



REGIONAL ENVIRONMENTAL CENTER

**Conference on
Financing eco-innovation in Central and Eastern Europe
*Experiences, new mechanisms, challenges***

**Monday, 23rd April 2007
Radisson SAS Beke Hotel, Budapest**

Draft minutes

SESSION I: *Opening session*

Chair: Ms. Oreola Ivanova-Nacheva, REC Deputy Executive Director

Official opening by Ms. Marta Szigeti Bonifert – Executive Director of the REC, and Ms. Oreola Ivanova-Nacheva, REC Deputy Executive Director.

Ms. Oreola Ivanova-Nacheva and Ms. Marta Szigeti-Bonifert welcomed the conference presenters and participants, wishing a successful and interactive exchange of ideas.

Financing Eco-innovation in Europe - Mr. Raymond Van Ermen, European Partners for the Environment.

Mr. Van Ermen outlined the most important eco-innovation sectors and technologies and the current state and issues of global and European eco-innovation financing. He then shed light on EU funding plans, and the European platform on financial support to eco-innovation, emphasising platform objectives and the political agenda. Mr Van Ermen gave an overview and outlined problems of access to private capital in the CEE countries, and explained the services provided by the European Partners for the Environment (EPE). He outlined green financial instruments other than subventions, as well as new developments, products and services for sustainable development and low carbon economy, illustrating with successful examples from France and the Netherlands.

(Power point presentation is available)

Hungarian Eco-innovation Programme. - Mr. Attila Varkonyi, Chairman of the Research and Technology Council on behalf of the Ministry of Economy and Transport, Hungary.

Mr. Varkonyi provided data and trends on the Hungarian national innovation system, and the importance of the eco-innovation in the system. He outlined the priorities of the new Hungarian Science, Technology and Innovation Strategy (STI) and its aspects of sustainability and R&D of social interest. He presented the Action Plan based on the research Development and Innovation (RDI) Strategy, and provided examples of successful eco-innovation projects in Hungary.

(Power point presentation is available)

Why eco-innovation? Competitiveness and Innovation Programme (CIP) – new EU framework programme - Mr. Mr Ian Clark, Head of Unit Research, Science & Innovation, DG Environment European Commission.

Mr. Clark presented the EU Environmental Technologies Action Plan (ETAP) Competitiveness and Innovation Programme (CIP). He explained the structure, goals, and priority actions of ETAP, and listed other EU instruments for financing eco-innovation and related instruments such as EIB Risk Snaring Finance Facility, EIB Climate Change Financing Facility, LIFE+, IEE, international and regional schemes etc. Mr Clark also outlined the Growth and Innovation Facility, and other financial instruments, as well as pilot and market replication projects.

(Power point presentation is available)

Discussion:

Question: What is the overall situation in eco-innovation funding under the Research Framework Program 7 (FP7)?

Answer: On the supply side, it was successful: 10BEUR was allocated for environmental technologies, one-third of which was allocated for eco-innovation.

Question: How will the new EMAS scheme differ comparing to the old one?

Answer: EC is still revising the new scheme, so we do not know precisely yet. The old scheme was too complicated, and it was competing with other schemes. The new scheme will try to address these problems.

Comment: The schemes that are addressing SMEs, should go for a bigger number of smaller projects, rather than for a small number of big projects.

Question: What is the relation between INNOnets, and ERAnets?

Answer: They are similar, but the INNOnets is not only for research, it is also for pushing it further into the market and competition.

Question: Why do not the new member states get more support than old member states?

Answer: Actually they do receive more support, because most of the capacity building funds are directed to NMS.

Eco-innovation as an opportunity for CEE region – GE's Ecomagination initiative ; Ms. Eszter Szabo, GE Corporate Communications & Public Affairs Leader for Central and Eastern Europe.

Ms. Szabo explained the GE approach to eco-innovation through the GE ecomagination concept, a commitment to imagine and build innovative solutions that benefit customers and society at large. It is both a business strategy to drive growth at GE and a promise to contribute positively to the environment in the process. She outlined the drivers as well as environmental economic and social benefits from the first two years of implementing the ecomagination concept. She outlined the main GE sectors and the most successful products in which the concept was applied and provided examples of GE's cooperation with various

countries and companies in this respect. Finally, Ms. Szabo presented energy efficiency and energy efficiency financing projects in the CEE region.

(Power point presentation is available)

Eco-innovation as an opportunity for finance community — Mr. Mikko Venermo, Senior Environmental Adviser, EBRD.

Mr. Venermo presented the EBRD's role, general objectives and financing mechanisms, as well as environmental and social aspects of EBRD's work. He outlined eco-innovation drivers, and the opportunities it provides to the companies and to the financing sector. Mr. Venermo also discussed the evidence of success of financing and applying eco-innovation in enterprises and in financing institutions.

(Power point presentation is available)

Eco-innovation in the CEE region –Regional Environmental Centre for Central and Eastern Europe (REC) as a facilitator of eco-innovation in CEE - Ms. Marta Szigeti Bonifert, Executive Director REC.

Ms. Szigeti-Bonifert REC's structure, roles and geographical scope, as well as the main directions of the REC's 2006-2010 Strategy. She presented the EU CIP indicative budget and its allocations for eco-innovation. Ms Szigeti Bonifert also presented ten most successful eco-innovation related REC's projects from the past period.

(Power point presentation is available)

SESSION II: Experiences of the Countries

Chair: Ms. Joanna Fiedler, REC Senior Project Manager on Environmental Financing

Austrian approach towards financing eco-innovation - Mr Gottfried Lamers, Federal Ministry of Agriculture, Forestry, Environment, Austria.

Mr. Lamers pointed out that there are many different broader and narrower definitions of what eco-innovation is, and that in the EC, eco-innovation is in terms of financing, unfortunately, located in a blind spot (Gap) between the R&D fund and the Cohesion Fund. He pointed out differences between innovation and eco-innovation, especially the additional political risks to financiers that come with eco-innovation. He stressed that these risks should be reduced by long-term strategies agreed upon on a very broad stakeholder basis, with accompanying adequate financial strategies that include subsidies, in order to reassure the financiers about the reliability of political decisions. He explained that in the water and waste sectors, the standard subsidies are sufficient, while eco-innovation sectors require specialised subsidies, such as those currently existing in CIP and LIFE+. Mr. Lamers explained the origins of the eco-innovation financing Gap, and the possible ways to overcome it. He proposed a possible mix of instruments in order to overcome the financing GAP, and gave good examples from Austria. Mr Lamers concluded that stimulating eco-innovation is not only a question of financing, but also of policy driven risk minimisation through adequate policies and strategies, as well as an updated institutional and legal framework. He stressed the importance of communication between different stakeholders, small and flexible financing instruments, venture funds (to replace risk-averse commercial banks, and subsidy instruments that should not prevent new economic approaches but give an incentive to find the best solution.

(Power point presentation is available)

Question: One of the major problems Dutch SMEs face is credibility, so the large corporations and banks do not want to invest in them. How to deal with that?

Answer: This is the typical case. We need an adequate policy/technology platform. We also need to form clusters for eco-innovation (such as the automotive industry cluster for example in order to make eco-innovative companies stronger and louder.

Estonian approach towards financing eco-innovation – Mr. Juri Truusa, Ministry of Environment, Estonia.

Mr. Truusa explained the EU level and National level sources of financing eco-innovation in Estonia, as well as the national institutional structure for related decision making. He explained the structure, budgets and functioning of the Enterprise Estonia (EE), the Environmental Investment Center (EIC) and of the County Development Centres. Mr Truusa outlined the Environmental Programmes, the Environmental Techniques Sub-programme, the Estonian National Developments Plan, and gave a SWOT analysis for eco-innovation in Estonia.

(Power point presentation is available)

National action plan for environmental business, "Cleantech" - Ms. Riina Loukola, Sitra, the Finnish Innovation Fund.

Ms. Loukola presented SITRA's structure, goals, budget and program areas, as well as the Environmental Programme 2005 – 2007. The major activities of the Environmental Programme are Market and (Cleantech) Industry development; National Action Programme; and Venture Capital Investments, and it has 3-year budget of 12 to 15 MEUR. The cleantech industry development relays on: statistical systems; integration of processes; networking programs; industry branch studies; development of new financing instruments and funding; and international co-operation, seminars, and forums. The main actions proposed in the National Action Programme consist of a marketing and communications programme; image building based on know-how and reputation of Finland; strengthening of Finland's international networks; innovative, environmentally sound public procurement; verification of eco-efficiency; innovative public-private co-operation; a material efficiency service centre; a private equity fund; a financing tool for reference plants and feasibility studies; a strategic centre for environment and energy to speed up development; an environmental technology cluster programme; integrated foresight system (co-operation) and other tools. The environmental programme of Sitra also makes venture capital investments to environmental businesses. In addition the programme is actively involved in developing (new) financing instruments, as well as in fund development.

(Power point presentation is available)

Norwegian approach towards financing eco-innovation - Norwegian Pollution Control Authority - Mr. Rune Opheim

Mr. Opheim presented the current structure and relationships between different Norwegian environmental authorities. He also presented the proposed organising of authorities in order to promote eco-innovation in Norway. Mr Opheim also presented the usual relationships between different actors in the sphere of eco-innovation and eco-innovation promotion financing, as well as the current challenges, which include the need to find the right balance between authorities

support to development of new technologies and “making market”; cooperation and coordination between different authorities; private-public cooperation; the need that authorities use more often the market forces as a tool instead of trying to fight them; better understanding of the difference between internalised and non internalised environmental costs; and that the authorities should accept the fact that the industry will save the environment if it pays, and that the stock owners define the required payback time. Mr Opheim stressed that efficient environmental legislation and efficient authorities are needed in order to create synergies between the environment and the market, and that efficiently enforced, clear, fair and predictable legislation, taxes etc. will actually attract investors in the field of eco-innovation.

The authorities’ roles in financing eco-innovation should include financing basic research, and other R&D with long distance to market; supporting technologies with future market potential through “Green public procurement”; avoiding “endless pilot projects”. Also, the authorities should have a realistic view on idealism, information etc, both in the private and public sector, and they should understand the difference between individual and organisational thinking. Finally, Mr. Opheim presented the EEA (Iceland, Lichtenstein, and Norway) financial mechanism for the newer EU member states (including Greece, Spain and Portugal), and its Environmental Component.

(Power point presentation is available)

SESSION III: *Experiences of Businesses*

Chair: Mr. Ruslan Zhechkov, REC Senior Project Manager

Environmental Policies and Legislation and Their Impact on Eco-innovations in Central and Eastern Europe - *Mr. Ruslan Zhechkov, REC*

Mr Zhechkov presented the results of a REC study on Financing Eco-innovations in CEE. First, he outlined the environmental problems of CEE industry. Mr. Zhechkov then presented the (potential) drivers for eco-efficient innovations that include: compliance with EU legislation, financial mechanisms, market pressure, new markets in EU through better company image, pressure from mother companies, social pressure, top management commitment, short payback periods, introduction of high enough, long-term guaranteed feed-in tariffs (RES) etc. He also outlined the main financial, regulatory, technology, diffusion, and management barriers to financing eco-innovation in the CEE. Mr. Zhechkov outlined possible strategies for eco-innovation, including: making companies proactive, benchmarking for eco-efficiency, building knowledge on environmental aspects of products, introducing environmental reporting requirements, strengthening research, providing funds, encouraging green procurement, eco-innovation policies and technology platforms, etc. as well as use of market-based instruments – pollution taxes and tradable permits, green tax reform, green investment funds and loan guarantees. Mr. Zhechkov also presented success stories from Lithuania, Latvia and Slovakia.

(Power point presentation is available)

Financing eco-innovation in Poland – *Mr. Andrzej Szoszkiewicz, CEO Smartlink Ltd. Poland*

Mr. Szoszkiewicz presented Smartlink, an information services company launched in 2004, which specialises in providing research and information publishing on financial assistance and innovation for business, public and community sector organizations, dissemination of complex economic development information in a user-friendly way, covering central, regional and local governments, and private enterprises. Smartlink is beneficiary of three grants from the European

Fund of Regional Development (2 projects from IROP 3.4) and European Social Fund (1 project IROP 2.6) worth PLN 1.8 million. Smartlink has created a web portal (FunduszeOnline) with Poland's most comprehensive data base of assistance programmes. The most recent project is Winnova, a one-stop information source on innovation and the links between R&D and business. Smartlik is a partner of the GUIDE project, the source of information about funds in EU countries.

Enterprises that run operation in Poland, and especially SMEs, encounter problems with access to external capital, in particular for financing innovative projects associated with higher risk. Expenditures of industrial enterprises on innovative activity have increased from PLN 12.2 billion in 2000 to PLN 15.4 billion in 2004. Their relation to GDP, however, has reached only 1.6%, which considerably differs from the one recorded in EU member states. This was due to the small share of enterprises running innovative operation. In 2004 it amounted only to 39%. An important factor that affects the situation and growth possibilities of the sector of enterprises is the regulation system, which is characterised by considerable instability. Frequent changes of legal regulations, which are important from the viewpoint of the sector of enterprises (e.g. fiscal services), lead to increased risk connected with running of business operation. Instability of the regulation system also hinders enterprises the development and implementation of medium and long term strategies and increases costs of their operation. Transfer of knowledge and innovation in the economy is considerably hindered by the lack of cooperation between business entities, as well as other entities involved in transfer of innovations to enterprises (scientific centres, business environment institutions, representatives of central or regional authorities).

In the of 2004- 2006 the money for innovation in Poland was available through Structural Funds and the Sectoral Operational Programme for Improvement of the Competitiveness of Enterprises. In the 2007 to 2013 period the biggest amount of money (EUR 67 bln) will come to Poland through Structural Funds. Financing innovation will be an important issue. The most important programmes will be: the Operational Programme Infrastructure and Environment, Operational Programme Innovative Economy and the Regional Operational Programmes. Besides the state will provide the Technological Credit which is dedicated to the realization of the investment applying new technology, in-house technology or both. Implementation of environmental technologies will be also co-financed by the National Fund for Environmental Protection and Water Management and 16 provincial funds, as well as EkoFundusz and the Bank Ochrony Środowiska. The National Fund for Environmental Protection and Water Management co-finances among other things implementation of technologies assuring the cleaner production and energy-saving production.

(Power point presentation is available)

Financing innovative wastewater treatment technologies – Mr. Attila Bodnár, Organica Ecotechnologies Inc Hungary

Mr. Bodnar presented briefly the main elements of the Organica innovative waste-water treatment technology and its advantages over standard technologies (including lower investment and operating costs). He then described the Organica development from creating a new technology, through providing products and equipment and services to the market, to creating an international company and brand (with future plans to become a worldwide knowledge management center). He also described the stages of financing, and types of investors during these stages (from business angels in 1999, through venture capital and private equity to strategic investors), as well as how the company type and structure evolved through these stages.

(Power point presentation is available)

Session IV: *Financing Eco-innovation in the CEE*

Chair: Mr. Raymond Van Ermen, EPE

Venture Capitals for Sustainability, *EUROSIF, Ms Marion de Marcillac*

Ms. de Marcillac explained the roles of the European Social Investment Forum (EUROSIF). The main role of EUROSIF is addressing sustainability through financial markets which is done by collecting information, and making it available to EU institutions, governments, investors, funds, and companies, as well as bringing these actors together in addressing sustainability. EUROSIF's activities consist of research, lobbying, as well as organising initiatives and events such as seminars and conferences. Their latest publication *Venture Capital for Sustainability (VC4S)* analyses the VC4S trends on the EU market in the period 2000 to 2005. The study found that the number of investments (initial and follow-on) has grown steadily over time; the average investment size was about €4 million, which still trails the mainstream VC investment size of €6.5 million, and that in eco-innovation industries, investment sizes are up to 10-15 MEUR. It was also found that small amounts of capital were being allocated from pension funds to VC4S, whereas they could be drivers for VC4S growth; pension funds account for up to 25% of the capital received by mainstream VC; and foundations have an opportunity to significantly increase their capital in the VC4S space.

(Power point presentation is available)

Financing energy efficiency and renewable energy project – *Mr. Tamás Solymosi CIB Bank, Hungary.*

Mr. Solymosi presented a concept for a replicable project of creating a database from existing meteorological data as well as relevant existing buildings data (buildings/flats size, type, state, insulation, type of heating /natural gas, electricity, district heating / etc.). Such databases would be a basis for further energy efficiency (building insulation / heat regulation) projects in EU cities.

Databases created on the basis of existing energy consumption, and property data would be a cheaper and more efficient and effective alternative to creating databases based on energy audits of individual flats/buildings (done by visits of engineers, charging 1-2 days for their work per flat as publicized in Hungary). This is much faster, much lower cost and much better quality. *Energie Cités Display* project and Hungarian government decree on district heating are good examples.

(Power point presentation is available)

Experiences with financing eco-innovation by Hungarian venture capital - *Mr. Herczeg Gábor, Deputy Director, Corvinus Kockázati Tőkealap-kezelő ZRt*

Mr Herczeg presented the Corvinus Venture Capital Fund Managing Co., and the Corvinus First Innovation Venture Capital Fund , their background, objectives, operation and cooperation with other organizations, investment targets (Innovative Products (IPR protection), Exclusivity to IPR, Negotiable IP, Legal Entities, SME-s, Start-up, spin-off companies, and Early phase companies). He also explained the investment procedure, recent activities and expectations, and provided project examples.

(Power point presentation is available)

Italian Trust Fund (ITF) for Central and Eastern Europe Strategy, Ministry for the Environment Land and Sea (IMELS), Ms. Stefania Romano, Italy

Ms. Romano explained the IMELS role in the CEE and SEE region, and the role of the ITF for CEE, which is based in the REC Headquarters in Hungary. The ITF has funded more than 50 projects in CEE, in the sectors of capacity building, climate change, and energy efficiency, with a total contribution of more than 9 MEUR.

(Power point presentation is available)

Financial mechanisms for eco-innovation in Japan – Mr. Osamu Mizuno, Japanese Trust Fund

Mr. Mizuno presented successful examples of Japanese laws aimed at stimulating eco-efficiency and eco-innovation, as well as the recent development in creating policies called the “Top Runner Approach”, where energy conservation standards for home/office appliances and fuel efficiency standards for automobiles are set to the highest levels of existing technologies/producers, rather than average levels, as has been done in the past. The “Top Runner Program” has stimulated competition and innovation in the market, diffused existing technologies, and enhanced industrial competitiveness. It also created “win-win” situation and virtuous cycle of ever improving technologies and standards. It is a very efficient blend of command/control and voluntary efforts, and it is innovative not only in technology terms but also in policy terms. Mr. Mizuno also presented the Japan’s institutions responsible for stimulating innovation and eco-innovation.

(Power point presentation is available)

Debate: Barriers and necessary changes for financing eco-innovation in CEE

Chair: Mr. Raymond Van Ermen, EPE

Debate questions:

Mr. Raymond Van Ermen opened the debate with three questions:

- What are the main barriers for financing institutions for financing eco-innovation?
- What would help to overcome these barriers?
- Should public stakeholders have a bigger role?

Ms. Marta Szigeti Bonifert added the fourth question for the debate:

- What would be the three most important changes for stimulating eco-innovation financing (three “magic wishes”)?

Mr. Gottfried Lamers:

It is possible to create the market for eco-technology and eco-innovation; we need to look at the example of bio-fuels. I am not sure whether the Structural Funds are a good platform for financing eco-innovation, because they require smooth and fast implementation of projects.

Mr. Raymond Van Ermen:

The Ministries of finance are the key players and we need to mobilise them. The Regional Environmental Centre for CEE (REC) has a huge experience in that.

Ms. Marion de Marcillac:

Venture capitalists find difficulties in raising funds for eco-innovation projects, and something should be done to ease this. There is interest for financing eco-innovation but there is also a perception of risks still being high. We should also somehow make investors aware of the long-term quality of eco-innovation investments, and thus attract long-term oriented investors.

Mr. Herczeg Gábor:

We need better recognition of environmental pollution and climate change market failure and better EU regulation for correcting the market failure. Tax benefits should be implemented, e.g. for VC funds for eco-innovation. The EU and national legislation should be easier about involvement of institutional funds and public-private partnerships (joint application of institutional and VC funds).

Mr. Mikko Venermo:

First, we need to understand innovation in a broader sense, in order to include in it the innovation of policies as well, and not only technological innovations. Secondly, the demand side for innovation in the CEE countries is not developed yet. There are good examples, but not many. Thirdly, I wish eyes would open at all levels, including the decision makers. For example, if a building insulation project as suggested by *Mr. Solymosi* had been carried out in Hungary, reducing e.g. 10% of heating energy needs, it would have a tremendous effect on GDP (savings which could, in turn, go for further stimulating eco-efficiency, eco-technology and eco-innovation). Therefore, we need education for all actors, and the whole society. The EBRD believes in open market economy and we hope that the CEE countries will develop mechanisms for supporting eco-innovation in an open-market environment.

Mr. Tamás Solymosi:

We need to have powerful lobbies for eco-efficiency and eco-innovation that can match the power of other existing lobbies. The decision makers need to be aware of possibilities and benefits of financing eco-innovation. For most of the existing problems, there are solutions and working technologies, but people need to be aware of that.

Mr. Raymond Van Ermen:

Yes, we need to strategise about how to spread the message to the decision makers and other actors. I have seen examples of meetings between top level businesses and decision makers, where company CEOs were more aware of problems and possible solutions than the decision makers, which resulted in the change of decision makers' views and led to improved climate for stimulating and financing eco-innovation. We need to base our strategies on such examples.

Finally, *Mr. Van Ermen* closed the conference by thanking to *Ms. Marta Szigeti Bonifert* REC's Executive Director, and the REC's Environmental Financing Team for organising a successful conference.