

## Outline

- ☐ Energy Situation in SEERC Member Countries
- ☐ Regional Academic and Indutry Outlook
- ☐ Technical Fields of Interest for Regional CIGRE Cooperation
- ☐ Interests in Leadership of topics
- ☐ Management and Conference Organization Survey

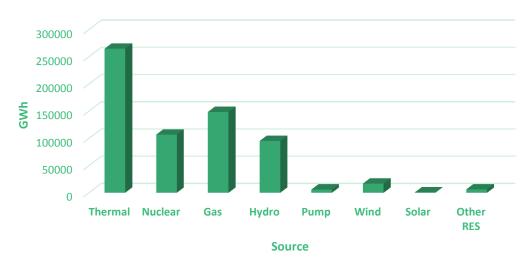




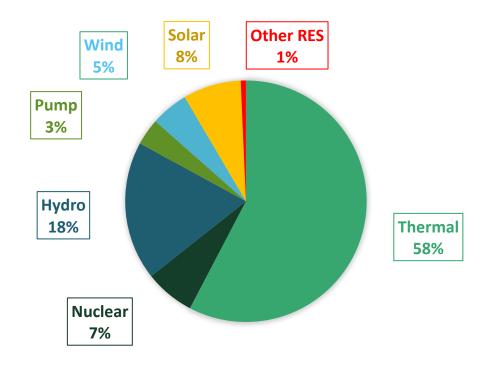
# **Energy Outlook**

Reference year 2012

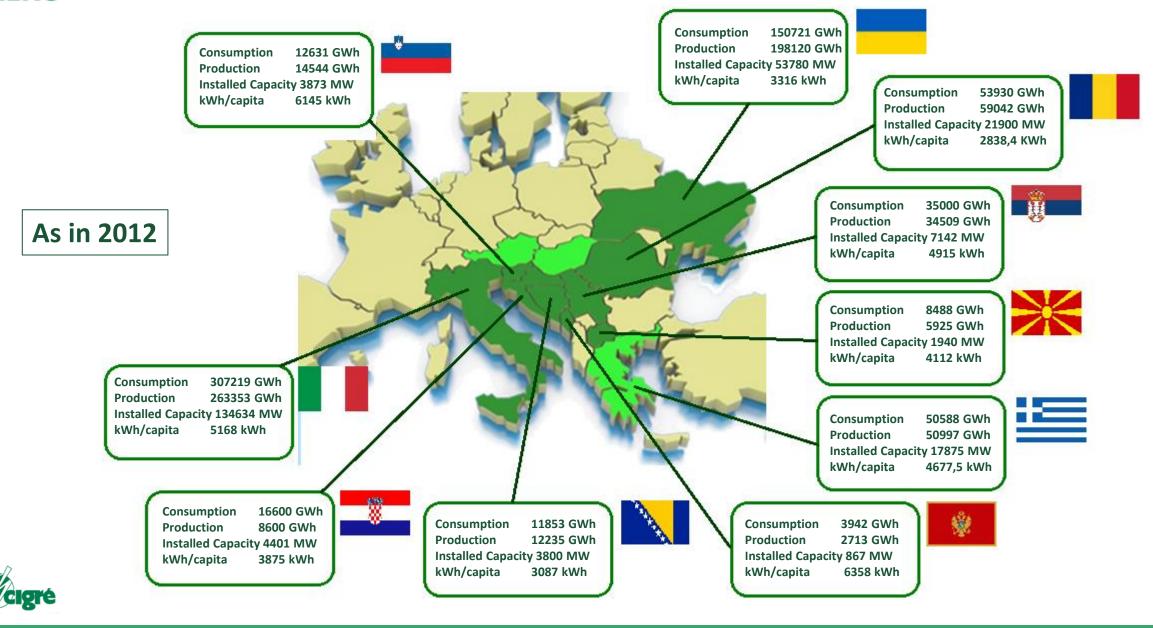
## Total Generated Energy in SEERC Member Countries [GWh]



#### **Installed Capacity in SEERC Member Countries [MW]**



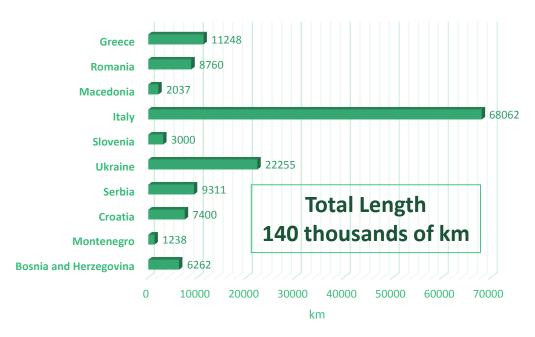




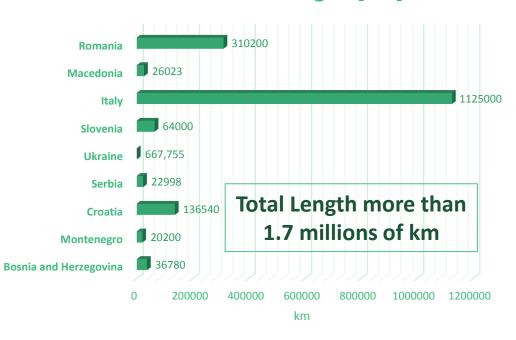


# Transmission and Distribution Line Length Outlook

#### **Transmission Line Length [km]**



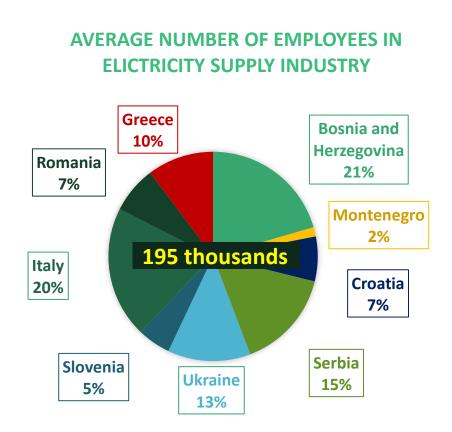
#### **Distribution Line Length [km]**

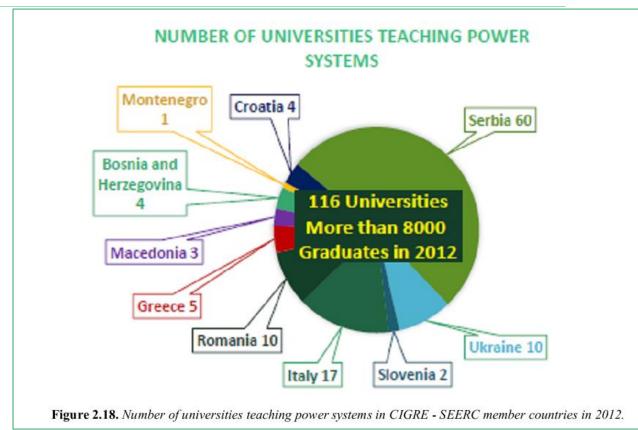






# Regional Electric Industry and Academy

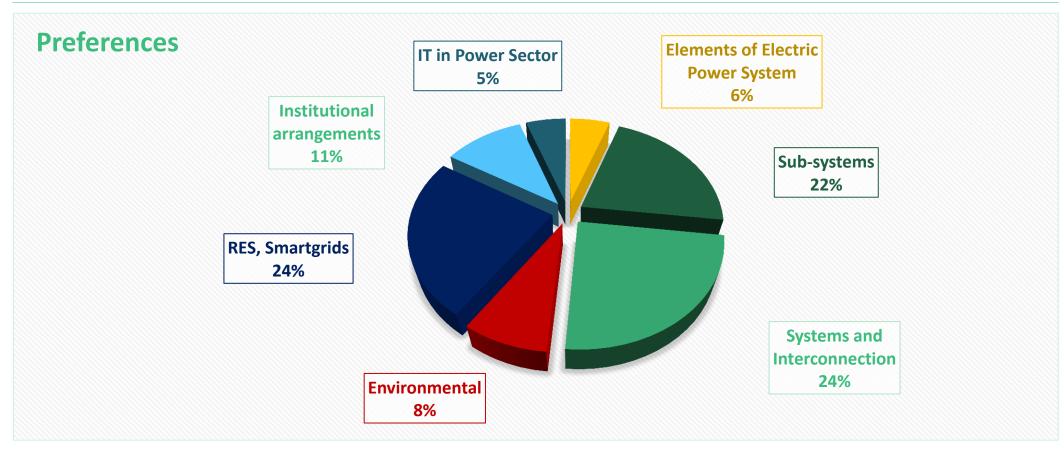






As in 2012

# Technical Fields of Interests for Regional CIGRE Cooperation





# Technical Subjects of Interest for WG

#### Fields of Interest

**Power Systems Development, Innovation and Standards** 

**Renewable Energy Sources and Energy Accumulation** 

**Market Design and Operation** 





#### **Power Systems Development, Innovations and Standards**

- Large Transmission regional projects and Construction of Strategic OHLs.
- OHL European Standardization NNA (National Normative Aspect) support.
- Power Quality standards in SEE.
- Protection of Cross-border OHLs.
- Smart grid in transmission and/or Distribution: Development and ICT.
- HVDC transmission Environmental issues with submarine cables.
- HVDC submarine interconnection Integration with mainland power system.
- Regional Center WAMS.





#### **Power Systems Development, Innovations and Standards**

- Future of thermal power plants
- Entso-E policy impact.
- Harmonization of environmental issues.
- Aerospace assets and maintenance and recovery of regional high voltage electricity transport systems.
- Reactors for HV transmission networks. (continuation of SEERC RWG 2, 2014)
- Environmental and technical assessment for submarine cables siting issues.
   (continuation of SEERC RWG 1, 2014)





#### Renewable Energy Sources and Energy Accumulation

- Renewable Energy Sources as Mini Hydro, Micro Hydro, Solar PV, Solar Thermal, Biomass, Wind Power.
- RES Integration, Support Mechanism and Operational Aspects.
- Power Energy Accumulation (Pump Storage) and Energy Storage.
- Reactive power planning considering large penetration of Renewables.
- Influence of large installation of RES (and Hydro Pump Storage) on power system
- Environmental issues with Hydro pump storage.





#### **Market Design and Operations**

- Market Design & Experiences with Renewable Integration.
- Cross-border capacity allocation in SEE and harmonization of congestion management methods.
- Development of SEE electricity exchange possibilities for cooperation, gap analyses and harmonization.
- Regional Market Issues.



# Preferred CIGRE's SC — leadership interest

	<b>Study Committees CIGRE</b>	RO	ВА	ME	HR	RS	UA	SI	IT	MK
A1	Rotating Electrical Machines				✓		✓			
A2	Transformers				✓					
A3	High Voltage Equipment				✓					
B1	Insulated Cables				✓				✓	
B2	Overhead Lines				✓		✓		✓	
В3	Substations									
B4	HVDC and Power Electronics							✓		
B5	Protection and Automation				✓		✓	✓		
C1	System Development and Economics							✓		
C2	System Operation and Control			✓			✓			✓
C3	System Environmental Performance								✓	
C4	System Technical Performance			✓						
C5	Electricity Markets and Regulation							✓	✓	✓
C6	Distribution Systems and Dispersed Generation							✓		
D1	Materials and Emerging Test Techniques									
D2	Information Systems and Telecommunication									✓



### Preferred Task for future SEERC WGs

Regional cooperation in certain standards up-rating

Regional initiatives for innovation in power sector

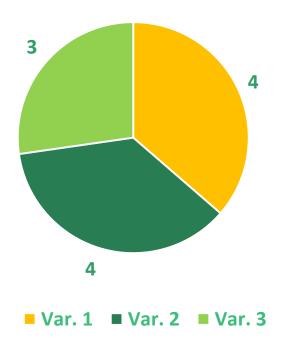




#### **Managerial Bodies**

Variant 1						
MB	Management Board (MB)	Chairmen of NC CIGRE. One meeting per year.				
AHAG	Ad Hoc Advisory Groups	For strategy plans. Free selection.				
ATG	Advisory Technical Committee (ATC)	Experts from ESI, Academia and Manufacturers Selection free.				
WG	Working Groups	selected from ATG for particular technical task.				
	Conference	announced by MB				
Variant 2						
AC	Administrative Council	Same as CIGRE Paris. One meeting per year.				
AHAG	Ad Hoc Advisory Groups	For strategy plans. Free selection.				
WG	Working Groups	Selected from AHAG for particular technical task.				
	Conference	announced by AC				
Variant 3						
AC	Administrative Council	Same as CIGRE Paris. One meeting per year.				

#### **Preferences for Managerial Bodies**

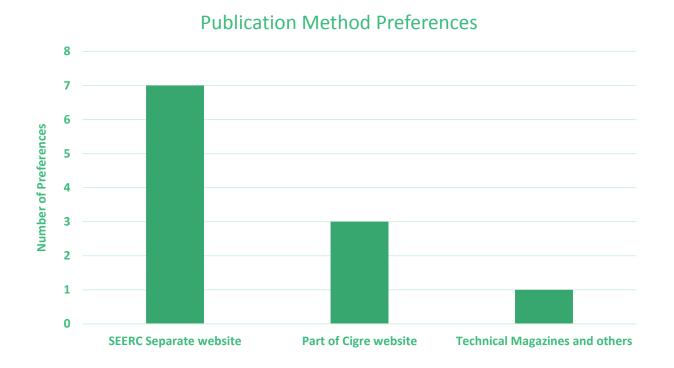






#### **Publication Methods**

The most preferred publication method is **SEERC's own website**.







#### **Regional Conferences**

#### **Financing**

has been preferred to be undertaken by the **National Committee** organizing the event.

#### **Contents**

of conferences has been preferred to consist in **selected topics at regional level**. This will be task of ATC.





**Anytime** 

#### **Conferences**

**Biennial** 

# Frequency of conferences has been preferred to be either Biennial or Anytime. 5 5

**Triennial** 

# **Organization** of conferences has been preferred to be responsibility of the Organizing Committee. **Organizing Committee** Scientific Committee



# **Additional Proposals**

- Institution of an International Advisory Group responsible for conference's organization.
- Carrying out Joint student's and young engineer's conferences.
- SEERC information exchange should be published on a separate platform while reporting the main information on the main CIGRE website.
- The most valuable scientific contributions should be published in magazine/journals ranked in scopus and xplore digital libraries.
- Any other idea?







# Thanks for your attention!