

# ENERGY FUTURES: CIBERSECURITY AND FINANCING EMERGING TRANSITIONS

ANNUAL EVENT OF THE SPANISH COMMITTEE  
OF THE WORLD ENERGY COUNCIL

**CEPSA TOWER**  
NOVEMBER 29TH 2017



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## Introduction

On November 29th, the Spanish Committee of the World Energy Council (CECME) and the Spanish Energy Club (Enerclub), in collaboration with the Elcano Royal Institute (RIE) organize in Madrid its traditional annual conference, sponsored by Cepsa.

The conference will analyse relevant issues of the international energy agenda. The title chosen for this edition is "Energy futures: cybersecurity and financing emerging transitions" with two main topics: cybersecurity in the energy sector; and financing the energy transition in emerging countries.

In the **Opening Session**, we will have the pleasure of having Pedro Miró, Vice Chairman and CEO of Cepsa, Borja Prado, President of Enerclub, and Emilio Lamo de Espinosa, Chairman of RIE.

During the **Plenary Session**, Christoph Frei, Secretary General of the World Energy Council, will stage a debate with the Chair of CECME, Íñigo Díaz de Espada, and comment on the major challenges of the international energy agenda.

### Round Table 1:

## Cybersecurity in the energy sector

The Internet and network technologies have changed many aspects of our economies, breaking barriers between countries and citizens, and allowing sharing information across the globe. In particular for the energy sector, increasing digitalization through technologies as Big Data, Blockchain or artificial intelligence is changing the way we produce, transport and use energy, and it is facilitating efficiency improvements in all type of processes and sources of energy. In addition, it is helping citizens become aware of the importance of using energy in a more sustainable way.

Due to increasingly connected infrastructures and industrial control systems, there is a risk of increased cyber threats across the energy value chain. A recent document from WEC, highlights that this kind of risks are growing in terms of sophistication and frequency, and that the energy companies have seen a massive increase in the number of successful cyber-attacks over the past years. This issue is currently among the top concerns for energy leaders, especially in countries with high infrastructure maturity, particularly in North America and Europe.

The need for high levels of cyber security in Europe is evidenced by recent statistics. "According to a recent survey, at least 80% of European companies have experienced at least one cybersecurity incident over the last year and the number of cybersecurity incidents across all industries worldwide rose by 38% in 2015" (European Commission, 2016). More specifically, an average of 74 attacks per day were launched in the world between 2012 and 2013 and 16% of these attacks targeted the energy sector (Symantec, 2014), illustrating both the need for adopting cyber security best practices and the importance of rapidly sharing information about cyber security in the energy sector.

The purpose of the RT1 is to discuss about the state of the art regarding the protection of critical infrastructures in the energy sector, the lessons learned from the past incidents, regulations and action plans as well as the potential cyber risks associated with the development of the Energy Industry 4.0.

## **Round Table 2:**

### **Financing energy transitions in emerging countries**

Transitioning to sustainable energy systems that meet everyone's needs, and to do so in a clean, reliable and affordable manner, is essential for sustainable development and is key in fighting climate change. This is why energy is at the heart of UN's Sustainable Development Goals and the Paris Agreement which, for the first time, brings all nations into a common framework to undertake ambitious efforts to combat climate change -by keeping a global temperature rise well below 2°C and pursue efforts to limit it to 1.5°C - and adapt to its effects.

In all regions, governments and businesses are mobilizing investment and deploying innovative technologies to meet these goals and expand access to modern energy. However, although significant progress is being made (at global level, energy-related carbon dioxide emissions stagnated in 2016 for the third consecutive year) the current pace is not enough to avoid dangerous interference with the climate system.

Efforts need to be increased in terms of inter alia, mitigation, adaptation, capacity building, innovation, technology transfer, and especially in financing. Bridging the climate finance gap is particularly important in emerging countries, where support will be needed to implement their Nationally Determined Contributions (NDCs) and to carry out their energy transitions. Assessing progress in the provision and mobilization of support is also part of the global framework of the Paris Agreement, which also focuses on the transparency and enhanced predictability of financial support.



## **ENERGY FUTURES: CIBERSECURITY AND FINANCING EMERGING TRANSITIONS**

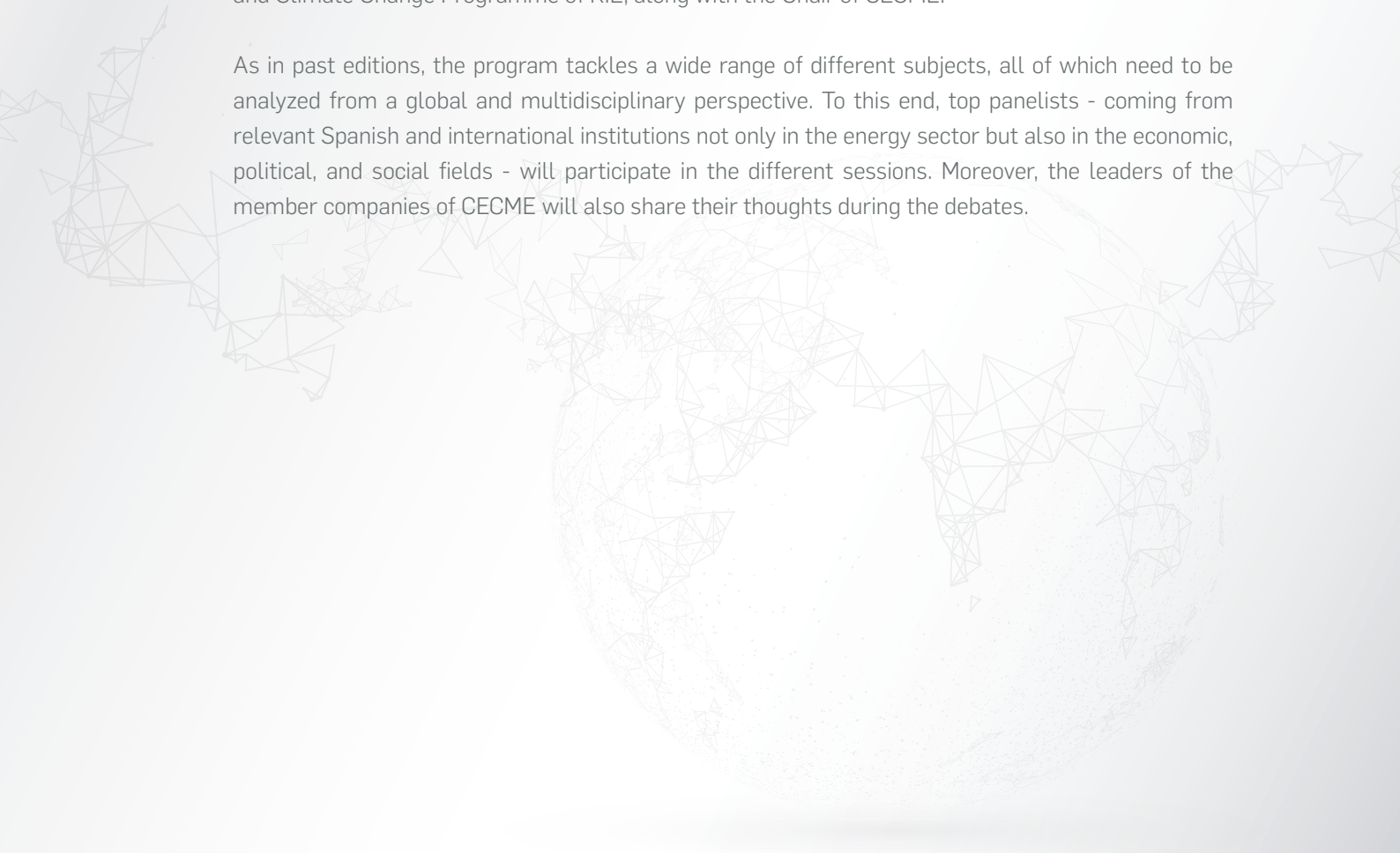
### INTRODUCTION

The purpose of the RT2 is to understand and assess the climate finance needs of emerging countries consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. This also aims to explore how these financial resources can be mobilized and which are the appropriate mechanisms or instruments, at national or international level, to effectively drive their energy transition.

This year's edition also includes two **Monographic Sessions**: the first one will focus on the project "World Energy Issues Monitor 2017 ", which has established itself as a strategic tool to analyze and compare, geographically and temporally, the key issues that define the national and international energy agenda; and the second one, on the "Future Energy Leaders", where the Spanish youth who are part of it will present their experiences within this WEC program whose goal is to inspire participants to become the next generation of energy leaders capable of solving the most pressing challenges in terms of energy and sustainability.

Finally, the **Closing Ceremony** will include the presence of Gonzalo Escribano, Director of the Energy and Climate Change Programme of RIE, along with the Chair of CECME.

As in past editions, the program tackles a wide range of different subjects, all of which need to be analyzed from a global and multidisciplinary perspective. To this end, top panelists - coming from relevant Spanish and international institutions not only in the energy sector but also in the economic, political, and social fields - will participate in the different sessions. Moreover, the leaders of the member companies of CECME will also share their thoughts during the debates.



## Programme

9:00

### ATTENDANCE REGISTRATION

**Laura Lapeña**

*FEL Member - Energy Economics Task Force  
CECME*

9:30

### OPENING SESSION

**Pedro Miró**

*Vice Chairman and CEO  
CEPSA*

**Borja Prado**

*President  
SPANISH ENERGY CLUB (ENERCLUB)*

**Emilio Lamo de Espinosa**

*Chairman  
ELCANO ROYAL INSTITUTE (RIE)*

11:00

### COFFEE BREAK

11:30

### ROUND TABLE I – CIBERSECURITY IN THE ENERGY SECTOR

Moderator

**Ángel Gómez de Ágreda**

*Colonel of the Air Force  
Analyst  
MINISTRY OF DEFENCE, GOVERNMENT OF SPAIN*

10.00

### PLENARY SESSION - KEY ISSUES ON THE GLOBAL ENERGY AGENDA

Speakers

**Christoph Frei W.**

*Secretary General & CEO  
WORLD ENERGY COUNCIL (WEC)*

**Johan Rambli**

*Corporate Privacy & Security Advisor  
ALLIANDER*

**Íñigo Díaz de Espada**

*Chair  
SPANISH COMMITTEE OF THE WORLD  
ENERGY COUNCIL (CECME)*

**Ruggero Contu**

*Research Director  
GARTNER*

10.30

### MONOGRAPHIC SESSION I - FUTURE ENERGY LEADERS EXPERIENCE

**Ignacio González**

*Deputy Director of Cybersecurity Technologies  
SPANISH NATIONAL CYBERSECURITY  
INSTITUTE (INCIBE)*

**Antonio Erias**

*FEL Member - Climate Change Task Force  
leader  
CECME*

**Marcel Kelder**

*Director Advanced Solutions  
YOKOGAWA EUROPE B.V*

**ENERGY FUTURES:**  
**CIBERSECURITY AND FINANCING EMERGING TRANSITIONS**  
PROGRAMME

Front Row Participants

**Nicolás Elías**

*Chief Information Officer*  
ENAGAS

**Florencio Retortillo**

*Director of Security Iberia*  
ENDESA

**Fernando Alonso**

*Corporate Director of Digitalization  
and Information Technology*  
REPSOL

**Gonzalo Olaso**

*Director of IT*  
VIESGO

13:00

**DEBATE**

13:15

**COCKTAIL**

14.30

**ROUND TABLE II –FINANCING  
ENERGY TRANSITION IN EMERGING  
COUNTRIES**

Moderator

**Carmen Becerril**

*Former President*  
ACCIONA ENERGÍA

Speakers

**Mark Lewis**

*Managing Director, Head of European Utilities  
Equity Research*  
BARCLAYS  
*Member of Task Force on Climate-related  
Financial Disclosures*  
FINANCIAL STABILITY BOARD (FSB) OF G20

**Xiang Junyong**

*Research Fellow, Economy and Technology  
Research Institute*  
GLOBAL ENERGY INTERCONNECTION  
DEVELOPMENT AND COOPERATION  
ORGANIZATION

**Lara Lázaro-Touza**

*Senior Analyst*  
RIE

Front Row Participants

**Fernando González**

*Head of Treasury*  
CEPSA

**Alfonso Serrano**

*Head of Financial Analysis  
and Rating Agencies*  
GAS NATURAL FENOSA

**Fernando Lasheras**

*Director of Energy Policies in the Directorate  
of Energy Policies and Climate Change*  
IBERDROLA

**Álvaro Solano**

*Vice President Sales Power & Gas*  
SIEMENS



**ENERGY FUTURES:**  
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PROGRAMME

16:00  
**DEBATE**

16:15  
**MONOGRAPHIC SESSION II - SPAIN  
IN THE WORLD ENERGY ISSUES  
MONITOR**

**Olalla del Río**  
*Secretary General*  
CECME

16:45  
**CONCLUSIONS & CLOSING  
CEREMONY**

**Gonzalo Escribano**  
*Senior analyst and Director of the Energy  
and Climate Change Programme*  
RIE

**Íñigo Díaz de Espada**  
*Chair*  
CECME

17:00  
**END OF THE MEETING**



## Information and registration

### VENUE

Torre CEPSA,  
Paseo de la Castellana, 259 A  
28046 Madrid

### REGISTRATION

On-line registration only ([www.enerclub.es](http://www.enerclub.es)).

Once you submit your registration request you will receive an automatic response of receipt from the system (**please note this is not a confirmation of registration**). It is mandatory to get another email from Enerclub ([basedatos@enerclub.es](mailto:basedatos@enerclub.es)) confirming your registration.

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[www.enerclub.es](http://www.enerclub.es)

### REGISTRATION FEES

Free registration



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