



**INTERNATIONAL FORUM FOR  
CLEAN ENERGY TECHNOLOGIES**

**XIII INTERNATIONAL FORUM FOR CLEAN ENERGY TECHNOLOGIES**

# **ENERGY DIGITAL PERSPECTIVE OF SERBIA**



**Novi Sad, October 29-30, 2019**

**PROGRAM**

Dear ladies and gentlemen and dear friends,

We are in the thirteenth year of work of the International Forum on Clean Energy Technologies (Forum) that will be held on 29<sup>th</sup> and 30<sup>th</sup> October this year under the name “ENERGY DIGITAL PERSPECTIVE OF SERBIA”. After three years of the “TOP ENERGY” awards for the most successfully implemented projects in the field of energy in Serbia and in the Southeast Europe, we are obliged to emphasize the best digitally integrated and realized projects this year and to make possible the high quality event with the program concept of a wider scope.

For quite some time, the Republic of Serbia has been making special efforts in the process of improving its energy security and in the construction of infrastructure which should meet the growing energy demand. Almost identical processes are taking place in other countries in the region of the Southeast Europe thus, confirming once again, that no one in this area can allow to be passive or to become an isolated energy island. The opening of the process of general national digitization in the Republic of Serbia imposes the obligation to rely on domestic and regional projects and, through synergy of long term common interests in achieving energy security as the basis of sustainable development, to put in the forefront the implementation of the most important principle of sustainable development - energy and digitization for all!

The decision of the Program Committee of the Thirteenth Forum is that in the thirteenth year of the Forum’s existence and work under the auspices of the Assembly of the Autonomous Province of Vojvodina and co-organizers, the Provincial Secretariat for Energy, Construction and Transport and the Chamber of Economy of Vojvodina, the focus of the Republic of Serbia and the countries of the region will be put on the most applicable identification of concrete processes and projects and their energy improvement through the use of new digital technologies and solutions, as a way to achieve the preset common European objectives. So far, we have been upgrading energy development plans on the horizon up to 2020, which is already ahead of us and now, we will try to put our own potentials in the context of forecasting strategic objectives up to 2050. The EU Energy Roadmap 2050 offers a very innovative approach to achieving ultimate objectives and a look from the future into the present, in order to consider the needs of changing the economic and social system that will take us to the desired objectives. Such an approach requires not only very dynamic and flexible energy policies and other policies connected with them of all those who want to belong to the group of successful nations of the future, but also especially well-controlled mechanisms for monitoring the implementation of these policies. Today, digitalization enables the change of the procedure for the implementation of all policies and the achievement of their reliable and efficient supervision. These are all prerequisites for the dynamic change of policies and for the creation of a new quality that is reflected in constant changes and adjustments of the surroundings.

Our common vision is that this year's two day work of the Forum should encourage more creative and concrete use of available potentials in clean energy in this region, initiate further cooperation and development of the energy sector and digitalization in the countries of the region and focus our future towards high objectives of the EU Energy Roadmap 2050 by means of the credibility of presented concepts, technological solutions and scientific papers.

In addition to the plenary session at which high officials of the host country and distinguished guests from abroad will address those who are present, the first day of the Forum will be devoted to the consideration and actualization of activities that are necessary in the process of the implementation of adopted energy strategy entitled “ENERGY DIGITAL PERSPECTIVE OF SERBIA”, as well as to results achieved in relation to preset objectives of the energy policy, national digitalization and sustainable development of the Republic of Serbia and to the announcement of major national projects that will qualify us for a better and smarter future.



Smart cities and digital infrastructures make an integral part of the third and fourth industrial revolution in which we live. However, the transformation and digitalization of cities is very slow because the process of change is very complex and the biggest obstacle is people who are by their nature unprepared for changes. Positive changes in some big cities give us the right to believe that such positive changes are possible and economically justified and that it is also possible to observe cities and buildings not only as energy consumers, but also as energy producers. On the example of projects that are undertaken by one of the 100 most successful global companies on the *World Finance List*, DANA HOLDINGS Company, Euro-Asian mega projects will be presented that contain all the elements of the most recent digital technological achievements and that meet all the criteria required by smart cities. The most famous world companies are included as partners in this project and presentation whose co-author is the BK TESLA Company LLC, Serbia.

Also, during the opening ceremony of the Forum, “TOP ENERGY 2019” awards will be given for the most successful projects implemented in the energy sector in Serbia and in the countries of Southeast Europe in the previous year. At the same time, the experiences of the countries in the region and in the EU will be discussed through the participation of relevant representatives of participating countries and the European regions and through the presentation of papers by invited authors on the topics of “NEW DIGITAL ENERGY TECHNOLOGIES” and “MANAGEMENT OF SMART URBAN SYSTEMS AND DIGITAL INFRASTRUCTURE”. In all working sessions, panel discussions will be opened after presentations and in the final common conclusion they should provide clear messages about the possible more dynamic sustainable development of the digitalized energy sector in Serbia and the region by 2050.

The second day of the Forum under the co-auspices of the Chamber of Economy of Vojvodina will be especially focused on the review of implemented business projects in the country and abroad through thematic sessions “PROJECTS IMPLEMENTED IN THE FIELD OF ENERGY EFFICIENCY AND DIGITAL INTEGRATION, RENEWABLE ENERGY SOURCES AND ENERGY MANAGEMENT” and “DOMESTIC AND INTERNATIONAL PARTNERSHIP – PRESENTATION OF NEW TECHNOLOGIES AND OPPORTUNITIES FOR COOPERATION”.

We take this opportunity to invite you to participate at this year's Thirteenth Forum “ENERGY DIGITAL PERSPECTIVE OF SERBIA” and to give your contribution in creating the vision of the digital energy future, as well as, in implementing business projects and strengthening mutual relations and energy security of the Republic of Serbia and of the countries in the Southeast Europe.

Respectfully Yours,

Tihomir Simić, D. Sc.  
Chairman of the Forum

Ivo Vajgl  
Co-Chairman of the Forum

October, 2019



## FORUM IS SUPPORTED BY



REPUBLIC OF SERBIA  
AUTONOMOUS PROVINCE OF VOJVODINA  
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## 2019 FORUM POOL



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## Preliminary Program

**First Day (Tuesday, October 29, 2019)**  
**Congress Center Master of the Novi Sad Fair**  
**11, Hajduk Veljkova Street, 21000 Novi Sad**

### PLENARY SESSION – “SERBIAN DIGITAL ENERGY PERSPECTIVE”

8:30 – 9:30	Registration of participants
9:30 – 10:30	<b>Ceremonial opening of the XIII Forum SERBIAN DIGITAL ENERGY PERSPECTIVE</b> <b>Introductory speech – Tihomir Simić; Chairman of the Forum, Novi Sad, Serbia</b> <b>Welcome speeches</b> <i>Ivo Vajgl; President for the Southeast Europe of INEA - Institute for European Affairs, Dusseldorf, Germany and Member of the European Parliament, Brussel, Belgium</i> <i>Nenad Grbić; Provincial Secretary for Energy, Construction and Traffic, Novi Sad, Serbia</i> <i>Milan Radovanović; President of the Society of Thermal Engineers of Serbia, Belgrade, Serbia</i> <i>Dejan Popović; President of the Council of the Energy Agency of the Republic of Serbia, Belgrade, Serbia</i> <i>Rade Doroslovački; Dean of the Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia</i> <i>Ištvan Pastor; President of the Assembly of the Autonomous Province of Vojvodina, Novi Sad, Serbia</i> <i>Aleksandar Antić; Minister of Mining and Energy of the Republic of Serbia, Belgrade, Serbia</i> <b>“TOP ENERGY” award ceremony and official opening of the Forum</b> <b>Joint photograph</b> <b>Press conference</b>
10:30 – 11:00	<b>Coffee break</b>

### FIRST WORKING SESSION ENERGY STRATEGIES

11:00 – 13:20	<b>DIGITAL BASIS OF THE FUTURE</b> <i>Tihomir Simić; President of the Forum for Clean Energy Technologies, Novi Sad, Serbia</i> <b>EUROPEAN 2050 ENERGY TARGETS – ENERGY CHALLENGE FOR SERBIA</b> <i>Miloš Banjac; Ministry of Mining and Energy of the Republic of Serbia, Belgrade, Serbia</i> <b>SUSTAINABLE DEVELOPMENT OF THE ENERGY SECTOR IN THE REPUBLIC OF SERBIA – REGULATIONS AND PERSPECTIVES</b> <i>Aca Marković; Energy Agency of the Republic of Serbia, Belgrade, Serbia</i> <b>ATLAS OF PROVINCIAL BUILDINGS ENERGY EFFICIENCY</b> <i>Slavoljub Arsenijević; Provincial Secretariat for Energy, Construction and Traffic, Novi Sad, Serbia</i> <b>ENERGY EFFICIENCY AND DIGITAL TECHNOLOGIES</b> <i>Dušan Gvozdenc, Branka Gvozdenc Urošević; Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia</i> <b>WIND FARM KOVAČICA – PRESENTATION OF THE PROJECT</b> <i>Miloš Colić; New Energy Solutions, Belgrade, Serbia</i> <b>Panel discussion</b>
13.20 – 13.30	<b>Coffee break</b>

### SECOND WORKING SESSION ENERGY AND DIGITALIZATION FOR SMART FUTURE

13:30 – 15:45	<b>ATLAS – THE FIRST DIGITAL MICROPROCESSOR TELE-INFORMATION SYSTEM</b> <i>Božidar Levi; Institute Mihailo Pupin, IMP Automation &amp; Control Systems Ltd, Belgrade, Serbia</i> <b>MODERN APPROACH TO ENERGY DEVELOPMENT IN THE BUILDING SECTOR</b> <i>Miroslav Kljajić, Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia</i> <b>SMART CITY – MINSK WORLD</b> <i>Tihomir Simić, Vitor Mulić; BK DANA Holdings Group, Minsk, Belarus</i> <b>SENSE YOUR WORLD (WITH IOT SOLUTIONS)</b> <i>Milutin Cvetković; SAGA Ltd, Belgrade, Serbia</i> <b>DIGITAL SIGNAGE - SMART CITY IN PRACTICE</b> <i>Daniel Golić; SAGA Ltd, Belgrade, Serbia</i> <b>TRANSITION TO SUSTAINABLE AND SMART DISTRICT HEATING SYSTEMS – EXAMPLE OF CITY OF BANJA LUKA</b> <i>Dejan Jovišević; EKO TOPLANE, Banja Luka, Republika Srpska, BiH</i> <b>BIPV (BUILDING-INTEGRATED PHOTOVOLTAIC) VIA SMART GRID, HEAT PUMPS THERMAL USE OF UNDERGROUND AND ABANDONED MINES ENERGY STORAGE FOR LARGE-SCALE RES UTILISATION</b> <i>Marija S. Todorović; Southeast University, Nanjing, China, CEO vea-invi.ltd, Belgrade, Serbia</i> <b>Panel discussion</b>
15:45	<b>Cocktail</b>



**Second Day (Wednesday, October 30, 2019)**  
**Main Hall, Chamber of Economy of Vojvodina**  
**11, Hajduk Veljkova Street, 21000 Novi Sad**

**THIRD WORKING SESSION**  
**PROJECTS IMPLEMENTED IN THE FIELD OF DIGITAL ENERGY INTEGRATIONS, ENERGY EFFICIENCY, RENEWABLE ENERGY SOURCES AND ENERGY MANAGEMENT**

8:30 – 9:00	<b>Registration of participants</b>
9:00 – 9:05	<b>INTRODUCTORY SPEECH</b> <i>Tihomir Simić; Chairman of the Forum, Novi Sad, Serbia</i>
9:05 – 9:10	<b>WELCOME SPEECH</b> <i>Boško Vučurević; President of the Chamber of Economy of Vojvodina, Novi Sad, Serbia</i>
9:10 – 9:25	<b>UNDP/GEF PROJECT FOR REMOVING BARRIERS TO PROMOTE AND SUPPORT THE ENERGY MANAGEMENT SYSTEM IN MUNICIPALITIES IN SERBIA</b> <i>Maja Matejić, Dragan Urošević; UNDP, Belgrade, Serbia</i>
9:25 – 9:40	<b>CULTURAL FACTORS OF BEHAVIOR OF END ENERGY USERS AND COMPETITIVENESS</b> <i>Valentina Ivanić; Cultural Due Diligence Institute, Novi Sad, Serbia</i>
9:40 – 9:55	<b>ANALYSIS OF COMPLEX ENERGY SYSTEMS BY MEANS OF ARTIFICIAL NEURAL NETWORKS</b> <i>Branka Gvozdenac Urošević, Damir Dozić; Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia</i>
9:55 – 10:10	<b>BIO-ECONOMY – A NEW CONCEPT OF ECONOMIC DEVELOPMENT SIGNIFICANTLY AFFECTING FUTURE ENERGY POLICY</b> <i>Goran Vasić; Guarantee Fund of the Autonomous Province of Vojvodina, Novi Sad, Serbia</i>
10:10 – 10:25	<b>THE EFFECT OF THE USE OF HEAT PUMPS ON THE PRIMARY ENERGY CONSUMPTION IN SERBIAN SCHOOLS</b> <i>Mirko Stojiljković*, Dušan Randelović**, Marko Ignjatović*, Goran Vučković; * University of Niš, Faculty of Mechanical Engineering in Niš, Niš, Serbia ** University of Niš, Faculty of Civil Engineering and Architecture in Niš, Niš, Serbia</i>
10:25 – 10:35	<b>Coffee break</b>
10:35 – 10:50	<b>THREATS AND STANDARD SOLUTIONS OF SAFE INDUSTRIAL OT NETWORKS</b> <i>Slavko Dubačkić, Aleksandar Bošković, Đorđe Vladislavljević; CIT, ODS "EPS Distribution", Belgrade, Serbia; Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia; CIT, ODS "EPS Distribution", Belgrade, Serbia</i>
10:50 – 11:05	<b>ADVANTAGES OF THE USE OF HEAT PUMPS IN A MUSHROOM CHAMBER DRYER</b> <i>Nikola Milivojević, Damir Đaković; Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia</i>
11:05 – 11:20	<b>OVERVIEW AND RECOMMENDATION OF AVAILABLE TECHNOLOGIES FOR THE IMPLEMENTATION OF TELECOMMUNICATION SUBSYSTEM AS THE PART OF THE DISTRIBUTION SYSTEM AUTOMATION</b> <i>Đorđe Vladislavljević, Slavko Dubačkić, Aleksandar Bošković; CIT, ODS "EPS Distribution", Belgrade, Serbia; Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia</i>
11:20 – 11:35	<b>EXPERIENCES IN THE USE OF SOLAR ENERGY</b> <i>Miodrag Vuković; Conseko, Belgrade, Serbia</i>
11:35 – 11:50	<b>DRAFTING AN ACTION PLAN TO STIMULATE INCREASED USE OF RENEWABLE ENERGY SOURCES AT THE TERRITORY OF THE MUNICIPALITY OF BAČKA PALANKA</b> <i>Zoltan Zavargo; ENEF Cluster, Novi Sad, Serbia</i>
11:50 – 12:00	<b>Coffee break</b>

**FOURTH WORKING SESSION**

**In the organization of the HVAC Society of Serbia at the SMEITS**  
**REFRIGERATION TECHNIQUES – TRENDS, EXPERIENCES AND APPLICATION**

12:00 – 12:15	<b>REGULATIONS IN THE AREA OF REFRIGERATION TECHNIQUES</b> <i>Slobodan Pejковиć; HVAC Society of Serbia at the SMEITS, Belgrade, Serbia</i>
12:15 – 12:30	<b>SPECIFICITY OF THE USE AND TECHNICAL SOLUTIONS FOR NATURAL REFRIGERANTS</b> <i>Vladimir Sovilj; Frigoria, Novi Sad, Serbia</i>
12:30 – 12:45	<b>NATURAL REFRIGERANTS – EXPERIENCES IN UTILIZATION</b> <i>Vladimir Beljanski, Danfoss, Serbia</i>
12:45 – 13:00	<b>USE OF INDUSTRIAL AMMONIUM HEAT PUMPS IN THE PRODUCTION OF MALT</b> <i>Dragutin Miljković, Nebojša Pejić, Zoran Stajić; Tehnomag-Teco, Novi Sad, Soufflet Serbia, Bačka Palanka, Emerson Commercial &amp; Residential Solutions-Vilter, Belgrade, Serbia</i>
13:00 – 13:40	<b>Discussions, conclusions and current information</b>

**CLOSING OF THE XIII FORUM**

13:40 – 14:00	<b>Proposal of Conclusions of the XIII Forum and ceremonial closing of the event</b> <i>Tihomir Simić; Chairman of the Forum for Clean Energy Technologies, Novi Sad, Serbia</i>
14:00	<b>Cocktail</b>

