



Sixth International Energy Forum – INTERENEf

Energy transition and green cities of the Mediterranean

INTRODUCTION

The International Energy Forum Interenef, in its sixth edition this year, was held in unprecedented circumstances.

Russian aggression against Ukraine served as a catalyst for numerous topics and policies closely related to energy, energy security, security of energy supply and renewable energy sources.

The consequences of Russian aggression are putting the issue of security of energy supply to the forefront of the European Union and accelerating the process of switching to renewable energy sources.

We are talking about geopolitical and geoeconomic processes that took place in the background for a long time, but almost only formally, because there was not enough political will within the EU to make important decisions on these issues, primarily due to the security-political dependence on the USA and energy dependence on Russia, which led Europe, often sluggish, to a divided, and as we now see, an unsustainable position.

In the context of these events and the uncertain energy future of the European continent, the sixth Interenef took place, which tried to look at the issue from a local, Mediterranean perspective, always keeping in mind the global picture.

The sixth Interenef consisted of four thematically different, but conceptually unified panels.

First panel

Global energy transition from the perspective of Southeast Europe and the Mediterranean

Moderator: Prof. **Daria Karasalihović Sedlar**, Ph.D., Faculty of Mining, Geology and Petroleum, University of Zagreb

Participants: **Kristina Čelić**, Ph.D. Director of the Directorate for Energy, Ministry of Economy and Sustainable Development of the Republic of Croatia, **Josip Mrčela**, Dipl.ing.el, Aalborg University, Aalborg, Denmark, **Leon Stille**, Energy Delta Institute, energy analyst, The Netherlands, **Ivana Grbeša**, E.On

At the beginning, the director of the Directorate for Energy of the Ministry of Economy and Sustainable Development of the Republic of Croatia, Mrs. Kristina Čelić, briefly described the position of Southeastern Europe and the Mediterranean in terms of the energy transition.

She gave her view of the energy transition in this area and its characteristics in relation to the transition in other parts of Europe. She additionally referred to the importance of the security of energy supply (especially due to the reduced import of Russian gas) and presented her view of how the transition will improve the current energy situation.

Ivana Grbeša, as a representative of the real sector from the company E.On, analysed the current factors of the global crisis (rising prices, inflation, war in Ukraine) on the energy transition in these areas. She stated what the perspectives of the area of southern Europe in terms of the use of renewable resources.

Mr. Leon Stille, president of the Energy Delta Institute as an educational institution that provides education in the latest segments of energy development, analysed projects such as CCS and CCUS and their role in the energy transition. He additionally referred to the importance of using sea energy and mastering it, as well as further development perspectives in this segment. As a representative of Western Europe and an external observer of events in this part of the world he presented his view of the main advantages of Southern Europe in the energy transition.

Mr. Josip Mrčela described how fossil fuels can be complementary with other energy sources and which fossil fuel he sees as the most promising. He further described the degree of development of energy storage technology in the south of Europe.

At the end of the panel, considering the weaker development of the South and Southeast compared to the rest of Europe, the panel participants gave their opinion on the expectation that all member states will succeed in meeting the EU's climate goals on time.

Second panel

The use of hydrogen in the framework of the energy transition

Moderator: prof. **Daria Karasalihović Sedlar**, Ph.D., Faculty of Mining, Geology and Petroleum, University of Zagreb

Keynote speaker: **Marijan Krpan**, President of the Board of Directors of the Agency for Hydrocarbons

Participants: **Joris Heijdt**, Energy Analyst, New Energy Business School, **Gorazd Ažman**, assistant director of the Department for Strategic Innovations, ELES — Electricity Transmission System Operator, Slovenia,

Robert Bošnjak, manager of strategic development at Plinacro, Prof. **Franjo Barbir**, Ph.D., Faculty of Electrical Engineering, Mechanical Engineering and Shipbuilding, University of Split

At the beginning of the panel, the President of the Governing Council of the Agency for Hydrocarbons, Mr. Krpan, described the current situation with the development of hydrogen use in our region regarding new projects, associations, plans for the future.

Gorazd Ažman, assistant director of the Department for Strategic Innovations, ELES — Electricity Transmission System Operator from Slovenia, analysed whether hydrogen in these areas is necessary for the complete integration of RES into the energy system. He also referred to the issue of hydrogen storage and its low energy density.

Mr. Robert Bošnjak from the company Plinacro gave an expert opinion on the mixing of hydrogen into gas pipelines with natural gas, with different contents of hydrogen in the gas mixture, for example 10% or 20%. He also described the state of the existing infrastructure and how suitable it is for the use of hydrogen.

Hydrogen storage in the wider region, along with potential locations (salt houses, tanks next to classic reservoirs) was analysed by Mr. Joris Heijdt, an energy analyst from the Energy Delta Institute in the Netherlands whose field of activity is the development of hydrogen projects. From the perspective of the Energy Delta Institute, he also analysed the public's perception of hydrogen.

Professor Frano Barbir from the Faculty of Electrical Engineering, Mechanical Engineering and Shipbuilding at the University of Split described the possibilities and perspectives of using hydrogen in traffic as well as the main challenges of using hydrogen in the transition.

At the end of the panel, Mr. Krpan analysed the fiscal/legal/political framework in the context of hydrogen use.

Third panel

Decarbonization of cities as part of the process of adaptation to climate change

Moderator: Nadežda Kokotović, Brussels Energy Club

Participants: prof. **Sanda Midžić Kurtagić**, Ph.D. Faculty of Mechanical Engineering, University of Sarajevo, Bosnia and Herzegovina, Assoc. prof. **Mirela Holy**, Ph. D VERN' University in Zagreb, Croatia, **Danijela Šegvić**, advisor in the Department of Spatial Planning and Environmental Protection, City of Split, **Nirvana Franković Mihelj**, Ph. D Environmental Protection and Energy Efficiency Fund

The third panel was held on the topic of challenges of decarbonization in Croatia and beyond.

Mrs. Nirvana Franković Mihelj from the Fund for Environmental Protection and Energy Efficiency of Croatia presented Croatia's climate goals and programs for improving air quality, methods of financing the Fund and distribution of funds through public calls to cities.

Mrs. Danijela Šegvić, advisor in the Spatial Planning Department of the Split city administration, spoke about Split's participation in the European Bank for Reconstruction and Development initiative called "Green Cities" and about the city's development strategy. She presented the key programs that the administration finances to reach the goal that the mayor of Split stated in his introductory speech, saying that Split must become the greenest of all green cities.

Mrs. Sanda Midžić Kurtagić presented the challenges that the city of Sarajevo faces in the implementation of the Green Action Plan that the Sarajevo Canton created in cooperation with the EBRD, and highlighted understanding as a key aspect that needs to be worked on to improve the air quality in Sarajevo, and the city relieved from traffic jams.

Mirela Holy, former Minister of the Environment in the Government of the Republic of Croatia, spoke about the necessity of increasing transparency in making city decisions when it comes to spending budget funds, as well as the fact that citizens must insist on greater responsibility of city authorities and all those in charge of the environment.

Fourth panel

The role and possibilities of cities in the fight for sustainable development and a clean environment

Moderator: Nadežda Kokotović, Brussels Energy Club

Keynote speaker: Haris Abaspahić, Senior Expert for the Green Agenda, Regional Council for Cooperation, Sarajevo (RCC)

Participants: Katarina Kulić, sustainable development specialist, Ball Corporation, USA/Serbia, **Nikolay Mihaylov**, senior consultant Denkstatt, Bulgaria, **Nirvana Franković Mihelj**, Ph.D Environmental Protection and Energy Efficiency Fund, Croatia

The fourth panel discussed sustainable development and the role of the circular economy in today's cities. Katarina Kulić, an expert in sustainable development from the Belgrade headquarters of the American Ball Corporation, spoke about Belgrade's experience in creating long-term action plans for green development, about the contribution of the Ball Corporation to the development of the circular economy concept in the region, and why incinerators are the last solution.

Nikolay Mihaylov from the Bulgarian branch of Denkstatt, a company that advises others on the possibilities of sustainable development and the circular economy, presented various ways in which new generations and new businesses can contribute to economic growth with reduced resource consumption. Finally, Haris Abaspahić from the Regional Cooperation Council (RCC) presented the way in which the RCC will coordinate the Green Agenda for the Western Balkans, which was developed by the European Commission in cooperation with governments.

Authors: Prof. Daria Karasalihović, Ph.D and Nadežda Kokotović

Editor: Mislav Vušković