



MEDREG

Mediterranean Energy Regulators

ANNUAL REPORT

2022



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European Union



ANNUAL REPORT

2022

ACKNOWLEDGEMENT

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©RAE (Greek Regulatory Authority for Waste, Energy and Water), Wind farm on the island of Agios Georgios, Greece



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Contents

PAGE		PAGE	
3	1 President's Message	32	6 High Level Events
6	2 About MEDREG	36	7 Cooperation with External Partners
6	• Mission and Objective	40	8 Dissemination and Awareness Raising
7	• Governance	44	9 2022 Events
8	• Areas of Work	46	10 Reports and Publications
9	• Members	48	11 The Way Forward
10	• Secretariat		
12	3 2022 in Numbers		
14	4 Energy Potential of the Mediterranean		
16	5 MEDREG's Impact on the Mediterranean Region		
16	• Reinforcement of the Status and Independence of the Regulators		
19	• Identification of Synergies Leading to the Reinforcement of National Energy Markets		
22	• Assessment of Infrastructures to Maximise the Potential of Interconnections		
24	• Promotion of Low Carbon New Technologies and Energy Policies		
27	• Tackling Energy Losses and Improving Consumer Protection		
29	• Minimisation of the Price Surge Impact and Strengthening of the Security of Supply		



1 President's Message

As the world moves towards a more sustainable energy strategy, the Mediterranean region's vast energy resources have become increasingly important in ensuring secure and clean energy supply.

The 2022 energy crisis and price surge presented a daunting task for regulators in the Mediterranean region. They had to navigate the complex interplay between energy supply and demand. These challenges often manifested as sudden and unexpected disruptions to the energy supply chain, forcing regulators to make rapid decisions about how to allocate scarce resources. At the same time, regulators had to strike a balance between maintaining affordable energy prices and promoting the adoption of renewable energy sources to reduce greenhouse gas emissions. Addressing these multifaceted challenges necessitated close collaboration between regulators and other stakeholders in the energy sector, including policymakers, system operators, International Financial Institutions, and private sector, to identify effective and equitable solutions. The regulators' ability to rise to these challenges played a crucial role in ensuring the stability and functionality of energy markets in the Mediterranean region. At this critical juncture, MEDREG's role in promoting fair, transparent, and harmonised regulations was deployed through the establishment of a specific task force to tackle these challenges.

As the elected President of MEDREG, I am committed to keep working closely with all the stakeholders to develop a coherent and effective regulatory policy that promotes sustainable and efficient energy. To achieve this goal, we have been focusing on building a platform for all stakeholders to engage in constructive discussions, share best practices, and develop innovative solutions that can help us achieve our common objectives. Through close collaboration and a sustained effort, we can ensure that the Mediterranean region's energy transition is achieved efficiently and effectively, while considering the unique circumstances of each member country.

Moreover, MEDREG is committed to empowering regulators to be independent, impartial, and transparent. We will continue to provide guidance, training, and best practices to our members to ensure they have the necessary tools and resources to effectively fulfil their regulatory duties. This includes promoting non-discriminatory and transparent regulations and enhancing the awareness of consumer rights and protections. MEDREG's efforts in this area aim to foster trust and confidence in the energy sector, ultimately leading to more stable and harmonised energy markets in the Mediterranean region.

In this context, MEDREG achieved and worked on many activities and deliverables supporting this cause, with its members and numerous partners. MEDREG designed a common approach to consumer protection principles, which is essential to ensure that consumers are adequately protected in the liberalised energy markets. Cross-border coordination for interconnection capacity development was also a priority for MEDREG in 2022. MEDREG assessed the rules preventing conflict of interest in the electricity and gas market and monitored the evolution of the regulatory framework, with a focus on the quality of service at the distribution level. Additionally, MEDREG explored the potential of hydrogen to meet flexibility and storage needs ensuring the continuous market functioning in the coming years. I cited only a few of the numerous MEDREG's achievements in 2022 which you will find detailed in this activity report.

We owe our accomplishments presented in this report to the relentless efforts of our working members, working groups, and secretariat, along with the continuous support of the European Commission. We express our heartfelt gratitude to everyone who dedicated their time, energy, and expertise to our cause, and we are thrilled to see even greater achievements in the years ahead.

As we look towards the future, MEDREG will continue to work on strengthening the energy market's functioning and ensuring that consumers are protected. We will also focus on the deployment of recent technologies, such as renewable gases and hydrogen, to support the energy transition.

MEDREG will continue to be a platform for its members to jointly address the challenges facing the energy markets in the Mediterranean region. Together, we will build a more sustainable and resilient energy future for our region.

Kind Regards,


Mr. Abdellatif BARDACH
MEDREG President



Message du Président

Alors que le monde se dirige vers une stratégie énergétique plus durable, les pays de l'espace méditerranéen regorgent de ressources providentielles à mêmes de leur garantir un approvisionnement énergétique à la fois sûr et propre.

La crise énergétique de 2022 et la flambée des prix ont représenté une épreuve difficile pour les régulateurs de la région méditerranéenne. Ils ont dû faire face à l'accentuation de complexité de l'interaction entre l'offre et la demande d'énergie. Ces défis se sont souvent traduits par des perturbations tant intenses qu'inattendues dans la chaîne d'approvisionnement, obligeant les régulateurs à prendre des décisions rapides sur la façon optimale d'allouer des ressources, par définition limitées. Dans le même temps, les régulateurs ont dû trouver un équilibre entre le maintien des prix à un niveau abordable et la promotion de sources d'énergie renouvelables afin de réduire les émissions de gaz à effet de serre.

Faire converger ces missions, qui présentent de multiples facettes, a nécessité une collaboration étroite entre les régulateurs et les autres acteurs du secteur de l'énergie, y compris les décideurs politiques, les opérateurs de systèmes, les institutions financières internationales et le secteur privé, dans le but d'identifier des solutions à la fois efficaces et équitables. La capacité des régulateurs à affronter cette crise a été cruciale pour garantir la stabilité et la fonctionnalité des marchés de l'énergie sur les rives de la méditerranée. À ce stade décisif, MEDREG joue pleinement son rôle dans la promotion de réglementations équitables, transparentes et harmonisées par la création d'un groupe de travail spécifique qui s'attaquera à ces problématiques.

En tant que président de MEDREG, j'ai poursuivi mon engagement à travailler en étroite collaboration avec toutes les parties prenantes afin de développer une politique de réglementation qui soit cohérente et efficace pour promouvoir une énergie durable et performante. Pour cela, nous avons veillé à créer une plateforme qui permet à toutes les parties prenantes d'engager des discussions constructives, de partager les meilleures pratiques et de développer des solutions innovantes susceptibles de nous aider à atteindre nos objectifs communs. Par le biais d'une collaboration étroite et d'un effort constant, nous pouvons faire en sorte que la transition énergétique de la région méditerranéenne se réalise de manière efficace et efficiente, tout en tenant compte des circonstances uniques de chaque Etat membre.

De plus, MEDREG s'engage à fournir aux régulateurs la capacité d'être indépendants, impartiaux et transparents. Nous continuerons à offrir des conseils, des formations et les meilleures pratiques à nos membres afin de nous assurer qu'ils aient les outils et les ressources nécessaires pour s'acquitter de façon optimale de leurs obligations réglementaires. Cela comprend la promotion des réglementations non discriminatoires et transparentes et une meilleure information sur les droits et les mesures de protection des consommateurs. Les efforts de MEDREG dans ce domaine visent à renforcer la confiance dans le secteur de l'énergie, ce qui devrait mener à une meilleure stabilité et une plus grande harmonie des marchés énergétiques dans le bassin méditerranéen.

C'est dans ce contexte que MEDREG a mené à bien de nombreuses activités et a produit une série de rapports soutenant cette cause, de concert avec ses membres et de nombreux partenaires. MEDREG a conçu une approche commune des principes de protection des consommateurs, et ceci est essentiel pour garantir une préservation adéquate de leurs droits sur les marchés de l'énergie libéralisés. En 2022, MEDREG a également travaillé en priorité sur la coordination transfrontalière pour le développement de la capacité d'interconnexion. MEDREG a évalué les règles de prévention des conflits d'intérêts sur le marché de l'électricité et du gaz et a suivi l'évolution du cadre réglementaire, en mettant l'accent sur la qualité de service au niveau de la distribution. De plus, MEDREG a étudié le potentiel de l'hydrogène pour répondre aux besoins de flexibilité et de stockage, garantissant ainsi le fonctionnement continu du marché dans les prochaines années. Je n'ai cité que quelques-unes des nombreuses réalisations de MEDREG en 2022 dont vous pourrez lire les détails dans ce rapport d'activité.

Nous devons les réalisations présentées ici aux efforts inlassables de nos membres, de nos groupes de travail et de notre secrétariat, ainsi qu'au soutien constant de la Commission européenne. Nous exprimons notre profonde gratitude à tous ceux qui ont dédié leur temps, leur énergie et leur savoir-faire à notre cause, et nous serons heureux d'assister à des réalisations encore plus importantes dans les prochaines années.

En ce qui concerne l'avenir, MEDREG continuera à travailler au renforcement du fonctionnement du marché énergétique et à la protection des consommateurs. Nous nous concentrerons également sur le développement des nouvelles technologies, comme les gaz renouvelables et l'hydrogène, afin de soutenir la transition énergétique.

MEDREG restera une plateforme qui permet à ses membres de relever ensemble les défis des marchés de l'énergie dans la région méditerranéenne. Tous ensemble, nous bâtissons un avenir énergétique plus durable et plus résilient pour notre région.

Bien sincèrement,
M. Abdellatif BARDACH
Président de MEDREG



رسالة الرئيس

بينما يتجه العالم نحو استراتيجية طاقة مستدامة، فإن الموارد الطاقية الهائلة لمنطقة البحر الأبيض المتوسط، أصبحت ذات أهمية قصوى لضمان التزود بالطاقات الآمنة والنظيفة.

تعتبر الأزمة الطاقية لسنة ٢٠٢٢ وارتفاع الأسعار، امتحان صعب بالنسبة لهيئات تنظيم الطاقة على مستوى المنطقة المتوسطية. إذ أن هذه الهيئات كان لها أن تتفاعل مع هذه الأزمة بالنظر إلى العنصرين المعقدين اللذين يتمثلان في العرض والطلب على الطاقة. غالباً ما تتجلى هذه التحديات في شكل اضطرابات مفاجئة وغير منتظمة في سلسلة الإمدادات الطاقية، الشيء الذي يحتم على هيئات تنظيم الطاقة إصدار قرارات عاجلة حول كيفية تخصيص الموارد المحدودة. كما يتعين على هيئات تنظيم الطاقة إيجاد توازن بين الحفاظ على أسعار الطاقة في مستوى مقبول وتعزيز اعتماد مصادر الطاقة المتجددة للحد من الاحتباس الحراري الناتج عن الغازات الدفيئة. فرضت هذه التحديات المختلفة ضرورة التعاون الموسع بين هيئات تنظيم الطاقة والفاعلين في القطاع، بما في ذلك أصحاب القرار والهيئات المالية الدولية والقطاع الخاص من أجل تحديد حلول فعالة وعادلة. لعبت هيئات تنظيم الطاقة دوراً محورياً من أجل ضمان استقرار الأسعار واستمرار الأداء الوظيفي لأسواق الطاقة في منطقة البحر الأبيض المتوسط.

وقد جاء استحداث فريق عمل مختص في مواجهة هذه الإشكاليات نتيجة للدراسات الحاسمة التي تلعبها هذه الجمعية في الترويج لأنظمة عادلة وشفافة ومنسقة.

وباعتباري الرئيس المنتخب لجمعية هيئات تنظيم الطاقة "MEDREG"، ألتزم بالاستمرار في العمل بتنسيق موسع مع جميع الأطراف المعنيين لتطوير سياسة تنظيمية متجانسة لتعزيز نشر واستخدام الطاقات المستدامة والفعالة للوصول وتحقيق هذه الأهداف، سنستمر في التركيز على إنشاء منصة لجميع الأطراف المعنيين بغية الانخراط في محادثات بناءة وتبادل أفضل الممارسات وتطوير حلول مبتكرة. كما يمكننا عبر التعاون الوثيق وتضام الجهود، ضمان تحقيق الانتقال الطاقى في منطقة البحر الأبيض المتوسط بكفاءة وفعالية مع مراعاة ظروف كل دولة من الأعضاء.

علاوة على ذلك، فإن MEDREG تواصل التزامها بتزويد هيئات تنظيم الطاقة بالقدرة على تحقيق الاستقلالية والاندماج والشفافية. كما أننا سنستمر بتقديم الإرشادات والتدريب وتبادل الخبرات وأفضل الممارسات لجميع أعضاء الجمعية للتأكد من حصولهم على الأدوات والموارد الضرورية لتنفيذ التزاماتهم التنظيمية بطريقة ناجحة. ويشمل هذا الالتزام تعزيز الانتماء العادلة والشفافة كما تعزيز الوعي لدى المستهلك وتدبير حمايته.

وفي هذا السياق، أنجزت جمعيتنا العديد من الأنشطة والمخرجات الداعمة لتحقيق هذا الهدف، ويتنسيق مع أعضائها وشركائها تبنت نهجاً مشتركاً لمبادئ حماية المستهلك وهو أمر ضروري داخل أسواق الطاقة المحررة. كما قامت MEDREG سنة ٢٠٢٢، باعتماد التنسيق عبر الحدود لتطوير إمكانية الربط وجعله من أولوياتها. قامت MEDREG أيضاً بتقييم القواعد التي تمنع تضارب المصالح في سوق الكهرباء والغاز ومراقبة تطور الإطار التنظيمي مع التركيز على جودة الخدمة على مستوى التوزيع.

ولضمان استمرارية عمل السوق في السنوات القادمة، قامت MEDREG بدراسة إمكانية استخدام الهيدروجين في تلبية احتياجات المرونة والتخزين... غير أن إنجازات الجمعية في عام ٢٠٢٢ لا يمكن عدها ولا حصرها وقد أشرت إلى بعضها في هذه المقدمة، تجدون التفاصيل في هذا التقرير.

وندين بالعرفان في تحقيق إنجازاتنا الواردة في هذا التقرير إلى الجهود الحثيثة التي يبذلها كافة الأعضاء، ومجموعات العمل، والسكرتارية، إلى جانب الدعم المتواصل من المفوضية الأوروبية. وكذلك، نعرب عن خالص امتناننا لكل من كرس وقته وطاقته وخبرته من أجل خدمة قضيتنا، ونطمح لتحقيق المزيد من الإنجازات في السنوات المقبلة.

وباستشرافنا للمستقبل، سنواصل العمل في MEDREG بتفاني وإخلاص لتعزيز أداء سوق الطاقة، وضمان حماية المستهلك مع التركيز أيضاً على نشر التقنيات الحديثة مثل الغازات المتجددة والهيدروجين لدعم الانتقال الطاقى.

وباعتبار MEDREG منصة تدعم أعضائها للتصدي بشكل مشترك للتحديات التي تواجه سوق الطاقة في منطقة البحر الأبيض المتوسط، فإنها ستواصل مجهوداتها الحثيثة لبناء مستقبل طاقة أكثر استدامة، صمود ومرونة لهذه المنطقة من العالم.

مع خالص تحياتي،

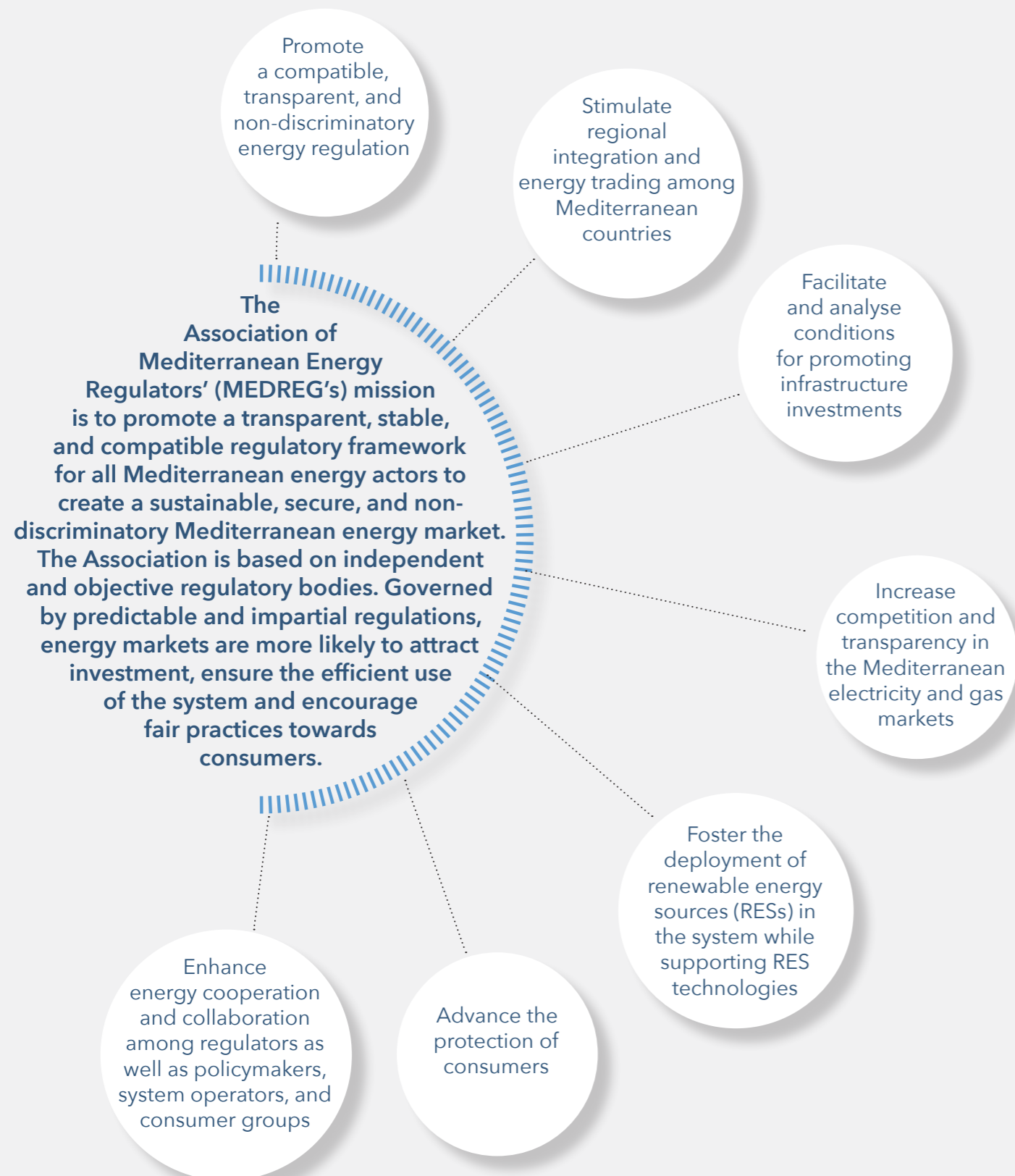
السيد عبد اللطيف برضاش

رئيس MEDREG

2 About MEDREG

Mission and objectives

The Mediterranean energy regulators work together to:



Governance

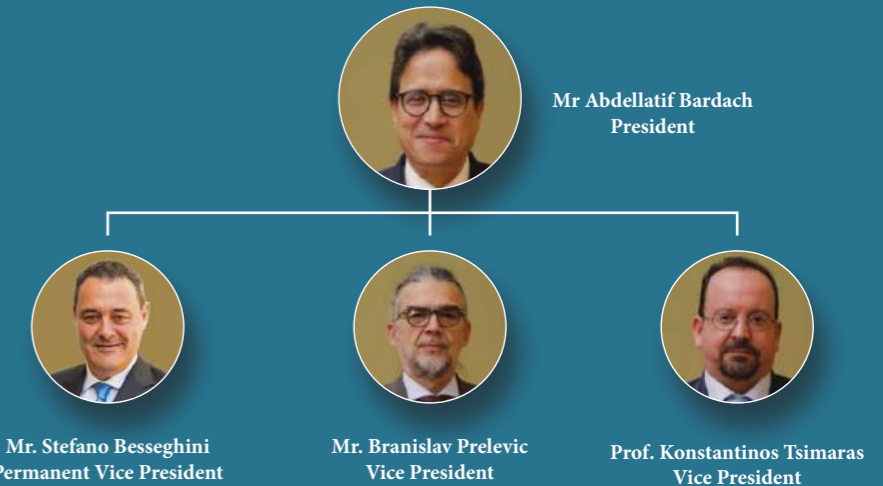
GENERAL ASSEMBLY

The General Assembly (GA) is the decision-making body of the Association and meets biannually. Among other prerogatives, the GA approves MEDREG's Action Plan, its annual budget, the reports, and the studies prepared by the Working Groups (WGs) and the Secretariat. It also oversees protocols and agreements with external bodies and organisations.

The GA consists of the President, the Vice-Presidents, the Chairpersons of the WGs, high-level representatives from among MEDREG members, and representatives of the MEDREG Secretariat. The European Commission is invited to the GA meetings as an observer.

PRESIDENCY BOARD

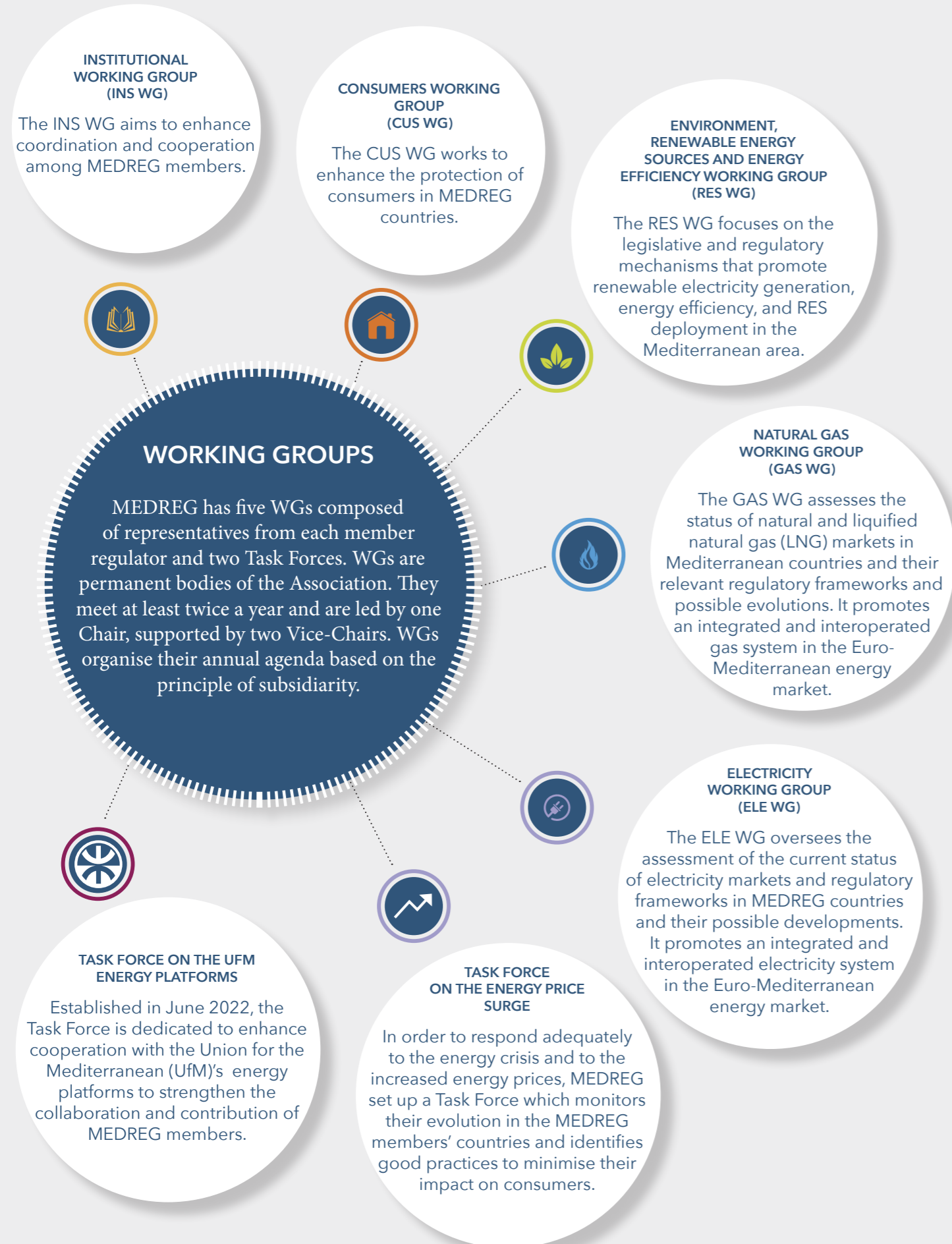
In December 2022, MEDREG members elected Mr. Abdellatif Bardach, President of the Moroccan National Electricity Regulatory Authority (ANRE), as their President for the next two years. Mr. Bardach had served as MEDREG Vice-President in his former mandate. The members also elected two Vice-Presidents: Mr. Branislav Prelevic, President of the Board of the Energy and Water Regulatory Agency of Montenegro (REGAGEN), and Prof. Konstantinos Tsimaras, Board member of the Greek Energy Regulatory Authority (RAE) joined by the Permanent Vice-President Mr. Stefano Besseghini, President of the Italian Regulatory Authority for Energy, Networks, and Environment (ARERA). Along with the election of the Presidency Board, the new WGs' Chairmanships took office.



STEERING COMMITTEE

The Steering Committee coordinates the activities of the Association per the GA's instructions and directions, prepares its work, supervises the implementation of the Action Plan, and provides guidance and recommendations. However, the Steering Committee has no decisional powers. It comprises the President, the Vice-Presidents, the Chairpersons of the WGs, and representatives of the MEDREG Secretariat.

Areas of Work



Members

ALBANIA		JORDAN	
ALGERIA		LEBANON	
BOSNIA AND HERZEGOVINA		LIBYA	
CROATIA		MALTA	
CYPRUS		MONTENEGRO	
EGYPT		MOROCCO	
FRANCE		PALESTINE	
GREECE		PORTUGAL	
ISRAEL		SLOVENIA	
ITALY		SPAIN	
		TUNISIA	
		TÜRKIYE	

Secretariat

The MEDREG Secretariat comprises ten experts representing seven countries from the region. The Secretariat develops and implements MEDREG's strategy in close coordination with the members, enhancing MEDREG's accountability and institutional cooperation in the

Mediterranean energy sector. It is responsible for managing and developing the Association's activities, guaranteeing continuous support to the President, Vice-Presidents, and all members.

The Secretariat is based in Milan, with independent premises.



Mr Hasan Ozkoc
Director



Mr Bardhi Hoxha
Deputy Director



Ms Genta Sinani
Finance and Human Resources
Officer



Ms Daphné Lacroix
Communication Manager



Ms Valentina Pelosi
Events and Communication
Officer



Mr Lamine Zitouni
Electricity Expert



Mr Tony Gebrayel
Policy Expert



Mr Omar Raafat
Gas Expert



Ms Tika Svanadze
Office Secretary

3 2022 in Numbers



17 TECHNICAL REPORTS

5 PEDAGOGICAL PUBLICATIONS

PARTICIPATION IN **17** HIGH-LEVEL MEETINGS AND EVENTS



11 WORKSHOPS
4 TRAININGS
4 STUDY VISITS



10 ANIMATED VIDEOS AND VIDEO INTERVIEWS



9 MEMBERS FROM
6 COUNTRIES BENEFITTED FROM TAILORED MADE SUPPORT ACTIVITIES



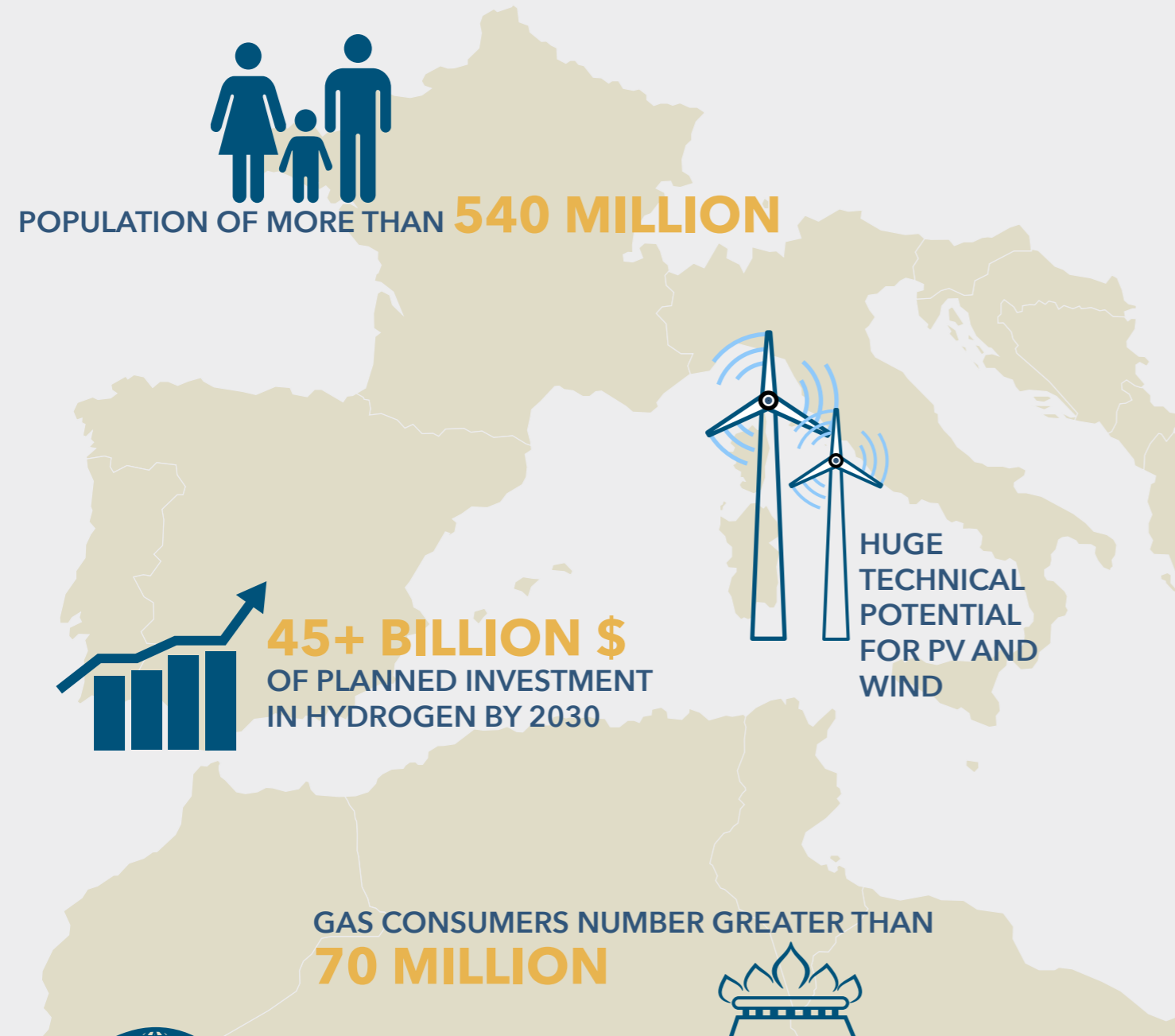
+10,000 VISITORS
+70,000 PAGE VIEWS ON OUR WEBSITE



5,000 SOCIAL MEDIA FOLLOWERS

+250 MEDIA MENTIONS

4 Energy Potential of the Mediterranean



POPULATION OF MORE THAN **540 MILLION**

45+ BILLION \$
OF PLANNED INVESTMENT
IN HYDROGEN BY 2030

HUGE
TECHNICAL
POTENTIAL
FOR PV AND
WIND

4 NATURAL GAS EXPORTING
COUNTRIES WITH MORE TO COME

GAS CONSUMERS NUMBER GREATER THAN
70 MILLION

27
OPERATIONAL LNG
TERMINALS

TOTAL RES INSTALLED CAPACITY
OVER 290 GW

ELECTRICITY CONSUMERS EXCEED
240 MILLION

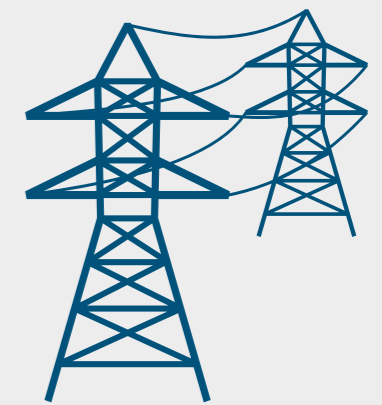
CROSS-BORDER INTERCONNECTIONS
SURPASSING 100
OF WHICH **50% ARE IN THE EU**

MORE THAN **2000 TWH** OF
ELECTRICITY GENERATED (IN 2021), OF WHICH

**30%
RES**

ELECTRICITY TRANSMISSION AND DISTRIBUTION
LINES SPAN OF **7,5 MILLION KM**

150 000+ KM OF NATURAL GAS PIPELINES SERVING NATIONAL CONSUMERS



5 MEDREG's Impact on the Mediterranean Region

Reinforcement of the status and independence of the regulators

An independent regulator is essential to ensure the protection of the rights of the different stakeholders and guarantee the best quality of service. For this purpose, MEDREG regularly follows up on the status of its member regulators. In 2022, we developed multiple activities and

reports for this end, such as the regulatory outlook and the workshop that followed on the issue, the report on model rules against conflict of interest, and the biannual training on the scope and role of regulation.

REGULATORY OUTLOOK UPDATE

Our regulatory outlook provides an overview of the **region's regulatory framework evolution**. It highlights the changes within the National Regulatory Authorities (NRAs) and **identifies the area of cooperation** among the members, **creating bridges** between them.

Regulators' duties may span many sectors. Among MEDREG members, three regulatory authorities regulate only the gas sector, six regulate only the electricity sector, fourteen regulate both the electricity and gas markets, and ten regulate electricity, gas, and other sectors.

NRAs must report some of their duties to the government and parliament. These duties vary from country to country and may include reporting on the tariff methodology, providing opinions on the security of supply issues, assessing national

development plans, drafting the budget, the annual work plan and activities report, and other activities.

Compared to the 2020 edition, the **key performance indicators (KPI) for monitoring the quality of service at the distribution level** were assessed and presented in the 2022 update.

In addition to this publication, a **workshop** on the subject involving our members and external energy professionals stressed the **crucial role of energy regulation** in developing a Mediterranean energy market. The workshop highlighted the **importance of cooperation** among the countries within the same region as they share many common aspects. It also encouraged **knowledge sharing** which can hasten the development of the growing countries, thus improving the whole region.



PHOTO: MEDREG Workshop titled "Regulatory Outlook," 12th October 2022, Milan (Italy)

MODEL RULES AGAINST CONFLICT OF INTEREST

Among the challenges that a regulator must face is the management of conflict of interest (COI) within its own institution and the establishment of rules which prevent it within the electricity and gas market actors.

COI may occur when personal interests — financial, family, friendships, or social factors — compromise the judgment, decisions, or actions in the workplace.

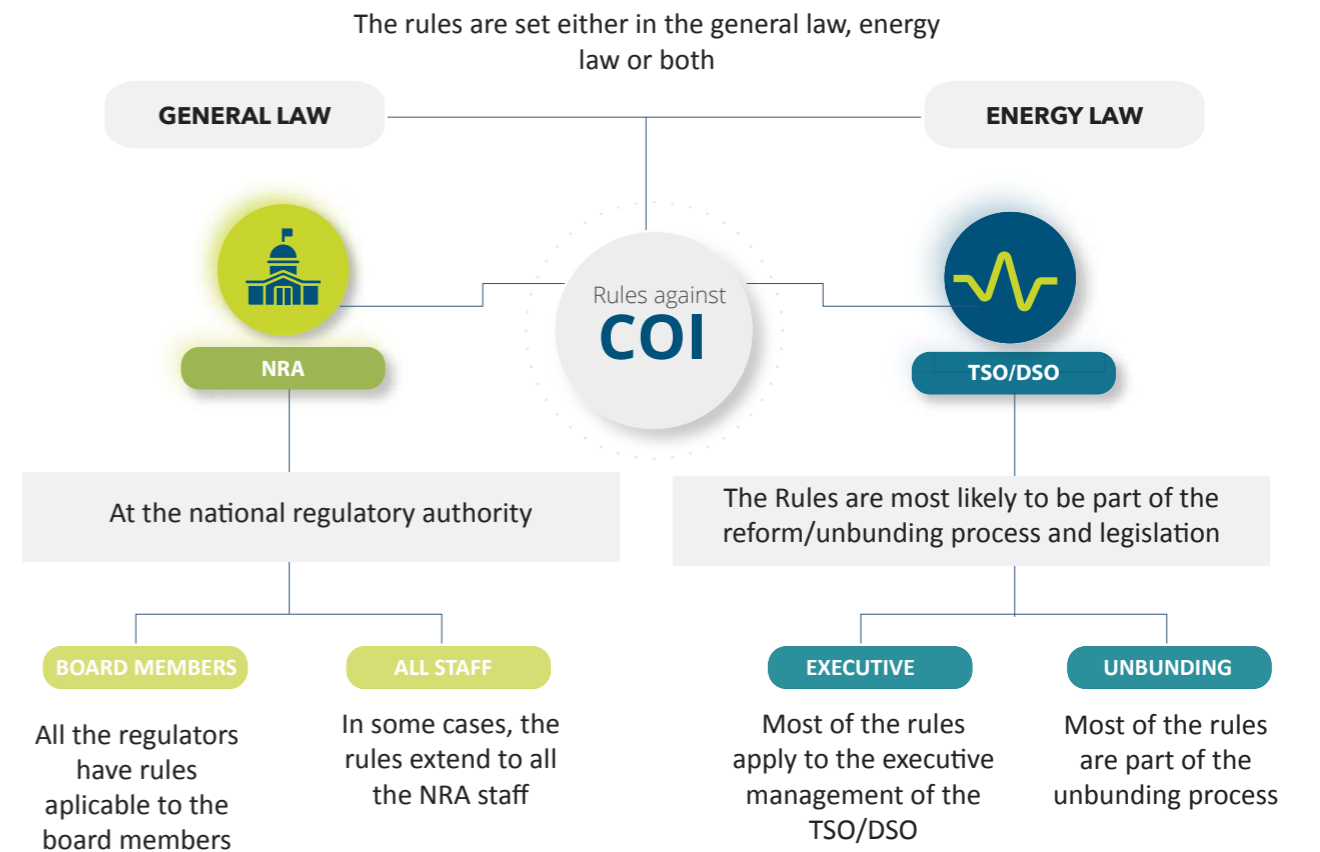
Indeed, the decisions of the NRAs, Transmission System Operators (TSOs), and Distribution System Operators (DSOs) should be oriented only towards ensuring the best quality and security of supply while also maintaining the affordability of the energy.

In order to **prevent COI and improve the management of these situations in the energy**

market, we studied the rules governing it at the NRA level, as well as within the TSOs, DSOs, market operators, and storage and LNG operators, if existing.

The report reveals that the unbundling of the electricity and gas market includes the rules against the COI within the TSO/DSO as observed in the EU member countries or Balkans. At the regulator level, the rules can be spread in many regulatory legislations, including the general law (administrative), electricity and gas law, or the NRA establishment law. In this case, most of the regulators regroup the rules in their own code of conduct to facilitate the comprehension of the procedures of managing the COI within their organisation.

FIGURE 1: Common Scheme of the Rules Against Conflict of Interest



BIANNUAL - TRAINING ON REGULATORY PRINCIPLES AND ENERGY ECONOMICS

In addition to the reports and workshops, MEDREG organises a recurring training biannually. Its objective is to **introduce the regulation sphere to entry-level employees** in the regulatory authorities by explaining its different aspects ranging from the regulator's independence to the tariff setting and relationship with TSOs and DSOs. The training encompasses both the **electricity and gas sectors**. Through sharing of experience from MEDREG members, the training **accelerates the formation of employees** that have recently joined the regulators.

It teaches them the role they are supposed to play and the **importance of maintaining a well-balanced market** that keeps all its stakeholders satisfied and willing to collaborate. This year, 20 representatives of different regulators from MEDREG attended the three-day training, signalling a high interest from the members in formation exercises for their employees and board members.



PHOTO: Training on "Role and Scope of Regulation," 12th-14th December 2022, Milan (Italy)

Identification of synergies leading to the reinforcement of national energy markets

It is always important to monitor the advancements happening worldwide, benefit from the available best practices and adapt them to the relevant national cases. To increase knowledge sharing between our members, MEDREG strives to identify synergies that can contribute to the reinforcement of the national

energy markets. MEDREG organises tailored-made study visits and workshops during which our members share their successful practices of market adaptation to serve the consumers and the different stakeholders under the best possible scenarios.

DEVELOPMENT AND IMPLEMENTATION OF THIRD-PARTY ACCESS (TPA) RULES AND ACTIVITIES FOR THE GAS SECTOR

Willing to know more about the French regulatory framework applied to the gas market and about the competencies of an independent regulator, the **Egyptian Gas Regulator (GASREG)** went to Paris on 21-23 February for a study visit hosted by the **French Energy Regulatory Commission (CRE)**. It was the first in-person study visit to be organised after the pandemic and marked the beginning of the return to normal operation. The exchange of information between the two regulators aimed to promote **regulatory cooperation** and **improve**

the regulatory practices in the gas sector in both France and Egypt. More specifically, the two regulators **exchanged new insights on regulatory mechanisms** representing valuable resources to develop the upcoming regulatory phase focusing on **energy transition, consumer protection, dispute settlement, tariff, and third-party access rules**. On the side lines of the study visit, the two entities also signed a Memorandum of Understanding to strengthen cooperation and collaboration.



PHOTO: Development and Implementation of TPA Rules and Activities for the Gas Sector, 21st-23rd February 2022, Paris (France)

PLANNING THE EGYPTIAN GRID OF THE FUTURE: CHALLENGES AND PERSPECTIVES

To benefit from other member countries' experiences, practices, and challenges regarding their transition towards flexible and fully interoperated transmission and distribution systems, MEDREG organised a **workshop for the Egyptian Electricity Regulator, EgyptERA**. The workshop assisted EgyptERA in developing a **well-rounded vision of best practices of other Mediterranean regulators on topics such**

as the integration of solar PV into the electricity sector, the governance of the electricity sector, transmission and distribution network codes, the verification of grid code compliance, and the planning of transmission and distribution investments.



PHOTO: Planning the Egyptian Grid of the Future, 19th-20th July 2022, Cairo (Egypt)

OPTIMISING THE NATURAL GAS (NG) TRANSPORTATION IN ALGERIA

The Turkish Energy Market Regulatory Authority (EMRA) welcomed its Algerian peer, the Algerian Authority of Regulation of Hydrocarbons (ARH), for a **three-day study visit in Ankara**. The ARH delegation **explored the liberalisation activities, the gas market tariffs**, and how they are calculated. Regulation of the oil and Liquefied Petroleum Gas (LPG) sectors, including the tariff structure, also formed a sizeable part of the debates. The Algerian member was also invited by **BOTAS**, the Turkish

Petroleum Pipeline Corporation, to hear about the Turkish case and operation of the grid and market. The activity ended with a visit to the SCADA system, where BOTAS shared its **grid management procedures** with the ARH representatives. This study visit appeared highly beneficial for the Algerian regulatory authority, whose delegation members **learned the specifics of the Turkish market and how they handle the transport and regulation of fuels in Türkiye.**



PHOTO: Study Visit from ARH to EMRA, 14th-16th November 2022, Ankara (Türkiye)

IMPROVING GAS MARKET MONITORING IN EGYPT

Our Egyptian member GASREG, which is developing its regulation and opening-up its market to competition, benefited from the detailed **knowledge of its Austrian counterpart E-Control**, in a **study visit to Vienna**. Together, the two regulators explored critical aspects such as the **gas market model and monitoring of system operators, TSO and DSO regulation**, network access rules,

and tariffication, regulation of storage market; infrastructure development procedures; security of supply; consumer protection tools and regulations; wholesale market monitoring, competition, and anti-trust regulation. The technical exchange also included a site visit to the **gas hub Baumgarten** run by **Gas Connect Austria**.



PHOTO: Study Visit from GASREG to E-Control, 14th-15th December 2022, Vienna (Austria)

Assessment of infrastructures to maximise the potential of interconnections

Infrastructure is a key step in the path to the energy transition. It is important to keep updating the infrastructure and adapting it to new emerging technologies that will help integrate additional amounts of renewable energy into the grid. Maximising the potential of interconnections will also enable overproducers to sell their excess energy to countries that are not producing enough. MEDREG assisted

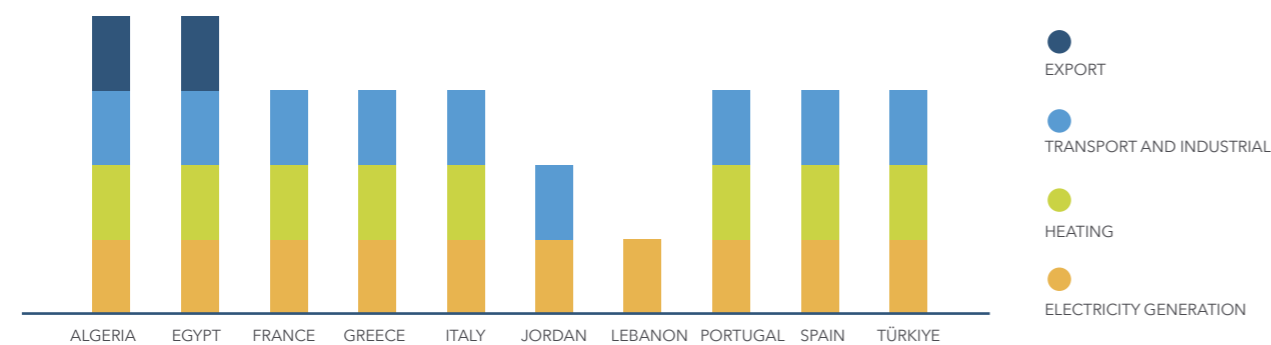
with this errand by developing a report on cross-border coordination for interconnection capacity development and by holding a workshop on the same topic. Additionally, MEDREG organised general training for all its members on infrastructure investments, network remuneration, and tariffs.

CROSS-BORDER COORDINATION FOR INTERCONNECTION CAPACITY DEVELOPMENT

In this report, we identify the **future role of natural gas in the energy transition** by providing further flexibility to the electricity market and system. We also analyse the

current **gas strategies**, assess **cross-border interconnections**, and study the challenges of developing a **new infrastructure for hydrogen and biogases**.

FIGURE 2: Natural Gas Applications per Country



Infrastructures are intended to be spread to try to achieve what has been mentioned in the Paris agreement and the targets and pledges made during the COP Summits.

New **cross-border interconnections** are being designed, and **investments** are being made to **increase the existing capacity** of the network.

However, with the emergence of the issue of **security of supply**, other alternatives should be studied, such as **using LNG**.

The roles of **energy regulators** are to deploy a stable regulatory framework, which will foster investments in new technologies and guarantee **fast-track permitting**. It will also **secure funding**, enabling



stability and clarity of the tariffs perceived by the consumers in a reliable and affordable energy framework.

A **workshop analysed the state of interconnection capacity development** across the Mediterranean region with the contribution of multiple stakeholders

who provided the private investors' perspective. Participants shared **regional insights**, followed by MEDREG members' **national case studies**, showcasing peculiarities in the different countries of the Mediterranean region.



PHOTO: Workshop on "Cross-Border Coordination," 13th October 2022, Milan (Italy)

TRAINING ON INFRASTRUCTURE INVESTMENTS, NETWORK REMUNERATION, AND TARIFFS

Over three days, the MEDREG Secretariat welcomed **twenty participants from ten regulators representing eight countries** for training on Infrastructure Investments, Network Remuneration, and Tariffs. The training **helped the members visualise and identify topics of interest** for them, such as the **transmission and distribution investments of the gas sector**, the role of the **Mediterranean region in the European**

gas security supply, and the **role of distribution grids in the energy transition**. They also visited the requirements for connecting **small and medium-scale RES projects** to the grid and the methodologies to calculate remunerations for gas/electricity transmission and distribution. Lastly, participants discussed tariffs, reduction of subsidies, and market access for demand-response measures based on concrete examples.



PHOTO: Training on "Infrastructure Investments, Network Remuneration, and Tariffs", 18th-20th October 2022, Milan (Italy)



Promotion of Low Carbon New Technologies and Energy Policies

Further integration of renewable energy sources in the national grids is highly important to reach a green economy by 2050 and help combat climate change. For that purpose, MEDREG aspires to help its members plan their future investments in green energy by providing reports, workshops, and study visits.

Considering that no one-size-fits-all solution exists, energy regulators usually benefit from the previous experience of their counterparts to accelerate the procedures in their relevant markets, by adapting the solutions to what fits them best.

LOOKING AT THE FUTURE ROLE OF RENEWABLE GASES

This report describes the **level of development of renewable gases** and their **future role in the Mediterranean region**. Decarbonising the energy sector will require using all available alternative technologies and energy sources. Hydrogen and biogases will have an important role in the future. The energy regulators of the Mediterranean initiated the

discussion on the **state of play of the development of these technologies**, starting with the **regulatory framework** and the **energy strategy** of the countries, followed by the **existing and planned projects in the region** and finally, the **support mechanisms** that are in place or planned to be elaborated.

FIGURE 3: RES Share in the Mediterranean Region Electricity Mix



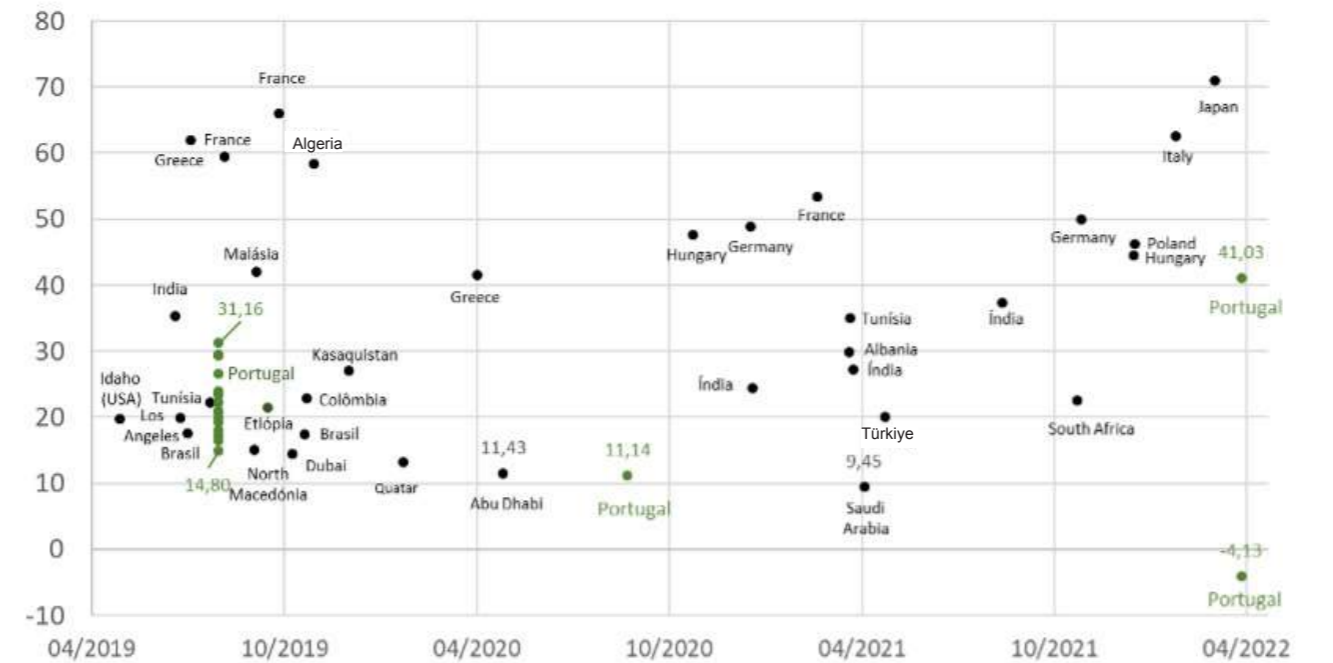
SHOWCASING THE POTENTIAL OF RENEWABLE ENERGY SOURCES IN THE MEDREG AND ECRB AREAS

As part of the partnership between MEDREG and ECRB, a workshop on integrating renewable energy sources and flexibility mechanisms was organised in Lisbon, Portugal, at the premises of the Portuguese regulator ERSE, in October 2022.

The workshop showcased the potential of the Mediterranean and ECRB region in terms of the

abundance of renewable energy sources. However, there is a **need to unlock this potential and work on concrete projects**, such as **interconnections between Morocco and Portugal** and bring forward the projects that have been suspended for a long time, such as the **interconnection between Tunisia and Italy**.

FIGURE 4: Results from Worldwide Solar PV Auctions 2019-2022



Source: ERSE

EXPLORING ENERGY STORAGE AND DEMAND MANAGEMENT

In July 2022, **representatives from eight regulators joined a mission to Lisbon**, hosted by ERSE to explore energy storage and demand management. On the first day, participants were acquainted with the different **energy communities, energy storage options, applications, and Electric Vehicles (EVs) role in matching the demand side management and**

energy storage needs. The second day consisted of a **study visit to E-Redes**, the main DSO in Portugal. The participants were familiarised with the state of the art of the Portuguese distribution sector and visited the control room where E-Redes can monitor their entire market.



PHOTO: Study Visit to ERSE on Energy Storage and Demand Management, 4th-5th July 2022, Lisbon (Portugal)

CONSIDERING THE COMMERCIAL AND REGULATORY ASPECTS OF RENEWABLE GASES

On 29th September 2022, MEDREG organised an online workshop on the commercial and regulatory aspects of renewable gases. The regulators of the Mediterranean region showed a high interest in the development of renewable gases with their large participation in the activity. This workshop discussed the **role of the gas infrastructure as a key enabler of the energy transition** and the development of

renewable gas-ready networks. Additionally, the online workshop gave an overview of renewable gas development in the Mediterranean, the role of the northern and southern shores, and a discussion on the design mechanism for a gas market that can foster the energy transition.

UNDERSTANDING HOW CLIMATE OBLIGATIONS SHAPE THE REGULATOR'S MISSION

After almost two years of online events, MEDREG resumed the physical format of the capacity-building activities with **training** hosted by ERE, the Albanian Energy Regulatory Authority. Twelve representatives from five regulators better understood how environmental and climate change

matters are intertwined with their daily regulatory work and **what is expected from regulators in terms of contribution to the ongoing efforts to reduce the carbon footprint**. The training involved many speakers from international entities as well as MEDREG members.



PHOTO: Training on Climate Obligations, 17th-19th May 2022, Tirana (Albania)



Tackling energy losses and improving consumer protection

It is important to tackle the losses in the grids, both technical and non-technical. Tackling these losses might be straightforward in some cases and will generate big revenues for the system operators. Additionally, given that consumers rarely have an entity to represent them,

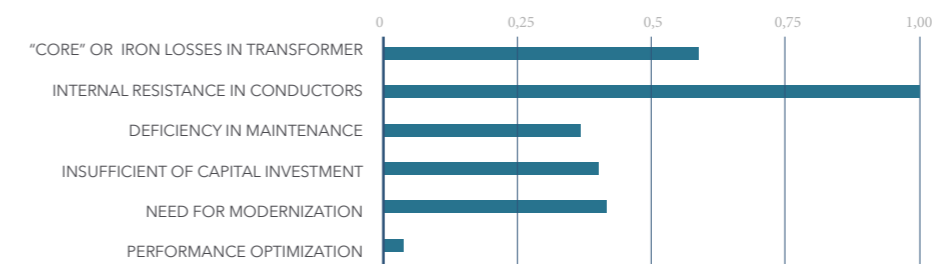
regulators should shelter them with regulations that preserve their rights to good services and facilitate their awareness of consumption while protecting their privacy and rights.

UPDATED ANALYSIS OF TECHNICAL AND NON-TECHNICAL LOSSES

In a report, which follows a previous study on the subject conducted in 2019, we analysed how countries define power losses, calculate them, and distinguish them. The report provides **state-of-the-art techniques to calculate and distinguish the loss types**. It also provides information about efforts made by some of the Mediterranean countries towards reducing the losses, featuring some of the best practices in the region.

The new edition of the report analyses the **effect of the COVID-19 pandemic on the losses**, especially at the distribution level. This effect differed from country to country, as some were heavily affected and found solutions to minimize the losses, while others were better prepared for emergencies.

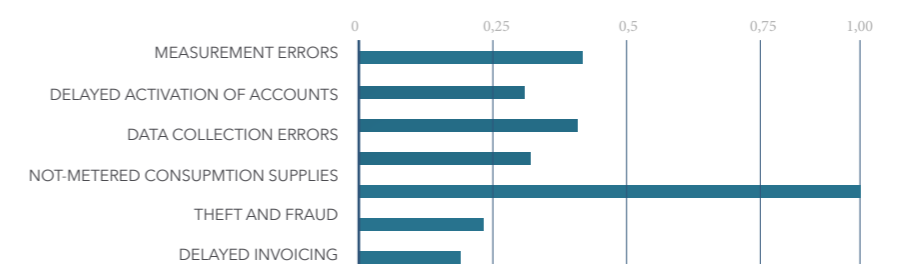
FIGURE 5: The severity of variables that cause technical losses



A part of the role of an energy regulator is to **protect consumers and ensure a constant, high-quality, and affordable supply** of energy regardless of the demand. To achieve such goals, **empowering**

consumers and giving them an active role within the energy market is essential. **Informed consumer behaviour** could assist in the overall reduction of losses and give back to the whole energy system.

FIGURE 6: The severity of variables that cause non-technical losses



STUDY ON THE REGULATORS' SUPPORT OF CONSUMER PROTECTION

As consumer protection constitutes a guiding principle of MEDREG's action, we regularly create opportunities to share good practices in this field. In this context, we held a **"Regulators' Support to Consumer Protection"** workshop involving MEDREG's members and external stakeholders. The discussions highlighted that the regulators' mandates ensure **consumers can access reliable, affordable energy services while protecting the public interest.** Regulators may also have a role in **setting the prices for energy products and services,**

either directly, through setting rates, or indirectly, through oversight of competitive markets.

Participants underlined that regulators may also **help consumers reduce their energy consumption and lower their energy bills by providing them with resources, information, and awareness** about energy efficiency, renewable energy options, and energy-saving tips. Regulators may also provide information about consumer rights and resources to resolve energy company disputes.



PHOTO: Workshop on Regulators' Support to Consumer Protection, 26th October 2022, Milan (Italy)

WORKSHOP ON DIGITALISATION AND CYBERSECURITY

Digitalisation also brings new opportunities for improving the efficiency and reliability of the energy grid. As it plays an increasingly important role in the energy market, we organised an online **digitalisation and cybersecurity workshop** on 20 December 2022.

The discussions revolved around using **advanced analytics and machine learning to optimise the operation of power plants and the grid** and the deployment of smart meters and other digital technologies to **improve the accuracy and reliability of energy consumption data.**

Cybersecurity and digitalisation are important considerations in the energy market, as they impact the reliability and security of the energy grid and the protection of sensitive data and information. Digitalisation offers many benefits for the energy market, but it also brings with it new cybersecurity risks. By implementing robust **cybersecurity measures,** energy regulators and companies can **protect their digital infrastructure** and ensure the reliability and security of the energy supply.

Minimisation of the price surge impact and strengthening of the security of supply

Current times are challenging as they coincide with the resurgence of the economy after the pandemic and the ongoing conflicts affecting the prices of all goods. Inflation has been soaring across all sectors, and the energy sector was not exempted. MEDREG has developed multiple

studies to find out how to tackle the inflation problem from the energy point of view and how to keep prices under control by diversifying the energy sources and strengthening the security of supply.

REACTING TO THE PRICE SURGE

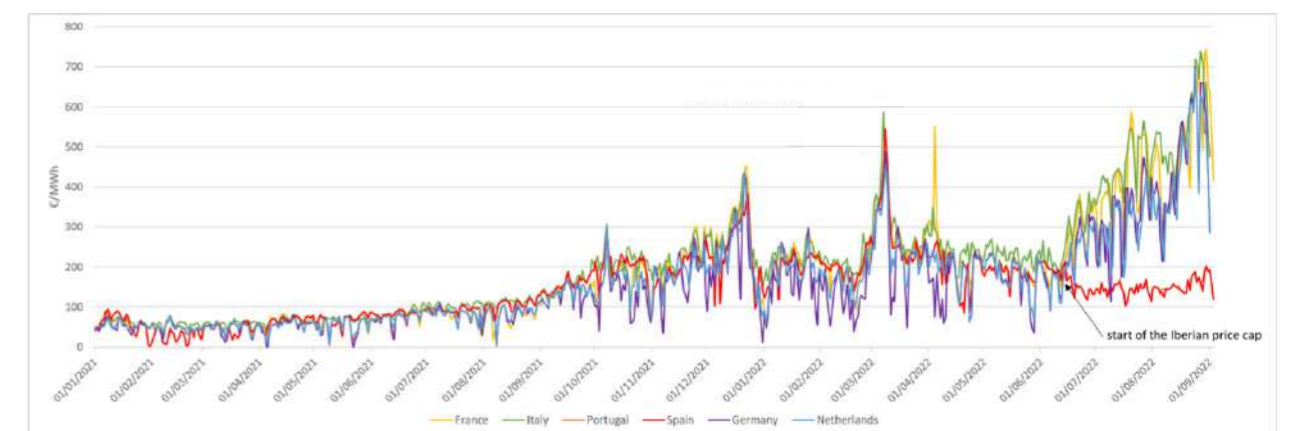
Due to the volatility of prices, MEDREG's General Assembly decided to tackle the price surge and security of supply in a task force dedicated to these topics. This task force revealed that the **exposure of countries to the current crisis is influenced by various factors** and the choices made by the countries.

In the EU, countries adopted various **emergency measures to protect consumers and ensure the security of supply.** The socioeconomic effects of the price level in developing Mediterranean countries

have been more severe due to the limited margin of manoeuvre for public intervention and the spread of the energy price surge to other commodities such as food.

The **flexibility of regulation** and the **ability of energy regulators to adapt the market rules** based on the lessons learnt from the current situation is key. Regulatory authorities are also essential to **advise governments** on the energy market's technical aspects and assess the potential policy decision implications.

FIGURE 7: Evolution of the marginal price of electricity markets in day-ahead markets in France, Italy, Portugal, Spain, Germany, and Netherlands - Jan 2021-Sep 2022



Source: REE (Red Eléctrica de España), September 2022

IDENTIFYING SECURITY OF SUPPLY MECHANISMS

Security of supply has always been of interest to different countries, especially during the latest conflicts. Given its importance and relevance, MEDREG held a **workshop** on the topic. Discussions focused on how **to limit the security of supply concerns and further enhance the security of supply** in each country. A light was shed on the

role of **renewable energy sources** in reinforcing the security of supply of the different countries and how it should be developed to make it happen. Additionally, **TSOs' role** in strengthening the security of supply was explained, and the importance of **securing the infrastructure and their availability**.

FIGURE 8: Focus on the Reliability Standard

AT A NATIONAL LEVEL

- Sizes the electricity system.
- Informs the decisions of the public authorities to set the trajectories of development of the mix.
- Serves as a reference for RTE to calculate the margins of the power system in its POs.
- Constitutes the indicator of the quality of security of supply.

AT THE EUROPEAN LEVEL

- Conditions the justification of the need for a capacity mechanism.
- Conditions the opening of delivery years of the capacity mechanism: if the national and European adequacy studies do not identify any difficulty in meeting the security of supply criterion for a given year, the mechanism is suspended for that year.

Source: REE (Red Eléctrica de España), September 2022

MONITORING THE MEDITERRANEAN ELECTRICITY MARKET

Every two years, we assess the Mediterranean electricity market based on our members' input in a **"Mediterranean Electricity Market Observatory" (MEMO) report**, which has become MEDREG's flagship report.

This edition provides **updated national data** and explores the **integration challenges of renewable energy sources (RES)**. It sheds light on the **gaps and obstacles** that slow their development in the Mediterranean region and opens opportunities for further cooperation and knowledge sharing among the MEDREG members. In addition, the

report analyses the **data and information exchange between the energy regulators and the electricity market actors**.

The study underlines that developing interconnections would have economic, environmental, and security impacts on the countries, sub-regions, and regions. Most of the impacts would be positive and **facilitate the development of a better energy system**.

The **energy transition** undergoing in our member countries brings challenges of three kinds: **deployment of renewable energy, development of electricity storage, and e-mobility**.

FIGURE 9: Frequency of Information Submission to the Regulator

	HOURLY	DAILY	MONTHLY	YEARLY
DATA ON electricity flow		Algeria/Jordan/Türkiye	Algeria/Jordan/Palestine/Lebanon/Cyprus/Montenegro/Croatia	Algeria/Egypt/Jordan/Palestine/Montenegro/Italy/Portugal/Croatia
DATA ON cross border interconnections	Greece	Algeria/Jordan/Türkiye	Algeria/Jordan/Lebanon/Montenegro	Algeria/Egypt/Jordan/Palestine/Montenegro/Italy/Portugal/Croatia
DATA ON quality of service at transmission level	None	Algeria	Algeria/Lebanon/Montenegro	Algeria/Egypt/Jordan/Palestine/Montenegro/Cyprus/Greece/Italy/Portugal/Croatia
DATA ON quality of service at distribution level	None	Algeria	Croatia/Lebanon/Montenegro/Türkiye	Algeria/Egypt/Jordan/Palestine/Montenegro/Greece/Italy/Portugal/Croatia
DATA ON quality of service at consumers level	None	Algeria/Greece	Lebanon/Türkiye	Algeria/Egypt/Jordan/Palestine/Cyprus/Italy/Croatia
DATA ON electricity wholesale price	Türkiye/Greece/Portugal	None	Jordan/Palestine/Cyprus/Croatia	Jordan/Palestine/Cyprus/Italy
DATA ON infrastructure development	None	Algeria/Jordan/Türkiye	None	Algeria/Egypt/Jordan/Palestine/Montenegro/Cyprus/Greece/Italy/Türkiye/Portugal/

REWARDING THEORETICAL AND PRACTICAL RESEARCH PUTTING FORWARD INNOVATIVE SOLUTIONS

In 2022, MEDREG launched its **first edition of the Research MEDORA Award in memory of Ms. Cristina Portugal de Andrade**, a cherished colleague of our Portuguese member whose regulatory work greatly contributed to ERSE and MEDREG.

The **MEDORA Award** sought contributions on "The Role of Nuclear and/or Gas in the Energy Transition" to **advance research on energy transition** that can **increase compatibility of Euro-Mediterranean gas and electricity markets**.

The aim of this initiative was to **support and recognise theoretical and practical research** on energy regulation in the Euro-Mediterranean region, as well as contribute to improve concepts and practices related to the working priorities of MEDREG.

The award was attributed to Mr. Ali Habib during the 34th MEDREG's General Assembly in Cairo.

6 High-level events

In 2022, we multiplied the occasions to raise awareness and advocate the role of regulatory cooperation in establishing an interoperable energy market in the Mediterranean region at high-level events and conferences. We also

organised workshops with top representatives of the energy sector to foster deeper cooperation between regulators on the one hand and energy stakeholders on the other hand.

TIGHTENING COOPERATION BETWEEN MEDITERRANEAN ENERGY REGULATORS ON ENERGY TRANSITION AND SECURITY OF SUPPLY

Kindly hosted by our Moroccan Member, the Electricity Regulatory Authority ANRE, MEDREG held its **2ND PRESIDENTS' WORKSHOP IN MARRAKECH** on 22nd June 2022. Ministers, top representatives from Moroccan institutions, and energy regulatory authorities from more than 20 countries of the Mediterranean region addressed

energy challenges in the context of international crises. The aim was to **rightly and timely define a response to the security of supply disruptions** and the steps to be taken in a collaborative and common way, to **minimise the impact of energy price surges** on consumers.



PHOTO: Mr. Abdellatif Bardach (ANRE, Morocco) moderating a panel in MEDREG's 2nd Presidents' workshop.



PHOTO: Mr. Petrit Ahmeti (ERE, Albania) providing a welcome address in MEDREG's 2nd Presidents' workshop.



PHOTO: Mr. Stefano Besseghini (ARERA, Italy) chairing MEDREG's 2nd Presidents' workshop.

To pursue this strategic dialogue, we held a **HIGH-LEVEL WORKSHOP ON "THE ROLE OF REGIONAL ORGANISATIONS IN PROMOTING A COHERENT REGULATION TO ACCELERATE THE ENERGY TRANSITION UNDER SECURITY OF SUPPLY CONCERNS"**, hosted by our Egyptian member GASREG in Cairo on 30th November 2022.

MEDREG exchanged with regional and European organisations active in energy field and the Egyptian

Minister of Petroleum and Mineral Resources about the role of regional entities, and particularly of regulatory authorities, in accelerating the energy transition in the Mediterranean. They envisaged **scenarios for an interoperated Mediterranean Energy Market** with integrated working approaches to enhance and **activate the roles of regional entities** through possible cooperation projects between the different parties.



PHOTO: Mr. Karem Mahmoud (GASREG, Egypt) providing the welcome address in MEDREG's high-level workshop, 30th November 2022, Cairo (Egypt)

ADDRESSING AND PROMOTING LOW-CARBON SOLUTIONS AT GASTECH 2022

In September 2022, we partnered with Gastech -the largest annual meeting for natural gas, LNG, hydrogen, and low-carbon solution professionals- which celebrated its 50th anniversary in Milan for a **four-day exhibition and conference**, welcoming more than 38.000 attendees.

Represented by its Presidency Board and Director, MEDREG actively participated in lively exchanges in various **panel discussions and roundtables** involving Ministers, CEOs, policymakers, business leaders, engineers, innovators, and disruptors.

We conveyed our perspectives on the current state of the energy industry and ambitions for how it

will evolve over the coming decade, focusing on the following:

- **Workable quick wins** and advisable long-term strategies that will bring **hydrogen infrastructure** to scale,
- The strategic importance of the **East Mediterranean and North African region** in relation to **increased gas and LNG exports**,
- The importance of **downstream infrastructure development for LNG** and other molecules such as hydrogen,
- **The role of governments and energy companies in ensuring Europe's energy security.**





PHOTO: Mr. Elton Radheshi (ERE, Albania) representing MEDREG President with fellow panellists at Gastech 2022, 7th September 2022, Milan (Italy)

ADVOCATING THE IMPORTANCE OF A CONVERGENT REGULATION FOR INTEROPERATED ENERGY MARKETS

Taking part in the **FLAME GAS CONFERENCE**, we debated on the theme of “Securing Europe’s Energy Supply and Hitting Climate Change Targets” and the pathways to transitioning towards a sustainable energy future. Exchanging on **East Med gas and LNG developments**, we highlighted the importance and role of **common and coherent regulation in the Mediterranean region**, which will forge **commercial ties, strengthen supply security** and contribute to resolve political disputes.

In the **MENA EUROPE FUTURE ENERGY DIALOGUE (MEFED)**, we exchanged experiences and **ideas for a reliable, affordable, and sustainable energy supply** with the highest-level representatives of governments, industry, academia, and civil society.

Hosted by the Jordanian Ministry of Energy and Mineral Resources and the German Federal Government, the conference aimed to deepen **energy cooperation between the MENA region and Europe**.



PHOTO: MEDREG Director Hasan Ozkoc and fellow panellists at the MEFED event, 8th-9th June 2022, Dead Sea (Jordan)

In addition, MEDREG members from Albania, Bosnia and Herzegovina, Lebanon, Montenegro, and Morocco participated in a **HIGH-LEVEL MEETING ON GAS CRISIS IN THE EUROPEAN UNION AND THE ROLE OF REGULATORS**, co-hosted by our

Croatian member HERA in Dubrovnik. Among the participants were HE Dr. Walid FAYAD, Minister of Energy and Water of Lebanon, and Mr. Saltuk Duzyol, CEO of the Trans Anatolian Natural Gas Pipeline Project (TANAP).

The discussion, which involved the Observatoire Méditerranéen de L’Energie (OME) and the Agency for the Cooperation of Energy Regulators (ACER), revolved around the **existing and potential**

capacities and resources in the Mediterranean region and Southern Gas Corridor to replace the Russian gas, if the necessary investments are made on time.



PHOTO: High-Level meeting on Gas Crisis in the European Union and the Role of Regulators, 3rd-5th October 2022, Dubrovnik (Croatia)

In the **PARLIAMENTARY ASSEMBLY OF THE MEDITERRANEAN’S (PAM) EURO-MEDITERRANEAN AND GULF ECONOMIC FORUM**, we also underlined the need for **closer cooperation and collaboration**

among the policymakers, regulators, industry, system operators, and consumer groups to strengthen the security of supply against energy shocks and crises.



PHOTO: MEDREG Director Hasan Ozkoc participating in the PAM Euro-Mediterranean and Gulf Economic Forum, 7th-8th December 2022, Marrakesh (Morocco)

7 Cooperation with external partners

To accelerate the energy transition and respond to the challenges implied in that process, we seek to maximise the opportunities for knowledge sharing and exchange of good regulatory practices in the Mediterranean region and beyond.

In that spirit, we held an important number of joint events in 2022 with close partners like the **Mediterranean Transmission System**

Operators (Med-TSO) on one hand and with **fellow regional regulatory associations** such as the Energy Community on the other hand, involving a **large spectrum of energy stakeholders** like European Institutions, International Financial Institutions, energy agencies and foundations and the private sector. 2022 also reinforced collaboration with the **European Union** by renewing its financial support to our project.

LAYING THE FOUNDATIONS FOR ELECTRICITY EXCHANGES AND TRADING IN THE MEDITERRANEAN

In a joint webinar, **Med-TSO and MEDREG investigated what it takes to achieve a common technical and regulatory framework in the MENA region** in the light of experiences and best practices from neighbouring regions. They discussed and identified the **missing links and requirements for electricity trading** in and with the MENA region and proposed necessary **actions to activate the right process**.

This joint event illustrates the long-lasting, fruitful cooperation between Med-TSO and MEDREG. The two Associations are working together to set up a harmonised technical framework in the Mediterranean to enable the efficient and secure use of the interconnected grids.

Our collaboration with Med-TSO extends to other close partners involved in the **Union for the Mediterranean (UfM)'s energy platforms**, including the European Commission (EC), the Observatoire Méditerranéen de l'Energie (OME), the Mediterranean Association of National Agencies for Energy Management MEDENER, the Mitigation Enabling Energy Transition in the Mediterranean region (meetMED), and the Regional Center for Renewable Energy and Energy Efficiency (RCREEE). Indeed, MEDREG actively contributes to the work of the platforms. In 2022, we provided valuable **input to the platforms roadmap** and supported their **technical deliverables** on regulatory issues.



PHOTO: MEDREG-Med-TSO joint webinar "Enabling electricity exchanges and trading in the Mediterranean", 9th February 2022, online.

MAXIMISING THE EXCHANGE OF BEST PRACTICES BEYOND THE MEDITERRANEAN BASIN

To widen our support to members with knowledge and experience-sharing tools, we expanded and multiplied the learning opportunities from regulators beyond the MEDREG's circle with **fellow regional regulatory associations from Europe, Southeast Europe, the Black Sea region, and beyond**.

We partnered with the Council of European Energy Regulators (CEER) and the Energy Community Regulatory Board (ECRB) to share perspectives and

good practices on **decarbonisation, digitalisation and consumer engagement**. Indeed, ensuring security of supply and energy independence by accelerating the energy transition and mitigating energy poverty constitute regulatory priorities in these times of turmoil.

Within our cooperation framework, the three organisations also kick-started an initiative on **sustainable empowerment, security of energy**



PHOTO: CEER-ECRB-MEDREG Trilateral workshop on "Regulatory aspects in the EU Clean Package, market design, consumer engagement, digitalisation and decarbonisation", 15th June 2022, Vienna (Austria)

supply, and interoperability of the systems at a trilateral workshop held in December 2022 in Vienna.

Together, we addressed the efforts needed to deliver the energy transition, assessed the relevance of joining regulatory forces towards this objective, and identified availabilities and needs. Discussions among the participants hinted at the complexity of the issues at hand, working **towards concrete**

measures for reaching the 2030 deadline for sustainable development while at the same time aiming at **delivering the 2050 target of carbon neutrality**.

We also looked at **how market design and regulation can offer flexibility and support the integration of renewable energy sources** with ECRB, in a joint workshop held in October 2022 in Lisbon.



PHOTO: Joint ECRB-MEDREG Workshop on "Support mechanisms for RES integration & flexibility mechanisms and innovative technologies", 18th October 2022, Lisbon (Portugal)

The regulatory challenges in coping with the energy crisis and concrete roads towards the energy transition were also explored on various occasions in 2022 with the Energy Regulators Regional Association (ERRA), which is a privileged partner for MEDREG.



PHOTO: 11th High-Level Meeting of Regional Associations of Emerging Markets, 5th December 2022, Istanbul (Türkiye)



PHOTO: MEDREG Director Hasan Ozkoc's participating in the Renewable Energy Investment Conference, 26th-28th October 2022, Tbilisi (Georgia)

A RENEWED PARTNERSHIP AND FINANCIAL SUPPORT FROM THE EUROPEAN UNION (EU)

When evoking MEDREG's key partners, one appears of particular importance: the EU.

Indeed, since the beginning of MEDREG's existence in 2007, the EU has provided financial and political support to our association. In 2022, it renewed its financial support for three years, from 2023 to 2025.

Regarding the objectives pursued, MEDREG's mission chimes with the new EU agenda for the Mediterranean adopted in 2021 to relaunch and

strengthen the strategic partnership between the EU and its Southern Neighbourhood partners. Indeed, the EU calls for a green transition to be deployed by supporting countries in meeting their climate commitments, driving energy transition, ensuring energy security, and encouraging resource efficiency, among other things.

NOURISHING AND SHAPING OUR WORK IN THE LIGHT OF ENERGY STAKEHOLDERS' INPUT

In addition, through MEDREG's participation in partners' events and their involvement in ours, our collaboration extended to international institutions such as the European Commission and the Parliamentary Assembly of the Mediterranean (PAM), International Financial Institutions such as the European Bank for Reconstruction and Development (EBRD) and the World Bank, energy agencies and foundations including the International Renewable Energy Agency (IRENA) and RES4Africa Foundation, the private sector with companies like Enel Green Power and other public bodies such as

the European Union Agency for the Cooperation of Energy Regulators (ACER).

These regular interactions with energy players from broader horizons enabled MEDREG to keep acquainted with the latest trends, policies, and technologies that emerged in the energy sector. Being up-to-date with the changing energy landscape, we were able to adapt our regulatory priorities to match more closely the reality of the market and respond adequately to its evolving challenges.

FIGURE 10: MEDREG's Partners



8 Dissemination and Awareness Raising

At MEDREG, we believe that communicating and advocating our messages to a large audience greatly increases the impact of our regulatory studies and recommendations. With this in mind, various communication products were developed to promote our best regulatory practices and provide technical yet

engaging content to our members. The vision and perspectives of our Presidency Board were also shared through video interviews on critical energy topics, along with other digital and social media activities informing about our work more broadly.

DIGITAL CARDS

- Energy Storage and Demand Management: The Example of Portugal, *January 2023*
👉 210 DOWNLOADS
- Delivering the Energy Transition with Infrastructure Investments, Network Remuneration, and Tariffs, *February 2023*
👉 120 DOWNLOADS



INFOGRAPHICS

- Digitalisation of the Energy Sector from the Consumers' Perspective, *June 2022*
👉 666 DOWNLOADS
- Using Energy Regulation to Serve Climate Obligations, *January 2023*
👉 200 DOWNLOADS



VIDEOS

- A series of 4 animated videos were produced to inform our audience about the role of MEDREG's Working Groups (WGs), their recent achievements, and ongoing and future priorities.
 - * Institutional WG
 - * Electricity WG
 - * Gas WG
 - * RES and Energy Efficiency WG
 - * Consumer WG video, which was produced in 2021
- 👉 2,167 VIEWS



- Summary videos of high-level events and interviews to promote and highlight MEDREG's cooperation and advocacy work in the Mediterranean energy sector.
 - * [Video summary of MEDREG's Marrakech events, 22-23 June 2022](#)
👉 1,004 VIEWS
 - * [Video interviews of MEDREG Presidency Board, Marrakech events, 23 June 2022](#)
👉 1,785 VIEWS
 - * [Video summary of MEDREG's Cairo events, 30 November and 1 December 2022](#)
👉 51 VIEWS



HIGH TRAFFIC ON THE WEBSITE:

👉 + 10,000 VISITORS 👉 + 70,000 PAGE VIEWS

MEDIA COVERAGE

- Over 250 press articles covered our high-level events in Marrakesh, Milan, and Cairo.

SOCIAL MEDIA FOLLOWERS AND INTERACTIONS INCREASED BY:

33% on LinkedIn 13% Twitter 25% on Facebook



A COMMUNICATION STRATEGY DEFINED COLLECTIVELY

The Communication Officers (COs) network gathered virtually on 3rd October 2022 to assess the recent and planned communication initiatives.

- FEEDBACK FROM THE NETWORK was collected to ensure the RELEVANCE OF THE VISIBILITY PROJECTS, feeding the 2023-2025 STRATEGY with activities that respond to the Members' needs and maximise the exposure and reach of our work.

SHEDDING LIGHT ON OUR WORK AT AN INTERNATIONAL SCALE

MEDREG's top representatives multiplied the opportunities to advocate the organisation's messages and raise awareness of our recent work and achievements in high-level international fora, such as Gastech, Flame, and the Parliamentary Mediterranean Assembly.

In addition, our contribution to the ICER biannual chronicle with articles titled "Egypt Embarks on Gas Market Reform to Become a Regional Energy Hub" and "Promoting Energy Efficiency in Portugal", published in July 2022 and March 2023, shed light on our Egyptian and Portuguese regulatory accomplishments to international regulatory peers.

Images: Press articles covering MEDREG's events in international media



Énergie : les régulateurs méditerranéens plaident pour un renforcement des interconnexions dans la région

Mohamed Sellam, | 24 juin 2022 à 13:29



L'Autorité nationale de régulation de l'électricité (ANRE), en partenariat avec l'Association des régulateurs méditerranéens de l'énergie (MEDREG), a accueilli, du 21 au 23 juin 2022 à Marrakech, des délégations venant de plusieurs pays conduites par les présidents des régulateurs de l'énergie de la région méditerranéenne. Objectif : échanger sur les moyens de renforcer les synergies au niveau régional à la lumière de la conjoncture énergétique mondiale actuelle.

Durant ces trois jours, des réunions de gouvernance de haut niveau ont été tenues sanctionnées par l'organisation d'une conférence sur une régulation cohérente pour accélérer la transition énergétique sous les contraintes de la sécurité d'approvisionnement. «Notre ambition est de faire de cette rencontre une plateforme d'échanges entre les différents acteurs de la région pour développer davantage de synergies pour accélérer la transition énergétique et l'intégration des énergies renouvelables dans nos réseaux», a déclaré, à cette occasion, le président du MEDREG, Peitit Ahmeti. L'enjeu étant de répondre aux inquiétudes sur la sécurité d'approvisionnement en énergie, à la lumière des conflits actuels en Europe, en diversifiant les sources d'énergie et en développant les interconnexions entre les pays de la

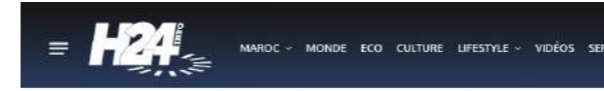


Mediterraneo, da cooperazione energetica risposta a crisi internazionale

Conferenza internazionale promossa da WEC Italia e OME



Roma, 24 giu. (askanews) – A seguito dell'invasione della Russia in Ucraina, i tem



Le Maroc élu à tête de l'Association des régulateurs méditerranéens de l'énergie

3 décembre 2022 13:15 — 1048 likes avec MAP



Abdelaziz Bardach, président de l'Autorité Nationale de Régulation de l'Électricité (ANRE) DR

مؤتمر مراكش ينهي أشغاله باجماع المشاركين على توحيد الجهود وخلق فضاء طاقي متكامل في حوض المتوسط

24 يناير 2022



Home > انتشار

افتتاح الجمعية العامة الـ 34 لمنظمة منظمى الطاقة بالبحر المتوسط MEDREG

يسرا السويدي في إستثمار



























خلال الكلمة الافتتاحية التي ألقاها الوزير أمام الجمعية العامة الـ 34 لمنظمة منظمى الطاقة بالبحر المتوسط MEDREG والتي تضم كليات وأجهزة تنظيمية مستقلة لتنظيم شؤون الطاقة بمنطقة البحر المتوسط ، أكد المهندس طارق الملا وزير البترول والثروة المعدنية أن صناعة البترول والغاز شهدت تحولات وتحديات كبيرة خلال السنوات الماضية دفعتها لمراقبة التغيرات والتطور مما أظهر مدى أهمية إنشاء كليات تنظيمية لتؤدي دور أساسي في ضمان فعالية تنظيم أسواق الطاقة وتقليل تأثير هذه التحديات والتقلبات سواء في تسعير الطاقة أو تأمين الإمدادات لحماية المستهلكين وضمان استمرار واستدامة الأنشطة الاقتصادية.

وأشار الملا إلى أن عقد هذه الجمعية في مصر بعد أيام من انتهاء قمة المناخ COP27 بشرم الشيخ يؤكد الدور الذي تلعبه مصر كتركيب استراتيجي ونقطة محورية لأجندة الطاقة العالمية وخاصة في منطقة البحر المتوسط ، وأن مصر دائماً مستعدة للتعاون مع دول الجوار لتحقيق الرخاء للشعوب وخاصة في منطقة البحر المتوسط والتي تعضي نحو مستقبل مشرق كمصدر موثوق لمصادر الطاقة وخاصة الغاز الطبيعي والذي يعد المحرك الأساسي لعمليات التحول الطاقى ، وأن المنطقة بالفعل اثبتت مؤخرأ أنها لاعب أساسي في عمليات تأمين إمدادات الطاقة لأوروبا والعالم.



9 2022 Events

-  **UfM ENERGY PLATFORMS ANNUAL MEETING**, 1st and 2nd February 2022, online
-  **MED-TSO AND MEDREG JOINT WEBINAR** titled “Enabling electricity exchanges and trading in the Mediterranean”, 9th February 2022, online
-  **MEETING WITH CEER, E-CONTROL, AND THE ENERGY COMMUNITY**, 15th February 2022, Vienna (Austria)
-  **GASREG STUDY VISIT TO CRE** on third-party access and gas regulatory aspects, 21st -23rd February 2022, Paris (France)
-  **6TH PRESIDENCY MEETING**, 9th March 2022, Tirana (Albania)
-  **31ST RENEWABLES WORKING GROUP MEETING**, 10th March 2022, online
-  **20TH CONSUMERS WORKING GROUP MEETING**, 15th March 2022, online
-  **32ND ELECTRICITY WORKING GROUP MEETING**, 22nd March 2022, Istanbul (Türkiye)
-  **32ND INSTITUTIONAL WORKING GROUP MEETING**, 23rd March 2022, Istanbul (Türkiye)
-  **BILATERAL MEETING BETWEEN THE PRESIDENTS OF ARH AND ARERA**, Mr. Rachid Nadil and Mr. Stefano Besseghini, 24th March 2022, Milan (Italy)
-  **31ST GAS WORKING GROUP MEETING**, 24th March 2022, Milan (Italy)
-  **MEDREG MEETING WITH THE TURKISH ENERGY EXCHANGE ISTANBUL (EXIST)**, 21st April 2022, Istanbul (Türkiye)
-  **10TH HIGH-LEVEL MEETING OF REGIONAL ASSOCIATIONS OF EMERGING MARKETS**, 22nd April 2022, Istanbul (Türkiye)
-  **TRAINING ON CLIMATE OBLIGATIONS, ENVIRONMENTAL STANDARDS, AND REGULATION**, 17th to 19th May 2022, Tirana (Albania)
-  **PARTICIPATION IN THE FLAME GAS CONFERENCE** on “Securing Europe’s Energy Supply and Hitting Climate Change Targets -Pathways to Transitioning Towards a Sustainable Energy Future”, 3rd -5th May 2022, Amsterdam (Holland)
-  **43RD STEERING COMMITTEE MEETING**, 25th May 2022, Milan (Italy)
-  **MEETING WITH THE TURKISH ENERGY MARKET REGULATORY AUTHORITY EMRA AND THE EU DELEGATION TO TÜRKIYE**, 6th June 2022, Ankara (Türkiye)
-  **MEETING WITH THE JORDANIAN MEMBER ENERGY AND MINERALS REGULATORY COMMISSION (EMRC)**, 8th June 2022, Amman (Jordan)
-  **PARTICIPATION IN THE MENA EUROPE FUTURE ENERGY DIALOGUE (MEFED)**, 8th -9th June 2022, Dead Sea (Jordan)
-  **21ST CONSUMERS WORKING GROUP MEETING**, 14th June 2022, Vienna (Austria)
-  **4TH TRILATERAL CEER-ECRB-MEDREG WORKSHOP** on “Regulatory aspects in the EU Clean Package Market design – consumer engagement – digitalisation & decarbonisation”, 15th June 2022, Vienna (Austria)
-  **2ND PRESIDENTS’ WORKSHOP** titled “A coherent Regulation to Accelerate the Energy Transition under Security of Supply Concerns”, 23rd June 2022, Marrakesh (Morocco)
-  **33RD GENERAL ASSEMBLY MEETING**, 22nd June 2022, Marrakesh (Morocco)
-  **STUDY VISITS TO ERSE** on “Energy Storage and Demand Management” of CREG (Algeria), EgyptERA and GASREG (Egypt), MEMR and EMRC (Jordan), LCEC (Lebanon), ANRE (Morocco) and EMRA (Türkiye)”, 4th -5th July 2022, Lisbon (Portugal)

-  **TRAINING FOR EGYPTERA** on “Planning the Egyptian Grid of the Future”, 19th -20th July 2022, Cairo (Egypt)
-  **MEETING WITH THE LEBANESE ENERGY MINISTER**, 11th and 12th August 2022, Beirut (Lebanon)
-  **PARTICIPATION IN GASTECH EVENT**, 5th-8th September 2022, Milan (Italy)
-  **WORKSHOP ON “RENEWABLE GASES: COMMERCIAL AND REGULATORY ASPECTS, AND THE EFFECT OF COP26 DECISIONS,”** 29th September 2022, Online
-  **8TH PRESIDENCY MEETING**, 3rd October 2022, Dubrovnik (Croatia)
-  **HIGH-LEVEL MEETING ON GAS CRISIS IN THE EUROPEAN UNION AND THE ROLE OF REGULATORS**, 3rd -5th October 2022, Dubrovnik (Croatia)
-  **15TH COMMUNICATION OFFICERS (COS) NETWORK MEETING**, 3rd October 2022, online
-  **INS WG WORKSHOP ON THE REGULATORY OUTLOOK**, 12th October 2022, Milan (Italy)
-  **33RD INSTITUTIONAL WORKING GROUP (INS WG) MEETING**, 12th October 2022, Milan (Italy)
-  **WORKSHOP ON THE CROSS-BORDER COORDINATION FOR INTERCONNECTION CAPACITY DEVELOPMENT**, 13th October 2022, Milan (Italy)
-  **32ND GAS WORKING GROUP MEETING**, 13th October 2022, Milan (Italy)
-  **TRAINING ON INFRASTRUCTURE INVESTMENTS, NETWORK REMUNERATION, AND TARIFFS**, 18th -20th October, Milan (Italy)
-  **JOINT ECRB-MEDREG WORKSHOP** on “Support mechanisms for RES integration & flexibility mechanisms and innovative technologies”, 18th October 2022, Lisbon (Portugal)
-  **32ND RES WORKING GROUP MEETING**, 18th October 2022, Lisbon (Portugal)
-  **33RD ELECTRICITY WORKING GROUP MEETING**, 25th October 2022, Milan (Italy)
-  **PARTICIPATION IN THE RENEWABLE ENERGY INVESTMENT CONFERENCE**, 26th -28th October 2022, Tbilisi (Georgia)
-  **WORKSHOP ON “REGULATORS’ SUPPORT TO CONSUMER PROTECTION”**, 26th October 2022, Milan (Italy)
-  **22ND CONSUMER WORKING GROUP MEETING**, 26th October 2022, Milan (Italy)
-  **44TH STEERING COMMITTEE MEETING**, 10th November 2022, Online
-  **STUDY VISIT OF ARH (ALGERIA) TO EMRA** on the natural gas transportation network, 14th -16th November 2022, Ankara (Türkiye)
-  **WORKSHOP ON “THE ROLE OF REGIONAL ORGANISATIONS IN PROMOTING A COHERENT REGULATION TO ACCELERATE THE ENERGY TRANSITION UNDER THE SECURITY OF SUPPLY CONCERNS”**, 30th November 2022, Cairo (Egypt)
-  **34TH GENERAL ASSEMBLY**, 1st December 2022, Cairo (Egypt)
-  **11TH HIGH-LEVEL MEETING OF REGIONAL ASSOCIATIONS OF EMERGING MARKETS**, 5th -6th December 2022, Istanbul (Türkiye)
-  **PARTICIPATION IN THE PAM EURO-MEDITERRANEAN AND GULF ECONOMIC FORUM**, 7th -8th December 2022, Marrakesh (Morocco)
-  **TRAINING ON THE “ROLE AND SCOPE OF REGULATION”**, 12th -14th December 2022, Milan (Italy)
-  **STUDY VISITS OF GASREG (EGYPT)** to E-control on gas market monitoring, 14th December 2022, Vienna (Austria)
-  **TRILATERAL CEER, ECRB, AND MEDREG WORKSHOP** on “Sustainable Empowerment, Security of Energy Supply and Interoperability of the Systems”, 16th December 2022, Vienna (Austria)
-  **WORKSHOPS ON “DIGITALISATION AND CYBERSECURITY” AND “SECURITY OF SUPPLY AND ADEQUACY MECHANISMS,”** 20th December 2022, Online

10 Reports and publications

TECHNICAL REPORTS



Rules against Conflict of Interest, March 2023

[DOWNLOAD](#)



Mediterranean Energy Regulatory Outlook – 2022, March 2023

[DOWNLOAD](#)



Mediterranean Electricity Markets Observatory – MEMO+, March 2023

[DOWNLOAD](#)



Price Surge and Security of Supply, March 2023

[DOWNLOAD](#)



Cross Border Coordination for Interconnection Capacity Development, March 2023

[DOWNLOAD](#)



Future Role of Renewable Gases, March 2023

[DOWNLOAD](#)



Update On Technical and Non-Technical Losses, March 2023

[DOWNLOAD](#)

WORKSHOP REPORTS

Enabling electricity exchanges and trading in the Mediterranean from MEDREG-Med-TSO Joint Workshop, March 2022

[DOWNLOAD](#)

2nd MEDREG Presidents Workshop Report, November 2022

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Regulatory Outlook Workshop, December 2022

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Snapshots of Regulatory Outlook Workshop, December 2022

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Security of Supply and Adequacy Mechanisms, December 2022

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Cross Border Coordination for Interconnection Capacity Development, December 2022

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Support Mechanisms for RES Integration from MEDREG- ECRB Joint Workshop, December 2022

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Digitalisation and Cybersecurity, December 2022

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Regulators' Support to Consumer Protection, December 2022

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TRAINING AND STUDY VISITS REPORTS

Climate Obligations, Environmental Standards, and Regulations, December 2022

[DOWNLOAD](#)

Infrastructure Investments, Network Remuneration, and Tariffs, January 2023

[DOWNLOAD](#)

Report Exploring Energy Storage and Demand Management, January 2023

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All our publications are downloadable and available on our website:
www.medreg-regulators.org/Publications.aspx



11 The Way Forward

In the continuity of the activities carried out in 2022, MEDREG developed an ambitious action plan for 2023, with a series of reports, workshops, personalised study visits, and pieces of training aimed at reinforcing the technical capacity of our members in a large spectrum of regulatory aspects.

Tackling **security of supply** will continue to be a priority, as well as promoting the **energy transition** through energy efficiency and labelling studies. We will also share sustainable energy policies addressing **smart meter and smart grid**, and other workshops stimulating **RES integration, distributed renewable energy and battery storage**.

Consumer protection will remain high on MEDREG's agenda with the elaboration of guidelines of good practices on consumer protection rules and communication strategies.

In 2023, we will continue to **raise awareness of the crucial role of energy regulators** in opening the market to competition, contributing to the energy transition, and arbitrating the transmission and distribution network operators, among other **high-level events**. Finally, MEDREG will provide assistance and technical support through the sharing of best practices and expertise exchange with its member countries, particularly those establishing their regulatory authorities.



MEDREG

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