



Energy Innovation Must be Second Nature

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An unprecedented transition is underway; the world is shifting from an energy portfolio underpinned by oil, gas and coal to one based on a lower-carbon energy mix. Innovation is driving this shift, including novel technological, regulatory and social tools and thinking.

According to the Abu Dhabi-based International Renewable Energy Agency (IRENA), growth in renewable energy could

24.4m

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deliver 24.4 million jobs worldwide between now and 2030. Both private and public organizations need to implement incentives and demonstrate a clear direction of purpose to foster an innovative energy transition culture. This will be vital to securing a pipeline of workers with the right skills; those who will form the backbone of this energy revolution.

The traditional oil and gas sector is reputed to have a relatively fixed mindset and low risk appetite when it comes to disruptive change,

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but that is changing. Both international oil companies (IOCs) and national oil companies (NOCs) need to keep nurturing in-house cultures that embrace a low-carbon development model. This may bring real near-term costs higher, incurred by intensive training or the acquisition of newly skilled personnel, for example. But it is crucial to maintain a long-term view of the tangible benefits. Some companies have already started to rebrand themselves to attract and acquire this new generation of talent.

In the GCC, energy efficiency among the public could be encouraged by devising financial incentives, such as discounted fees for energy efficient households and for those who use electric vehicles (EV). The level of awareness can be further supported by education – starting small in schools and moving into college education – by teaching youth to become resourceful and to embrace clean energy and efficiency. Deploying messages via social media is a very effective tool to reach generations Y and Z.

Governments need to direct policies and regulations to be more supportive of the private sector. They could set up a dedicated authority to encourage investment, or designate brand ambassadors and ‘champions’ to promote awareness programs and work on behalf of the energy ministry with corporates. Easing bureaucracy and regulations on financing, particularly for small and medium-sized enterprises (SMEs) that are promoting clean energy or efficiency would be beneficial to economic growth.

Today’s regulatory procedures are often cumbersome and an impediment to change, preventing incentives from materializing. Alignment among governments’ institutional bodies on the main goals to achieve energy efficiency is generally lagging in the region. Government departments

2016

Energy innovation is integral to enabling producers to both satisfy rising demand and meet the commitments made when the Paris Agreement, the world’s most comprehensive climate-related deal, was established in 2016.

and businesses need to embrace a ‘change culture’, which encompasses making procedures and processes more flexible. This will allow the energy transition to transpire more easily.

When we talk about energy transition, most people think about the power sector, particularly renewable energy and solar energy. Other sectors, such as transport and heavy industry, are much harder to decarbonize fully. Therefore, full energy transition will take decades and will require continued collaboration and innovation among policy makers, business leaders, non-governmental organizations (NGOs) and consumers. ■

Oman’s Outlook

Energy transition presents a challenge as well as an opportunity for Oman. The challenge is to keep meeting the increased energy demand from a growing population and economy while living up to the commitments of the Paris Agreement. The opportunity lies in using the energy transition to create new employment opportunities, reduce the physical impact of the energy system and maximize the contribution to the diversification of the economy.

There are two dominant themes for energy transition in Oman. The first one is around the adoption of renewable power in the energy mix. Sun and wind are two of the country’s major resources; both have been largely untapped until today. Several initiatives are gaining ground. Shell has initiated a program that includes an investment in solar PV panels for 22 schools and the company educates the children

on the importance of renewable energy. Efforts extend to training and contracting local SMEs to do insulation works. The Oman Power and Water Procurement Company (OPWP) and Petroleum Development Oman (PDO) have also announced tenders for large scale solar farms.

Energy efficiency is the other key element of energy transition in Oman. Proven technology is available to significantly reduce energy demand while maintaining or even improving living standards. Yet little progress seems to have been made on a national scale. Using significantly fewer resources to keep the population and the economy energized is within reach and would make gas available for the government to monetize in a different way. Plus, it would reduce the fiscal impact of subsidies and represents a significant opportunity for the employment of local talent.