

Background Paper

The Maturing Producer-Consumer Dialogue

12th IEF Ministerial, 30-31 March 2010, Cancun, Mexico

The International Energy Forum (IEF) is the world's largest gathering of Energy Ministers. IEF Countries account for more than 90% of global oil and gas supply and demand. In addition to IEA and OPEC countries, transit states and key energy players, including Brazil, China, India, Mexico, Russia and South Africa, participate in the Forum. The magnitude and diversity of this engagement is a testament to the IEF's position as a neutral facilitator. Through the Forum and its associated events, IEF Ministers, their officials, energy industry executives, and other experts engage in a dialogue of increasing importance to **global energy security.** The IEF and the **global energy dialogue** are promoted by a permanent Secretariat of international staff based in the Diplomatic Quarter of Riyadh, Saudi Arabia.

1 - INTRODUCTION

Guided by Energy Ministers gathered at the 11th International Energy Forum in 2008, the International Energy Forum (IEF) Secretariat began an ambitious programme of work to carry it forward to the 12th International Energy Forum in Cancun, Mexico in 2010. With support from the energy ministers at the G8, G20, and the Jeddah and London Energy meetings, the IEF has continued to grow, deepen and enhance the producer-consumer dialogue. Today, as increased uncertainty and economic instability reign, that dialogue has become increasingly vital.

Given the economic turbulence of the last two years, and all that has changed, it is worth returning to the sentiments expressed by Ministers at the 11th International Energy Forum meeting in 2008. IEF Ministers, meeting in Rome in April 2008, agreed that the world energy scene in the coming decades will be characterized by three key trends:

- 1. Significant growth in world energy demand, in particular because of population growth and economic growth in developing countries;
- 2. Fossil fuels will continue to provide the lion's share of the energy mix;
- 3. Increasing interdependence between oil and gas producing and consuming countries.

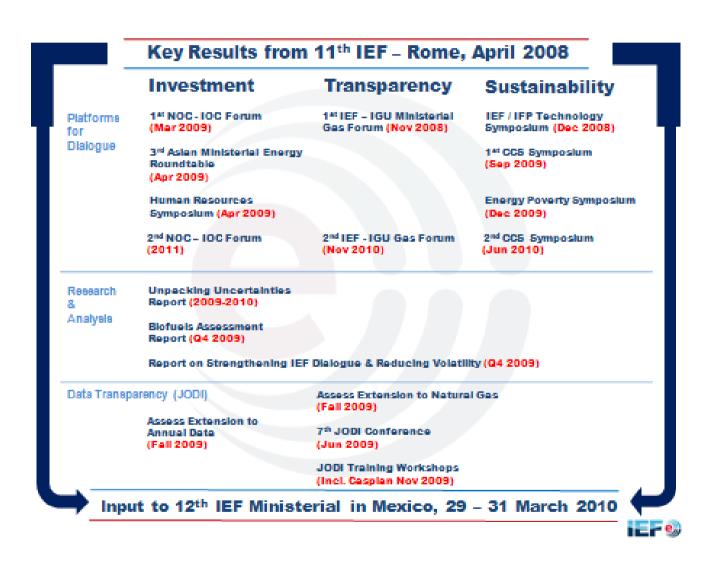
This "**Rome consensus**" highlighted the need for greater international cooperation and a more result-oriented producer-consumer dialogue based on mutual trust, which would build toward more common understanding.

Despite a severe decline in demand, engendered by the recent economic crisis, growth is returning to energy demand—most substantially in the developing world. There were questions about the shape of future energy demand, given the scale of the 2008/2009 recession, but early indicators have signalled that demand is indeed recovering quickest in the developing world, much as Ministers had noted in 2008.

The Ministers' contention that fossil fuels would continue to dominate the energy mix remains valid. Policy shifts in several developed economies raised the profile of renewable energy considerably, but the dominance of fossil fuel appears likely to continue for decades to come.

Despite the economic recession, the interdependence between producing and consuming countries is greater now than it was in Rome in 2008 and it will be greater again at the next IEF in Kuwait in 2012.

Responding to calls from Ministers at the 11th IEF Ministerial, **the IEF Secretariat developed its programme of work on three main strands of activity, under the overriding theme of energy security: investment, transparency and sustainability**. Within each strand, the IEF focused on activities in which our convening power and the unique perspective of the producer-consumer dialogue could be leveraged to best deliver productive events and tangible results. These activities included the organization of regional training workshops, symposia, fora, the commissioning of research and analysis, and together with our partner organizations (APEC, Eurostat, IEA, OLADE, OPEC and UNSD) advancing our flagship transparency activity, the Joint Oil Data Initiative (JODI). The programme of work was designed to deliver concrete recommendations and action-oriented input to the 12th IEF Ministerial in Mexico, 29-31 March 2010. Nearly **700 people** from industry, governments, and research institutes from both producing and consuming countries were actively involved in the execution of the IEF programme of work. The biennial IEF Programme of Work, covering the period 2008-2010, is summarized in the matrix below¹. Details on actions and recommendations on specific items of the programme are given later in this paper.



¹ The IEF Secretariat has produced a series of documents on the key findings of all the activities undertaken since the 11th IEF Ministerial in Rome 2008. They are available online at www.ief.org.

2 — INVESTMENT

Investment uncertainty has long clouded the energy sector. With revenues tied to shifts in both the geopolitical and policy realms, as well as to unpredictable commodity price swings, the appropriate level of investment is difficult to ascertain. Over the last two years in particular, the increase in oil price volatility has exacerbated concern in the oil and gas sector over investment returns, and in conjunction with an intermittently prohibitive credit environment, contributed to the deferral of capital expenditures². The current climate of economic uncertainty has cast a shadow over future supply and demand as firms have scaled back their capital expenses and delayed project deadlines. These conditions impact oil and gas project development immediately, but also echo through to investment in new technology and alternative energy.

Although current demand is down from previous years, global energy demand will continue to grow in the coming decades, driven primarily by population growth and economic development in China, India and the Middle East. As the world economy recovers, energy demand growth will revive with it. To satisfy this demand growth, huge investments will be necessary to discover, develop, process, transport and deliver final products to consumers. According to recent estimates by the IEA, the world will need to invest approximately \$26 trillion to meet global projected energy demand by 2030, nearly \$1.1 trillion per annum, of which \$250 billion must accrue to the oil and gas sector alone. OPEC puts the world cumulative oil investment requirements for both upstream and downstream at \$3.1 trillion. **Beyond the importance of investment in new supply, much of the investment in the oil and gas sector is needed to compensate for natural decline of oil and gas production in existing fields.** Meeting future demand will require all hands on deck.

Despite the importance of investment in the sector, various obstacles and uncertainties continue to restrain that investment. Divergent outlooks from various international organizations often colour investment outlooks and, as was noted at the London Energy Meeting in 2008, it is the divergence itself that fosters further uncertainty among market participants. Greater transparency and a better understanding of why the outlooks are different, how their assumptions were established, and the type of modelling used would improve market stability³.

Of particular interest to Energy Ministers of late has been the rise of alternative energy. While recognizing and welcoming the need to develop alternative sources of energy, such as biofuels, Ministers at the International Energy Forum have highlighted the need for a better assessment of their potential. A deeper and more precise assessment of select alternative energy sources could usher in a common understanding of the source's impact on future supply and demand balances, and in doing so, reduce uncertainty.

To answer these key questions, and explore the topics laid out by Ministers at the 11th International Energy Forum Ministerial, the IEF held a Ministerial Forum on natural gas development and challenges, symposia on NOC-IOC cooperation and human resource

² The rebound of oil prices has since brought some projects back to the implementation phase.

³ The IEF will organize, in co-operation with the IEA and OPEC, an Annual Symposium in Riyadh, with participation from leading institutions that publish regular energy outlooks. The Symposium will, among other topics, cover the previous year's market behavior as well as the respective energy outlooks themselves.

development in the energy sector and commissioned studies on biofuels and the uncertainties plaguing energy investment.

2.1 — Shifting Dynamics of Gas Markets

The IEF joined hands with the International Gas Union (IGU) and organized the First Joint IEF-IGU Ministerial Gas Forum in Vienna, Austria in November of 2008. Ministers and industry leaders discussed the shifting dynamics of gas markets, and in particular, the trend towards globalization through the rise of LNG trade. **Participants noted that while current global gas resources may be capable of meeting future demand, timely investment of an enormous scale will be necessary to achieve this goal.** They underlined the need for cross-investment and better cooperation between producers and consumers, as both could benefit all parties and allow nations to move beyond the traditional buyer-seller relationship. Producers, consumers and transit nations alike would gain from the reduced uncertainty and improved investment timelines this cooperation could engender. A key recommendation of the IEF-IGU Ministerial Gas Forum was the call to develop a natural Gas Data Transparency Initiative, a project which has since been undertaken by the IEF. A second IEF-IGU Ministerial Gas Forum will be held in Doha, Qatar, on 30 November 2010 to further strengthen the global gas dialogue.

2. 2 — Cooperation between NOCs and IOCs

Given the multidimensional nature of the challenges ahead (technological, economical, environmental, political), combining the efforts of all relevant stakeholders offers the most promising approach to address such challenges. **Improved cooperation between NOCs and IOCs could optimise investment in the oil and gas industry, and help secure its development, particularly in the current, volatile market environment.**

In March 2009, the IEF held its first NOC-IOC Forum, hosted by the government of Kuwait and KPC. "Enhancing Global Energy Security through Cooperation and Partnership" was the central theme. Participants highlighted successful examples of long-term partnerships between NOCs and IOCs and exchanged views on how such cooperation and partnerships could be developed to further enhance global energy security. Among other recommendations, **participants stressed the need for NOCs and IOCs to encourage cross-investment along the value chain and develop innovative models of cooperation** that go beyond the conventional approach to better incorporate the strategic role played by oil and gas resources in the economic, social and political environment of the host countries. It was concluded that the topic of NOC-IOC cooperation merits a permanent place under the umbrella of the IEF and a second NOC-IOC Forum is already planned for 2011, hosted by TOTAL.

2.3 — Tackling the Human Resources Crunch in the Petroleum Industry

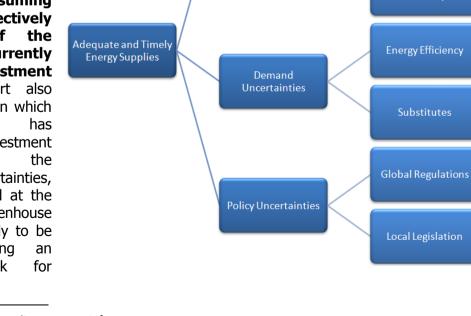
A shortage of skilled personnel in the petroleum sector coloured investment decisions and contributed to cost escalation in the oil and gas industry until 2009. **Perceptions of the industry as a "sunset" sector, misconceptions about its approach to environmental concerns, increased competition from other high-tech industries, and cutbacks in technical programmes in universities have reduced the number of skilled staff available to the petroleum industry.** Additionally, long term job security is a major concern for students, perhaps now more than ever given the global

economy's recent turns, and the industry's reputation for vulnerability to "boom and bust" cycles presents a major obstacle to recruitment. All of the above have left the sector with an ageing workforce. A recent survey places the average age of professionals in the oil industry at close to 50. If current business practices remain unchanged it is likely that 50% of the industry's current skilled workforce will be lost to natural attrition through retirement within the next ten years as junior recruits comprise barely 15% of the resource base.

In April of 2009, the IEF held a symposium, hosted by the government of Oatar, entitled "Tackling the Human Resources Crunch" with the participation of representatives from oil and gas firms, services companies, and educational institutions. The symposium delivered recommendations on ways to attract, motivate and retain talent and emphasized the need for collective, targeted and innovative cooperation between government, educational institutions and industry. Maintaining investment in training and human resources despite the economic downturn, and the need for a significant improvement of the industry's image were among the symposium's most prominent recommendations.

2.4 — Key Uncertainties hampering the Investment Climate

of In recognition the difficulties facing timelv investment strategies, the IEF Secretariat commissioned a study by PFC Energy entitled "Unpacking Uncertainty." In addition to detailing the ways in which market uncertainties are formed and supported, identified the study specific areas where cooperation among producing and consuming countries could effectively reduce some of the uncertainties currently hampering the investment climate. The report also delineated the ways in which price volatility has complicated investment decisions. Despite the uncertainties, economic energy policies aimed at the mitigation of greenhouse gases (GHG) are likely to be continued, suggesting an even lower track for demand's trajectory.⁴



Supply Uncertainties

Size of Reserves and **Converting Resources**

to Reserves

Role of Technology

Substitutes

⁴ The full report is available online at www.ief.org

The study also addressed the uncertainty of demand, an issue previously raised by major producers. The study recommended that governments sponsor the basic R&D necessary to promote commercialization of new processes, both to increase supply and to encourage efficient use. Coordination of energy and environmental policies needs to move beyond a broad agreement on goals, but also coordination of policies intended to realize these targets as well. Transparency in energy policies should be pursued to provide greater clarity to the security of both energy supply and demand. The study also noted that stability of the investment climate, especially within the major resource holders, is essential to maximizing investment under prevailing conditions. Investment regimes must offer predictability for firms operating in the oil sector and stability over time.

2. 5 — Assessment of Biofuels Potential and Limitations

The IEF Secretariat commissioned two world-class and widely experienced energy experts, Claude Mandil and Adnan Shihab-Eldin, with the difficult task of crafting a realistic assessment of the potential and limitations of biofuels⁵.

Driven by policies aimed at enhancing energy security through the diversification of energy sources and reducing greenhouse gas (GHG) emissions, the production and use of biofuels have increased rapidly in recent years. These developments have outpaced our understanding of their potential impacts on the environment, the sustainable utilization of natural resources and food security.

Establishing ambitious targets for biofuels (as was the case in OECD countries) appears to have added uncertainty to supply in the medium-to-long term, as oil producers have become more reluctant to commit to making timely investments.

The report reviews existing biofuel policies and their associated targets in an international context in order to avoid environmental and economic mistakes, ensure long term sustainability, protect the poor and safeguard against food insecurity. Among notable findings, the assessment finds that for most first generation biofuels (with the exception of ethanol in Brazil), the net impact on GHG emission reduction is marginal and in some cases downright unfavourable. The report also indicates that **biofuels production contributed to a price increase among certain food crops**, as was observed in recent years. Notwithstanding the early targets set by several countries, it is not likely that next generation biofuels will become commercially available on a large scale within the next ten years.

The report concludes that **future biofuel production and use should meet several essential criteria**: it should result in significant GHG savings when compared to fossil fuels; rely on environmentally sound agricultural and forestry management systems for the production of feedstock; preserve biodiversity and cultural heritage; be socially inclusive; and integrate with food, feed and other biomass use sectors.

⁵ The full report, "Biofuels: Potential and Limitations," is available online at www.ief.org.

3 — TRANSPARENCY

Transparency is essential to efficient oil and gas market stability and global energy security. Incomplete data in one element of a hydrocarbon's very global supply and demand chain—from well to wheels—can have an enormous impact on the market price of the commodity. Greater transparency aids in price discovery and limits volatility, thus reducing uncertainty for investors.

3.1 — Joint Oil Data Initiative (JODI)

The core objective of the Joint Oil Data Initiative (JODI), coordinated by the IEF and developed by the six partner organizations (APEC, Eurostat, IEA, OLADE, OPEC and UNSD) with the participation of their respective member countries, is to provide an accurate, timely and comprehensive database on oil market data including: crude oil production, refinery output, crude oil and petroleum products demand, stocks levels, and imports and exports.

The IEF and JODI partner organizations spare no effort to improve the quality of data collected for JODI. A wide range of supportive activities sponsored by the partner organizations including training statisticians, sharing best practices and developing knowledge on data collection and checking have all contributed to significant improvement in the submission, timeliness and completeness of oil data to JODI with almost 100 countries participating in the initiative today.

An average of 70 countries over the last 6 months reported the most up-to-date figures (M-1) compared to only 63 countries during the same period in the previous year. Countries which have regularly reported M-1 data include China, India, Russia and Brazil.

The initiative's latest participation assessment on data submission, timeliness and completeness in the three evaluation categories, "Good", "Fair" and "Poor", shows continued improvement. In this assessment, 83 countries for data submission, 59 countries for timeliness and 68 countries for completeness obtained a "Good" evaluation. These are improvements of 10.7%, 11.3% and 13.3% respectively when compared to the same period in 2008^{6} .

Ultimately, the success of JODI will depend on the achievement of full data transparency delivered by all participating countries against each evaluated measure (three "smiley faces"). The IEF Secretariat and its JODI partner organisations re-iterate their call for this as a collective target to be achieved by the end of 2010.

⁶ An updated assessment of the JODI performance of countries over the period June-December 2009 will become available on the JODI website (<u>www.jodidata.org</u>) by 20 March 2010.

JODI Participation Assessment Summary

Global Participation of 98 countries		Number of Smiley Faces		\odot
		2009 Jan-Jun	2008 Jan-Jun	Improvement (%) 2009 Jan-Jun/2008 Jan-Jun
Submission	©	83	75	10.7%
Timeliness	0	59	53	11.3%
Completeness	O	68	60	13.3%

• Expansion of JODI to collect additional key oil data

Following the recommendations of the 6th International JODI Conference to extend the format of the JODI questionnaire in order to give a more complete picture of the oil industry and allows for a more accurate supply/demand picture, the JODI partner organizations prepared an extended JODI questionnaire with additional flows and products. Having conducted a trial exercise over two years using the extended format to collect monthly oil data, the JODI partner organisations concluded that the extension is feasible. The 7th International JODI conference endorsed full utilization of the extended format and the seven JODI organizations have begun collecting data from their member countries in the new format, and the IEF has been gathering data from the JODI partner organisations.

• Extension of JODI to collect Natural Gas monthly data

In light of the gas market's increasing globalization, the IEF Secretariat and its JODI partners assessed an extension of the Initiative to cover natural gas data. The issue was also discussed during the first IEF-IGU Ministerial Gas Forum in November 2008, where Ministers and industry leaders noted that improving transparency on gas market data, such as prices and trade flows, will contribute to the reduction of uncertainties, improve predictability and facilitate project planning. Despite challenges identified by a feasibility study conducted by the IEF, JODI partner organizations expressed their support for the extension. **The gas questionnaire format was adopted and trial data collection on natural gas has begun as of December 2009.**

• Annual data on upstream and downstream capacities and expansion plans in the petroleum sector

The Jeddah Energy Meeting Communiqué called for further improvement of market transparency and stability and the seven organizations involved in JODI (APEC, Eurostat, IEA, IEF, OLADE, OPEC and UNSD) are called upon "to start work to cover annual data that includes, among other things, upstream and downstream capacities and expansion plans".

Participants at the London Energy Meeting (19 December, 2008) noted the importance of providing accurate, complete, and timely data to the Joint Oil Data Initiative, "including information on upstream and downstream capacities and expansion plans".

JODI partner organisations recognized that annual data collection would be a challenging and resource intensive process, but agreed to examine feasible means to achieve this Minister-recommended goal.

• 7th International JODI Conference

The 7th International JODI Conference was held in Quito, Ecuador on 4-5 June 2009 to assess progress made since the 6th International JODI Conference that took place in Riyadh, Saudi Arabia in November 2006 and to discuss the development of JODI. Participants in the 7th International JODI Conference noted that the Initiative continues to find greater support among Energy Ministers and that JODI data is a tool increasingly employed by oil analysts around the world. While JODI was mainly developed by JODI partner organisations and data providers since inception, the Quito Conference revealed that oil analysts and more broadly all oil data users are presently the main drivers of the Initiative, thank to the improvement in JODI data quality noted over the past 2 years⁷. JODI is now a very useful data source for all consuming regions, in particular the regions in which demand is growing quickest, Asia and the Middle East, in addition to having great value for all producing countries. The JODI User Survey, conducted before the 7th International JODI Conference, found that **more users are accessing JODI on a regular, monthly basis**. Users find JODI data to be valuable in filling statistical gaps and asked for more detailed data to be made available where possible.

• JODI Training and Internships

The IEF Secretariat and its JODI partner organisations regularly host JODI Training Workshops in countries and regions around the world. Regional training workshops are part of a joint effort by the IEF Secretariat and its JODI partner organisations to promote JODI and improve the quality of oil market data. National administrations play a crucial role in collecting and releasing complete and accurate oil data.

Through these workshops, the IEF and JODI partners help participating countries report better quality data through the JODI questionnaire. These workshops also offer officials in charge of oil statistics from governments an occasion to clarify JODI definitions and to learn more about data quality assessment techniques. The workshops have proven themselves as an excellent opportunity to share best practices on data validation and to discuss issues that arise through data collection.

After successful workshops for Latin American, Sub-Sahara African, Middle East and North African countries, the IEF and JODI partners held their 4th JODI Training Workshop in September 2008 in Bangkok, Thailand for **Asia Pacific countries** in 37 officials from 13 APEC member economies participated in this workshop. In November of 2009, the fifth JODI Workshop took place in Ankara, Turkey, and was hosted by Turkish

⁷ JODI is now increasingly utilized by oil analysts around the world. 55% of users are energy analysts, up from 24% just two years ago. A full user survey is available on www.jodidata.org

Petroleum for **Caspian and other regional participants**. The Ankara training workshop addressed 37 officials in charge of energy and oil data collection from 12 different countries.

Also in response to a request from the Department of Energy of South Africa for assistance in improving its oil data reporting capacity, an in-house JODI training workshop was held in Johannesburg in December 2009. This is a new approach for the Initiative. The In House Workshop tailors the regular training workshop to country specific needs to more effectively tackle country specific problems. 17 participants from the country's oil industry attended the workshop.

The IEF and its JODI partners' will continue the series of regional training workshops on data collection, a cornerstone of their statistical capacity building effort.

4 — SUSTAINABILITY

Energy is an important input for global development and it is hard to imagine a future without energy. Given the projected long-term demand increases and the projected dominance of fossil fuels in the energy mix for decades to come, there is an urgent need to improve the sustainability of the production and consumption of fossil fuels, especially with regard to their environmental footprint.

A wide range of technological solutions ranging from CO_2 capture and storage (CCS), to the development of renewables and nuclear power will all be important tools in mitigating climate change. However, energy efficiency measures remain the most effective and easily implemented of all options to reduce greenhouse gas emissions while ensuring the most effective use of finite global resources.

4.1 — Role of Technology in the Petroleum Sector

The petroleum industry has an unparalleled record of technological advances in the supply chain, including advances that have improved resource quantification and characterization, a considerable reduction in production costs, enhanced recovery rates, extended field utility, greater environmental sensitivity and a total increase in hydrocarbon recovery.

Among the many challenges facing the energy sector at present is an increase in depletion rates. This trend has driven the race to develop cost-effective and efficient exploration and production technologies, not only to meet rising petroleum demand, but to compensate for the loss of production in aging fields. Additionally, the sector must achieve these advances in technology in an environment of volatile costs and increasingly onerous field conditions.

In December 2008, the IEF Secretariat, in partnership with the IFP, gathered representatives from every component of the petroleum sector, both public and private, to address the role of technology in enhancing global energy security.

Among key findings, the symposium concluded that there is still great potential in increasing recovery rates through technology, reconfirming that the availability of oil should not be the chief concern. **Participants advocated joint technological development and**

implementation among NOCs, IOCs, service companies, universities and research institutes, as one key to tackling the challenges facing the oil industry; reducing costs, improving efficiency and increasing output. Participants also encouraged all relevant players to maintain R & D funding despite current budget constraints.

4.2 — Carbon Capture and Storage (CCS)

CCS development and deployment could offer a viable solution that can contribute, along with energy efficiency, to delivering a sustainable energy future. **CCS technology used in conjunction with CO₂ enhanced oil recovery is a "double-win" option as it reduces greenhouse gas emissions while increasing recoverable reserves in mature fields.** CCS technology presents a huge opportunity to tackle climate change, although there is still a long way to go before it makes a significant impact on greenhouse gas emissions. Cost of implementation and the need to reduce energy consumption of in the transportation and storage of CO_2 are among obstacles still to be overcome before CCS technology attains commercial viability.

With these issues in mind, the IEF, in conjunction with the Global CCS Institute and hosted by National Development and Resources Commission (NDRC) / Energy Research Institute (ERI), convened in Beijing in October of 2009, a symposium on CCS technology to investigate ways to accelerate its deployment. The Symposium gathered representatives from international oil and gas companies, technology and service providers, research centres, financial institutions and officials from producing and consuming countries. Symposium participants discussed the current state of CCS development and deployment and the potential for CCS to be implemented in conjunction with enhanced oil recovery (EOR). They reviewed critical issues related to CCS, exchanged views on how to accelerate its deployment, and examined means to enhance cooperation and partnership among all stakeholders. They observed that the progress of CCS to date is encouraging; however, high cost, productive knowledge sharing, and the necessary regulatory infrastructure remain as obstacles. Participants called for greater commitment to full scale demonstration projects to accelerate commercial deployment of CCS. One of the key recommendations was that the CDM and other future financial mechanisms should be opened up to CCS projects. A second CCS Symposium will be organized, again in cooperation with the Global CCS Institute, on 31 May-1 June 2010 in Algeria.

4.3 — Energy Poverty: Collective Efforts to Help Achieve the Millennium Development Goals

2.5 billion people lack access to modern fuels for cooking and heating and this figure is set to increase to 2.6 billion by 2020, according to IEA projections. Additionally, 1.5 billion people have no access to electricity, 85% of whom live in rural areas.

The IEF and the Department of Energy of South Africa held a Symposium on Energy Poverty in Johannesburg on 8-9 December 2009. The symposium was held as a response to the call from the 11th International Energy Forum which noted that "over two billion people do not yet have access to modern energy services. This perpetuates the poverty cycle and inhibits economic development, availability of clean water and food, while preventing education and training and acceptable health standards." Symposium participants discussed the most

effective means to alleviate energy poverty through informed dialogue and enhanced cooperation and partnerships, and reviewed the role of different stakeholders.

Their discussion led to notable findings and recommendations, **most importantly that reducing energy poverty should be added as the 9th goal in the Millennium** Development Goals (MDG). Participants observed that the causes of energy poverty cannot be divorced from the causes of general poverty, the two are intertwined, and that combating energy poverty demands a managed coordination of financial, social and energy policies. They declared that energy poverty programs are severely underfunded, and more funding (both public and private) is needed to fill the investment gap. Participants also called for greater cross-sector, intergovernmental and private sector cooperation.

5 — THE WAY FORWARD

The energy sector is in a period of flux. The scale and complexity of the challenges that face nearly every element of the industry are daunting, but they are not without solutions. The industry has consistently demonstrated its ability to adapt and evolve to meet rising challenges. The uncertainties laid before the industry today demand ever greater cooperation from within the sector. Governments from producing and consuming countries, NOCs and IOCs must work together more closely to promote cooperation to better address common issues such as transparency and energy security.

The level of uncertainty in today's energy sector is unprecedented but a healthy and frank energy dialogue can reduce those uncertainties, increase transparency in traditionally dark corners of the sector, all while enhancing global trade broadly. The dialogue, as organized and supported by the IEF, is maturing and moving toward more focus and a stronger actionorientation.

An Expert Group (EG) was established pursuant to the decisions made in the Jeddah and London ad-hoc Energy Meetings (2008) to provide recommendations to the 12th International Energy Forum (IEF) Ministerial Meeting on 29-31 March 2010 in Cancun, Mexico, for "strengthening the architecture of the international dialogue, the IEF, and reducing volatility in the oil market." A High Level Steering Group (HLSG), coordinated by the IEF Secretariat, assisted by IEA and OPEC, and including officials from the host and co-host countries of the 12th IEF, along with the hosts of the two ad-hoc Ministerial Meetings in Jeddah and London, oversaw the work of the EG. The recommendations and implementation plan designed by the HLSG have been reviewed and endorsed by an Expanded High-Level Steering Group (EHLSG) composed of a large group of representatives from producer and consumer, developed and developing countries.

The EHLSG recommendations focus on an **enhanced framework for the IEF** to sustain and reinforce the commitment of producer and consumer states to the informal dialogue, and on **means for mitigating energy market volatility**. The IEF Secretariat trusts that the strengthening of the institutional structure of the IEF will ensure predictable and sustainable funding of the IEF Secretariat at an adequate level that is commensurate with the expanded role and additional tasks of the IEF. In a related move, IEA, IEF and OPEC have approved a tri-lateral agreement which identifies specific areas of cooperation between the three organizations in line with and supportive of the recommendations of the EHLSG. These areas include **future energy trends**, **the physical and financial market linkages and energy market regulation**, and **data transparency**.

Against the background of the shifting centre of gravity in the world energy scene, the role of the IEF as a **neutral facilitator of the global energy dialogue** is becoming more important than it ever was before to meet the global energy challenges. The International Energy Forum strives to be the platform for that cooperation, through the IEF Ministerial, topical symposia, the Joint Oil Data Initiative, and focused training efforts. Though the IEF Secretariat has focused its programme of work through the pillars of Investment, Transparency and Sustainability, it is the first to note that it is the interaction between these categories that will define a healthy energy dialogue⁸.

The IEF Secretariat stands ready to implement the changes that IEF Ministers gathered in Cancun will agree on, and will actively guide and support IEF countries in their efforts to develop better mutual understanding and trust. Based on the guidance of IEF Ministers, the Secretariat will focus its programme of work over the next two years to ensure delivery of concrete results on key topics at the next IEF Ministerial in Kuwait in 2012.

⁸ The IEF Secretariat is profoundly thankful for the support it has been granted by Energy Ministers, the G8, the G20, oil and gas companies, and the countless speakers and panellists that have contributed to improving mutual understanding and trust through a productive and constructive dialogue.