

# EVOLUTION OF THE MEDITERRANEAN ENERGY SECTOR 2013-2015

 **MedReg**  
Mediterranean Energy Regulators  
DECEMBER 2015



## ● WHAT IS MEDREG?

## ● MEDREG WORDS

## ● STRENGTHENING THE ROLE AND ACTION OF REGULATORS

- REGULATORY PRINCIPLES
- REINFORCEMENT OF REGULATORS' COMPETENCES
  - ELECTRICITY
  - GAS
  - CONSUMERS
- NATIONAL UPDATES FROM MEMBERS
- DEVELOPMENT OF RES, ENERGY EFFICIENCY

## ● INSTITUTIONAL COOPERATION

- EURO-MEDITERRANEAN ENERGY PLATFORMS
- EVENTS
  - EXTERNAL COOPERATION
  - FOCUS ON MEMBER

## ● COMMUNICATION

# WHAT IS MEDREG?

MEDREG is the **Association of Mediterranean Energy Regulators**, born in **2007** under the Italian law.

It currently gathers **24 energy regulators** from the following countries: Albania, Algeria, Bosnia-Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Jordan, Libya, Malta, Montenegro, Morocco, Palestine, Portugal, Slovenia, Spain, Tunisia and Turkey.

MEDREG promotes a transparent, stable and harmonized regulatory framework in the Mediterranean Region fostering market integration and infrastructure investments, as well as aiming to consumer protection and enhanced energy cooperation.

MEDREG carries out its activities through a well-structured and effective internal cooperation process and external collaboration with energy stakeholders in the Mediterranean Basin, with the objective to implement the conditions for **the establishment of a future Mediterranean Energy Community**, based on a bottom-up approach.



**MedReg**  
Mediterranean Energy Regulators

## ● Information exchange

Providing permanent discussion framework and collecting data

## ● Independent Regulators

MEDREG brings together 24 energy regulators around the Mediterranean Region

## ● Sustainable Development

Greater efficiency and integration of energy markets

## ● Bottom up approach

Considering the specificity of each member when thinking about regional models

## ● Harmonization

Considering the specificity of each member when thinking about regional models

## ● Capacity Development

Working groups, training sessions and seminars

## ● Best practices

Dissemination of expertise through comprehensive studies, recommendations, reports and specialized training sessions

# MEDREG WORDS

## ● Regional Cooperation

Progressive market integration and intense institutional cooperation

## ● Assistance

Helping regulators to reinforce their institutional capacities and encourage appropriate reforms

## ● Mediterranean Membership

Providing permanent cooperation network

# STRENGTHENING THE ROLE AND ACTION OF REGULATORS

## REGULATORY PRINCIPLES

### Independence

from the government and political power and from the industry to guarantee the neutrality, fairness and stability of the regulator

**Financial independence 73%** of MEDREG members have a separate budget under their direct control and that is financed totally or for the majority through the energy regulated companies  
**65% of MEDREG members have the power to set up the fees** they collect from the regulated sector

### Competences

define the specific responsibilities of the regulator to promote competition and empower consumers

**Access to networks and charges 76% of MEDREG** members can impose proportionate and non-discriminatory conditions to access national networks and should ensure that charges applied by network operators are transparent and cost-reflective

### Enforcement

ensures that market participants and regulated entities comply with the market rules, in order to obtain the public benefit that regulation provides

**Imposing fines 70% of MEDREG members** can impose fines for failure to comply with licenses requirement and secondary legislation

### Effective internal organization

providing a clear decision making process and a clear distinction of roles and responsibilities within the structure, which should be regularly assessed by a performance evaluation process

**Code of ethics 80% of MEDREG members** have established an internal code of ethics

### Transparency

in the regulatory process provides all market players with a clear understanding of the procedures behind regulatory decisions and of the impact of these decisions on their activities

**Evaluation of tariffs 87% of MEDREG members** are tasked with carrying out a detailed evaluation of tariffs and possible tariff changes providing a reasoned justification for their decisions on the matter

### Accountability

entails that the regulator is able to demonstrate outcomes and results from its regulatory action and support a proactive stakeholders' engagement

**Annual report and official publication of decisions 82% of MEDREG members** issue an annual activity report that is presented to the national Parliament and Government and 78% publish their official decisions as well as consultation documents on their websites

# REINFORCEMENT OF REGULATORS' COMPETENCES

## MEDREG counts 24 members



11 regulate electricity and gas



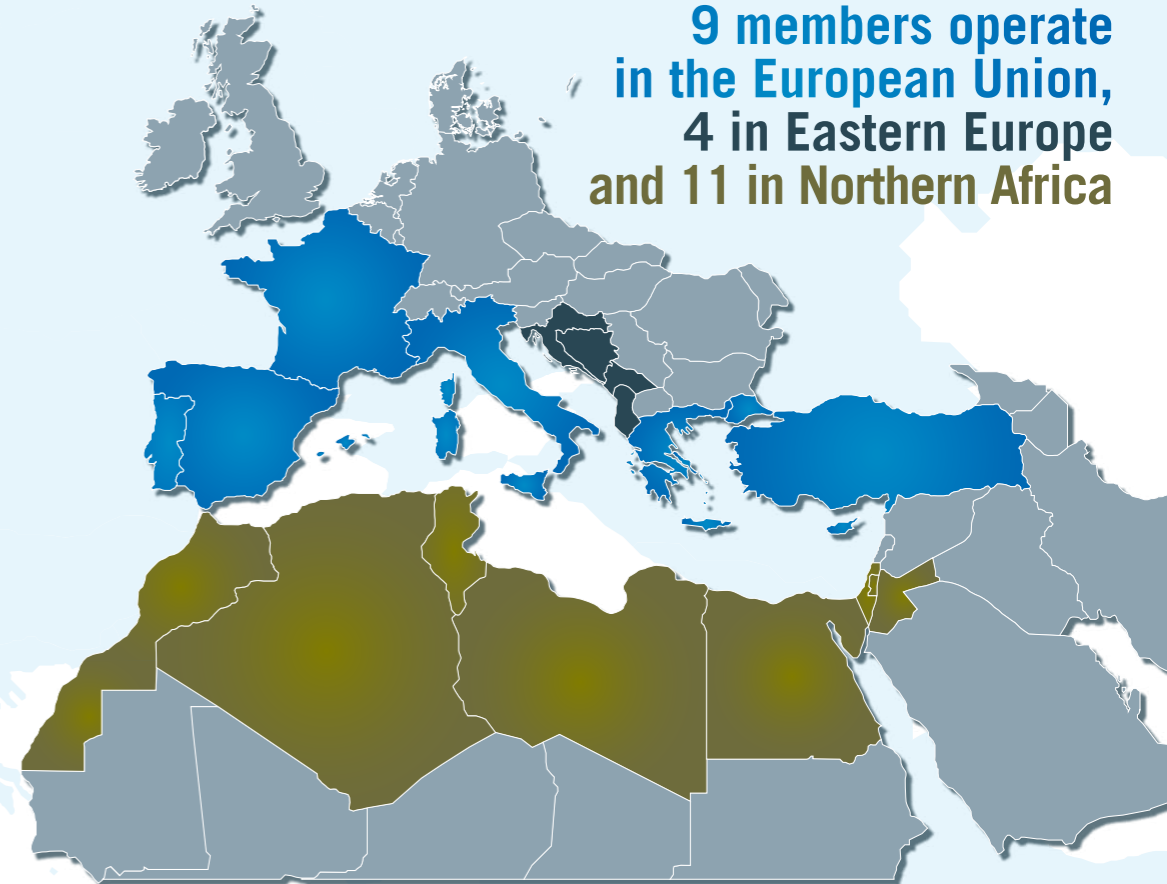
10 regulate only electricity



3 regulate only gas

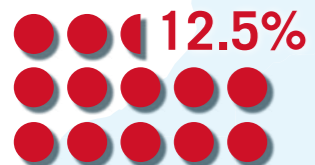
19 are independent regulators, while 5 are ministries

9 members operate in the European Union, 4 in Eastern Europe and 11 in Northern Africa

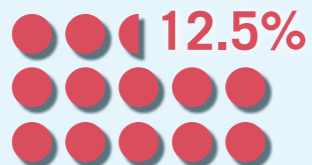


## Barriers to energy investments

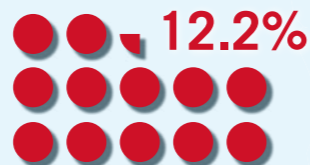
MEDREG mapped current and projected interconnection infrastructures for electricity and gas and discussed the main barriers that hinder investments in infrastructure.



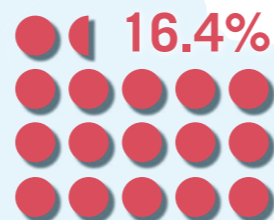
Lack of coordination and cooperation



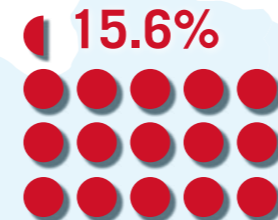
Political instability and lack of a clear institutional framework



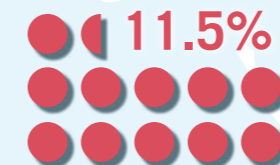
Lack of interest in interconnection projects



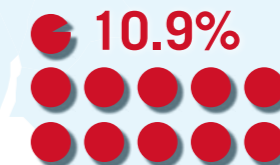
Insufficient market demand



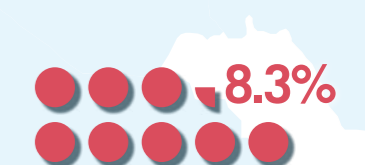
Lack of internal reforms



Technical barriers

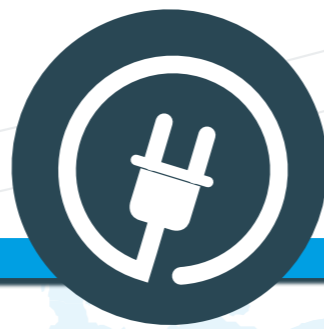


Financial feasibility of the project



Regulatory and/or legal obstacles

# ELECTRICITY



## Electricity wholesale markets

**10 electricity regulators\*** expect to have **fully liberalized** their wholesale market by **2020** undergoing considerable structural changes, while only 2 plans to keep a vertically integrated model

\* 3 from the Southern shore

## RES

**12 electricity regulators\*** directly oversight part of their **national RES programs**

\* 5 from the Southern shore

## Electricity Capacity

**7 electricity regulators\*** have established new objectives in terms of **installed capacity**

\* 5 from the Southern shore

## Electricity Tariffs

**21 electricity regulators\*** are now **responsible for power** and access tariffs

\* 4 from the Southern shore

## Electricity Coverage

**11 electricity regulators\*** have established objectives in terms of coverage of gross electricity demand, **production and consumption**

\* 5 from the Southern shore

## Cogeneration

**13 electricity regulators\*** have developed **national regulation** on Combined Heat and Power

\* 5 from the Southern shore

## Electricity interconnections

● **13 cross-border** electricity interconnections are currently **active in the North African countries** that are represented in MEDREG

● **11 electricity interconnection projects** are currently being implemented between Southern shore countries, at different levels of advancement

● **9 Projects** of Common Interest of the European Union concern the **Mediterranean region**

# GAS



## Unbundling

**10 gas regulators** operate in a situation of **ownership** or legal unbundling, while **3 regulators** operate under account **unbundling** of the operated entities

## Third Party Access

- **11 members** regulate **Third Party Access** to their gas networks
- **10 members** are competent for **TPA rules** on network codes

## Dispute settlement

**13 regulators\*** are responsible for **settling disputes** in the gas market  
\* 2 from the Southern shore

## Eligibility of gas consumers

**8 gas regulators** monitor a **liberalized gas market**

## Quality of service

**10 members** are competent to ensure the application of **quality of service rules**

## Gas suppliers

**6 gas regulators\*** supervise **more than one supplier**, while **4 gas regulators** supervise **only one supplier** nationwide  
\* 2 from the Southern shore

## Gas interconnections

**15 cross-border gas** interconnections are currently active in countries that are **represented in MEDREG**; 5 concern North African countries

## Gas infrastructure projects

**36%**



construction phase

**36%**



planning phase

**28%**



permitting and feasibility phase



# CONSUMERS



## Competences

**13 regulators\*** have competences in the field of **consumer protection**, information and empowerment

\* 4 from the Southern shore

## Vulnerable consumers

**7 regulators** deployed specific programs for the protection of **vulnerable consumers**

**MEDREG** created a brochure for energy consumers that can be adapted to the different Mediterranean markets

## Bills

**13 regulators\*** declare that **all consumers** in their countries **receive** electricity and gas **bills**

\* 1 from the Southern shore

## Hotline

**11 regulators\*** established a **hotline** for consumers

\* 2 from the Southern shore

## Detailed information

- **11 regulators\*** declare that the electricity bills issued in their countries contain **information** on the **variable energy charge** based on the energy consumed in high tariff and low tariff

\* 2 from the Southern shore

- **16 regulators\*** declare that electricity and gas **bills** issued in their countries **showed total consumption and payable amount**

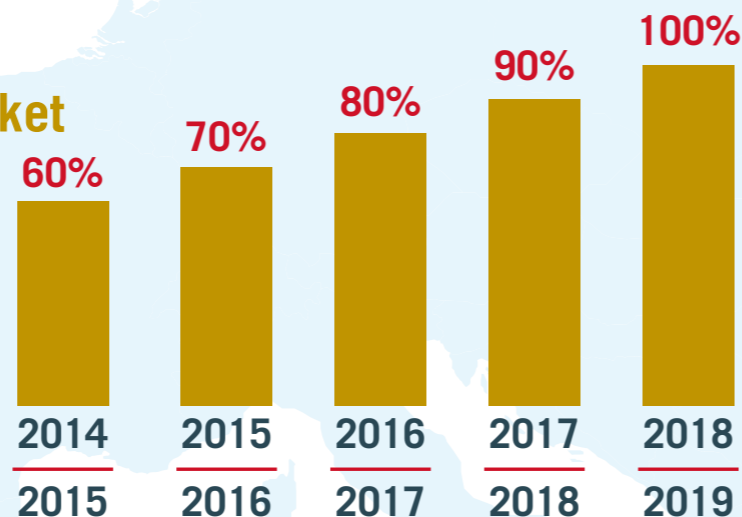
\* 4 from the Southern shore



# NATIONAL UPDATES FROM MEMBERS

## Egypt

- Creation of an **independent agency** regulating the **gas market**
- Launch of a **phasing out subsidies** with price increases between the end of 2014 and 2018



## Jordan

- **Development of a wheeling charge directive to encourage** the introduction of **RES** in the Jordanian system: consumers can install renewable energy systems to generate electric power in a location different from their living premises and connect them to the grid at transmission or distribution level
- The regulator approved a plan to **incentivize the reduction of technical and non-technical losses** in the distribution sector
- The government plans to **fully remove energy subsidies for electricity by 2017**



## Palestine

- The regulator determined connection fees and reviewed tariffs
- The regulator worked to have **more consumers being served by distribution companies**, which now comprise 95% of the total consumers
- The regulator revised distribution licenses and **prepared draft instructions to implement net metering**



## Israel

- By 2020, Israel will have **9% of its total produced energy coming from RES**
- The regulator **revised the basis of tariff calculation for the Feed-in tariffs (FiTs)** of the photovoltaic sector; the regulator intends to avoid the gradual disconnection of FiTs from actual costs with unreasonable margins
- The tariff for each separate project will be determined in order to encourage the industry to consider global cost standards aiming at **eventually achieving grid parity**
- The regulator **reduced the national tariff for electricity by 7%** in September 2015 and is working to link it to incentive regulation mechanisms



# NATIONAL UPDATES FROM MEMBERS

## Morocco

- Creation of an independent agency regulating the electricity and gas market
- Opening of the electricity market for RES for the **Medium Voltage (MV) consumers**
- Implementation of an **Energy Efficiency Action Plan** for transports, industry, construction sector and street illumination to **reduce consumes by**



**12 %** before 2020    **25 %** before 2030

## Algeria

- Availability of Concentrated solar power (CSP) from 2021
- **Installation of 22,000 MW of capacity on the period 2015-2030**, of which 4,525 MW should be installed by 2020
- **Creation of feed-in-tariffs (FIT)** that guarantee to RES producers purchase tariffs for photovoltaic and wind facilities during 20 years



## Tunisia

- Implementation of a **Solar Plan** that deploys **1750 MW of wind energy, 1510 MW of photovoltaic and 460 MW of concentrated solar power by 2030** for a total of 3720 MW of RES generation capacity (30% of 2030 installed capacity)
- Since May 2015, **the private sector can invest in the production of RES generation**
- Development of a **connection project with the European Union's grid** to allow Tunisia to get electricity from the EU during peak periods



# NATIONAL UPDATES FROM MEMBERS

## Greece

- In line with the EU Target Model for the electricity market, the electricity market will be reformed to **further open the wholesale and retail markets** and mitigate the high market share of the incumbent national



- A **new capacity remuneration mechanism** being designed to ensure investments in generation are adequate and the system is flexible enough to deal with increased penetration of intermittent RES

## Turkey

- In July 2015, it was created the **intra-day market**
- In 2013, it was completed the privatization of distribution assets was completed
- In 2015, the **eligibility threshold for consumer switching passed from 4,500 kWh/year to 4,000 kWh/year**, corresponding to a potential market opening of 85% of the total
- The regulator activated a **new market-based balancing regime for natural gas**, which is currently being tested



## Malta

- In July 2015 a **new Regulator for Energy and Water Services (REWS) was established** to regulate the functions related to energy and water with new functions such as Central Stock Holding Entity for Emergency Stocks, strengthening its independence and competences on dispute resolution



- In 2014, the provider of generation and distribution services, **Enemalta, was partially privatized**, as the Maltese government reduced its share to 63.3%
- Electricity consumers are on a **regulated retail tariff**, which **was reduced** both for household and non-household consumers in the last two years

## Cyprus

- In January 2015, the regulator introduced a **new electricity market model**
- The regulator approved **schemes for the installation of photovoltaic systems** in houses and buildings of local authorities in combination with net metering and in commercial and industrial premises through self-production
- The regulator provided a **definition of energy poverty and of vulnerable consumers** and adopted specific measures to protect their rights such as the right of uninterrupted supply during critical periods



# NATIONAL UPDATES FROM MEMBERS

## Albania

- During 2015 the DSO **increased the collection of bills and decreased distribution losses**
- The regulator started the first step towards electricity **market liberalization** and opened it for **consumers connected in the 35kV distribution network**
- The Regulator is working on the harmonization of **the secondary legislation bases** as a follow to **the implementation of the 3rd Energy Package** for Electricity and Gas Sector



## Croatia

- In 2016, the **Croatian Power Exchange** will become operational in 2016
- Since 2007, the current feed-in support scheme for RES and high-efficiency CHP resulted in **over 440 MW of new generation capacity** - roughly 10% of the total installed capacity
- Based on the recently passed Law on RES and high-efficiency CHP, Feed-in-Tariffs will be substituted with a market oriented support scheme - **premiums granted via tenders**- from 2016 onward



## Bosnia and Herzegovina

- The electricity market in Bosnia and Herzegovina is **fully open** as of 1 January 2015
- Relevant Ministries and Regulators work **jointly on transposition of the Third Energy Package into primary legislation** (development of secondary legislation to follow)
- Bosnia and Herzegovina remains a net electricity exporter. A number of new generation projects in development phase (a new **300 megawatt (MW)** coal fired thermal power plant to be put in operation in **early 2016**)



## Montenegro

- The regulator is working on the **tender procedures to develop the secondary legislation of its gas sector**
- The regulator cooperates to the realization of a **Gas Development Master Plan** and a Priority Project Portfolio Identification in Montenegro



# NATIONAL UPDATES FROM MEMBERS

## France

- A new law on energy transition for green growth provides for an improved incentive regulation when designing distribution and transmission tariffs to **reduce energy consumption in peak** demand periods. CRE will set these tariffs from entry into force of the law



- The law also specifies the power of the regulator to **sanction** infringements with regard to the European Regulation on wholesale energy market integrity and transparency (REMIT)

## Spain

- The RES support mechanism had been recently reformed, moving from a Feed-in Premium scheme to **a new system** based on a **specific remuneration** per capacity installed, trying to obtain an adequate return rate

- The **rate of return is based on 10-year government bond yields** + 300 basis points spread

- **Specific remuneration** is based on several remuneration parameters **allowing for a very precise classification of plants**, depending on their technology, commissioning date, location and specific fuel (for biomass and CHP)



## Portugal

- **In 2013, regulated end user tariffs for domestic consumers for electricity and gas terminated** and transitory tariffs subject to an incentive to encourage customers to switch suppliers started being active

- In September 2015, nearly **7 out of 10 electricity customers were supplied by a market supplier** and nearly 9 out of 10 kWh were supplied in the liberalized market



- In the gas sector, almost **100% of the energy consumption is supplied in the liberalized market**

## Italy

- The regulator has launched a **monitoring of the energy market** in compliance with the REMIT regulation

- The regulator implemented the **capacity allocation and congestion management regulation**, setting out the methods for allocating capacity in day-ahead and intra-day timescales and outlines the way in which capacity will be calculated across the different zones

- In cooperation with the Albanian and Greek regulators, the Italian regulator contributed to the **release of the TPA exemption for the Trans-Adriatic Pipeline gas project**



# DEVELOPMENT OF RES, ENERGY EFFICIENCY



In the Mediterranean the **Concentrated Solar Power (CSP)** technologies are becoming **increasingly mature**, especially when combined with **Combined Cycle (CC)** units

**Hydro** is currently the most deployment RES technology, but **Wind** and **PV solar** are on the top of **new installed capacity**

the role of **Independent Power Producers (IPPs)** from RES has gained weight

Three MEDREG members of the Southern Shore, **Algeria, Egypt** and **Morocco** are currently building CC units

In **Algeria, Egypt** and **Morocco**, within the **next 10 years**, the new plants (CSP) will provide around **2500 MW**

**Algeria** is the first country in the MENA region to draft a legislative **framework for private investments CC units**

In Algeria, **publication of tariff levels for PV and Wind are now public**, for the other technologies (CHP, biomass) they are in development

**Algeria** projects to install **343 MW of photovoltaic** in 13 localities in the highlands and **7 photovoltaic projects** in the Sahara **with installed capacity of 53MW**

**Morocco**, in the **period 1995–2008** the **electrification rate** in rural areas has increased from 18% to **98%**  
10% of the increase has been solely based on PV kits

# INSTITUTIONAL COOPERATION

## EURO-MEDITERRANEAN ENERGY PLATFORMS

MEDREG, MED-TSO and the EC, signed in **November 2014** a **MoU**, to promote the modernization and strengthening of physical infrastructure, set of common technical and economic rules for facilitating the investments for grid development

MEDREG in cooperation with MED-TSO drafted the roadmap for the UfM **Regional Electricity Market Platform**

The GAS WG contributed to the **UfM Gas Platform** for drafting the Mediterranean **background report** coordinated by OME and in the context of the **Working Guidelines**

Contributing in the **6 meetings** organised by UfM co-Presidency for the **REM and RES Platform** for the background reports and the Working Guidelines

MEDREG attended **3 meetings** organized by OME and the UfM co-Presidency for **Gas Platform**

MEDREG contributes in the **Euro-Mediterranean Platform for GAS, Regional Electricity Market and Renewables** in the context of the Union for the Mediterranean process



# EXTERNAL COOPERATION

- 1<sup>st</sup> Joint Energy Regulatory **MEDREG-CEER Roundtable**
- Two **MEDREG-ECRB Roundtables** on Energy Investment and Consumers protection
- **MEDREG-ERRA Workshop**: The Forefront Topics in the Gas Market: Tariffs, Performance Standards and TPA
- **3<sup>rd</sup> MEDREG-IMME Seminar** on “Reform and Opening of Maghreb Electricity Markets”
- **MEDREG-PAM** Framework Cooperation Protocol
- **MEDREG-Med-TSO** Framework Cooperation Protocol
- Answer to the **EC** Public Consultation on the paper “Towards a new European Neighborhood Policy”
- Answer to the **ECRB** public consultation on the document “Proposals for the Future”
- MEDREG Workshop on Interconnection Infrastructures in the Mediterranean: **37 responses** to the public consultation; **48 participants** to the Workshop on Interconnection Infrastructures in the Mediterranean



- 6<sup>th</sup> World Forum On Energy Regulation (**WFER VI**)
- Two **UfM** and **EU-Med Ministerial meetings** on Energy
- Rendez-vous on energy: European union – Union for the Mediterranean”, jointly organized by **MedGrid** and the **European Parliament**
- 4<sup>th</sup> and 5<sup>th</sup> **Dii** Desert Energy Conferences
- **RCREEE-League of Arab States** Experts Workshop on “Renewables Integration with Electricity Grids in the Arab Region”
- **PAM** 8<sup>th</sup> and 9<sup>th</sup> Plenary Sessions and Awards Ceremony
- **ERRA**:
  - 2<sup>nd</sup> ERRA High-Level Meeting of Regional Energy Regulatory Associations of Emerging Markets
  - 13<sup>th</sup> and 14<sup>th</sup> Energy Investment and Regulation Conferences
  - ERRA Chairmen meeting
- **ENERMED-OME** Workshop «Renewable Energies and Flexible Power Systems: Integration Effects and Adaptation»
- **MEDELEC-EURELECTRIC** Event “The MENA Energy Transition: How to get investments right?”
- **RES4MED** International conference “Delivering Renewable Energy Investments in Egypt: Challenges and Opportunities”
- Rabat **Energy Charter** Forum II
- **EU** Climate and Energy Week: Official endorsement of the cooperation process on the three platforms
- Launch of the **UfM** Regional Gas Market and of the Electricity Market (REM) Platforms

# FOCUS ON MEMBERS

## Capacity buildings

- Capacity Building Activities **26 participants** of which 14 from the Southern shore
- Subjects:**
- Restructuring of electricity and gas tariffs
  - Reporting methodologies: how to collect data and monitor regulated entities
  - What are the effects of RES on electricity tariffs?

## Trainings

- **MEDREG-ERRA** Training “Economic and Technical Aspects of the Deployment of Renewable Energy Sources (RES)”, 3-day training course; **16 participants, 73% found this course excellent**
- **ERRA Training Course** “Principles of Natural Gas Market Regulation”, 5-day training course, **5 participants, 100% found this course excellent**
- **FSR Summer school** on the regulation of energy utilities. 5-day training course, **10 participants. 83% found this course excellent**
- **FSR Annual e-learning course** on the regulation of energy utilities One-year training course, **8 participants**
- **IEA Energy Statistics and Indicators Training for Middle East and North Africa Region**, organized jointly by the TARES Project, the International Energy Agency, the Egyptian Electric Utility & Consumer Protection Regulatory Agency (EgyptEra), 4-day training course, **2 participants**
- **Enel Foundation, OME and IEA training** on new challenges for the energy system in the Mediterranean Region, 5 day-training course, **11 participants**
- **Joint Research Center-Institute for Energy** Training on methods for the implementation of the EC Regulation 994/2010 on Security of Gas Supply, 2 days training, **6 MEDREG members participants**

**Total number of participants to the trainings: 58 of which 35 from the South shore**

## Working Groups

- **Institutional (INS) WG**  
4 meetings, for a total of **63 participants**
- **Electricity WG (ELE WG)**  
4 meetings, for a total of **46 participants**
- **Gas WG**  
4 meetings, for a total of **59 participants**
- **Renewables (RES) WG**  
4 meetings, for a total of **45 participants**
- **Consumers Issues (CUS) WG**  
4 meetings, for a total of **53 participants**
- **Communication Officers Network**  
4 meetings for a total of **60 participants**

## General Assemblies

4 meetings for a total of **164 participants**

# COMMUNICATION

## First MEDREG forum

The Mediterranean Forum on energy regulations, held in Barcelona on 26 November 2014, has

seen the presence of **120 participants and 28 speakers**

The audience reached corresponds to almost **270,000 single users, including press readers, radio listeners, internet views and social media impacts**

## MEDREG newsletter

- **3000 subscribers** among members, external partners and media
- **One third from the south shore**
- **250 new subscriptions request**
- on average one person on two of those that open news and alerts click on our communications

## Media relations

- **8 press releases, 250 articles, 25 news on social media, 2 radio interviews**
- **1947 visits in the press area** - 2% of the total

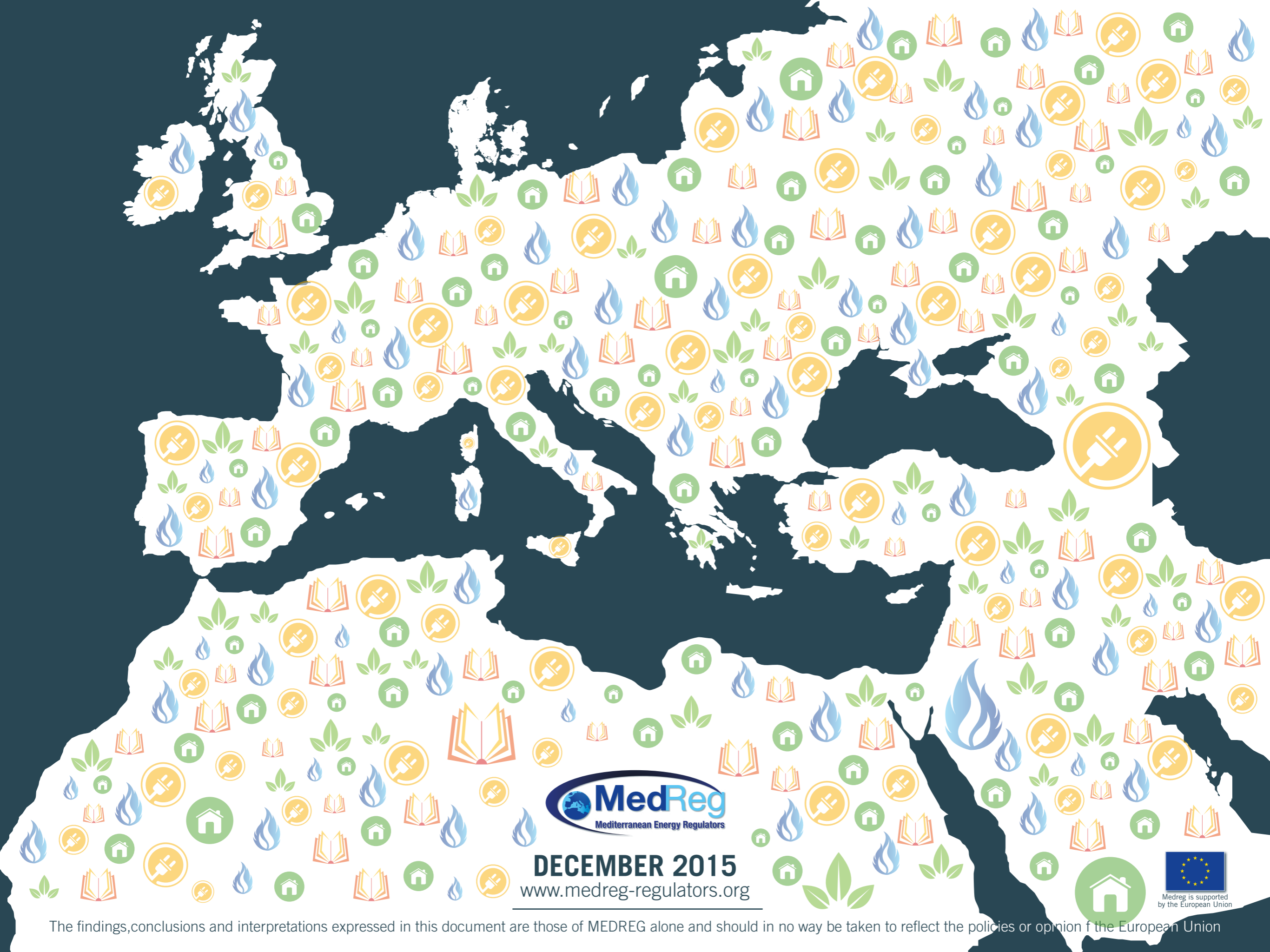
## Publications

- MEDREG Institutional Brochure in the 3 official MEDREG languages ( English, French, Arabic), **5.000** hardcopies disseminated at regional level
- MEDREG papers series: n 1 and 2 disseminated electronically to **14.000 contacts**
- MEDREG Annual reports (2012-2014), **6.500** hardcopies disseminated at regional level

## Free publications and information on MEDREG website and members area

- MEDREG website registered more than **25.000 visits**
- 18,123 page views of a total of 114,992 - 16% of the page views are reserved pages (members area)
- **245 members have access to the members area**
- **OECD i-library, 397 visits**
- **OECD database, 336 visits**





**DECEMBER 2015**  
[www.medreg-regulators.org](http://www.medreg-regulators.org)



The findings, conclusions and interpretations expressed in this document are those of MEDREG alone and should in no way be taken to reflect the policies or opinion of the European Union