#### **G8 SUMMIT 2009**

#### G8 MEETING OF ENERGY MINISTERS

# ROUND TABLE OF ENERGY REGULATORS

ROME, 24 MAY 2009

#### G8+ ENERGY REGULATORS STATEMENT

REGULATION, ENERGY MARKETS AND NEW INVESTMENTS:
THEIR CONTRIBUTION TO ECONOMIC RECOVERY, CLEAN ENERGY
TECHNOLOGY DEPLOYMENT AND ENERGY SECURITY

### G8 SUMMIT 2009

# **ENERGY REGULATORS ROUND TABLE**









**BRASIL** 

BRASIL

CANADA

**EGYPT** 









FRANCE

**GERMANY** 

**GREECE** 

INDIA









INDIA

**ITALY** 

JAPAN

MEXICO







RUSSIA

SAUDI ARABIA

SOUTH AFRICA







SOUTH KOREA

**⊔.K.** 

U.S.A.











AFUR

ARIAE

CAMPUT

CEER

ERGEG









**ERRA** 

**MEDREG** 

NARUC

SAFIR

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#### Framework and participants

In the framework of the G8 of Energy Ministers, Rome, 24-25 May 2009, the Italian Presidency has invited the Italian Regulatory Authority for Electricity and Gas (AEEG) to organize a Round Table of Energy Regulators.

Therefore the Italian Presidency, together with the other G8 Energy Regulators (Canada, France, Germany, Japan, Russia, U.K. and U.S.A.), has invited also the Energy Regulators from Brazil, China, Egypt, India, Mexico, Saudi Arabia<sup>1</sup>, South Africa and South Korea. Furthermore, also the energy Regulator from Greece has been invited, in view of the next IV World Forum on Energy Regulation (WFER IV) that will be held in Athens, in October 2009. The following regional Associations have also been invited with the aim to provide a supranational overview to the debate: AFUR (African Forum for Utility Regulators), ARIAE (Asociacion de Reguladores Iberoamericanos), CAMPUT (Canadian Association of Members of Public Utility Tribunals), CEER/ERGEG (Council of European Energy Regulators/European Regulators' Group for Electricity and Gas), ERRA (Energy Regulators Regional Association), MEDREG (Association of the Mediterranean Regulators for Electricity and Gas), NARUC (National Association of Regulatory Utility Commissioners) and SAFIR (South Asian Forum for Infrastructure Regulation).

All the invited Parties participated in the initiative and contributed to the related activities.

Regulators who attended the Round Table of Energy Regulators after review and discussion about both general and specific energy regulatory issues, submit the present document entitled "G8 + Energy Regulators Statement", containing their perspectives towards a new world energy governance.

<sup>&</sup>lt;sup>1</sup> Representing Electricity and Co-generation Regulatory Authority (ECRA).

#### Round Table conclusions

Efficient and transparent international energy markets combined with a modernized energy infrastructure and effective utilization of both new and existing resources, all within the context of open and progressively more interconnected/integrated regional energy markets, are keys to a sustainable energy future.

Energy regulation has an essential role to play in the development and establishment of modern electricity and gas markets based on the empowerment of energy consumers, increased integration of demand resources, increased need for energy efficiency, incentivising energy producers, increased penetration of renewable energy, reduction of GHG emissions, more interconnected/integrated energy markets and improved cooperation among system operators aimed at improving the security of energy supply, demand and transit.

A 21<sup>st</sup> century energy regulatory policy is much more complex than previous policies. It requires new regulatory tools, including continuous market monitoring, new forms of institutional cooperation to build efficient regional markets, new communication strategies and efficient dialogue and collaboration mechanisms with energy policy decision-making bodies (Governments, Parliaments and relevant regional and international organizations). Decision making bodies should also be aware of their role in "opinion forming" to improve public acceptance of necessary measures like construction of grid and production infrastructures to increase energy security.

Energy Regulators promote a safe, secure, environmentally sound and efficient energy infrastructure and markets in the public interest. In order to foster sustainable development, regulation must promote: consistency of rules, market based mechanisms whenever technically and economically feasible, fair and reasonable cost remuneration/tariffs, clear and accountable decision-making processes based on widespread consultation and involvement of stakeholders and transparent monitoring.

There is a growing need to coordinate and harmonize regulatory frameworks at the international level within integrated markets, starting from a comparison and adoption of best practices for the development of cross-border infrastructures and integrated regional markets. These need of course to respect the principle of national sovereignity. Moreover, it is important to recognize the need for a continued dialogue between energy consumer and supplier countries.

#### In the light of these considerations, energy Regulators consider it important to:

 a) support the powers and independence of national regulatory authorities (NRA) from political and commercial pressure, and their transparency and accountability requirements in order to maintain a favorable climate for investments and to enable them to face the challenges in terms of deployment of new and best available clean technologies;

- b) wherever deemed appropriate and necessary, engage decision making bodies in providing the legal framework and empowerment required by the NRAs to achieve an effective energy regulation, and competitive industry structure;
- adopt clear policies enabling development and modernization of energy systems and their interoperability based on shared objectives that facilitate the correct functioning of efficient market mechanisms:
- d) facilitate the cooperation and where possible the compatibility and coordination of regulatory policies at the international level and strive to remove barriers that hinder energy trade between countries, thus promoting the efficient use of resources and/or mitigating market distortions;
- e) enable/promote institutional cooperation among NRAs in order to accelerate effective convergence of rules of cross-border markets at regional level by improving existing tools (e.g. Regional Associations, bilateral collaboration, including Twinning Arrangements, information dissemination through IERN<sup>2</sup> and regional website cooperation, initiatives for financing coordination of training and dedicated education actions, etc.);
- smooth and streamlined approval procedures related to the construction of energy infrastructures and harmonize their solutions in order to enhance energy markets and ensure energy security and cost-effective development and integration of renewable energies;
- g) utilize Regulators' information and expert analysis in the energy and energy related policy decision making process;
- h) encourage continued dialogue and facilitate interactions between Regulators of energy consumer and supplier countries;
- i) ensure NRAs and regional Regulators' fora and Associations from developing countries are adequately funded to fulfill their duties.

In the framework of the above mentioned agenda, G8 + energy Regulators, notably through the World Forum on Energy Regulation (WFER) and within the scope of their mandate and jurisdictions, are committed to:

 where appropriate, assume leadership in their respective regions with regard to the promotion of modern regional energy markets responding to climate change and integrating new and best available technologies;

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<sup>&</sup>lt;sup>2</sup> International Energy Regulation Network (IERN)

- collaborate in mitigating energy poverty, support vulnerable energy consumers and empower energy consumers, in particular given the global recession, in line with market mechanisms as much as possible and in conformity with the G8 Ministers' policies with regard to Africa and other parts of the world;
- bridge the cross-border regulatory gap by developing tools for regulatory consistency at regional level where grids are interconnected and the potential for regional market building exists (e.g. Southern African Power Pool, Mediterranean Electricity Ring, etc.);
- 4. facilitate convergence of interconnected regional markets (e.g. EU-Mediterranean, EU-Energy Community,......) through appropriate harmonization of regulatory frameworks;
- 5. improve energy market monitoring and transparency;
- disseminate information (including website linkages, e.g. IERN at world level, several regional initiatives) and in particular of best regulatory practices aimed at improving capacity building, including through financial instruments available from international institutions;
- 7. achieve professional excellence through training and education (e.g. FSR<sup>3</sup>, ERRA<sup>4</sup>);
- 8. cooperate with national and regional regulatory authorities from developing countries including cooperation aimed at improving capacity building.

The G8+ energy Regulators acknowledge the importance of increasing cooperation, first initiated by invitation of the Italian G8 Presidency, and will continue their collaboration. The next World Forum on Energy Regulation (WFER IV) in Athens, on 18-21 October, will provide an ideal opportunity further to elaborate consideration of the above issues and to broaden the discussion to all interested parties. After the WFER IV, G8+ energy Regulators will also prepare a report on best regulatory practices concerning the promotion of energy efficiency that will be presented next year to the G8 Energy Ministers.

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<sup>&</sup>lt;sup>3</sup> Florence School of Regulation (FSR)

<sup>&</sup>lt;sup>4</sup> Energy Regulators Regional Association (ERRA)

#### **Background**

Efficient energy markets - at national, regional and international levels - are a pre-requisite for energy security and sustainable development. On one hand, competitive energy markets must provide a secure, reliable and affordable energy supply which is essential for efficient economic and social development. On the other hand, by affordable and accessible clean energy technologies and a shift towards cleaner fuels, more generally energy markets can contribute to the reduction of greenhouse gas (GHG) emissions.

Regulation plays a crucial role in ensuring open and non-discriminatory energy network and market access, attracting adequate and sustainable investments and safeguarding efficient markets that promote public interest and support public policies, such as customer protection and environment protection.

The importance of efficient energy markets for sustainable development has been addressed by the G8 several times in the past.

- The St. Petersburg G8 Statement for global energy security and the associated Plan of Action<sup>5</sup> have recognized efficient and competitive markets as a key to global energy security and the role of transparent, equitable, stable and effective legal and regulatory frameworks, including the obligation to uphold contracts, as a necessary foundation for sustainable investments throughout the whole energy value chain.
- The Heiligendamm G8<sup>6</sup> chair conclusions, affirmed the importance of "technology, energy efficiency and market mechanisms, including emission trading systems or tax incentives in mastering climate change as well as enhancing energy security". The Heilingendamm Process, launching a dialogue of G8 with the main emerging economies on energy issues, recognized the importance of secure, stable and competitive energy supplies for achieving sustainable development.
- The G8 Hokkaido Toyako Leaders<sup>7</sup> "stress the importance of energy markets which send undistorted price signals and are free from any political pressure" in reaffirming their commitment to energy security, to improve transparency and the dialogue between producers and consumers. They also recognize that market mechanisms and performance based regulation can help to achieve emission reduction in a cost effective manner and stimulate long term innovation in the frame of their commitment to combat climate change.

<sup>&</sup>lt;sup>5</sup> St. Petersburg, July 16, 2006

<sup>&</sup>lt;sup>6</sup> June 6-8, 2007

<sup>&</sup>lt;sup>7</sup> July 7-9, 2008

# The importance of efficient and effective regulation at national, regional and global levels

Regulation by accountable institutions independent of political and industry pressure, in cooperation with relevant competition authorities, plays an important and increasingly recognized role in the development of efficient and competitive energy markets. Regulators' role includes: setting of transparent and stable rules for access to essential facilities, such as networks, and their development (including their remuneration through fair and reasonable tariffs); enforcing the implementation of these rules; guaranteeing an efficient and independent monitoring of market functioning and in some case, of energy security<sup>8</sup>.

The effective and efficient performance of regulatory authorities independent of political and industry pressure provides both operators and consumers with a transparent, stable and predictable set of rules that promotes confidence in the functioning of market mechanisms, is a prerequisite for an adequate flow of new investments needed for the development of secure, competitive and sustainable energy markets and guarantees customer protection.

In the next few years, climate change policies will require substantial development of new and best available clean energy technologies aimed at reducing GHG emissions and increasing energy efficiency. Such policies include new investments for "low emission" fossil fuel use, renewable as well as nuclear generating plants which curb global warming gas emissions from the energy sector. Energy infrastructure is undergoing a process of modernization, namely through the introduction of modern information and communication technologies (ICT). "Smart grids" have the potential to enable demand response, thus making retail and wholesale markets more competitive, with higher penetration of renewable generation and improved system operation, leading to higher reliability, improved quality of supply and reduced losses. Some countries have already generalized the use of smart meters (e.g. Italy) with others to follow.

Energy Regulators are actively contributing to the discussion on sustainable development and helping to manage the transition to a low carbon economy. Being a global issue, climate change should find global solutions targeted on market mechanisms. In that regard CEER<sup>9</sup> published in April 2009 its first report assessing the progress that Europe has made in working towards the development of sustainable internal energy markets. The CEER report has identified indicators related to: carbon abatement, air quality, renewable and energy efficiency. It also compiled valuable information on sustainability and the measurement of improvements made (and those outstanding).

<sup>&</sup>lt;sup>8</sup> In 2008 MEDREG published a Report "Recommendations on the minimum requirements considered necessary to ensure independent Regulatory Authorities in the Mediterranean area".

<sup>&</sup>lt;sup>9</sup> The Council of European Energy Regulators (CEER) is a "not-for-profit" organization in which 29 Europe's national Regulators of electricity and gas voluntarily cooperate to protect consumers interests and to facilitate the creation of a single, competitive and sustainable internal market for gas and electricity in Europe.

To provide the massive amount of new investments<sup>10</sup> needed in this phase by all segments of the energy sector on supply and demand sides (exploration, development, production, transmission, distribution, storage, supply and demand, and research), also because of the demand increase and the need to ensure universal access to energy, capital markets require clear, predictable and stable regulatory frameworks and efficient and transparent identification of separated activities.

Since major infrastructure projects and energy networks are often cross-border, their development and reliable operation require high level of coordination among the operators and also shared or harmonized rules. Also, improved "technical" coordination between production and grid operation will ensure the proper integration of renewable energies and demand response measures. In addition, competitive interconnected energy markets imply freedom of choice by consumers and adequate remuneration of the investments of system operators across different regional and national markets.

This calls for harmonization of rules and coordination of the regulatory function of cross-border markets - wherever existing or agreed to be created - at regional and supra-state levels. Moreover, the structural transformation of the energy industry requires increasingly sophisticated and harmonized regulatory frameworks which take into account the special features of the countries concerned. The development of efficient regional markets also requires increased interconnection capacity within the region and, in some cases, between neighboring regions.

In the energy sector, North America and to a certain extent Europe have already experienced different forms and degrees of enhanced regulatory inter-state coordination and co-decision-making at the institutional level. Similarly, throughout the world the development of regional and continental associations of Regulators goes hand in hand with the development of competitive regional energy markets (e.g. SADC<sup>11</sup>, SIEPAC<sup>12</sup>). Russia has developed its own two-levels (federal-regional) energy market across 9 time-zones which is regulated by public authorities in partnership with relevant self-governing bodies.

Coordination of the regulatory functions and rules among countries within a regional market has many advantages. It avoids the danger that different regulatory approaches and solutions can result in asymmetries and/or distortion of competition among different national markets. In this way it contributes to the creation of a level playing field. It also facilitates the dialogue between energy consumers, transit and supplier countries, thereby enhancing energy security. Such dialogue can be further strengthened by establishing, where appropriate, long term rules representing an adequate framework for the planning of continuous or recurring investments.

<sup>&</sup>lt;sup>10</sup> The IEA WEO 2008 Reference scenario identifies \$26.3 trillion worth of investment needed to meet global demand by 2030 (> \$1 trillion per year), and its scenario to keep down GHGs below 550 ppm CO2 equivalent would require an additional \$4.1 trillion in investment.

<sup>&</sup>lt;sup>11</sup> SADC, Southern African Development Community

<sup>&</sup>lt;sup>12</sup> SIEPAC, Sistema de Interconexión Eléctrica para América Central

Regulation of energy trading presents a useful example of fruitful collaboration between different Regulators - in this case between financial services and energy Regulators - with the objective of supervising and consolidating the key pillars of providing liquidity and enhancing competition in energy markets. Such regulation of the rapidly growing energy trading activities focuses on designing tailor made solutions to ensure market integrity and to prevent market abuses.

New and coherent approaches to regulatory policies are needed to provide an underpinning of some of ongoing processes and to facilitate the growth and spread of new technologies that follow market principles. In order to promote the access to, and transfer of energy efficiency technologies that lead to more effective energy products, these approaches should seek to eliminate competitive inefficiencies between countries and possible interferences with price signals for the efficient deployment of new and best available technologies at the lowest costs to consumers.

The current financial crisis has revealed the critical importance of efficient and effective regulation for market stability and consumer protection. In particular, the crisis highlighted the importance of appropriate market monitoring and of measures that seek to avoid potential abuse of market power. Given the central role of energy markets for economic development, security and sustainability, it is essential to support: i) energy Regulators with appropriate, independent and accountable powers and clear mandates that enable them to safeguard market integrity, stimulate timely, adequate and affordable infrastructure investments and promote technological innovation; ii) coordination, collaboration and cooperation among Regulators at regional and global level.

The financial crisis also places a special obligation on energy Regulators to take into account the impact of regulatory policies and market activities on vulnerable energy consumers, as well as the social responsibilities of regulated undertakings. This obligation requires that proposals for new investment, are carefully reviewed to ensure adequate and reliable resources at appropriate rates; that markets are closely monitored to detect potential manipulation harming consumers, and the impact of harmful tariff setting on consumer welfare.

#### The importance of the energy sector for economic recovery and revival

Efficient energy markets help to improve competitiveness of the industry and services across the board. That can significantly facilitate economic recovery especially in the current depressed economic climate, given that energy is a strategic crucial input for most production processes.

In this phase of the current economic downturn, the energy market plays an important stabilizing role. It has been among the sectors less affected by the current crisis not only because of the relative inelasticity of demand but also, to some extent, because of the effectiveness of using incentives and incentive-based regulation that provides investors, at least at the national level, with a framework for taking sound investments decisions.

The new investments in energy infrastructures will have direct and indirect economic benefits. They are needed in order to respond to expected demand. The enhancement of gas network, including its interconnection, and new investments in the LNG chain and in storage are important for meeting increasing energy demand based on optimal use of new and existing infrastructures. Continued investments in the energy sector will be crucial to ensure there will be adequate and reliable capacity when economic growth resumes.

Expansion and modernization of the transmission and distribution networks and clean production facilities are required to bring about a robust revival in the energy sector. Ensuring that there is sufficient transmission and distribution infrastructure needed to deliver electricity from renewable energy resources is one of the keys to reducing greenhouse gas emissions and strengthening the security and reliability of the electric system. Communication and coordination standards and protocols of the smart grid will also be critical to the efficient and reliable integration of these new renewable resources and better integration of demand resources in energy markets.

Massive new investment is necessary to promote access to energy. This new investment must take into account the need to modernize energy systems, through the deployment of best industry practices, proven and advanced technologies, widespread introduction of modern information and communication technologies and new paradigms of distributed production and supply systems, as well as better utilization of demand resources. These investments will not only improve energy services and create new ones but they will also enable energy consumers to play a more active role in energy markets and therefore will represent new challenges to both the industry and Regulators.

Appropriate application of regulatory rules and incentives, ex-ante regulatory review and approval of long-term investments plans can align short-term objectives, such as increasing investments on infrastructure, with the long-term goals, including facilitating the development of sustainable, secure and increasingly competitive energy markets.

Regulatory incentives to encourage investment should be balanced with careful consideration of their impact on consumers, and deployment of new energy infrastructure, including gas pipelines and electric transmission facilities, should be prudent, beneficial and minimize the impact on the environment.

Establishing market monitoring as a policy instrument will also facilitate economic recovery through promotion of stable, transparent and well-functioning energy markets as a significant part of the global economy.

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