5-Year Report
2008 | 2012

ASSOCIATION OF MEDITERRANEAN REGULATORS FOR ELECTRICITY AND GAS

Supported by the European Union
ACKNOWLEDGEMENTS

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More information on MEDREG is available on the Internet
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Association of Mediterranean Regulators for electricity and gas

MEDREG is the Association gathering Energy Regulators for Electricity and Gas of 20 Mediterranean countries: Albania, Algeria, the Palestinian Authority, Bosnia-Herzegovina, Cyprus, Croatia, Egypt, France, Jordan, Greece, Israel, Italy, Malta, Morocco, Montenegro, Portugal, Spain, Tunisia and Turkey. MEDREG was established as a permanent “working group” in May 2006 and became a non-profit Association in November 2007. MEDREG permanent Secretariat is based in Milan, Italy.

The main objective of the Association is the promotion of clear, stable and harmonised legal and regulatory frameworks in the Mediterranean region with the aim to facilitate investments in energy infrastructures and support market integration. To this aim MEDREG promotes a permanent exchange of know-how, data collection and diffusion of expertise through comprehensive studies, recommendation reports and specialised training sessions.

MEDREG long term goal is to provide valuable support to energy governance at regional level towards the establishment of a Mediterranean Energy Community. MEDREG activities benefit from the active commitment of all Member Regulators, and have been supported since 2007 by the European Union, and by the Council of European Energy Regulators (CEER). MEDREG has been recently acknowledged by the Committee on Industry, Research and Energy (ITRE) of the European Parliament as the reference Institution for energy regulation in the Mediterranean region.

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Presidency:
President: Nadjib Otmane (CREG)
Vice Presidents: Luigi Carbone (AEEG), Alberto Lafuente Félez (CNE)

Membership of Medreg

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulator Name</th>
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<tbody>
<tr>
<td>Albania</td>
<td>ERE - Albanian Electricity Regulatory Authority</td>
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<tr>
<td>Algeria</td>
<td>CREG - Electricity and Gas Regulation Commission</td>
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<tr>
<td>Algeria</td>
<td>ARH - Hydrocarbon Regulatory Authority</td>
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<tr>
<td>Bosnia Herzegovina</td>
<td>SERC - State Electricity Regulatory Commission</td>
</tr>
<tr>
<td>Croatia</td>
<td>HERA - Croatian Energy Regulatory Agency</td>
</tr>
<tr>
<td>Cyprus</td>
<td>CERA - Cyprus Energy Regulatory Authority</td>
</tr>
<tr>
<td>Egypt</td>
<td>EGYPTERA - Egyptian Electric Utility and Consumer Protection Regulatory Agency</td>
</tr>
<tr>
<td>France</td>
<td>CRE - Regulatory Commission of Energy</td>
</tr>
<tr>
<td>Greece</td>
<td>RAE - Regulatory Authority for Energy</td>
</tr>
<tr>
<td>Israel</td>
<td>PUA - Public Utilities Authority - Electricity</td>
</tr>
<tr>
<td>Israel</td>
<td>NSA - Natural Gas Authority</td>
</tr>
<tr>
<td>Italy</td>
<td>AEEG - Regulatory Authority for Electricity And Gas</td>
</tr>
<tr>
<td>Jordan</td>
<td>ERC - Electricity Regulatory Commission</td>
</tr>
<tr>
<td>Jordan</td>
<td>MEMR - Ministry of Energy and Mineral Resources</td>
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<tr>
<td>Malta</td>
<td>MRA - Malta Resources Authority</td>
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<td>Spain</td>
<td>CNE - National Energy Commission</td>
</tr>
<tr>
<td>Tunisia</td>
<td>MIT - Ministry for Industry and Technology</td>
</tr>
<tr>
<td>Turkey</td>
<td>EMRA - Energy Market Regulatory Authority</td>
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Since its creation MEDREG has conceived and implemented an ambitious work plan, aimed to build a common vision among its Members based on concrete and in-depth expertise exchange.

Today, the achievements of this period of intense activity are presented to all stakeholders in this unique 5-Year Report. It gathers the executive summaries of all deliverables and technical outputs produced by the Ad Hoc Group on Institutional issues (INS AG), the Ad Hoc Group on Electricity (ELE AG), the Ad Hoc Group on Gas (GAS AG), the Ad Hoc Group on Environment, Renewable Energy Sources and Energy Efficiency (RES AG), and the Task Force on Consumer issues (CUS TF).

The 5-Year Report has been coordinated by MEDREG Permanent Secretariat in close cooperation with the Presidency and the Chairs of the Ad Hoc Groups. The executive summaries are presented in the form of thematic fiches and briefly develop the main contents of each report, highlighting their conclusions and recommendations. This allows MEDREG to better explain and promote the very concrete results of our activities over the last 5 years.

We sincerely believe that this publication, focusing on an extensive range of energy regulatory aspects, would be of real added value to all energy stakeholders and to the research community to further raise the attention and provide concrete proposals on the key problematics at the heart of regulatory harmonization and regional market integration in the Mediterranean basin.
**EXECUTIVE SUMMARY**

1. **Recommendations on the minimum requirements considered as necessary to ensure independent Regulatory Authorities in the Mediterranean area** (November 2008)

MEDREG completed a survey to reference the state of the art of regulation in the different Mediterranean countries, regarding the structure, organization and competences of National Regulatory Authorities. On the basis of a benchmarking assessment report, this document aims to identify the minimum requirements considered as necessary to ensure independent Regulatory Authorities, which could be shared and implemented throughout the Mediterranean region.

**CONCLUSIONS**

Analyzing the answers to the 187 items of the Regulatory Benchmarking Questionnaire, some essential principles are already shared among a significant number of Mediterranean regulators. However, diverging issues remain as regards organizational and functional criteria. The main points are related to differences in the level of autonomy allowed to regulators, especially regarding the sharing of the missions and competencies with governmental bodies. As promoting closer cooperation between Mediterranean regulators starts with building a common regulatory approach, this benchmarking study represents a first step toward the identification of shared values and best-practice elements to foster strong and independent regulatory authorities.

**RECOMMENDATIONS**

First, a legal separation between NRAs and governments’ administrations is essential. NRAs should be provided with autonomous discretion in every aspect of the regulatory decision-making process, with particular reference to their budget and human resources selection. Second, the minimum requirements for effective regulation should include, inter alia, the ability for each NRA to: determine tariffs setting principles for the elaboration of access tariffs to the networks; issue and manage licenses; elaborate and enforce networks rules and standards; monitor the market; ensure consumer protection; review effective utility unbundling; investigate the activity on the operators and sanction failure to comply with standards and codes. Last, NRAs should seek and receive inputs from all relevant stakeholders and build a sound communication and networking strategy based on a transparent regulatory framework.

**EXECUTIVE SUMMARY**

2. **Assessment report on smart grid in Mediterranean countries** (December 2011)

This report has the aim to map out the existing status and future plans for Smart Grid (SG) in MEDREG countries, to gain insights into the drivers, barriers, and timing for adoption of new technologies, to focus on the financing methodologies, required plans, and necessary regulations that pave the way to SG in MEDREG countries, and finally to conclude, with a general overview, on the future of MEDREG SG. The structure of the report was divided into two parts: introduction to Smart Grid, and the Smart Grid Survey that was categorized into four sections.

**CONCLUSIONS**

The outcome of this report can be summarized as follows:

- There is a huge gap between member countries in many SG-related aspects.
- Some MEDREG countries, such as Italy, have advanced networks and applications in terms of SG concepts and implementation; others are now taking action to implement SG.
- Governments/stakeholders should give more attention to developing policies and regulatory environments that support investments in SG.
- Finally, SG deployment is expected to be similar across MEDREG countries, but the routes and time it takes could be rather different. Therefore, a clear roadmap is required.
2. ELECTRICITY

2.2. Summary assessment: survey on the legal framework for management of electricity interconnection in the Mediterranean region

(December 2011)

The aim of this report is twofold. First, it draws up a comprehensive picture of the management of interconnections in electricity in the Mediterranean region. Second, it provides a basis for developing common recommendations on the regulatory issues related to cross border interconnections in electricity in the Mediterranean Basin. To the purpose, a questionnaire was prepared and circulated to INS and ELE AG members.

EXECUTIVE SUMMARY

This is a common project set up with the MEDREG Ad Hoc Groups on Institutional (INS AG) and Electricity (ELE AG) issues. The project is dedicated to the legal framework of the management of electricity cross-border interconnections. The related questionnaire was organized in five thematic chapters, whose results are represented as follows:

1. Legal and Institutional Framework
   - Primary legislation or secondary regulation is in place in all countries for the management of electricity interconnection.
   - Capacity Calculation and Allocation
   - For the majority of the countries reviewed, the assessment of the available capacities is done by TSOs rather than the NRAs. In general, in the north shore of the Mediterranean, auction mechanisms are in place for the capacity, while the system of explicit auction is facilitated in most cases. In case of implicit auction, transmission capacity allocation is implicitly included in the auctions of electrical energy in the market.

2. Capacity Calculation and Allocation
   - The gate closure represents the deadline for participants to submit their bids and offers for each delivery period. At the gate closure, the TSO gets in charge of the management of the network electricity flows and settles any possible difference between demand and supply. For Northern shore countries the gate closure system is exceptional, as they generally rely on a balancing market.

3. Transit Tariff
   - A transit tariff does not exist in the majority of countries. In European countries, an Inter-transmission system operator Compensation (ITC) mechanism is applied. The mechanism deals with compensation and contribution of costs. Indeed, the fair and transparent remuneration of transits due to cross-border trade has been on the list of major topics in the European discussion since the beginning of electricity market liberalization. The implementation of the ITC mechanism has played a vital role in the development of a legal electricity market in the EU in order to reduce “pancaking” and all trading barriers across the borders.

4. Balancing System
   - The aim of balancing is to ensure equilibrium between supply and demand in the short term. The system of gate closure is used in the balancing market to determine the prices and dispatch the bidding generation units.

5. Cross Border Power Exchange
   - Through Bilateral Contacts
   - The use of bilateral contracts as a general framework for the Cross Border Power exchange remains an exception.

CONCLUSIONS

Fourteen MEDREG Countries replied to the questionnaire. The essential principles identified as shared characteristics are:

1. NRAs competences to:
   - Set or approve rules regarding the management and allocation of interconnection capacity.
   - Fix or approve methodologies to assess balancing services.
   - Require the transmission operators to modify their congestion and balancing mechanisms to ensure that these are proportionate and applied in a non-discriminatory manner.

2. Capacity calculation and allocation capacities:
   - Create a mechanism of auction for the allocation capacities.
   - Assess the available capacities realized by the TSOs.
   - Submit the capacities rights to the principle of “use it or lose it or sell it”.

RECOMMENDATIONS

The role of TSOs is crucial (e.g.: implementation of legal framework, capacity calculation). They recently created their association for the Mediterranean region, Med-TSO, which aims to build a link between market regulation functions and the electrical system operation. Med-TSO offers the opportunity to establish contacts and discuss regulatory issues on cross-border interconnections. Consequently, it is recommended to disseminate knowledge and start a capacity building programme on cross-border exchange operations in a market environment.

The training program could address:

- Interconnection capacity calculation and allocation.
- Transit fees and ITC mechanisms.
- Auction mechanisms.
- Mechanisms for allocating the remaining capacities.

2.3. Report on heading to an integrated Mediterranean electricity market

(June 2011)

This report studies the status of each of specific blocks based on: internal countries market, interconnection infrastructure between the countries, and the regional market under which each of the blocks operates. It focused on the following blocks: Iberian Market, West Mediterranean, South East Mediterranean, and South Eastern European.

Furthermore, a follow up survey was circulated among member countries to update the data of previous reports.

EXECUTIVE SUMMARY

The content of the report touches on the following points:

- Existing and future planned infrastructure of interconnections: it analyzed the interconnection infrastructure of the seven mentioned blocks (markets), as a starting point that will lead to more emphasis for the internal and regional markets that comprise them.
- Financing infrastructure projects: reliable interconnection infrastructure acts as a key element for market integration, which most of the time represents an investment challenge. Thus, this challenge resulted in developing different approaches for investing in this field, each of which has specific financing schemes, depending on the requirements (Public Ownership, Public-Private Partnership (PPP), PPP Consortium Financing, Equity Composition Schemes Options, BOO or BOTOT Regulated Schemes, and Private Ownership) that can meet different requirements.
- MEDREG Member’s electricity markets (regional and internal): the available internal electricity market structures were introduced with an example of their application in Italy. Furthermore, as a result of installing interconnection lines between Mediterranean countries, the available cross-border trade methods were illustrated through the example of the Iberian electricity market. Finally, some Mediterranean regional electricity market structures (such as Iberian and SEE) were discussed.

Benchmarking for the regulatory and markets status development in member countries for all blocks.

A follow-up survey provided these updates and was organized in three following parts:

1. Part A • Legislative and regulatory framework
   - Financial viability of the industries
   - Unbundling of the industries
   - Removing obstacles to competition
   - Market access
   - Market arrangements
   - Implementation of national markets
   - Regulation
   - Technical and commercial rules and agreements
   - Infrastructure requirements for market operation
   - Imports and exports

2. Part B • Updates on the basic infrastructure such as generation and transmission systems, distribution systems, interconnection projects, and energy export and import

3. Part C • Internal structure of the electricity vector organization

Priority of purpose of international trade:

- Security of Supply had the first priority among all countries, while the “Quality of Supply” had the least, except for France which gave the first priority to “Efficient Long Term Investment Planning”.
- Transmission Rights: among all transmission rights, “central dispatch of an interconnection network, with national dispatchers taking dispatch as instructions as a priority” had the highest priority.
- Regulatory status and market implementation:

Based on the reply of just eleven MEDREG Member countries, results follow:

- Priority of purpose of international trade: “Security of Supply” had the highest among all countries, while the “Quality of Supply” had the least, except for France which gave the first priority to “Efficient Long Term Investment Planning”.
- Transmission Rights: among all transmission rights, “central dispatch of an interconnection network, with national dispatchers taking dispatch as instructions as a priority” had the highest priority.
- Regulatory status and market implementation: results showed the progress among member countries with respect to year 2007 benchmarking process.

CONCLUSIONS

The expected outputs of this comprehensive report are:

- A master plan for energy and interconnection expansion that reflects the approach of Regulators, as agreed among MEDREG Members;
- A report on the present and future needs on interconnection infrastructures investments necessary to integrate the Mediterranean electricity market;
- Report on the Smart Grids in MEDREG countries;
- Proposals on common rules/guidelines for electricity exchanges among MEDREG Member countries;
- A benchmarking report for internal markets and cross border trade;
- A functional training program.

RECOMMENDATIONS

The full report is published online at www.medreg-regulators.org

Supported by the European Union

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2. ELECTRICITY

2.4. Report on interconnection rules and practices for MEDREG countries
(November 2008)

This report builds on the feedback coming from two survey forms which have been circu-
lated among MEDREG countries, along with the information collected by the task forces. These
surveys focus over the principle of energy exchange between the EU Mediterranean
countries; the contracts of energy exchange between the Balkan countries within the Medi-
terranean area; the contracts of energy exchange of the Mashreq countries; the contracts
of energy exchange between the Maghreb countries.

**CONCLUSIONS**

This report replaces the results of the two surveys cir-
culated among MEDREG participants pertaining the pre-
sent interconnection infrastructure and the cross-border
governing rules and procedures. The report affirms that
the first step to the establishment of a regional elec-
tricity market requires the harmonization of countries’
internal market rules. Still, reinforcements for the inter-
connections as the physical medium of the market are
in progress in different states. Closing the ring around
the Mediterranean is awaiting the removal of the hurdles
faced by the SEMB, SWMB and Turkish interconnec-
tions. Furthermore, pan-Mediterranean methodologies
for cross-border trade still need to be put in place.

**RECOMMENDATIONS**

It is recommended to establish a master plan and an en-
tity responsible for the follow up of the required efforts for
the fulfillment of this plan. Moreover, it is recommended to establish a Reliability
Council in the Mediterranean region. The Mediterranean Electric Reliability Council is to look at two aspects
of bulk power system reliability: system adequacy and
system security. A system must have enough capacity to
supply power to its customers (adequacy), and it must be
able to continue supplying power to its customers if some
unforeseen event disturbs the system (security).

3. GAS

3.1. Status review on Third-Party Access in the Mediterranean region
(December 2011)

This study focuses on the Third Party Access (TPA) status in the Mediterranean region and
on the future needs in order to develop an integrated Mediterranean market. This study is the result of a questionnaire that circulated among MEDREG countries with the
aim to get a picture as complete as possible of the TPA situation in the whole region. The
paper takes into account different levels of market development in the Mediterranean
countries. The participative process of the survey suffered from some countries’ defec-
tions. However, it has been possible to generally assess the status of TPA to the infrastruc-
tures of the gas markets.

**CONCLUSIONS**

The main conclusion of this monitoring exercise is that regulated TPA to the infrastructures is linked to the de-
gree of opening of the gas market. The more developed a gas market is in terms of penetration of gas consump-
tion, openness and liberalization, the more likely it is that TPA to the infrastructures is regulated, the rules for ac-
cess the infrastructures are published and the regulator has competencies regarding the approval of these rules
and of the access tariffs to the infrastructures. Generally and as a conclusion per subject it is possible to remark:

- The status of market opening, the quality of service and the dispute settlement are generally satisfactory
  in the countries that answered the questionnaire.
- The unbundling, the TPA to the infrastructures, the exist-
  ence of methodologies for capacity allocation and con-
  gestion management, the transmission access tariffs, the
  existence of anti-horning mechanisms and of mech-
  anisms to promote market need some improvement.

**RECOMMENDATIONS**

Taking into account the results of this benchmarking study, it can be stated that the situation of TPA to infra-
structures in the Mediterranean region gas markets can be improved and some measures can be proposed to
pursue this goal. This will be done in the second stage of this work, when the Guidelines of Good Practice (GDP)
on TPA for gas in MEDREG countries will be developed.

Additionally, and as the participation of all MEDREG countries in answering the questionnaires is of princi-
dial importance to share information and knowledge, the group will ask for stronger contribution from those coun-
tries which have not provided sufficient data on their TPA
to gas systems. The sharing of information and knowl-
edge remains a key factor to the promotion of wide Gas Markets in the MEDREG countries.
The transparency requirements analyzed in the Status Report are:

1. System and Services • A detailed description of the gas system of each TSO, identifying all entry and exit points, including maps, or a detailed description of the LNG and storage facilities operated by the concerned TSOs/ISOs. • Detailed and comprehensive information about all services offered. • Detailed and comprehensive information about the agents that can require access to the services offered. • The different types of contracts available for the services offered and the contracting processes. • The flexibility and tolerance levels included in transportation and other contracted services. • As applicable, the network code(s) and/or the main standard conditions outlining the rights and responsibilities for all users of the gas system of the TSO. • The capacity allocation, congestion management, anti-hoarding and reutilization provisions. • The rules applicable for capacity trade on the secondary market. • The quality and pressure requirements.

2. Capacity Situation • The maximum technical capacity (Million m³/h or GW/day). • The total contracted firm and non-firm capacities (k-md). • The available firm and non-firm capacities (k-md).

The transparency situation of gas markets in the Mediterranean region can be improved and some measures can be proposed. The basic recommendation to disclose information in a meaningful, quantitatively clear and easily accessible way, and free of charge, is almost unanimously respected. However, the recommendation to publish information in English, in addition to the national language(s), is not as widely fulfilled. As the GGP(s) are to be implemented on a voluntary basis, actions must be oriented to inform more about the contribution that Transparency GGP gives to the market, thus obtaining support and commitment from different stakeholders to:

- Increase contribution in providing information on transparency.
- Work in collaboration with the TSOs’ associations in order to spread the conclusions of the transparency study and broaden the application of the GGP’s learnings.
- Support the online publication of the relevant transparency information in English.
1. Barriers in Non-EU Countries for RES and CHP

These barriers may be overcome through successful mechanisms and external financing measures.

1.1. Barriers for RES and CHP in Non-EU Countries

Barriers for RES and CHP in Non-EU Countries • Guarantees of regulatory stability. Regulation has to offer sufficient guarantees to ensure that economic incentives are stable and predictable during the entire life of a facility. • Definition of specific national targets/objectives. Targets have to be ambitious, but realistic, according to the economic, social and physical features of the country, and the possible evolution of energy prices. • Definition of network development plans. A minimum network development has to be defined in the mandatory planning. • RES and CHP access regulation and grid integration. It is important to set up connection procedures for RES and CHP facilities. Non-discriminatory access rules and priority of dispatch have to be established. • Collaboration programs between Members. Knowledge exchange, regulatory collaboration in Regional Associations, technical collaboration between ISOs, or training programs. • Definition of promotion mechanisms. It is necessary to get basic information for each technology concerning investment costs and average operating costs in order to design an adequate support scheme for RES and CHP.

1.2. External Financing Non-EU countries should receive external financing to increase their renewable capacity. This can take place through: • Official Aid Development. Access to electricity from RES is an essential component in the fight against poverty and underdevelopment. • Private initiatives. The regulatory framework must ensure profitability of private investments.

2. Possibility to Introduce Successful Mechanisms and Eliminate Barriers

CONCLUSIONS

Some lessons can be learned from the RES experiences in the EU countries. There are several EU examples where it is possible to find good guidelines in order to select the right mechanisms for each country, according to the particular economic and social situation.

There are some specific barriers to develop RES in non-EU countries, but there are also mechanisms to remove them, based on regulatory stability, definition of specific national targets, definition of adequate promotion mechanisms, definition of RES and CHP access regulation and grid integration and of network development plans. All of these mechanisms should be based on a fruitful cooperation between Members and on some mandatory planning.

RECOMMENDATIONS

The definition of realistic but ambitious targets in the national legislation is a key point for each Member. According to these targets, the second step would be the definition of promotion mechanisms based on transparency and stability of the national legislation.

Also, it is essential to develop connection procedures for RES and CHP facilities. Non-discriminatory access rules and priority of dispatch need to be established. Finally, developing countries must receive external financing to increase their renewable capacity, through public and private initiatives under the framework of Flexibility Mechanisms in Kyoto and post-Kyoto Protocol, or flexibility mechanisms in the Directive 2008/28/EC.

4.2. Report on the effects of the introduction of successful mechanisms to promote energy efficiency in non-EU countries

(May 2010)

The objective of this paper consists in verifying the possibility of extending energy efficiency policies to other MEDREG countries, analyzing potential obstacles and main factors of success to their implementation.

Efficient mechanisms have been identified, including white certificates markets, tender mechanisms, time-based pricing, and energy audits. Through specific case studies, some conclusions and recommendations are provided for those countries interested in introducing similar measures in their national context.

For developing countries approaching the issue for the first time, it is advisable to initially introduce energy efficiency obligations placed on energy utilities. Later, they can progress toward more complex systems, such as the white certificates mechanisms.

Regarding smart metering, it is recommended to introduce interoperable meters from the beginning, and comply with minimum functional requirements. This will allow the switching of consumers from one supplier to another when markets are mature for the development of competition.
The report addresses the question of whether a more aligned approach in the energy efficiency field is possible and which initiatives can be undertaken to foster energy efficiency in the Mediterranean context. The objectives of this paper are to assess the possibility for enhanced cooperation on energy efficiency policies among MEDREG countries; to carry out a comparative analysis of national energy approaches and identify gaps and areas with potential for energy savings; to provide recommendations to foster energy efficiency more effectively.

**CONCLUSIONS**

This report provides an overview of the rational for coordinating policy interventions on energy efficiency in the MEDREG context. In particular, it reviews the main efficiency policies in place in Mediterranean countries, grouped by main categories, and assessing for each of them the main bottlenecks and consequent justifications for enhanced cooperation. The lessons provided by the European experience and by the first implementation of National Action Plans on energy efficiency suggests that a more holistic approach, based on the balance between different types of intervention, is more effective than focusing on individual measures.

**RECOMMENDATIONS**

In order to foster energy efficiency and international cooperation among Mediterranean countries, a set of recommendations has been formulated, suggesting to:

- accelerate the preparation of future national strategies for energy efficiency in order to achieve improvements where there is more potential for energy savings;
- establish a partnership to provide technical assistance in the design of national plans/strategies;
- monitor results, share experiences and lessons, agree on good practices and use them as a guide for future actions;
- reduce the financial barriers to scale up the potential of energy savings interventions.

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### RECOMMENDATIONS

1. **Assessment of the effects of extending the functioning of national mechanisms to a supra-national level - RES and CHP**

   **(December 2011)**

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   - establish a partnership to provide technical assistance in the design of national plans/strategies;
   - monitor results, share experiences and lessons, agree on good practices and use them as a guide for future actions;
   - reduce the financial barriers to scale up the potential of energy savings interventions.
The objective of this document is to promote the exchange of information, knowledge and experiences about Environment protection, promotion of RES, CHP and Energy Efficiency. Every year this report aims to give an overview of the situation and the evolution of each MEDREG Member in terms of Renewable Energy Sources, Energy Efficiency, CO2 and other pollutant emissions, power generation structure, demand evolution, and market organization. The information is based on responses to a questionnaire and on other sources.

**EXECUTIVE SUMMARY**

4.5. **Benchmarking assessment 2010 data** (December 2011)

The objective of this document is to promote the exchange of information, knowledge and experiences about Environment protection, promotion of RES, CHP and Energy Efficiency. Every year this report aims to give an overview of the situation and the evolution of each MEDREG Member in terms of Renewable Energy Sources, Energy Efficiency, CO2 and other pollutant emissions, power generation structure, demand evolution, and market organization. The information is based on responses to a questionnaire and on other sources.

In almost all MEDREG countries, there is an independent regulator (versus the existence of a Ministry), which includes its own funding and appropriate appointment procedures. It is also ensured that the regulator works under the definition of regulatory principles. Overall, it is possible to determine that all examined countries have a mix of technologies to cover their electricity needs. As for RES, the most extended is hydro-power, followed by wind and biomass. Taking into account the data about demand evolution, it is possible to observe that electricity demand was rapidly increasing until 2008 in all countries. On the other hand, in 2009 and 2010 some countries show a downward trend because of the economic crisis. Finally, promoting systems for electricity produced from RES and CHP plants are mainly divided into fixed price mechanism (Feed-in-Tariff/Feed-in-Premium) and a Tradable Green Certificates (TGC) system.
5. CONSUMER PROTECTION

5.1. Recommendations on the minimum requirements considered as necessary to ensure consumers protection in the field of Electricity and Gas in the Mediterranean region

(June 2011)

This document identifies the minimum criteria considered as necessary to ensure consumer protection that could be shared by MEDREG members. Similarities have been identified in the fields of legal framework on competition; consumer protection; access and connection to networks; and regulatory role. Differences exist in the sphere of market design; organization and function; and processes and procedures (such as the handling of complaints, appeals and mediation, the relationship between operators, regulators and consumers, the policies towards vulnerable consumers).

The success of cooperation between MEDREG’s member countries depends on the establishment of a common approach for consumer protection. This study represents a first step that has identified a set of values and best practices to be shared among MEDREG member countries with the aim to improve the effectiveness of mechanisms to protect consumers.

4. Consumer Protection and Transparency: Regulators should act in order to: • Allow the establishment of service quality standards ensuring harmonization. • Introduce incentives within the tariff structure, including possible sanctions in case of failure. • Improve the information given to consumers (readability of bills, information, prices, etc.). • Allow consumers to be compensated if the operator fails or causes damage. • Be entitled to access to financial/technical information regarding regulated activities. • Have a dedicated department that supports complaint handling and an established decision-making power. • Have an international cooperation program on issues related to the consumer protection interests.

5. Accessibility: Connection to the networks shall be made within a reasonable amount of time and at reasonable prices. • Regulators should monitor the switching process and ensure its smoothness. • Regulators must coordinate with authorities to protect vulnerable consumers facing prices and tariffs. • Regulators should identify a supplier of last resort. • Energy demand forecast should be a statute responsibility for all regulators.

6. Education and Information: Institutional actors should use a sound communication strategy to educate, train, advise and assist consumers on important aspects related to their protection and the energy environmental impact.

7. Invoicing, Payment, Power Cuts: To reduce disagreements between operators and consumers, clear procedures about bill invoices, time of payment and suspension/restriction of supply should be disseminated.

5.2. Summary assessment: survey on consumer protection in the electricity and natural gas sectors in the Mediterranean region

(October 2010)

In 2008, MEDREG INS Ad Hoc Group set up a Task Force on consumer issues to present a clear picture of the consumer protection condition in the Mediterranean region, with a specific focus on vulnerable customers. The Task Force leader is CREG (Algeria), which was entrusted with the elaboration of a questionnaire and the drafting of a report in close collaboration with the Chairs of the INS Ad Hoc Group, HERA (Croatia) and CRE (France).

The analysis of the information provided on a voluntary basis by 14 Mediterranean Energy Regulators led to the following main results, organised around 7 thematic chapters:

1. Legal and Institutional Framework: The legal basis for consumer protection is ensured by regulators, governments, operators and consumer associations. The legal definition of “consumer” differs from one country to another.

2. Overview of the Energy Market: Electricity generation and energy supply are highly competitive in most countries and they are followed by specific bodies (Ministry, regulator, operators, etc.). Tariffs are regulated in most countries and the regulator is generally responsible for them. Consumers are categorized on the basis of consumption threshold, level of tension or pressure, and energy use.

3. Network Regulatory Framework: 14 countries have laws on electricity and natural gas, which defines the technical and commercial access networks conditions and procedures for setting connection costs.

4. Customer Protection and Transparency: Almost all countries have technical and commercial standards governing the quality of service, either regulated or international. They can also be set by the regulator or proposed by the operator. Also, almost all countries have enacted a legislation to protect the economic interests of consumers and regulate contracts of supply and access. Most countries’ regulators have the power to take decisions on complaints.

5. Accessibility: Access to transmission and distribution networks is regulated in 13 countries. Specific programs for developing energy infrastructures, including an opinion or formal approval delivered by the regulator, exist in 13 countries. Consumers support mechanisms are in place through a reduced price (specific category of consumer), a social tariff or a direct subsidy.

6. Education and Information: In most of the countries, regulators are responsible for ensuring consumers information and education, together with other institutions and bodies (national and local governments, consumer health and safety authorities, operators and consumer associations).

7. Invoicing, Payment and Power Cuts: Most of the countries have defined the frequency and readability criteria of invoices, billing conditions and delays. The procedure regarding suspension or limitation of supply in case of non-payment is in place in all participating countries.

CONCLUSIONS

MEDREG members’ regulators are encouraged to undertake a harmonization process following the practices identified by this study. Also, MEDREG countries should develop a code of conduct for consumer protection to better regulate the electricity and gas sectors.

RECOMMENDATIONS

→ All interested stakeholders, including MEDREG institutional partners, should circulate this report through different communication channels.
→ It is advisable to perform a follow-up about the evolution of the electricity and gas consumer protection framework in the MEDREG countries.
→ An update of this report and of its recommendations is expected every two years.

Supported by the European Union
Following the first five years of MEDREG fruitful and successful activities, the key strategic challenges faced by Mediterranean countries imply the need for more regulation as an essential instrument for economic and social development, enhanced trade and exchanges, market opening to competition, security of energy supply, and development of new financing tools and mechanisms.

The objective of MEDREG is to implement strong, transparent and stable legal and regulatory frameworks and requires a long-term vision to 2020, designed at regional level. Continuous efforts are necessary to achieve a step-by-step and holistic approach towards regulatory harmonization. This approach may take into account not only market liberalization, but also investment in trans-Mediterranean infrastructure, climate change and the environment, innovative financial support schemes for renewable energy sources and energy efficiency, consumer protection, capacity building, information exchange and technology transfer.

MEDREG is firmly positioned in the long-term perspective towards the progressive integration of Euro-Mediterranean energy markets into a Mediterranean Energy Community, based on a bottom-up and inclusive process leading to a strengthened institutional setting. This 2020 target shall be reached with the decisive support of Energy Regulators, through the consolidated activities of MEDREG permanent Ad hoc Groups and Task Forces, and thanks to the continuous support provided by the European Union, the CEER and all the MEDREG partner institutions.