

## Foreword

The network of the „Four Motors for Europe“ (Baden-Württemberg, Lombardy, Catalonia and Rhône-Alpes) has been working together in various policy areas since more than 25 years. One of the most important items in the work of the Economy Group is to foster innovation and competitiveness of small and medium enterprises and to support their internationalization. For this reason the Four Motors have established special contacts with certain regions in the world. Baden-Württemberg is one of the main initiators and a strong impetus for the Danube strategy. To build a bridge from our long-standing partnership of the Four Motors with the Danube Region, Baden-Württemberg organized a joint mission with conferences and B2B meetings from 1 to 3 July 2013 in Novi Sad, in the Autonomous Province of Vojvodina in the Republic of Serbia.

The goal of the Danube strategy is to encourage sustainable growth and prosperity but also to improve the environmental conditions and to bring the Danube countries closer to a high level of protection for the environment in the medium-term. One of the key objectives of the Priority Area 8 „Support of Competitiveness“ of the EUSDR focuses on the field of environment technologies and in particular renewable energy such as biomass. The Danube Region has a huge biomass potential that must be used to provide economic opportunities and create new chances for sustainable rural development in the Danube Region. For that purpose a Danube Region Biomass Action Plan was drawn up and intends to create synergies and coordination between existing policies and initiatives of countries in the Region in order to extend the sustainable use of biomass. Following the last conference in Novi Sad, the biomass-conference in Timisoara will be a good occasion for networking and cooperation between science, industry and politics from the central Danube Region and the Four Motors.



*Nils Schmid*

Dr. Nils Schmid  
Minister of Finance and Economics and Deputy Minister President  
of the State of Baden-Württemberg



## Background

The Ministry of Finance and Economy Baden-Württemberg has commissioned the Eastern Europe Centre of the University of Hohenheim to organize the conference. The R&D and higher education institutions in the Danube region are important stakeholders for innovative measures for efficient biomass use. Often clustered around regional centres they have a great potential for spill over of innovations and synergy effects to professionalize the agri-food and renewable energy systems. Due to this background the Eastern Europe Centre of the University of Hohenheim has designed the project „Smart and Innovative Rural Areas“ (SIRA DANUBE) with the intention to increase the competitiveness of peripheral regions through the creation of regional centres of competence. Within the European Strategy for the Danube Region this action is also based on an existing university network in the fields of agricultural, food and environmental sciences with all agricultural faculties in the Western Balkan region. It evolved from various EU and DAAD funded programmes and other initiatives.

The organizers would like to thank the Polytechnic University of Timisoara and the Banat's University of Agricultural Sciences and Veterinary Medicine for hosting this conference.

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**Venue: Polytechnic University Timisoara/  
Romania, 300006 Timisoara,  
Piata Victoriei No. 2, Large Senate Room**



VIER MOTOREN FÜR EUROPA  
QUATRE MOTORS PER A EUROPA  
QUATTRO MOTORI PER L'EUROPA  
QUATRE MOTEURS POUR L'EUROPE



**International Conference**

**“Perspectives of the Use of  
Regional Bioenergy Potentials”**

**19-21 March 2014**

**Timisoara, Romania**





**16:30-18:30** **Introduction** **Wednesday | 19 March 2014**

Chairman: *Dr. h.c. Jochem Gieraths, Eastern Europe Centre, University of Hohenheim, Baden-Württemberg*

Polytechnic University Timisoara - an important performer in promoting of RDI renewable energy solutions for Central Europe Area  
*Dr. Viorel-Aurel Șerban, Rector, Polytechnic University, Timisoara, Romania*

Agriculture and Green Energy - present and prospects  
*Prof. Dr. Paul Pirsan, Rector, Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara, Romania*

Brief introduction of the economic group of the Four Motors  
*Ramón Pinós, President of the Economic group of the Four Motors for Europe, Catalonia*

The activities of Sustainable Energy Priority Area (PA2) of the Danube strategy - the Biomass Action Plan  
*Szilárd Árvay, Ministry of Foreign Affairs of Hungary*

Politics regarding energetical efficiency in Romania  
*Bogdan Pandelica, Under-Secretary, Ministry of Economy, Bucharest, Romania*

Possibilities for financing programmes for energy efficiency improvement  
*Viorel-Mădalin Beltechi, General Director, Ministry of Economy, Bucharest, Romania*

**08:30-10:30** **Biogenic solid fuels** **Thursday | 20 March 2014**

Chairman: *Dr. Andreas Lemmer, University of Hohenheim, Baden-Württemberg*

BioEnergy as a key for agricultural sustainability  
*Prof. Dr. Fabrizio Adani, University of Milano, Lombardy*

Alternative energies for the territories - focus on gasification technologies  
*Etienne Lebas, COGEBIO, Irigny, Rhône-Alpes*

Research Institute for Renewable Energy - an important solution to stimulate the high quality in implementation of RDI projects  
*Prof. Dr. Petru Negrea, Polytechnic University, Timisoara, Romania*



Advanced Research in obtaining valuable energy products from photosynthesis  
*Prof. Dr. Joan Salvadó, Catalonia Institute for Energy Research (IREC), Tarragona, Catalonia*

Solutions for optimization of equipment and harnessing of Short Rotation Coppice –Projects BIOHEAT and ROD PICKER  
*Prof. Dr. Ioana Ionel, Polytechnic University, Timisoara, Romania*

Studies and prospects for Paulownia crop production in Banat  
*Prof. Dr. Dumitru Mnerie, Polytechnic University, Timisoara, Romania*

The biomass market in Serbia  
*Vojislav Milijić, President of the national biomass association Serbia, Serbia*

Cascade processing of biomass to enhance energy yield  
*Teodor Vintila, Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara, Romania*

**10:30-11:00** **Coffee Break**

Application of Life Cycle Cost Analysis for SRC culture  
*Prof. Dr. Dumitru Tucu, Polytechnic University, Timisoara, Romania*

Influence of air mass flow and feeding rate on combustion properties of *Jatropha curcas* L. pellet  
*Dr. Shkelqim Karaj, University of Hohenheim, Institute for Agricultural Engineering, Baden-Württemberg*

Pellet production  
*Radu Domnita, HIMMEL Maschinen, Melchingen, Baden-Württemberg*

Energy solutions for windbreaks of roads  
*Ec. Wilhelm Hollerbach, S.C. Rebina, Timisoara, Romania*

Grinding, Briquetting and Combustion of agricultural residues  
*Markus Müller, Mutek Systemtechnik – GmbH, Filderstadt, Baden-Württemberg*

**13:00-14:30** **Lunch Break**

**14:30-17:00** **Biogenic liquid fuels and biogas production**

Chairman: *Dr. Shkelqim Karaj, University of Hohenheim, Baden-Württemberg*



Corn stover as a fuel and feedstock for biofuels in Vojvodina  
*Prof. Dr. Milan Martinov, University of Novi Sad, Faculty of Technical Sciences, Serbia*

Availability of maize and wheat residues for potential bioethanol production in Croatia  
*Ass. Professor Dr. Željko Jukić, University of Zagreb, Faculty of Agriculture, Croatia*

Different pathways to use biogas – a technical and economical evaluation  
*Dr. Andreas Lemmer, University of Hohenheim, State Institute of Agricultural Engineering and Bioenergy, Baden-Württemberg*

**15:30-16:00** **Coffee Break**

Biogas related research activities at the University of Szeged  
*Dr. Norbert Ács, University of Szeged, Department of Biotechnology, Hungary*

From waste to energy-practical experience in Croatia  
*Marko List, Agrokor-Energija d.o.o., Zagreb, Croatia*

Biogas production from organic waste in tomato production in terms of glasshouse  
*Prof. Dr. Davor Kralik, University of Osijek, Faculty of Agriculture, Croatia*

CHP – Units running on biogas or plant oil: a reliable and efficient energy supply system  
*Wolfgang Jörgen, Director International Sales, SCHNELL Motoren AG, Amtzell, Baden-Württemberg*

Practical examples of an energy efficient heat and electric power supply by biogas stations  
*Dominik Helffrich, Methavis GmbH, Sandhausen, Baden-Württemberg*

**Friday | 21 March 2014**

**09:00-11:00** **Conclusion: Economic and scientific perspectives for future cooperation**

Chairman: *Michael Gerner, Dr. Hans Peter Herdlitschka (PAC 8), Ministry for Finance and Economy, Baden-Württemberg*

An example for a possible design of projects: „Development of a sustainable bioenergy market in Serbia“  
*Alexis Brakhan, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Belgrade, Serbia*

