



PRESENTERS' PROFILES

Dusan Sevic
Project Manager
Environmental Policy
Regional Environmental Center for Central and Eastern Europe

1) EU and Regional Mechanisms for Financing Eco-innovation

EIB, EBRD, FP7, CIP

2) Initial Findings of the REC Study on Financing Eco-innovation in SEE Countries

- Regional Findings
- Sectoral findings

CV

Mr. Sevic is member of the REC environmental financing team. He is currently managing the project titled "Promoting Financing Mechanisms for Eco-innovation in the SEE". The project includes collecting and processing information (including interviews with key actors in each country) about existing and potential conditions and mechanisms for financing renewable energy, energy efficiency, recycling and cleaner production projects in the West Balkan countries. Mr. Sevic is also currently working on the Priority Environmental Investment Program (PEIP) for South Eastern Europe countries (Serbia, Albania, Bosnia and Herzegovina, FYROM and Montenegro) which encompasses priority projects for environmental infrastructure project preparation, for regional and local water supply, waste-water, and waste management facilities. Other projects include promoting financing mechanisms for eco-innovation projects and SMEs in South East Europe; National implementation of the WEEE Directive in CEE; Support to Regional Water utility in BiH, Support to Regional Waste Management Centers in Croatia, etc. Previous professional experience includes environmental and occupational noise assessment, EHS auditing, environmental impact assessment (EIA) and Strategic Environmental Assessment (SEA) quality reviewing.

Raymond Van Ermen
Executive Director
European Partners for the Environment

Financing Eco-Innovation: Definitions, Approaches and Challenges.

To meet the financial challenges of tackling climate change and securing an energy efficient economy, public institutions will need the help of commercial type funding on a very large scale. Financial innovation is required and investment flows must transcend the traditional boundaries of public and private finance. In particular a range of custom-designed instruments are needed to finance low-carbon and resource efficient technology deployment. These innovative instruments must tap into private pools of capital, as public resources will prove insufficient to meet the new financing requirements. But these segments cannot act in isolation from each other; much more cooperation between players in public and private finance is required. Governments, Regions, Cities have also a key role to play as "buyers" of eco-innovation. Specific sectors should be targeted as retrofitting existing buildings. In the framework of the "green revolution", SEE Countries have the opportunity to leap-frog if they succeed to put the right financial scheme in place.

The presentation will include a 5 minutes film: Towards a Global Green New Deal. The film is also available at:

http://www.unep.org/NewsCentre/videos/player_new.asp?w=480&h=272&f=/newscentre/videos/shortfilms/2009-02-16_GreenEconomy

CV

Raymond Van Ermen is Executive Director of *European Partners for the Environment* (EPE) since 1998. EPE facilitates the *European Platform on Finance & Eco-Innovation* as well as the *Resource Efficiency Alliance*. Mr Van Ermen is also Board Member and Treasurer of the *European Water Partnership* and Member of the International Sustainable and Responsible Investment Advisory Committee of the *Investment Bank FORTIS L Fund*, (Frankfurt)

He has been the co-ordinator of the FUNDETEC report (Funding the development of environmental technologies).



Ruslan Zhechkov
Senior Expert
Regional Environmental Center for Central and Eastern Europe

Resource Efficiency for Competitiveness. Eco-innovations as a Driver of the Economy

Environment and economy are often regarded as contradictory. Environmental measures are perceived as burdens rather than as an opportunity. Through this presentation I would like to share some thoughts on how eco-innovations can bring benefits to companies in particular and society as a whole.

CV

Ruslan Zhechkov is an economist with MA from University of Political Sciences, Paris; University of Bridges and Roads, Paris and University of Mining, Paris. Ruslan has been a Project Manager in REC for the past seven years and is currently Senior Expert Environmental Financing and leader of the Environmental Financing Topic Area within REC. Ruslan has been involved in eco-innovation projects covering a broad range of topics: cleaner production, Integrated Pollution Prevention and Control, financing eco-innovations, etc.

Danica Maljkovic

Senior researcher

Department of Energy Generation and Transformation, Energy Institute Hrvoje Požar

Western Balkans Sustainable Energy Direct Financing Facility (WeBSEDF)

In this presentation a short description of EBRD's tailor-made financing for small renewable energy and industrial energy efficiency projects will be given. WeBSEDF is a part of a broader EBRD's Sustainable Energy Initiative in the region of Western Balkans (Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Kosovo, FYROM, Albania) that consists of two programs: presented Western Balkans Sustainable Energy Direct Financing Facility and Western Balkans Sustainable Energy Credit Line Facility. A short overview of the latter will be given as well. In the presentation an introduction to the program will be given, operational arrangements, an explanation of CO₂-based incentive payments, a case study example and a list of contacts for attendants of the conference.

CV

Danica Maljkovic is a senior researcher in the Energy Institute Hrvoje Požar, Zagreb, Croatia. She has graduated in 2005 at the Department of Energy, Power Engineering and Environment at Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb. Presently she is undergoing International Master of Science program in sustainable energy engineering with an advanced course in Sustainable Energy Utilization in the Built Environment. Her special interest is in cogeneration technologies and related issues, district heating with pricing, financing and tariffing, ESCO concepts and funding solutions, energy efficiency and renewable energy – more specifically geothermal and ocean energy. She is the winner of a Rector's Prize and Special Dean's Prize. In 2007 she was Croatian National Representative at World Energy Council Youth Conference in Rome, Italy. She is fluent in English, and comprehensive in Russian, German, French and Italian.

Gottfried Lamers

Sustainable Development and environmental funding policy

Federal Ministry for Agriculture, Forestry, Environment and Water Management

The Austrian Approach Towards Financing Eco-innovation

Eco-Innovation is different from other sort of innovation. Eco-Innovation is a solution for policy driven markets. So additional risks occur which cannot be assessed properly by investors or banks. So the main task of a successful policy for environmental technologies is to reduce the risks. This could be done in many different ways and requires more political will than pure subsidies.

Following conclusions can be drawn:

- Forcing eco-innovation is not only a question of financing.
- Reduction of the political risks is a policy goal.
- The institutional and legal framework has to be adapted.
- Eco-innovation requires a lot of communication between different stakeholders
- Eco-innovation doesn't seek for the big pot of gold. Small and flexible financing instruments might be sufficient.
- Private risk capital is welcomed but will solve our problems only in some specific areas.
- Venture funds are necessary and replace risk-averse commercial banks.



- Subsidy instruments should not prevent new economic approaches but give an incentive to find the best solution.

CV

Present Position: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management responsible for budgeting, strategic planning and EU co-financing in the fields of „Environmental Support in Austria and Abroad“

Main duties:

- Strategic planning of the Ministry's Environmental Support Programme including legal and internal guidelines for and monitoring of the administration unit Kommunalkredit Public Consulting (KPC)
- Budgeting including EU co-financing of the Environmental Support in Austria (industries; renewable energy). Co-financing of INTERREG projects of the Ministry of Environment.
- Strategic planning and budgeting of the Ministry's Environmental Support Abroad including co-financing with international financing institutions and donors.
- Member of the Monitoring Committees of all EU Regional Funds Programmes in Austria
- Integration of environmental aspects into the structural funds and member of the EU network of environmental authorities in the structural funds (ENEA)
- Responsible for Austria for the part of the eco-innovation in the CIP Programme of the EU.

Adrian Balaci**Director****DVD Ltd /GESB SA****Social Housing Energy Efficiency and Renewable Energy Measures in Hungary – Mr. Adrian Balaci, Global Environmental Social Business (GESB)**

Basically, the presentation will describe the experience DVD Ltd and its European counterpart the GESB SA has in managing eco refurbishments in Hungary and other European countries.

It also describes the developing work done by the company in the financing sector.

It will present information about the important role governmental bodies have in the stimulation of eco investments in the housing sector. It will conclude with the presentation of the Social Housing Energy Efficiency Renewable Energy Renovation Program (SHEERER). A program developed by the company, which aims to stimulate the availability of financing on the green housing market

CV

Adrian Balaci has started his career in 2000 as a consultant while finishing his studies in Budapest. From 2002 he worked as a professional consultant for Aniko Dobi-Rozsa, the country manager of the Hungary Energy Efficiency Co-financing Program, IFC(World Bank Group). In 2005 he was one of the founders of the social business pilot, DVD Ltd(„Durgá-Vishnu Dévá“ Socially and Environmentally Aware Project and Business Development Ltd.) Since then he is leading the creative department, responsible for innovation, social sensibility and charity work done by the company. He is one of the creator of a special financing mechanism, called Social Housing Energy Efficiency Renewable Energy Renovation Program(SHEERER Program), that aims to provide financing solution for green investments in the housing sector, with the goal of decreasing CO2 emissions and energy/fuel poverty. Based on the success and experienced gained in Hungary, hi started working in 2008 on replicating these successful programs in other European countries. Adrian Balaci is deeply involved in human rights activism and the fight against social injustice.

Zsolt Bauer**Communications Advisor****REC – ED Office****Experience of Financing a Zero-Emissions Building in Hungary**

Dennis Meadows – the author of “Limits to Growth” – encouraged governments and the businesses to start as may pilot projects as possible on fields of renewable energy and energy efficiency during the World Science Forum. The new Zero Emission Conference Center of the Regional Environmental Center has become a widely known demonstration building in the Central and Eastern European region. The building through its innovative technologies aims for zero carbon dioxide emission. The technologies provide sustainable solutions but are the cost payable and financeable? What can be the drivers of these investments and what can be the resources?

CV

Zsolt Bauer graduated at the Budapest Business School (Faculty of Commerce) and at the Budapest University of Technology and Economics (MBA). Between 1990 and 2000 he worked for international communication agencies like BBDO and Ogilvy in various capacities. After this period he was the managing director of OgilvyOne. (A below-the-line agency of Ogilvy).Since 2003 he is the communications advisor of the Regional Environmental Center. In the last three years beside other



commitments he was member of the project team on the Zero Emission Conference Center. He is board member of the Hungarian Business Leaders Forum.

Dorđe Balabušić**Energy Efficiency Senior Adviser****Department for Renewable Energy Sources and Energy Efficiency
Ministry of Economy, Labor and Entrepreneurship of Croatia****Renewable Energy Sources and Energy Efficiency Policy in Croatia**

Energy efficiency in Croatia, the law on Energy efficiency use in direct use, the Program of Energy Efficiency in Republic of Croatia for the period 2008 – 2016, National objective, Strategy of energy development RH, RES in Croatia, Strategy of Energy development RH –RES, Tariff rate – incentive prices OIE, Economic instruments RES

CV

Dorđe Balabušić is a mechanical engineer, currently working as Energy Efficiency Senior Adviser Department for Renewable Energy Sources and Energy Efficiency in Ministry of Economy, Labor and Entrepreneurship of Croatia. In department for Energy Efficiency he is participating in preparation of national programs for efficiently use of energy and adjustment of their implementation; overlooks activities for efficiently use of energy in activities connected with agreements of Republic of Croatia with other countries and international organizations on field of energy efficiency; participates in implementation of measures for effectively energy use in public sector, especially in sector of public administration and in organizing of promotional activities regarding improvement of energy efficiency

Dr. Igor Kovacevic**Department for Energy Efficiency and Renewable Energy Sources
Ministry for Economic Development Montenegro****The year of energy efficiency in Montenegro**

The paper presents an overview of programmes, projects and activities conducted by the Ministry for Economic Development of Government of Montenegro in the framework of the Project „The Year of Energy Efficiency “ (hereinafter “Project”). The Project was officially launched in November 2008. The new legislation in the field of energy efficiency and renewable energy sources developed in the framework of the Project is explained. Activities and cooperation on the regional level in the field of energy efficiency and renewable energy sources are presented. The goals of the Project as well as the results achieved up to date are presented. Special focus is placed on current activities in the Project.

CV

Igor Kovačević was born in 1974 in Sarajevo, where he finished elementary and high school. He graduated from the Faculty for Mechanical Engineering of the University of Montenegro in 1997, and he received his Master's diploma from the Faculty for Mechanical Engineering of the University of Ljubljana in 2003. From 2003 to 2007 he was hired as a Junior Researcher in the Laboratory for multiphase processes of the University of Nova Gorica in Slovenia, where he received his PhD in 2008 in the field of numeric modeling of phased transformations in aluminum alloys. Mr Kovačević worked as a Visiting Researcher at the Technical University in Delft in Netherlands. He is the author of more than 20 scientific works, published in numerous renowned scientific journals, as well as presented at the conferences in USA, Germany, France, Netherlands, Sweden, Greece, Portugal, Poland, Hungary, Croatia, Slovenia, Serbia and Montenegro. His fields of specialization are energy, transfer of heat and mass, numerical methods and modeling, phase transformations in materials. Since 2008, Igor Kovacevic is the Coordinator of the Department for Energy Efficiency and Renewable Energy Sources of the Ministry for Economic Development of Montenegro.

Prof. Dr. SIMEON OKA**National energy efficiency program, Serbia****Research and Development in the field of Energy Efficiency - experience and results of the Serbian national energy efficiency program**

Results, experience and problems of the Serbian National Energy Efficiency program (NEEP) are presented. NEEP was founded by Ministry of Science and Technology Development as R&D&D program, to be a avant-garde of the governmental program aiming to increase EE and use of RES in Serbia. Main concept of the NEEP was that small, developing countries need R&D&D as a support of the implementation and transfer of new modern, energy efficient technologies, new methods of energy management and wide use of RES. Some most interesting R&D&D results are mentioned, but main emphasis was given to the new approach in planning R&D&D activities and problems in implementation of the results obtained in projects financed from 2002 to 2008.

**CV**

Prof. Dr. Simeon Oka dipl. eng. is scientific advisor of the Institute of Nuclear Sciences Vinca, and full professor full professor at Mechanical engineering faculty in Belgrade. 42 years long research activity, fundamental and applied, experimental and theoretical, of the physical processes important for energy production, in border zones between fluid mechanics (turbulence), heat transfer and combustion, aimed to the development of modern energy technologies for coal and biomass combustion. He was coordinating international projects in **turbulence and fluidized bed combustion (FBC)**, and was a member of Executive Committee of the Agreement of the OECD countries for implementation of FBC. From retirement in 2002 is acting as Director of the National energy efficiency program in Serbia, and was mostly engaged in solving strategic problems of the development of Serbian energy system, in activities for implementation of energy efficient technologies and renewable energy sources. He was engaged in preparing Strategy of energy development in Serbia up to 2010, National strategy of economic development of Serbia up to 2012, and Development of energy system in Belgrade up to 2030. He has initiated and leading research activities in turbulent flows with closed vortex regions, flow and heat transfer research in two-phase gas-particle flows, high temperature turbulent and plasma flows. In 1976, he initiated research activity in fluidized bed combustion, and by introducing original methodology for testing solid fuels for suitability for FBC he determined characteristics of lignite and brown coal in fluidized bed combustion. Based on the research results, domestic boiler companies made original designs of FBC hot-gas generators and boilers. Full Member of the Engineering Academy of Serbia and Scientific Society of Serbia. Editor-in-chief of the journal Thermal Science, founded by the Society of Thermal Engineers of Serbia.

Ivan Bošković
UNDP Montenegro**UNDP project for supporting small hydropower in Montenegro**

My presentation will focus on main challenges in the process of promotion of small hydro power sector and the ways in which our project is trying to overcome those barriers. Main focus will be on the policy level and new legislation and other acts that will be drafting in cooperation with the Government.

CV

Ivan Bošković graduated in Faculty of Law, Podgorica. Worked in United Nations Development Programme, Liaison Office in Podgorica, Montenegro as Legal expert from September 2005 - May 2006. From May 2006 - February 2007 worked in EPTISA International - Project of establishment of EPA (Environmental Protection Agency) funded and supervised by EAR (European Agency for reconstruction) as legal expert. From February 2007 - September 2007 **worked in United Nations Development Programme, Country Office Montenegro at Position: Deputy Project Manager, Spatial Planning Project.** From September 2007 - September 2008 worked at United Nations Development Programme, Country Office Montenegro at position Private Sector and Tourism Development Project Manager. Since September 2008 he is working at Nations Development Programme, Country Office Montenegro as Project Manager and Leading National Legal Expert, Small Hydro Power Development Project.

Dimitrije Lilic, PhD
Serbian Energy Efficiency Agency
Energy Efficiency and RES in Building Stock
Senior Advisor**ROLE OF SERBIAN ENERGY EFFICIENCY AGENCY**

The Serbian Energy Efficiency Agency (SEEA) is a national non-profit organization and it has been established as a special republic organization with the status of a legal entity. Mission of the Agency is to promote and support rational use of energy at energy demand side and wider use of renewable energy sources contributing by that to the sustainable development of the country. The Agency realizes its mission and tasks through multi annual programmes for energy efficiency improvement in buildings, municipal infrastructure and industry as well as programme for promotion and wider use of renewable energy sources. Presentation is short review of the role and activities of SEEA, realized projects, projects investment, technical and market potential, etc.

CV



Dr Dimitrije Lilić earned a Degree in Mechanical Engineering, a Master's degree and a Doctor's degree at Faculty of Mechanical Engineering at the University of Belgrade. During his career he worked in Technical Institute in Belgrade as the Leading researcher from 1979 to 2005, and as Research fellow in the Institute "Kirilo Savić" in Belgrade in 2005. In this period he was engaged in research and development projects in the fields of: heating, ventilation and air conditioning, NBC Protection, indoor thermal comfort in the special purposes objects - stationary or mobile, use of the renewable energy sources, energy efficiency improvement in the buildings and the special purposes objects and installations, etc. Since 2005 he is on position of Senior Advisor for Energy Efficiency in Building Stock in the Energy Efficiency Agency of the Republic of Serbia. Now he is developing the programmes and projects of energy efficiency improvement and use of renewable energy sources in the building Stock. Dr Dimitrije Lilić is author and co-author of many scientific and professional papers published in national and international scientific journals and conferences.

Zoran Stanić
Deputy director
HEP-Obnovljivi izvori energije d.o.o.

Experience of a Croatian Electricity Company (HEP) in the Renewable Energy Sector

In this presentation experiences of HEP with deployment of RE technologies will be presented including relevant regulations, RE market assessment and feed-in tariff system. HEP RE strategy will be shortly described with projects wind, biomass, and other RE technologies, as well as potential barriers for faster realization of investments.

CV

I was born in 1970 in Osijek. I completed my elementary and secondary education in Valpovo. I graduated from the Faculty of Electrical Engineering and Computing, University of Zagreb in 1996. In 1997, I received my Master's Degree in environmental management from the Amsterdam University. In 2002 I graduated from a DSM post-graduate study at the University of Zagreb in the field of business management. The same year I completed a two-year LEAD international specialist course in the field of sustainable development. In May 2007. I defended my PhD thesis with the theme of Modeling Sustainability of Electricity Market with CO₂ emissions trading. At the end of 2007. I completed Education Program: Corporate Governance for members of Supervisory and Management Boards at the Faculty of Economics University of Zagreb and Faculty of Economics University of Split.

Since 1996, I have been employed with Hrvatska Elektroprivreda, Development Department. I worked as an environmental coordinator and the coordinator of the use of renewable energy sources. As an authorized representative of HEP I conducted the elaboration of a number of scientific and professional studies in the field of power supply, environmental protection and sustainable development. From 1 November 2006 to August 2008, I have been appointed Managing Director of HEP's daughter company HEP-Obnovljivi izvori energije d.o.o. (Renewable Energy Sources) and currently having position of Deputy Director in the same company.

Since 2002 I have been an external associate of the Department of Power Systems with the Faculty of Electrical Engineering and Computing, University of Zagreb, participating in the projects launched by the Ministry of Science and Technology. I 2007. I have started teaching at Zagreb University, Faculty of Electrical Engineering and Computing: *Environment and Sustainable Development* module. As an author or co-author I wrote a number of scientific and professional papers in the field of power supply and environmental protection. I am a member of the Executive Committee of the Scientific Council for Power Supply with the Croatian Academy of Sciences and Arts and Secretary of the Study Committee of HO CIGRE C3 – Environmental Impact of Electric Power Systems.

Dragoljub Dakić
Ministry of science and technology development, Serbia
National energy efficiency program
Institute Vinca, Belgrade

Development and financing of innovative biomass power technology in Serbia

In presentation we will show developing path (research and invest money) of one industrial boiler for using baled soya straw like renewable fuel.

Republic of Serbia consumes about 15 million tons of equivalent oil per year (Mtoe). At the same time potential of the renewable energy sources is about 3,5 Mtoe/year. Main renewable source is biomass, with its potential of about 2,6 Mtoe/year. There from 60% of biomass source is agricultural biomass. Mainly, that type of biomass is collected, transported and stored in form of bales. At the same time in one of the largest agricultural companies in Serbia (PKB) there are over 2000 ha of soya plantations, and there are more than



4000 t/year of baled soya straw available, none of which being used for energy purposes. Therefore, efforts have been made in the Laboratory for Thermal Engineering and Energy of the "Vinča" Institute to develop a technology for utilizing bales of various sizes and shapes for energy production. Satisfactory test results of the 1 MW experimental facility – low CO levels and stable thermal output – led to the building-up of a 1.5 MW soya straw bales-fired hot water boiler, with cigarette type of combustion, for the purposes of greenhouse and office heating in the PKB. Further more, achieving good results in exploitation of that hot water boiler, the next step is building up the first combined heat and power (electricity) production facility (CHP), which will use agricultural biomass as a fuel, in Serbia.

Keywords: Biomass, cigarette type of combustion, low CO emission, CHP facility

CV

Born in Belgrade 26.12.1951. Graduated at Mechanical Engineering faculty, University of Belgrade, in 1978. Finished post graduate studies (MS degree in the field of fluidized bed coal combustion) at Mechanical Engineering faculty, University of Belgrade, in 1991. Finished doctor thesis in 2001, University of Belgrade. Title of Doctor Thesis is "Influence of coal type and fluidized bed temperature on primary fragmentation during combustion in fluidized bed". He is employed as Research Associate in Thermal Engineering and Energy Research Department of "Vinča" Institute, Vinca (Belgrade), from 1979. One year research fellowship on University of Twente (Enschede, the Netherlands) September 87 - September 88. in the field of fluidized bed combustion. Head of project and erection of mineral water factory with PET bottles production (capacity 3000 l/h, 2000 bottles/h). Head of project, calculation and erection of few industrial boilers and furnaces with combustion of coal in fluidized bed.

His main field of interest are coal combustion in fluidized bed (design and calculation of Fluidized bed boilers and furnaces, fragmentation and swelling of coal and coal characterization), experimental and modeling work, cigar burners for agricultural baled biomass (design and calculation), all industrial processes with heat and mass transfer.

He was awarded with Annual award of the city Belgrade for the development of the fluidized bed combustion technology (as member of a team), in 1986.

Has more than 20 published papers, more than 60 papers submitted at conferences and 29 scientific and project reports. He has 5 patents and technical innovations.
