

Indaba Energy Leaders' Dialogue (IELD)

Featuring the Trilemma Ministerial Roundtable

17 February 2015, Johannesburg, South Africa

Debrief and Summary Notes



Over 40 energy leaders representing the spectrum entire energy met Johannesburg to discuss some of the key issues facing the global energy industry. Taking place as part of the 7th Annual Africa Energy Indaba, Indaba Energy Leaders' Dialogue (IELD) welcomed industry leaders and government officials to private discussions from 20 countries, including 4 government ministers.

The important gathering also featured a Trilemma Ministerial Roundtable, providing an informal and private platform for Ministers and the WEC Patron CEOs to discuss critical issues and to share visions for the region.

The Dialogue was a great success, gathering both key international and African energy leaders to share insights and solutions to Africa's energy crisis, while exploring Africa's vast energy development opportunities. Key issues that were addressed were the critical importance of regional integration for the regions' socio-economic development and Africa's potential for natural gas and LNG. We will continue to make these issues a focus of our further on-going World Energy Scenarios, World Energy Trilemma and World Energy Resources studies and such insights will help inform this work.

The Indaba Energy Leaders' Dialogue and global bi-annual events the World Energy Leaders' Summits (WELS) are high-level exclusive events organised twice a year by the World Energy Council. Participation is by invitation only to Ministers, the WEC's Patron and Global Partner CEOs, the WEC officials and selected high-level guests. The meetings provide an important milestone and build on the WEC's unique ability to convene this powerful community to address more specific issues and challenges in a targeted regional context.

Looking ahead, our next World Energy Leaders' Summit will be held in Manila, Philippines (16-18 June, 2015) and then in Addis Ababa, Ethiopia (26-30 October, 2015), which will run back to back with our 2015 Executive Assembly. Last but not least, our 23rd World Energy Congress will take place 9–13 October 2016 in Istanbul, Turkey. For further information please do not hesitate to contact us directly at reville@worldenergy.org.

Programme Overview

Indaba Energy Leaders' Dialogue (IELD)

Session Name	Time
Trilemma Ministerial Roundtable The vision ahead: Ensuring trilemma benefits through regional integration	11.00 – 13.00
Lunch	13.00 – 14.15
New dynamics of natural gas and LNG markets	14.15 – 16.00

Summary Notes

Trilemma Ministerial Roundtable
The vision ahead: Ensuring trilemma benefits through regional integration

Key takeaways



- 1. Regional integration has clear benefits and cross border projects will help in the acceleration of trust. Yet there is still a clear need for policy frameworks to help bridge the trust gap between the energy and financial communities.
- 2. Costs remain a big issue, with initial pricing standing as a huge barrier to investment. This is compounded by an education and skills gap in project development.
- 3. Tackling these issues can be addressed through the availability of finance, technology, strong political will, the right pricing and better incentivised businesses to build-up capacity.

Summary

Regional integration in Africa is an important topic. Energy is scarce in Africa, and stands as a barrier to development. In order for countries to develop economically, electricity must be developed further, particularly in rural areas. Specific to the continent, energy access and equity are by far the largest problems.

Key projects for development are mainly found in Southern Africa; whilst developing Namibia, Botswana, and Zimbabwe would help to increase regional integration in the southern part of sub-Saharan Africa. At the same time, support for ECOWAS in the western Africa can also help to develop key energy corridors. Throughout the continent, the deployment of more transmission lines would help to increase regional cooperation.

The development of renewables is critical in projects for Africa. While potential gas projects could increase energy access specific to the southern corridors, an accelerating investment in small-scale hydro, solar, wind, and even



geothermal projects will tackle energy access and put Africa on a track for sustainable future.

One key barrier to investment is project risk. Governments, financers, and developers alike need to build in a better understanding of risk to ensure that projects come to fruition. However, this is difficult due to the lack of available information to identify risk thoroughly. At the same time, pricing stands as a significant barrier. Large projects come with a hefty upfront price tag and the costs to investors are expansive. Instead, Africa should work on how to make projects more bankable. Only with more bankable projects will Africa be able to deliver projects that can deliver energy at the lowest possible cost.

Technical barriers prevent a large amount of new build, but human capital also poses a threat to regional integration project development. At the project level, the education and skills in both engineering and in risk analysis are not there; at the more authoritative level corruption, bribery, and a lack of transparency negate many project developments. The lack of political will to instil systems that both work and can deliver to communities is a huge problem.

In order to overcome these barriers, governments must create frameworks that both increase transparency and provide guiding standards in project financing. A platform like the World Energy Council is critical for bringing together the energy leader and financial communities, in ensuring that the development of projects is analysed in a thorough manner. Through identifying the best instruments for regional integration projects, countries can better address the energy trilemma.

New dynamics of natural gas and LNG markets

Key takeaways



- 1. Africa holds about 7.5% of the world's energy resources and a number of factors combine to present unprecedented opportunities for gas development and economic growth in African countries.
- 2. Globally, gas is and will remain one of the most important energy fuels, but especially in emerging markets. This statement holds true with respect to other fossil fuels and renewables and the role it plays in climate change mitigation.
- 3. The flexibility of gas furthers it as a favoured energy fuel, because of availability (large resources), enabling technology developments and a large support base to provide security.

Summary

On the one hand, global energy dynamics is greatly impacted by short term economic activity and geo-politics. On the other hand, energy investments are much longer term. Currently, the sluggish global economic growth, the Russia-Ukraine situation and low oil prices are the main causes of large volatility and uncertainty in the market. Market fluctuations are normal and part of the economic cyclical nature, but a trend seems to be emerging of these cycles becoming shorter and more intense. This level of volatility and price uncertainty is indeed new for the open market.

Developed economies' energy sources are in general more diversified, which allows policy-makers the space to avoid kneejerk decisions in times of high uncertainty. Emerging economies are often in a more dependent situation with fewer options available. For many African countries, gas has become an important economic factor in terms of export income, as well as growth in the domestic market. New discoveries are still being made in East and West Africa, which requires testing and investment. If gas is developed within a country, about ninety percent of the value add will be in the country, which will of course be lost if it has to be imported. Where gas developments in African countries could be a major source of economic growth, this new level of volatility and reputation of large projects to overrun on project costs, could put a break on it.

The quality of the offtake is another factor that would impact on the financing of projects and there are new trading hubs emerging around the world. New supply routes are opening up in the Panama Canal and Arctic and there are various new pipeline deals either development, or discussion. This leaves demand as one of the risk elements and to this extent, economic growth in Asia presents exciting new market opportunities for African gas exports. Pipeline politics, price uncertainty and the possible overinvestment in renewables could also render Europe as a potential export



market. The large percentage of renewable energy creates a need for a low carbon option to balance the grid and serve as back-up, for which gas provides this flexibility. The advent of emerging technologies in drilling and manufacturing techniques will further change the future dynamics in terms of demand and pricing of gas.