moderation:

**Tilman Altenburg**, Head of Department, Sustainable Economic and Social Development, German Development Institute (DIE), Germany

## Presentation of a programme approach in the field of resource efficiency

### Project examples:

#### **National Cleaner Production Center**, South Africa (NCPC-SA)

This Center, established in 2002, has branches in Cape Town, Pretoria and Durban, and helps South African companies to reduce their costs through more environmentally friendly production. The German Government supports the Center by means of a human capacity development project. The organisation is a member of UNIDO and UNEP's Global Resource Efficiency and Cleaner Production Network (RECPnet):

**Reuben Kadalie**, National Operations Manager, National Cleaner Production Center (NCPC), South Africa

## **Financing Schemes for Energy Efficiency and Cleaner Production in Micro, Small and Medium Enterprises (MSMEs) in India**

The principal financial institution for the promotion, financing and development of the MSME-sector in India is the Small Industries Development Bank of India (SIDBI). The financial support provided by the German Government to SIDBI aims to assist Indian MSMEs in introducing innovative climate- and environmentally friendly products, processes and services to the market. The intention is to close the existing funding gap for risk capital by simultaneously supporting SIDBI with the further development of its financing products and its capacities for project assessment: <http://www.sidbi.in/>

**Maike Lerch**, Principal Project Manager, KfW Bankengruppe, Germany

**Mikael P. Henzler**, Managing Director, adelphi consult GmbH, Germany

## **Policy Advice for Environment and Climate Change (PAKLIM)**

PAKLIM is an Indonesian – German Cooperation Programme supporting the national and local governments, industry, and civil society organisations to implement and disseminate climate friendly measures. As one of the world's largest emitters of greenhouse gases, Indonesia needs to put well planned and coordinated strategies into practice in order to face current and future climate challenges.

**Michael Funke-Bartz**, Senior Advisor, Environment and Climate, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany

14:00

## **Working group (b) Recycling**

### **Moderation:**

**Georgeta Vidican**, Sustainable Economic and Social Development Department, German Development Institute (DIE), Germany

### **Presentation of a programme approach in the field of recycling**

#### **Best of 2 Worlds**, Ghana, Egypt

This project supported by the German Government aims to set up new recycling structures in Ghana and Egypt. The Best of 2 Worlds concept is based on establishing cooperation arrangements between recycling structures for precious metals in developing and industrialised countries. This approach is meant to ensure the safe disposal of materials, while at the same time increasing local value added.

**Matthias Buchert**, Head of Division, Infrastructure & Enterprises, Institute for Applied Ecology, Germany; Project Director “Best of 2 Worlds”

## **Private Sector involvement in E-waste recycling in Ghana**

Nehlsen GmbH & Co. KG has been working in the area of waste disposal and cleansing for over 90 years, focusing on the development of new disposal concepts and recycling methods. The company has subsidiaries in several European and African countries. Its Ghanaian subsidiary is currently involved in a Public-Private-Partnership on recycling E-Waste. The company's CEO is Deputy Chairwoman of the board of German RETech, an association for the promotion of sustainable environmental technology of the German recycling sector abroad. <http://en.nehlsen.com/locations/ghana.html>

**Claudia Bunkenborg**, Deputy Chairwoman, German Recycling Technologies (RETech) Partnership; Chief Executive Officer (CEO), International Business, Nehlsen GmbH und Co KG, Germany

## **Climate-friendly waste management in Marga-Marga, Chile**

This model project promoted by the German Government aims to introduce a sustainable waste management system for the recovery of materials and energy from municipal waste in the Marga-Marga Association of Municipalities. For this purpose, a municipal waste treatment facility and a training centre for experts and decision-makers have been set up so that technology and knowledge can be transferred to other parts of the country: <http://www.stoffstrom.org/projekte/internationale-projekte/marga-marga-chile/>

**Michael Knaus**, Head of the International Department, Institute for Applied Material Flow Management (IfaS), University of Applied Sciences Trier, Germany

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16:00

## **COFFEE BREAK**

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### **Development cooperation to promote eco-innovation**

Based on the findings of the morning sessions and the outcomes of the working groups, this final session looks into the question of how development cooperation activities can better contribute to promoting eco-innovations in future.

16:30

### **Presentation by working groups (a) Resource efficiency and (b) Recycling**

**Tilman Altenburg**, Head of Department, Sustainable Economic and Social Development, German Development Institute (DIE), Germany

**Georgeta Vidican**, Sustainable Economic and Social Development Department, German Development Institute (DIE), Germany

- What suggestions did the working groups make regarding the policies that foster eco-innovations?
- What is their view of the role played by development cooperation in this area?

16:45

## On the role played by development cooperation in promoting eco-innovation

### Key questions

- How can we scale up the implementation of approaches to eco-innovation in developing countries?
- What role should governments and entrepreneurs/companies play?
- How can development cooperation support this process?
- How can systemic approaches to innovation promotion be improved and more effectively designed?

**Mario Cimoli**, Director, Division of Productivity and Management, Economic Commission for Latin America and the Caribbean (ECLAC), United Nations, Santiago de Chile

**Garrette Clark**, Programme Officer, Business and Industry Outreach, Business and Industry Unit, Sustainable Consumption and Production Branch, Division of Industry, Technology and Economics, United Nations Environment Programme (UNEP DTIE), Paris

**Katherine Sierra**, Nonresident Senior Fellow, Global Economy and Development, Brookings Institution, USA; former Vice President for Sustainable Development at the World Bank, Washington D.C.

17:15

## Discussion with the audience

17:50

## Conclusion and outlook

**Susanne Dorasil**, Head of Division, Economic Policy; Financial Sector, Federal Ministry for Economic Cooperation and Development (BMZ), Germany

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18:30

## Walk

to Oscar & Co. am Potsdamer Platz, Voxstraße 1, 10785 Berlin

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19:00

## DINNER

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21:00

## Return

to Scandic Hotel

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# Eco-Innovation Systems in Developing Countries

## TUESDAY, 28 JANUARY 2014

**Location:** EUREF-Campus, Torgauer Straße 12–15, 10829 Berlin | **Time:** 9:00 – 13:00

### Tour of Berlin's Eco-Innovation Hotspots

### Side-event of the International Policy Forum "Eco-Innovation Systems in Developing Countries"

Organised by Borderstep Institute for Innovation & Sustainability gGmbH

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08:45 **Departure from Scandic Hotel**

Bus for max. 40 participants

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09:15 – 10:00 **Introduction to the EUREF-Campus cluster**

GreenGarage Conference room

- **EUREF AG:** Introduction to the EUREF-Campus: Idea behind the campus, planning and realisation of the site, tenants of the cluster (outside on-site, if the weather permits it)
  - **Chamber of Commerce and Industry of Berlin (tbc):** Presentation of the city's systemic support for eco-innovation
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10:00 – 10:45 **Case Study Electric Mobility**

GreenGarage Conference room & parking lot

- **InnoZ GmbH:** Presentation of the company and its activities
  - **ubitricity GmbH:** Presentation of the company and its activities
  - **Q&A** with the companies
  - **Demonstration and testing of the charging station** on-site in the parking lot
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10:45 – 11:15 **COFFEE BREAK**

Café im Wasserturm

- Opportunity to discuss the results of day 1 of the conference
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11:15 - 12:30 **EU-level support system in Berlin: Climate-KIC & GreenGarage**

GreenGarage Conference room

- **Climate-KIC:** introduction to innovation support activities
- **GreenGarage start-up residents:** 3-minute pitches
- **Q&A and discussion** with the start-ups in small groups

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12:30 **Return from EUREF-Campus to Scandic Hotel**

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13:00 – 14:00 **LUNCH**

Scandic Hotel

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## Participating organisations & companies:

**EUREF AG:** EUREF AG is the driving force behind the development of a “smart city” for work, research, education, lifestyle and leisure on the EUREF-Campus. The company initiates and develops real estate projects in Berlin and Eastern Germany concentrating on sustainability, energy-saving property development and the preservation of cultural heritage.

**Chamber of Commerce and Industry of Berlin:** the Chamber of Commerce and Industry of Berlin has a public mandate to promote Berlin as a place to do business and provides the city’s enterprises with a diverse range of products and services related to funding, imports and exports, taxation, legislation and education, amongst others.

**ubitricity GmbH:** ubitricity is developing an innovative solution, which helps reduce substantially the costs for electric vehicle networks and related accounting systems by using smart meters. Charging stations have been simplified to become specific, cheap electrical sockets that can be installed practically anywhere (e.g. at the workplace or on street lamps). ubitricity was founded in 2008 in Berlin and has been financed by Venture Capital Investor Earlybird since 2010.

**InnoZ – Innovationszentrum für Mobilität und gesellschaftlichen Wandel GmbH:** InnoZ develops innovative solutions, market analyses and supports the introduction of new mobility products and services to the market place. InnoZ contributes to the living lab on the EUREF-Campus with its research projects and “elektroMobilität” platform. InnoZ is a collaborative company comprised of DB Mobility Logistics AG, Siemens AG, T-Systems International GmbH, WZB gGmbH and DLR e.V.

**Climate-KIC:** Climate-KIC is one of three Knowledge and Innovation Communities (KICs) created in 2010 by the European Institute of Innovation and Technology (EIT). As one of 5 such Climate-KICs at EU-level, Climate-KIC in Berlin supports environmentally and economically sustainable technologies, processes and services, to decelerate climate change and support climate adaptation strategies. GreenGarage is part of the centre’s innovation programme and is an incubator with workspace for up to 6 start-ups.