



**SÜDOSTEUROPA-
GESELLSCHAFT**

**Energy Crisis and Climate Change –
Challenges for Politics and Business
in South East Europe**

International Conference

in Cooperation with



Evangelische Akademie Tutzing



AKADEMIE FÜR
POLITISCHE
BILDUNG TUTZING

Vereinigung der Bayerischen Wirtschaft e. V.

vbw

**27 /28 March 2009
Evangelische Akademie Tutzing**

**Conference Report
by Maria Sharmina, Budapest**

Climate change and the security of energy supply constitute enormous challenges for politics, society and business world wide. Obtaining energy security and, at the same time, successfully protecting the world climate have become important political goals everywhere. They also figure prominently on the agendas of EU, UN, G8, international financial institutions (like the World Bank) and national governments, especially in Western Europe. The International Energy Agency in its November 2008 Report demands a “global energy revolution”, in order to meet the challenges of securing energy supply and mitigating climate change.

Within the transition states of South East Europe the consciousness about these challenges is quite low, due to the many-fold tasks and problems that these countries are facing. On the other hand, the SEE states are highly depending on fossil energy sources that mostly have to be imported due to the lack of own resources. The shortages occurring in the supply of natural gas during January 2009 quite drastically demonstrated the dependence from Russian natural gas. In addition, the efficiency of energy use in the private, public and production sectors is extremely low. Efforts to saving energy and climate protection have remained scarce. Additionally, due to the growth in economic activities and consumption, the emission of hydro-carbonates has been dramatically increasing in recent years.

For the countries of South East Europe, new members of the EU and potential accession countries alike, it is therefore indispensable to set the course for a new orientation of energy and climate politics without further delay. The Southeast Europe Association and its partners summoned more than 70 experts from all over Europe, representatives from the European Commission, ministries and (semi-)governmental institutions, the Regional Cooperation Council, IFIs, consulting agencies, think tanks, development agencies, business, science, the media – a gathering of experts that has been unprecedented so far, as participants univocally agreed. It was the main objective of the conference to trace existing potentials in SEE for the use of renewable energies and improving energy efficiency and present concrete examples and programs in this direction, also identifying new potentials for business.

A complete documentation of the conference is available on SOG`s website: www.suedosteuropa-gesellschaft.com. Some additional papers will be published in vol.3-4/2008 of Suedosteuropa Mitteilungen, the journal of Suedosteuropa-Gesellschaft. (Note by the editor).

Introduction and Opening Words

The Conference was opened by Dr. *Martin Held*, Head of the Economy and Sustainable Development Department of the Protestant Academy Tutzing. He welcomed the delegates and compared today's energy issues with the ones discussed three years ago, in 2006, at a conference on energy issues in South East Europe, organized together with Südosteuropa-Gesellschaft (Southeast Europe Association / SOG) in Tutzing. He stressed that the situation has changed and that sustainable energy markets are becoming increasingly important. In this respect, a systematic, not haphazard, reduction of energy consumption by the countries of SEE is a pressing issue that will define future economic growth of the region.

Dr. *Roland Schönfeld*, SOG's Vice President, Leipzig, welcomed the participants on behalf of his organization. He reminded the audience of a successful tradition of cooperation between SOG, the two Tutzing academies, and the Bavarian Business Association. Dr. *Hansjörg Brey*, SOG's Executive Director, Munich, followed with a speech of Mr. *Gernot Erler*, MP, Minister of State at the German Federal Foreign Office, President of SOG, who could not attend the Conference. It was underlined that shaping energy relations demanded cooperation, not confrontation. The Minister predicted that by 2020 there will be more tensions on energy market and some countries will want to use their influence in a strategic way. In this respect, there would be no national solutions, since they would be based on global cooperation and trust. It was noted that both new (e.g., EU-Central Asia strategy: the Nabucco pipeline) and existing (e.g., Russia) energy partnerships should be considered. Addressing EU energy security issues indispensably involves SEE with its need to diversify energy supply routes, to decrease carbon and energy intensity, to provide fair partnership and sustainability of development.

The opening session was concluded by Mr. *Albert Uwe Schön*, Chairman, Energy Committee of the Bavarian Business Association (vbw), Munich. He underlined that the energy sector is characterized by an enormous demand for investment. Despite this fact, it is necessary to find an optimal energy concept that would be balanced regionally and would assimilate several important aspects, such as security, climate, environment, balance of payments, reliability, and affordability.

The Conference was structured in four topical panels scheduled over two days. Each panel began with a few brief presentations by invited speakers and was followed by discussion between the expert panel and the audience.

Panel I: Energy Crisis and Climate Change – Challenges and Chances for Southeast Europe

Panel I started with a presentation by Dr. *Stefan Agne*, Team Leader, Climate Strategy, International Negotiation and Monitoring of EU Action, DG Environment, European Commission, Brussels, who told the delegates about energy and climate policies of the European Union. The first part of his presentation covered issues of international negotiations. Dr. Agne supported the opinion that all countries should share in the emission reduction agreement, while the developing world is definitely not expected to comply with as strict targets as the industrialized countries. The second part of his presentation concerned the EC package on sharing the emission reductions between the EU members. Dr. Agne claimed that the 30% target that the EU would take upon itself in case of a comprehensive international agreement is realistic but not ambitious enough, being only a bottom margin of scientific predictions.

The topic was continued by Mr. *Jørgen Henningsen*, Senior Adviser on Energy and Environment, European Policy Centre, Brussels. He spoke highly about the EU being a leader in climate protection policies, especially in the field of renewable energy. Further, he claimed that in spite of the overall 50% reduction target by 2050, developed countries should reduce more than 50%, namely 75-80% during the next 40 years, in order to observe fairness criterion. Further, Mr. Henningsen argued that the trial period of the International Emission Trading was a fiasco, and the future of the second period does not look bright either. The latter is due to strong inbuilt uncertainties, such as the carbon price or the number of CDM (Clean Development Mechanism) units flowing into the system.

Further, three SEE representatives gave presentations on challenges and opportunities for politics and business in their countries. Mr. *Silviu Stoica*, General Director, Direction of Structural Instruments Management, Ministry of Environment, Bucharest, told the audience about financing opportunities for the energy sector in Romania. He stated that Romania has a clear national energy strategy and commitment to international agreements, being the first country among economies in transition that ratified Kyoto Protocol (its commitment is a 8% reduction of Green House Gases – GHG -, with 1989 as a base year). Mr. Stoica discussed Romania's potential for renewable energy sources (RES) in different regions. It was identified that the RES market in 2010 will be dominated by biomass (65%), followed by wind (17%) and solar (13%) energy. The presentation was concluded by a description of financing programs available in the country for energy efficiency (EE) and RES projects: There are the Sectoral Operational Programmes (SOP) ("SOP Competitiveness" and SOP "Environment" and a governmental programme on rehabilitation of district heating systems). The Environmental Fund provides further aid for investors and local authorities.

Mr. *Kolio Kolev*, Director, Directorate Energy Efficiency Control in Buildings and Register, Energy Efficiency Agency, Ministry of Economy and Energy, Sofia,

presented the activities of EU Structural and Cohesion Funds (SF/CF) in the Bulgarian energy sector. He stated the necessity of addressing the problem of energy dependency, as Bulgaria imports about 70% of its primary energy resources and has 10% higher energy intensity than the EU average. Mr. Kolev showed, however, that very few energy-related projects are currently financed through SF/CF. For example, in 2005, less than 1% of the SF/CF budget was spent on sustainable energy development, although in the current programming period (2007-2013), financing related to sustainable energy has slightly increased. Mr. Kolev demonstrated that, generally, shares of SF/CF budget in New Member States allocated to energy efficiency projects and RES are less than 5%. He, further, discussed the importance of the Operational Programs “Regional Development” and “Environment” in Bulgaria and described their sources of funding, such as European Fund of Regional Development (max. 85%) and the state budget (min. 15%).

Mr. *Miroslav Kukobat*, Head of the Infrastructure and Energy Unit, Regional Cooperation Council, Sarajevo, gave a speech on energy security and climate change and the challenges for SEE. He stressed the importance of ensuring secure and affordable energy supply. According to him, this can be reached through the four main activities: promoting energy efficiency; diversification of energy sources and routes of energy supplies; redirecting subsidies from fossil to alternative fuels; encouraging RES via mandatory quantitative targets. Mr. Kukobat then underlined a major role of business and government in these activities. He listed pending challenges for the SEE energy sector, such as the fragmentary legal framework, low public awareness, subsidized energy prices, missing scientific capacity and expertise, etc. His second speech concerned the Energy Community Treaty (ECT). Mr. Kukobat presented the ECT implementation as a successful collaboration within SEE as well as between SEE and EC with regard to the transfer of experience and harmonisation with the EU directives in the energy area. Finally, the speaker pointed out that there is a need for further cooperation in the region.

The Panel was concluded by Mr. *Harald Rapp* from Energy Efficiency Association for District Heating, Cooling and CHP (AGFW), Frankfurt a.M., and Chairman of the German-Bulgarian Cooperation Council – Working Group “Energy”. He talked about the activities of AGFW that works both with businesses and policy-makers in order to promote efficient local and district heat as well as an exchange of expertise in this field. He further explained that the AGFW is planning to double CHP in all areas by 2020. Mr. Rapp also discussed his experiences in the Bulgarian energy sector where his company worked with utilities combining them and training the staff, restructuring the networks and grids, doing away with lignite coal. He noticed that, while working with utilities, it is important, first, to keep in mind the local municipality level and, second, to contribute to education and awareness.

Panel II: The State of Affairs: Supply and Consumption of Energy in the States of Southeast Europe

Panel II was launched by Assoc.Prof. Dr. *Franz-Lothar Altmann*, Member of the Board, Southeast Europe Association, Munich. He presented on Europe's reliance on imported Russian energy and his suggestions as to how to reconcile this with regional development. He mentioned that in the next 20-25 years 70% of European energy would originate from fossil fuels with Russia as the dominant supplier. Demand on gas will increase, and the main sources will be either increasing imports from Russia or diversifying suppliers. To this end, the Energy Community Treaty was created with a focus on SEE in order to strengthen the supply network, harmonize legislation, and diversify energy supply. Prof. Altmann then shared some facts on SEE's dependence on fossil fuel imports. In general, the Western Balkans' oil demand is 80% satisfied with Russian oil. Among the SEE countries, Romania is in the best position with regard to oil imports and possesses significant oil refining capacities. Romania is also comparatively well situated with regard to gas reserves importing "only" 25% of consumed gas while Albania and Croatia are 50%-dependent on gas imports and Bulgaria, Moldova, and Serbia are 100%-dependent. Prof. Altman proceeded to talk about possible schemes of energy supply diversification. Besides the Nabucco, there are several pipelines being planned including the ones from Turkmenistan, Azerbaijan, Libya, and Egypt. Finally, the speaker noted that a major obstacle for the diversification is funding.

Dr. *Jens Boysen* from the Fraunhofer Center for Central and Eastern Europe MOEZ, Leipzig gave a speech on the state of affairs in the CEE and SEE regarding RES development and pollution tendencies. He first described the general situation in the region with regard to legislation as well as the environmental situation and emission trends. By and large, the SEE countries tend to reduce emissions via the energy sector, thermal retrofits of buildings, and waste treatment. Dr. Boysen then detailed the situation in the individual countries and listed the barriers to introducing and developing RES, such as high initial investment costs; absence of or too low feed-in tariffs; strong industry that forms lobby structures to promote fossil fuels; low public awareness; administrative barriers. Dr. Boysen concluded by discussing the perspectives that the energy crisis is laying out for the region and for Europe as a whole.

Panel III: Climate Protection, Energy Efficiency and Renewable Energy Sources in Southeast Europe: Incentives, Potentials, Instruments

Panel III consisted of four presentations and started with DI Dr. *Klaus Reisinger*, Executive Director, ALLPLAN GmbH, Vienna, presenting on the SEE countries' participation in the Emission Trade Scheme of EU. He, first, introduced his company and described its activities as a consultancy. Next, he discussed the main idea of the EU ETS creation: large scale plants, industrial facilities,

refineries obtain a chance to reduce emissions in the cheapest possible way by trading emission rights. He criticized the Scheme for, often, not reducing emissions as such, but just shifting them from one producer to another. Dr. Reisinger asserted that the role of the state is to trigger market mechanisms that will become self-regulating. The speaker also mentioned the issue of double-counting that had prevented the so-called Joint Implementation (JI) within the EU-27 and caused JI schemes to be of a secondary importance in comparison with CDM.

Dr. Reisinger was followed by the Vice-President of the European Investment Bank (EIB) Dr. *Matthias Kollatz-Ahnen*. The latter described the role of international financial institutions, such as EIB, EBRD (European Bank for Reconstruction and Development), in promoting energy sustainability. Dr. Kollatz-Ahnen detailed on the activities of EIB in Europe and outside the EU. He commented on the four energy fields that EIB focuses on: RES (with a preference to mature technologies), energy efficiency, diversification of internal energy sources, and secure external energy supply. For example, direct loans of EIB for developing sustainable, competitive and secure energy totaled EUR 23.7 billion in 2004-2008. Dr. Kollatz-Ahnen finished his presentation by saying that EIB is trying to give a counter-cycle direction to the development of areas that their activities are targeting.

Dr. *Claudia Loy*, Head of Division, Energy/Transport, KfW-Entwicklungsbank, Frankfurt, related information about her organization, KfW. She recommended it as a promotional bank of Germany and as a leading financial institution in the area of environment. Dr. Loy then talked about the Bank's active portfolio in SEE, namely in the countries that have not yet acceded to the EU. In the region, KfW works in cooperation with private industry, but public institutions are the main partners. Dr. Loy stated that the Bank does not set general conditions but develops projects on a case-by-case basis. She further expanded on specific circumstances of SEE, such as the change of energy provision after the collapse of Soviet Union and insufficiency of transmission lines. After describing the case studies of the SEE countries, Dr. Loy concluded by saying that the sustainability of energy supply in the Balkans guarantees secure energy provision in Western Europe.

Dr. *Stoyan Stalev*, Executive Director of the Bulgarian Investment Agency, Sofia, presented on energy efficiency and RES promotion in Bulgaria. He began with some statistics on energy production in the country stating that RES covered only 6.5% of the total energy demand in 2008. He then elaborated on the structure of the used renewable energy with hydroelectricity heavily dominating the market. Dr. Stalev described Bulgaria's potential in RES: in addition to hydropower, the country has wind capacity up to 3,400 MW as well as moderate solar and geothermal potential. The presenter then talked about financial and legislative support mechanisms for RES. Apart from the EBRD initiatives, there are national schemes of RES promotion, such as tax exemptions for biofuels, feed-in tariffs, and mandatory purchases of RES-produced electricity.

Panel IV: Renewable Energies and Energy Efficiency – Examples in / from Southeast Europe

DI *Gerhard Bayer*, Austrian Society for Environment and Technology (ÖGUT), Vienna, started his presentation with an introduction of his company, a non-profit organization. The main activities of the ÖGUT are focused on environmental research projects, recommendations to policy-makers, providing network and communication in the area of environmental innovation. Mr. Bayer further noted that governments are facing a strategic question whether to invest into energy efficiency or to RES since financial resources and decision-making capabilities are limited. Energy efficient refurbishment of buildings represents the largest savings potential and can be implemented everywhere, unlike RES. However, stated Mr. Bayer, in the competition between RES and energy efficiency projects, politicians would prefer the former as a large-scale solution that is more visible to the electorate and to supranational authorities (e.g., in EU). In spite of this fact, Mr. Bayer showed that there is an exponential trend for passive houses in Austria and demonstrated several case studies with intelligent building technologies to support his words. The speaker then introduced the notion of a new energy-colonialism that implies using unsustainable technologies to produce energy and exporting this energy to other countries.

Ms. *Friederike Sabiel*, Federal Ministry of the Environment, Nature Conservation and Nuclear Safety, Berlin, presented on the cooperation between the German Ministry of the Environment and the SEE countries. She demonstrated that there are two approaches to collaboration: CDM and international climate protection initiative. Basic principles that the Ministry applies to CDM projects are demand-orientation, adaptation of technologies to host countries, capacity building, and support of non-mature technologies. As to the international climate protection initiative, the Ministry aims at promoting climate-friendly economies in developing and transitional countries. Its activities in SEE are covering energy efficiency and RES projects as well as transfers of know-how and political consultation with the funding amounting to EUR 115 million. Ms. Sabiel concluded her presentation by citing two exemplary projects: Pigs for Kilowatt in Serbia and Community Climate Protection Initiative in Croatia.

The third speaker of Panel IV, Dr.-Ing. *Hartwig Rupp*, Head of Team, Open Regional Fund on Energy for South East Europe, Gesellschaft für Technische Zusammenarbeit (gtz), Sarajevo Office, started by giving a general overview of the gtz' activities. The Fund does not provide financial resources but is involved into technical assistance at a regional level. Dr. Rupp noted that there are striking differences between the SEE countries with regard to national energy policies' development. He further elaborated on the gtz' activities in the SEE countries and cited several examples of on-going projects. The presenter performed a SWOT-analysis of implementing measures in energy efficiency and RES in SEE. He indicated that the Fund's projects aim at using synergies that are present in regional cooperation and that the Fund is open for suggestions from the regions.

The afternoon session opened with a presentation of Eng. *Ovidiu Apostol*, Deputy General Director, Institute for Energetic Studies and Projects (ISPE),

Bucharest, who gave a speech on wind energy developments in Romania. He started by discussing the national RES target (33% of domestic energy consumption by 2010) and the current state of affairs. As of 2008, 25-30% of national electricity was produced by hydropower and less than 1% originated from wind installations. Mr. Apostol then listed national regulations on RES and mentioned an increasing role of green certificates. The speaker underlined that there are enormous developments with regard to wind energy in the country (mostly, near to the Black Sea shore) and described several on-going projects implemented by the ISPE.

Mr. *Marcel Lauko*, Director of the Energy Centre Bratislava (ECB), followed with a presentation on RES and EE promotion in the Slovak Republic. He first described Slovakia's energy situation stressing that 90% of the country's primary energy is imported; from those, 98% originates from Russia. The most developed RES are biomass and hydropower with some potential in geothermal and solar energy sources. Mr. Lauko noted the lack of the government's interest in renewable energy and said that he sees the solution in changing the mindset of people. The presenter then introduced his company and major results of its activities in the four areas: biomass, households, municipalities, and market conditions. He underlined the importance of working in the households' area and shared reassuring results on higher awareness, increasing demand on retrofitting services and solar collectors' installations in Bratislava.

Three representatives from Serbia who described the situation regarding energy efficiency and RES in their country continued the Panel. First presenter, Mr. *Dejan Stojadinović*, Assistant Minister, Ministry of Mining and Energy, Belgrade, introduced the country's legal framework, institutional stakeholders, and energy production/consumption structure. He demonstrated that, as of 2008, the biggest part of produced RES came from large hydro installations. As regards Serbia's RES technical potential, it is dominated by biomass (63% of the total RES) and solar energy (17%). The speaker also listed institutional, financial, and technical barriers for wider use of RES.

Mr. Stojadinović was followed by Ms. *Ana Seke*, Advisor, Climate Change Unit, Ministry of Environment and Spatial Planning, Belgrade. She presented Serbia's national CDM strategy and specified potential areas for CDM/PoA (Programme of Activities) projects, such as street-lighting, landfills, small hydropower plants, and construction. She then described several on-going activities and remarked that the development of Programmatic CDM might bring more projects into the country.

Dr. *Siegfried Brenke*, Team Leader, Strengthening Local Self-Government in Serbia, gtz, Belgrade office, continued the session on Serbia and gave a talk on municipal infrastructure investments in waste, water- and energy efficiency. He described the method that gtz applies to identifying the best matches of projects and funding options, with training for successful project development closely linked to all gtz' activities. Dr. Brenke mentioned that working with private and public sectors as well as with civil society is one of the key requirements for the process of matching.

The last presentation of Panel IV was given by Assoc.Prof. Dr. *Goran Rafajlovski*, University of Skopje. He outlined the latest developments of Macedonia's energy efficiency and RES promotion. Prof. Rafajlovski indicated that the country's import energy dependence amounts to 46% of the national energy demand. About 85% of energy is produced from fossil fuels and around 10% is based on RES, such as hydro, fire wood, and geothermal. The presenter underlined that, with regard to RES, there is a significant potential in hydroenergy; as to energy efficiency, the potential is high in the buildings sector and industry. However, there are such obstacles as bureaucracy, lack of experience and finance, and subsidised energy prices.