





## PRELIMINARY PROGRAMME

WEC CENTRAL & EASTERN EUROPE REGIONAL ENERGY FORUM

10-14 JUNE 2018

14th Edition

### **FOREN 2018**

CENTRAL AND EASTERN EUROPE
IN THE NEW ERA OF ENERGY TRANSITION:
CHALLENGES, INVESTMENT OPPORTUNITY
AND TECHNOLOGICAL INNOVATIONS









VOX MARIS GRAND RESORT
COSTINESTI, ROMANIA







#### **World Energy Council (WEC)**

The World Energy Council (WEC) is the largest global network of energy leaders and practitioners promoting an affordable, stable and environmentally sensitive energy system for the greatest benefit of all.

Formed in 1923, the Council is the UN-accredited global energy body, representing the entire energy spectrum, with more than 3000 member organisations located in over 90 countries and drawn from governments, private and state corporations, academia, NGOs and energy-related stakeholders.

The World Energy Council informs global, regional and national energy strategies by hosting high-level events, publishing authoritative studies, and working through its extensive member network to facilitate the world's energy policy dialogue.

WEC hosts the triennial World Energy Congress, which is the premier international, multi-energy forum for participants to better understand energy issues and solutions from a global perspective. The 24th World Energy Congress will take place in Abu Dhabi, United Arab Emirates from 7-14 September 2019.

#### Romanian Member Committee of the World Energy Council (WEC/RNC)

WEC/RNC is a non-governmental organisation and a founding member of the World Energy Council, from 1924. It is also a strategic partner in Romania's sustainable energy development programme.

WEC-RNC mission is to promote the sustainable supply and use of energy for the benefit of all.

WEC/RNC members are: important national companies, trade companies, energy producers, suppliers and distributors, national electricity and heat regulatory authorities; non-working organizations, decisions makers; governmental agencies, energy users, research and development institutes, universities etc.

WEC/RNC offers topical information for all forms of energy (coal, oil, gas, nuclear, hydro and renewable) and has a steady communication strategy with its members, keeping them abreast with the latest energy policies.

WEC/RNC represents the interests of its members (over 400 individuals and over 150 corporate members – legal entities) within the meetings and events organised by WEC; and contributes to decision making at worldwide level, with Romanian representatives in all of WEC's Study Groups.

WEC/RNC has initiated and is successfully coordinating the "Future Energy Leaders in Romania Programme – FEL Romania", aligned to the Future Energy Learders' Programme – FEL 100 promoted by the World Energy Council. FEL Romania is a network of the best energy professionals who represent different players in the energy sectors, energy industry, academia, civil society and social entrepreneurs. Its main objective is to promote the excellence in diversity, with a view to creating a new generation of specialists and future energy leadres able to prove their capability in offering solutions to the challenges laying ahead for shaping a sustainable energy future.

WEC-RNC organizes events on energy themes, in order to provide conclusions and recommendations in the energy field and to elaborate points of view regarding the official documents of energy policy.







#### **WEC Central & Eastern Europe Regional Energy Forum**

The WEC Central & Eastern Europe Energy Forum, organized every two years, is the most important regional event and exhibition hosted by the Romanian National Committee of the World Energy Council (WEC/RNC).

Since 2011, FOREN is recognised as **the WEC's official regional meeting for Central and Eastern Europe**. As a major event in WEC in 2018, it is aimed to support the WEC's mission to inform the energy debate and to create dialogue on energy policies for a sustainable energy future.

Thanks to the participation of a large number of decision makers and of the best energy specialists in the region, FOREN is a powerful platform for dialogue, communication and networking among the countries of the CEE region, meant to address and analyse the major issues and energy trends, while providing relevant recommendations to governmental, corporate and academic decision makers, for a sustainable future in the world. FOREN also represents an ideal platform for the regional cooperation, aimed at improving energy security.

With the main theme "Safe and Sustainable Energy for the Region", the previous edition, FOREN 2016, brought together more than **700** delegates from over 15 countries, policy makers from private and state companies in the energy industry, top executives and members of WEC National Committees from the CEE region, high ranking officials from governmental, local and regional authorities, policy makers from national and foreign energy companies, leading representatives of academia and education, investors and developers, renowned experts from research, development and ITC institutes.

Over **200** noteworthy personalities in the energy field led the **11** main events (Regional Energy Day, Keynote Addresses, Energy Trilemma, Round Tables and Workshops) at Forum level and the **5** technical communication sessions of FOREN 2016, as chairs, secretaries, members and speakers, addressing the topical issues on the latest technological developments in the energy, oil, gas, coal, nuclear, renewable fields, and analysed the economic and political decisions to be made in order to change energy vision into reality.

#### **Testimonials**

#### Dr. Cristoph Frei, Secretary General of the World Energy Council (WEC):

FOREN is "an ideal platform for the decision makers in the region to address the region's energy issues and to identify the right policy frameworks for securing economic growth and sustainable energy supply".

#### Einari Kisel, Regional Manager, Europe; Senior Fellow, European Policies, WEC

On behalf of the World Energy Council Vice-Chair for Europe Dr Leonhard Birnbaum, Secretary General Dr Christoph Frei, and myself we would like to congratulate you for an outstanding organisation of 13<sup>th</sup> consecutive forum FOREN.

Facts and figures from FOREN prove that the Romanian Member Committee runs the most attended European level event of the World Energy Council, bringing together energy policymakers, companies, academia and future energy leaders from Central and Eastern Europe. Interesting programme, valued discussions, knowledgeable community and smooth organisation have made from FOREN a landmark event, where participants gather to hear most up-to-date developments in the regional energy markets.

All this together has clearly raised the visibility and accountability of the Romanian Member Committee both nationally and internationally. We are glad to see that despite the difficult times of energy sector your Member Committee is strongly leading the energy discussions in Romania.

#### Elena Nekhaev, Director Programmes, WEC

I would like to take this opportunity to send a warm message of success, on behalf of the World Energy Council and on my own behalf, in regard to the debates organised by RNC-WEC during FOREN 2016. Given the current energy status, specialists play a key role in ensuring the fulfilment of WEC targets on accessibility, availability and sustainability of energy, with minimal effects onto the environment. For this purpose, it is required that all existing forms of energy resources be considered and used in a manner that will minimise the carbon footprint.

#### Mihkel Harm, General Secretary of WEC Estonia

We congratulate the Romanian National Committee of the World Energy Council on the organisation of this event of great importance for the Central and Eastern European Region. I am expressing my strong belief that the Forum participants will engage in a fruitful exchange of experience enabling the analysis and settlement of complex problems pertaining to the current energy system, for the purpose of fulfilling the targets proposed by WEC on energy affordability, availability and supply security.







#### **An Equisite Venue**

The 14th WEC Central & Eastern Europe Energy Forum will be held at the Vox Maris Grand Resort in Costinesti, on the Black Sea Shore, Romania, during 10-14 June 2018.

**Costineşti** is a resort in Constanța County, Romania, located on the shore of the Black Sea, about 30 kilometres (19 mi) south of the county seat, Constanța. The resort is crowded with hotels, pensions, villas.

The most luxurious location is Vox Maris Grand Resort (4 stars), which is one of the most appreciated hotels on Romanian seaside due to its position in the center of the resort and the short distance to the beach, the quality services and the intimacy it offers. The touristic complex is built on 7 hectares surface and it is made up of several villas, restaurants, terraces, 3 swimming-pools for adults and children, bowling center, disco, tennis field, playground, bars, fitness center, conference halls, all being surrounded by large greenery with a lawn, trees, ornamental trees, palm trees and flowers. Access inside the complex is allowed only to tourists which are accommodated here, this assuring intimacy and a high level of safety. The rooms are designed to be cozy, in warm and peaceful colors, and are equipped with air conditioning, balcony with view to the garden, tv, minibar, and telephone. Further details: <a href="https://www.voxmarisclub.com">www.voxmarisclub.com</a>.

Costineşti is accessible by either rail or road. There are two railway stations within the resort, and the town is connected to the main E87 road which runs north to Constanţa and south to the Bulgarian border. There is also an airport (Kogalniceanu) located at 65 km from the resort.



#### Accommodation

For the convenience of national and international participants, the organizing committee will secure accommodation in various price categories for participants. For further details please visit the Forum website.

#### **Social Programme**

Delegates and accompanying persons are invited to attend the following social events, which are covered by the registration fee:

- Opening Ceremony
- · Musical Show
- Welcome Cocktail
- Farewell Dinner Party
- Refreshments
- · Closing Ceremony.

#### **Optional Tourist Programme**

A special and attractive optional tourist programme has been prepared, comprising evening events and visits to museums, monuments of architecture and many others.

#### **Technical and Post Forum Visits**

Companies will have the possibilities to present the performance of their research and design departments, technical facilities, in the period 11<sup>th</sup> to 13<sup>th</sup> June 2018.

The delegates can enjoy very attractive post-forum tours too, in the period 15th to 17th June 2018.







#### FOREN 2018 - The 14th WEC Central & Eastern Europe Regional Energy Forum

The 14<sup>th</sup> Regional Energy Forum for Central and Eastern Europe (FOREN 2018) will run under the theme "Central and Eastern Europe in the New Era of Energy Transition: Challenges, Investment Opportunity and technological Innovations" and will be held at the Vox Maris Grand Resort in Costinesti, on the Black Sea Shore, Romania, during 10-14 June 2018. The event will focus on the main challenges, developments and opportunities of the CEE power industry for a sustainable development.

The Programme of the Forum will include Keynote speeches from noteworthy policy makers and businessmen in the CEE region, Round Tables on the latest accomplishments in the energy field, Special Events, hundreds of technical papers presented within the five Discussion Sessions, workshops to present a number of WEC flagship studies, technical visits and social events.

The event will take place under the auspices of the Romanian Government, with the coordination by WEC and the kind support of the WEC Member Committees in Central and Eastern Europe.

#### **Top Reasons to attend FOREN 2018**

- Regional coverage, large participation
- The most topical and state-of-the-art themes and sessions
- An impartial and detailed review of the major issues in the energy field
- A general assessment of the CEE energy sector and energy policies status, and their alignment with the European policies
- Participation of top leaders in the energy industry
- Experienced speakers sharing their intensive knowledge
- · Key strategies and policies for achieving the sustainable development
- Presentation of the next technology trends
- Round tables and panel sessions to confront ideas
- Paper and Poster presentations
- International Exhibition EXPO FOREN 2018
- Attractive social programme.

#### Who should attend

The Forum is open to members of the World Energy Council, energy industry leaders, government ministers and officials, heads of international organizations, academics, media, WEC/RNC individual and corporate members interested in Forum theme:

- Electric and thermal power producers and suppliers
- Fuel (oil, gas, coal) producers and suppliers
- Equipment and service producers and suppliers
- · Research and design institutes
- Universities and research centers
- Energy consumers
- Governmental institutions: ministries, regulatory authorities, regional and urban authorities
- Investors, banks, financial institutions
- Associations, non-profit professional organizations
- Mass-media.







#### **FORUM MAJOR EVENTS**

<b>Event Category</b>	Event Topics
KEYNOTE ADDRESSES (KA)	
KA1: Financing Resilient Energy Infrastructure: Challenges and Solutions  On Monday, June 11th 2018	<ul> <li>Emerging risks for energy system, general, regional &amp; local;</li> <li>Challenges raised by the new risks on systems resilience;</li> <li>Security of work - major vulnerability in the energy system;</li> <li>Risk in hydropower plants;</li> <li>EU Clean Energy Package emerging risks;</li> <li>Financing schemes for improving energy systems resilience.</li> </ul>
KA2: Renewable Electricity System Integration: Development of energy markets in Europe. Covering energy needs in the context of markets interconnection  On Thursday, June 14th 2018	<ul> <li>Solutions to increase the share of renewable energy sources. Role of large hydro;</li> <li>Forecasting of the production of renewable energy sources;</li> <li>Technical, economic and financial criteria for the practical use of renewable energy sources;</li> <li>Characteristics of the production of renewable sources;</li> <li>Market access for energy from renewable sources;</li> <li>Dimensioning of energy storage systems, including hydropopower sources;</li> <li>Increasing the efficiency of renewable energy sources;</li> <li>The power quality in a network with renewable energy sources;</li> <li>Connection to the electrical network of the unconventional sources;</li> <li>Integration of Prosumer in the electricity market;</li> <li>Management of electricity sources in the power system in the presence of renewable energy sources.</li> </ul>







#### **REGIONAL ENERGY DAY**

The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements

On Tuesday, June 12th 2018

- Big challenges of the moment: decarbonisation ◆
  digitalisation ◆ deregulation ◆ blockchain ◆ smart grids ◆
  cybersecurity ◆ energy storage ◆ E-mobility ◆ IoT;
- World Energy Grand Transition. WEC Scenarios;
- Disruption transformations of the world energy
- Energy resources balance: ◆ primary resources: coal, oil, gas ◆ renewable energy sources ◆ energy efficiency;
- Market liberalization and new market instruments.
   Blockchain:
- Paris Agreement COP 21 various attitudes and approaches;
- Smart grids. Cybersecurity;
- Energy storage;
- E mobility;
- Power System security;
- A customer oriented trend;
- National and regional strategies in compliance with world directives

#### **ENERGY TRILEMMA**

Energy Trilemma. The development of the distributed energy sources policy

On Wednesday, June 13th 2018

- Energy Trilema Study for 2017;
- Contribution of the Energy Trilema study to the construction of the Romanian energy Policy;
- Romanian energy regulatory environment for development of distributed energy sources;
- Main Challenges for Romanian electricity grid companies;
- Position of the distributed energy sources representatives;
- Role of the NGO's for the development of the distributed energy sources;
- Financing the energy distributed sources development
- Voice of energy consumers.







#### **ROUND TABLES AT FORUM LEVEL**

RTF 1: World Energy
Scenarios: E-Mobility:
An optimization of
solutions for Energy,
Transport and
Environment

On Monday, June 11th 2018

- The impact of e-Mobility on the energy industry;
- · Impact on the environment and fiscality;
- Studies on the evolution of the hybrid / electric vehicle park in Romania;
- Developing the vehicle loading infrastructure;
- Impact of the electric transport development on the National Energy System installations;
- Development of Energy Market Mechanisms to stimulate the use of electric vehicles in Romania in the mutual interest of the owners and NPS units;
- Alternative energy storage technologies required for electric transport.

# RTF 2: World Energy Resources: Management of primary energy resources. Current Challenges

On Tuesday, June 12th 2018

- Structure of primary regional and national energy resources;
- · Diversification of primary energy resources;
- Rational use of energy resources;
- National and European energy strategies and their impact on the management of primary energy resources;
- Impact of technology evolution on the management of primary energy resources;
- Impact of legislative changes on the management of primary energy resources;
- Management of fossil fuels (conventional and unconventional) and reduction of greenhouse gas emissions;
- Management of water resources in connection with social aspects;
- Management a key factor in increasing the share of renewable energy resources in the energy mix;
- Natural gas management, the main primary resource in the transition to clean energy.

# RTF 3: Developments in Energy Transport (oil and gas). Cooperation within the Region

on Wednesday, June 13th 2018

- Assessment of the current status of national gas and oil transport and storage systems;
- Network upgrade, digitalization and monitoring hydrocarbon transport and distribution systems; SCADA systems in the transport system;
- International gas transport systems and interconnecting with neighboring countries;
- Abilities to diversify gas supply sources through pipes or liquefied gas;
- Gas distribution; current condition of the distribution network and upgrading and extension expectations;
- Environmental impact of hydrocarbon transport systems;
- Economic concerns in respect of natural gas and oil transport and influence of its costs on the price charged to users:
- Other important topics proposed by the invited institutions / companies.







RTF 4: Technological,
Economic and
Environmental
Performance of
Generating Plant

On Thursday, June 14th 2018

- WEC's Programme and Knowledge Network regarding Performance of Generating Plant (PGP);
- Good practices on the availability of power plants;
- Good practices on the efficiency of power plants;
- Good practices of "environmental friendly" power plants: role of large hydro;
- · Cogeneration and district heating;
- Distributed generation of power and heat (thermal energy).

#### **WORKSHOPS AT FORUM LEVEL (WF)**

WF 1: Human Resources and Work Safety in Energy Systems

On Monday, June 11th 2018

WF 2: Energy Efficiency:

Energy efficiency – a

straight path towards

energy sustainability

On Tuesday, June 12th 2018

- · Workforce status in the Romanian energy system;
- Impact of technologic developments on workforce supply;
- Education and training of employees at secondary and high professional level in the oil and gas industry;
- Further training of experts; role of benefiviary undertakings;
- Financing of universities, in relation to laboratory equipment;
- Post-graduate education cooperation between universities and industry
- Analysis of recent developments and trends in energy efficiency at European and national level;
- Energy efficiency programs at national and local level preparation, financing, implementation, monitoring;
- Energy efficiency at local level; smart cities;
- Modern technology in the final consumption sectors, with high energy efficiency;
- Increasing energy efficiency in the production of electric and thermal energy; promoting high efficiency cogeneration;
- Use of renewable sources (hydro, wind, sun etc.) to increase energy efficiency;
- Introducing modern measurement and control systems as well as energy management systems in the industry;
- The role of scientific research in increasing energy efficiency;
- Improving the professional training of energy managers, energy auditors, other specialists with activities in the field;
- Educating public opinion (and especially young people) on energy efficiency issues; the role of the school, the state institutions, the media;
- The role of tariffs, subsidies, financial and fiscal incentives;
- The cost of energy efficiency.







# WF 3: Financing Sustainable Energy Development

On Wednesday, June 13th 2018

- In the context of the Energy Union, the SET Plan and the Road Map 2050, efficiency, emissions, renewables, interconnection and innovation are the dimensions by which the sustaiability of the future integrated EU energy system is assessed.
- Attaining sustainability in development is, among others, based on the availability and costs of the new technologies as a basic ingredient for the supporting financing schemes.
- The institutional and regulatory context is preparing to help and push the fostering of new domains of business structures, governance, consumption patterns, as well as innovative financial schemes with associated job creation and prosperity.
- The new financial instruments are bringing a new wave of large financial operation at a moment when old technologies need to be replaced. In a World with a high geo-political dynamics and the associated risks, securing available funds may be a problem for the immediate future.
- Energy security and other associated risks (operational, financial, hazard, etc) with the new systems may have an impact on the financing of energy projects.
- The fund associated with the Energy Union policy of the EU could give a boost to investment if given features are in place to ensure attractive projects.
- Investment banks as well as other investors exposed to the large volatilities of today's energy and economic systems are in need of financial innovations.
- The role of the IFIs must adapt to the evolution of investment patterns and investors behavior as well as to the capability of states to absorb financial risk.

#### International Exhibition EXPO FOREN 2018

The International Exhibition held during the Forum represents an important opportunity to network with leading global energy companies and leaders, providing a crucial advantage to increase sales. Exhibition participants can also use the event to exchange information on cutting-edge energy with potential customers.

- Theme: ENERGY TECHNOLOGIES FOR THE 21<sup>ST</sup> CENTURY: SECURITY, ENERGY EFFICIENCY, ENVIRONMENT, RENEWABLES
- Date: June 10 (Sun) 14 (Thu), 2018 (5 days)
- Place: Vox Maris Grand Resort, Costinesti, Romania
- Number of booths: 50
- Exhibit Categories:

Power Generation: Thermal, Nuclear, Hydro, Power Generation using Renewables, Co-generation and District Heating and Cooling • Power Transmission and Distribution • Oil, Gas and Coal, Industrial Power • Equipment for Power Generation (Boilers, Turbines, Pipes, Valves and Pumps) • Electrical Equipment • Energy Saving Technologies and Equipment • Software and IT Solutions • Finance and Institutional Consulting, Technical Consulting and Engineering, Installation, Constructions and Commissioning.

For further information on exhibition participations, please refer to the Forum website.







#### **CALL FOR PAPERS AND POSTERS**

FOREN 2018 Organizing Committee is delighted to invite representatives from the World Energy Council, WEC MCs, WEC/RNC members and other specialists from the national and international energy community, to submit papers for discussion and poster sessions within the Forum, thus sharing their views with other participants and contributing to the technological development of the regional and European energy sector.

Selected papers will be delivered by the authors during the Forum and will be available on USB flash drives to be distributed to all participants.

DISCUSSION SESSIONS	
Discussion Session	Topics
DS 1A: National Policies and Objectives to meet EU Energy- Environment Policy Integration 3 time grids	<ul> <li>Energy demand forecasts and scenarios 2050; Regional, European and global energy; perspective; National strategies;</li> <li>Energy and Environment Policies;</li> <li>Security of energy supply;</li> <li>Energy accessibility;</li> <li>European Energy Union – objectives and implementation.</li> </ul>
DS 1B: Safe and Sustainable Supply. Conventional and Technological Elements regarding the Renewable Sources. Financial Mechanisms	<ul> <li>Large European projects/common interest projects;</li> <li>Carbon pricing;</li> <li>Financial mechanisms;</li> <li>Storage; role of hydropower plants.</li> </ul>
DS 2: Energy Markets. Market vs Planning. Transmission and Distribution Operators Role in Energy Market. Stability vs Flexibility  5 time grids	<ul> <li>Power System Management;</li> <li>Interconnectivity in the European market;</li> <li>Management of interconnected systems.</li> <li>Regional markets;</li> <li>Capacities market;</li> <li>Allocation of cross-border capacities;</li> <li>Communication infrastructure;</li> <li>Safety of data transfer systems;</li> <li>Integration of renewable sources in power system; limits; solutions;</li> <li>Ancillary services.</li> </ul>
DS 3: Energy Efficiency, Renewable Energy Sources, New Trends and Issues	<ul> <li>Demand management;</li> <li>New technologies &amp; instruments;</li> <li>Smart grid;</li> <li>Smart city;</li> <li>Green city;</li> <li>Electric vehicles;</li> <li>Hydro, wind and sun power.</li> </ul>
DS 4A: Oil, Gas – Conventional and Unconventional  3 time grids DS 4.1, 4.2, 4.3	<ul> <li>Conventional and unconventional gas and oil;</li> <li>Resources and new exploration perimeters</li> <li>Modern technologies and equipment;</li> <li>Storage;</li> <li>Transport infrastructure,</li> <li>Distribution;</li> <li>Development of LNG infrastructure;</li> <li>Pricing policy and global market;</li> <li>Environmental impact.</li> </ul>







#### **DS 4B: Nuclear Energy**

New nuclear technologies for power plants;

Nuclear waste storage and disposal;

Preparation of nuclear fuel;

Flexibility of nuclear power plants:

Risk and nuclear safety

Clean coal technologies;

Carbon capture and storage:

Co-firing:

Coal resources, mining, security;

Modern methods of coal mining, environmental issues:

Modern solutions for use of combustion products

#### DS 5: Coal and Clean Coal **Technologies**

5 time grids

2 time grids

DS 4.4, 4.5

#### **Key topics for discussion sessions**

For each discussion sessions are proposed five key topics. These are specific to each session and will approach the following issues:

- Environmental issues
- Energy security
- Energy accessibility
- Energy efficiency
- Financial Mechanisms ad pricing policies
- · New solutions in the energy field
- Training of human resources

#### **Paper Preparation Guidelines**

- Authors must submit only FULL PAPERS.
- \* The Paper must contain original material, never published before, which reflect special issues, addressed through finalized research and/or describe new technologies with safe implementation.
- The paper must be written in English, in MS Word format, and must not exceed 15 pages in total length.
- The paper must include a self-contained one page Executive Summary outlining the aims, scope, core findings and conclusions of the paper. List 3-5 keywords by which the paper might be searched online or identified in indexes.
- Authors must specify whether their paper is to be submitted for Discussion Session or Poster Session
- The organisers reserve the right to select and include papers into the main discussion sessions and the poster presentations.

For further details (structure of the paper, text layout, submitting procedure etc.) please refer to the Forum website.

#### **POSTER SESSION**

- Posters will also be an integral part of the Forum. Authors are invited to submit non commercial posters on state-of-the-art technologies and on the most innovative projects in the energy and energy-related sectors. Two halls in the Conference Center will be reserved for Posters which will ensure high visibility for the accepted submissions.
- Posters must be submitted in MS Word format, in English.
- Posters should follow the guidelines given to the authors by e-mail or downloaded from the Forum website.
- The Papers submitted for the poster session a self-contained one page Executive Summary outlining the aims, scope, core findings and conclusions of the paper.

#### Number of papers and posters presentations: 225

- 145 papers (29 papers for each discussion session)
- 80 poster presentations.

#### Awarding prizes to the best 3 papers

- The best 3 papers of each session will be awarded in the Closing Ceremony.
- A special prize will go to the best paper of each session delivered by the young energy professionals (up to 35 years old).







#### Selection criteria for FOREN 2018 Papers Awarding

- a) innovation and originality of the subject
- b) credibility of the results
- c) technical and scientific level and applicability in the energy sector
- d) author's professional experience
- e) interest in the national energy system
- f) practical implementation

#### **Publishing and Indexing**

The papers submitted will be evaluated and selected by the members of the WEC/RNC Scientific Council and by FOREN Technical Program Committee .

The accepted papers will be published in the Forum Proceedings (with ISSN), in electronic format (USB Flash Drive, provided in the delegate bag) and also on the Forum website <a href="https://www.cnr-cme.ro/foren2018">www.cnr-cme.ro/foren2018</a> (post-event). The Forum Proceedings will be BDI indexed.

The WEC/RNC Secretariat will retain the copyright to all accepted papers and will authorize suitable reproduction upon request.

IMPORTANT NOTICE

The papers in English, with a high degree of novelty and a great scientific value, will be selected for publication in specialized journals: ISI indexed – as AECE - Advances in Electrical and Computer Engineering, University "Stefan cel Mare" Suceava) or BDI indexed - as EEA Journal

(Publisher Electra, ICPE), AGIR Bulletin, Journal of Sustainable Energy (University of Oradea, Faculty of Energy) and others (TBC). Upon notification of acceptance for publication in these journals, the author must submit the paper accordingly the specifications and templates on the websites of these journals.

#### **Deadlines**

Paper and Poster Submission Opens:
 Paper and Poster Submission Deadline:
 Selected Papers Notification:
 Registration Deadline for authors:
 Early Registration Deadline for Participants:
 Presentation at the Forum:
 15 August 2017
 Reprivation 2018
 April 2018
 10-14 June 2018

A 10% discount on the Forum fee will be offered to the authors of accepted papers (only the presenter, in case of joint papers), and a 50% discount for participants from CEE academic institutions and WEC member committees. Please note that in order to present their papers, the authors are required to register and pay the registration fee.

#### **FOREN 2018 Secretariat:**

Romanian National Committee of the World Energy Council Address: 1-3 Lacul Tei Blvd., Bucharest 2, 020371, Romania

Tel.: +40372 821 475; +40372 821 476

E-mail: foren2018@cnr-cme.ro; foren2018@gmail.com

Website: www.cnr-cme.ro/foren2018







#### **TIMETABLE FOREN 2018**

Date	HOURS	TECHNICAL AND SOCIAL EVENTS PLACE OF THE EVE						NTS	
9 June	12 <sup>00</sup> -18 <sup>00</sup>	Welcome to attendants / Participants Registration  Vox Maris Grand R							
Sunday, June 10	8 <sup>30</sup> -18 <sup>00</sup>	Welcome to attendants / Participants Registration Costinesti, Romania							
	10 <sup>00</sup> -12 <sup>30</sup>	THE OPENING CEREMONY INTERNATIONAL EXHIBITION EXPO FOREN 2018				Vox Maris Grand Resort Costinesti, Romania Expo Area			
	15 <sup>00</sup> -17 <sup>00</sup>	THE OPENING CEREMONY FOREN 2018 Offered by E-distributie Dobrogea					Vox Maris Grand Resort Costinesti, Romania Romania Hall		
	17 <sup>00</sup> -17 <sup>30</sup>	Coffee break Offered by E-distributie Dobrogea							
	17 <sup>30</sup> -19 <sup>00</sup>	CONCERT / MUSICAL SHOW							
	1700-1900	Offered by SN NUCLEARELECTRICA							
	19 <sup>00</sup> -20 <sup>00</sup>			<b>DME COCKTAIL</b> ed by ADREM	<u>_</u>		!		
10-14 June	8 <sup>30</sup> -18 <sup>00</sup>	INTERNATIONAL EXHIBITION EXPO FOREN 2018 (with the financial support of HIDROELECTRICA)							
		(with the financial support of HIDROELECTRICA)  MAIN EVENTS  DISCUSSION SESSIONS AND ROUND TABLES							
	HOURS	CH 1	CH 2	CH 3	CH 4	CH 5	CH 6	CH 7	
		Romania 300	Transilvania 150	Muntenia 80	Oltenia 80	Banat 80	Maramures 80	Moldova 40	Expo Area
	8 <sup>30</sup> -10 <sup>00</sup>	Financing Resilient	-	-	-	-	-	-	
Monday, June 11	1000-1030	Energy Infrastructure KA 1		50.11		e break		50.51	
ond	10 <sup>30</sup> -12 <sup>30</sup>	IVA I	- Human	DS 1.1	DS 2.1 DS 2.2	DS 3.1	DS 4.1	DS 5.1	Poster
žī	14 <sup>00</sup> -15 <sup>30</sup> 15 <sup>30</sup> -16 <sup>00</sup>	World Energy	Resources and	DS 1.2		DS 3.2 e break	DS 4.2	DS 5.2	Session
	16 <sup>00</sup> -18 <sup>00</sup>	Scenarios: E-Mobility RTF 1	Work Safety in Energy Systems WF 1	RT 1	RT 2	RT 3	RT 4	RT 5	
				SPECIAL PROG	RAM FOR ACC	OMPANVING	PERSONS		
	8 <sup>30</sup> -18 <sup>00</sup>	MAIN EV		ST LOIAL T NOC	ROUND TA		FERSONS		
	HOUDO	CH 1	CH 2	CIL2	CH 4	•	CLLC	CH 7	ı
	HOURS	Romania	Transilvania	CH 3 Muntenia	Oltenia	CH 5 Banat	CH 6 Maramures	Moldova	Expo Area
	8 <sup>30</sup> -10 <sup>00</sup>	300 Regional	150 -	80	80	80	80	40	
15, <del>4</del>									
ay, 12,		Energy Day:	-	Coffee h	reak offered by	HONEYWELL	ROMANIA	-	
Tuesday, June 12	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security	-	Coffee b	reak offered by	- HONEYWELL   -	ROMANIA -	Corporate Films	Poster
Tuesday, June 12	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup> 14 <sup>00</sup> -15 <sup>30</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment	- Energy	Coffee b	- RT 7	- RT 8	ROMANIA - RT 9		Poster Session
Tuesday, June 12	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup> 14 <sup>00</sup> -15 <sup>30</sup> 15 <sup>30</sup> -16 <sup>00</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources	- Energy Efficiency	- RT 6	- RT 7 Coffe	- RT 8 e break	- RT 9	Corporate Films RT 10	
Tuesday, June 12	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup> 14 <sup>00</sup> -15 <sup>30</sup> 15 <sup>30</sup> -16 <sup>00</sup> 16 <sup>00</sup> -18 <sup>00</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy	- Energy Efficiency WF 2	- RT 6 RT 11	RT 7 Coffe RT 12	RT 8 e break RT 13	- RT 9	Corporate Films	
Tuesday, June 12	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup> 14 <sup>00</sup> -15 <sup>30</sup> 15 <sup>30</sup> -16 <sup>00</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2	Energy Efficiency WF 2	- RT 6 RT 11	RT 7 Coffe RT 12 GRAM FOR ACC	RT 8 e break RT 13 COMPANYING	RT 9 RT 14 PERSONS	Corporate Films RT 10 RT 15	
Tuesday, June 12	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup> 14 <sup>00</sup> -15 <sup>30</sup> 15 <sup>30</sup> -16 <sup>00</sup> 16 <sup>00</sup> -18 <sup>00</sup> 8 <sup>30</sup> -18 <sup>00</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources	Energy Efficiency WF 2	- RT 6 RT 11	RT 7 Coffe RT 12 GRAM FOR ACC	RT 8 e break RT 13 COMPANYING	- RT 9	Corporate Films RT 10 RT 15	
Tuesday, June 12	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup> 14 <sup>00</sup> -15 <sup>30</sup> 15 <sup>30</sup> -16 <sup>00</sup> 16 <sup>00</sup> -18 <sup>00</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania	Energy Efficiency WF 2 ENTS CH 2 Transilvania	RT 6  RT 11  SPECIAL PROG	RT 7 Coffe RT 12 GRAM FOR ACC DISCUSSIO CH 4 Oltenia	RT 8 e break RT 13 COMPANYING ON SESSIONS CH 5 Banat	RT 9  RT 14  RT NO S AND ROUND  CH 6  Maramures	Corporate Films  RT 10  RT 15  TABLES  CH 7  Moldova	
	10 <sup>00</sup> -10 <sup>30</sup> 10 <sup>30</sup> -12 <sup>30</sup> 14 <sup>00</sup> -15 <sup>30</sup> 15 <sup>30</sup> -16 <sup>00</sup> 16 <sup>00</sup> -18 <sup>00</sup> 8 <sup>30</sup> -18 <sup>00</sup>	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300	Energy Efficiency WF 2	RT 6  RT 11  SPECIAL PROG	RT 7 Coffe RT 12 GRAM FOR ACC DISCUSSIO CH 4	RT 8 e break RT 13 COMPANYING ON SESSIONS	RT 9  RT 14  REPERSONS  SAND ROUND  CH 6	Corporate Films RT 10 RT 15  D TABLES CH 7	Session
	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-18°0  HOURS 8°30-10°0 10°0-10°30	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania	Energy Efficiency WF 2  ENTS CH 2 Transilvania 150	RT 6 RT 11 SPECIAL PROG  CH 3 Muntenia 80	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break	RT 9  RT 14  REPERSONS  AND ROUNI  CH 6  Maramures  80	Corporate Films  RT 10  RT 15  TABLES  CH 7  Moldova 40	Session
	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-18°0  HOURS  8°30-10°0 10°0-10°30 10°30-12°30	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI  CH 1 Romania 300  World Energy Trilemma	Energy Efficiency WF 2  ENTS CH 2 Transilvania 150	RT 6  RT 11  SPECIAL PROG  CH 3  Muntenia 80  -  DS 1.3	RT 7 Coffe RT 12 GRAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break DS 3.3	RT 9  RT 14 G PERSONS G AND ROUND CH 6 Maramures 80 - DS 4.3	Corporate Films  RT 10  RT 15  TABLES  CH 7  Moldova 40  -  DS 5.3	Session  Expo Area
	10°0-10³0 10³0-12³0 14°0-15³0 15³0-16°0 16°0-18°0 8³0-18°0  HOURS  8³0-10°0 10°0-10³0 10³0-12³0 14°0-15³0	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport	Energy Efficiency WF 2  ENTS  CH 2  Transilvania 150  -  Financing	RT 6 RT 11 SPECIAL PROG  CH 3 Muntenia 80	RT 7 Coffe RT 12 GRAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4	RT 9  RT 14  REPERSONS  AND ROUNI  CH 6  Maramures  80	Corporate Films  RT 10  RT 15  TABLES  CH 7  Moldova 40	Session
Wednesday, Tuesday, June 12	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-18°0  HOURS  8°30-10°0 10°0-10°30 10°30-12°30	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region	Energy Efficiency WF 2  SENTS CH 2 Transilvania 150 -	RT 6  RT 11  SPECIAL PROG  CH 3  Muntenia 80  -  DS 1.3	RT 7 Coffe RT 12 GRAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break DS 3.3	RT 9  RT 14 G PERSONS G AND ROUND CH 6 Maramures 80 - DS 4.3	Corporate Films  RT 10  RT 15  TABLES  CH 7  Moldova 40  -  DS 5.3	Session  Expo Area  Poster
	10°0-10³0 10³0-12³0 14°0-15³0 15³0-16°0 16°0-18°0 8³0-18°0  HOURS  8³0-10°0 10°0-10³0 10³0-12³0 14°0-15³0 15³0-16°0	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI  CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within	Energy Efficiency WF 2  ENTS CH 2 Transilvania 150 - Financing Sustainable Energy Development WF 3	RT 6  RT 11  SPECIAL PROS  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17	RT 8 e break RT 13 COMPANYING ON SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4 e break RT 18	RT 9  RT 14 G PERSONS S AND ROUND CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19	Corporate Films  RT 10  RT 15  TABLES  CH7  Moldova 40 -  DS 5.3  DS 5.4	Session  Expo Area  Poster
	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-18°0  HOURS  8°30-10°0 10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region	Energy Efficiency WF 2  ENTS CH 2 Transilvania 150 - Financing Sustainable Energy Development WF 3	RT 6  RT 11  SPECIAL PROS  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16	RT 7 Coffe RT 12 GRAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe	RT 8 e break RT 13 COMPANYING ON SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4 e break RT 18	RT 9  RT 14 G PERSONS S AND ROUND CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19	Corporate Films  RT 10  RT 15  TABLES  CH7  Moldova 40 -  DS 5.3  DS 5.4	Session  Expo Area  Poster
	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-10°0 10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-18°0	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region	Energy Efficiency WF 2  ENTS  CH 2 Transilvania 150  -  Financing Sustainable Energy Development WF 3	RT 6  RT 11  SPECIAL PROS  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17  GRAM FOR ACC DINNER PA	RT 8 e break RT 13 COMPANYING ON SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4 e break RT 18	RT 9  RT 14 G PERSONS S AND ROUND CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19 G PERSONS	Corporate Films  RT 10  RT 15  TABLES  CH7  Moldova 40 -  DS 5.3  DS 5.4	Session  Expo Area  Poster
Wednesday, June 13	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-10°0 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-18°0 10°0-21°0 HOURS	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI  CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region RTF 3	Energy Efficiency WF 2  ENTS  CH 2 Transilvania 150  -  Financing Sustainable Energy Development WF 3	RT 6  RT 11  SPECIAL PROG  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16  SPECIAL PROG  CH 3  Muntenia 80	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17  GRAM FOR ACC DINNER PA DISCUSSIC CH 4 Oltenia 80	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 e break DS 3.3 DS 3.4 e break RT 18 COMPANYING ARTY ON SESSIONS CH 5 Banat 80	RT 9  RT 14  PERSONS  AND ROUNI CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19  PERSONS  CH 6 Maramures 80  CH 6 Maramures 80	Corporate Films  RT 10  RT 15  DTABLES  CH 7  Moldova 40   DS 5.3  DS 5.4  RT 20  CH 7  Moldova 40  CH 7  Moldova 40	Session  Expo Area  Poster
Wednesday, June 13	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-10°00 10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-18°00 19°0-21°00 HOURS  8°30-10°00	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region RTF 3  MAIN EVI CH 1 Romania 300  Renewable Electricity	Energy Efficiency WF 2  SENTS  CH 2 Transilvania 150  -  Financing Sustainable Energy Development WF 3	RT 6  RT 11  SPECIAL PROG  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16  SPECIAL PROG  CH 3  Muntenia 80  DS 1.5	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17 GRAM FOR ACC DINNER PA DISCUSSIC CH 4 Oltenia 80 DS 2.5	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4 e break RT 18 COMPANYING ARTY DN SESSIONS CH 5 Banat 80 DS 3.5	RT 9  RT 14  PERSONS  AND ROUNI CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19 PERSONS  CH 6 Maramures 80 DS 4.5	Corporate Films  RT 10  RT 15  DTABLES  CH 7  Moldova 40   DS 5.3  DS 5.4  RT 20  CH 7  Moldova 40  DS 5.5	Expo Area  Poster Session
Wednesday, June 13	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-10°00 10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-18°00 19°0-21°00 HOURS  8°30-10°00 10°0-10°30	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region RTF 3  MAIN EVI CH 1 Romania 300	Energy Efficiency WF 2  SENTS  CH 2 Transilvania 150 - Financing Sustainable Energy Development WF 3	RT 6  RT 11  SPECIAL PROG  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16  SPECIAL PROG  CH 3  Muntenia 80  DS 1.5	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17 GRAM FOR ACC DINNER PA DISCUSSIC CH 4 Oltenia 80 DS 2.5	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4 e break RT 18 COMPANYING ARTY DN SESSIONS CH 5 Banat 80 DS 3.5	RT 9  RT 14  PERSONS  AND ROUNI CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19 PERSONS  CH 6 Maramures 80 DS 4.5	Corporate Films  RT 10  RT 15  DTABLES  CH 7  Moldova 40   DS 5.3  DS 5.4  RT 20  CH 7  Moldova 40  CH 7  Moldova 40	Expo Area  Poster Session  Expo Area
Wednesday, June 13	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-10°0 10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°0 16°0-18°0 8°30-18°0 19°0-21°0 HOURS  8°30-10°0 10°0-10°30 10°30-12°30 10°30-12°30 10°30-12°30	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI  CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region RTF 3  MAIN EVI  CH 1 Romania 300  Renewable Electricity System Integration	Energy Efficiency WF 2  ENTS CH 2 Transilvania 150 - Financing Sustainable Energy Development WF 3  ENTS CH 2 Transilvania 150 - Performance of Generating Plant	RT 6  RT 11  SPECIAL PROG  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16  SPECIAL PROG  CH 3  Muntenia 80  DS 1.5	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17 GRAM FOR ACC DINNER PA DISCUSSIC CH 4 Oltenia 80 DS 2.5	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4 e break RT 18 COMPANYING ARTY DN SESSIONS CH 5 Banat 80 DS 3.5	RT 9  RT 14  PERSONS  AND ROUNI CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19 PERSONS  CH 6 Maramures 80 DS 4.5	Corporate Films  RT 10  RT 15  DTABLES  CH 7  Moldova 40   DS 5.3  DS 5.4  RT 20  CH 7  Moldova 40  DS 5.5	Expo Area  Poster Session  Expo Area
	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-10°00 10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-18°00 19°0-21°00 HOURS  8°30-10°00 10°0-10°30	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI  CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region RTF 3  MAIN EVI  CH 1 Romania 300  Renewable Electricity System Integration	Energy Efficiency WF 2  ENTS  CH 2 Transilvania 150  -  Financing Sustainable Energy Development WF 3  ENTS  CH 2 Transilvania 150  -  Financing Sustainable Energy Development UF 3	RT 6  RT 11  SPECIAL PROG  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16  SPECIAL PROG  CH 3  Muntenia 80  DS 1.5	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17 GRAM FOR ACC DINNER PA DISCUSSIC CH 4 Oltenia 80 DS 2.5	RT 8 e break RT 13 COMPANYING DN SESSIONS CH 5 Banat 80 - e break DS 3.3 DS 3.4 e break RT 18 COMPANYING ARTY DN SESSIONS CH 5 Banat 80 DS 3.5	RT 9  RT 14  S PERSONS  S AND ROUNI  CH 6 Maramures 80  -  DS 4.3  DS 4.4  RT 19  S PERSONS  CH 6 Maramures 80  DS 4.5  ESS MANAGI	Corporate Films  RT 10  RT 15  DTABLES  CH 7  Moldova 40   DS 5.3  DS 5.4  RT 20  CH 7  Moldova 40  DS 5.5	Expo Area  Poster Session  Expo Area
Wednesday, June 13	10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-10°00 10°0-10°30 10°30-12°30 14°0-15°30 15°30-16°00 16°0-18°00 8°30-18°00 19°0-21°00 HOURS  8°30-10°00 10°0-10°30 10°0-10°30 10°0-10°30 10°0-10°30 10°0-12°30 12°30-13°00	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI  CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region RTF 3  MAIN EVI  CH 1 Romania 300  Renewable Electricity System Integration KA 2	Energy Efficiency WF 2  ENTS  CH 2 Transilvania 150  -  Financing Sustainable Energy Development WF 3  ENTS  CH 2 Transilvania 150  -  Performance of Generating Plant RTF 4	RT 6  RT 11  SPECIAL PROCE  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16  SPECIAL PROCE  CH 3  Muntenia 80  DS 1.5  Coffee break	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80 - Coffe DS 2.3 DS 2.4 Coffe RT 17 GRAM FOR ACC DINNER PA DISCUSSIC CH 4 Oltenia 80 DS 2.5	RT 8 e break RT 13 COMPANYING ON SESSIONS CH 5 Banat BO RT 18 COMPANYING ARTY ON SESSIONS CH 5 Banat BO DS 3.5 CH 5 Banat BO CH	RT 9  RT 14 G PERSONS G AND ROUNI CH 6 Maramures 80 - DS 4.3 DS 4.4  RT 19 G PERSONS G CH 6 Maramures 80 DS 4.5 ESS MANAGE - G C	Corporate Films  RT 10  RT 15  DTABLES  CH 7  Moldova 40   DS 5.3  DS 5.4  RT 20  CH 7  Moldova 40  DS 5.5	Expo Area  Poster Session  Expo Area
Wednesday, June 13	10°0-10³0 10³0-12³0 11°0-12³0 14°0-15³0 15³0-16°0 16°0-18°0  8³0-10°0 10°0-10³0 10°0-12³0 15³0-16°0  16°0-18°0  8³0-10°0 10°0-10³0 10°0-21°0  HOURS  8³0-10°0 10°0-10³0 10°0-10³0 10°0-10³0 10°0-10³0 10°0-10³0 10°0-10³0 10°0-10³0 10°0-10³0 10°0-10³0	Energy Day: The World Energy Grand Transition. Disruption Trends, Environment Challenges, Security Requirements  World Energy Resources RTF 2  MAIN EVI CH 1 Romania 300  World Energy Trilemma  Developments in Energy Transport (Oil and Gas). Cooperation within the Region RTF 3  MAIN EVI CH 1 Romania 300  Renewable Electricity System Integration KA 2  Lunch break	Energy Efficiency WF 2  ENTS  CH 2 Transilvania 150  -  Financing Sustainable Energy Development WF 3  ENTS  CH 2 Transilvania 150  -  Performance of Generating Plant RTF 4	RT 6  RT 11  SPECIAL PROCE  CH 3  Muntenia 80  -  DS 1.3  DS 1.4  RT 16  SPECIAL PROCE  CH 3  Muntenia 80  DS 1.5  Coffee break	RT 7 Coffe RT 12 RAM FOR ACC DISCUSSIC CH 4 Oltenia 80  - Coffe DS 2.3 DS 2.4 Coffe RT 17  RAM FOR ACC DINNER PA DISCUSSIC CH 4 Oltenia 80 DS 2.5 offered by EME - SAGE AND PAI	RT 8 e break RT 13 COMPANYING ON SESSIONS CH 5 Banat BO RT 18 COMPANYING ARTY ON SESSIONS CH 5 Banat BO DS 3.5 CH 5 Banat BO CH	RT 9  RT 14  RPERSONS  AND ROUNI CH 6 Maramures 80  DS 4.3  DS 4.4  RT 19  RT 1	Corporate Films  RT 10  RT 15  DTABLES  CH 7  Moldova 40   DS 5.3  DS 5.4  RT 20  CH 7  Moldova 40  DS 5.5	Expo Area  Poster Session  Expo Area