



Monthly Sustainability Newsletter

CHAIRMAN'S MESSAGE

June 2017, Vol. 1, Issue 5

Dear members, partners, friends and stakeholders. It is my pleasure to introduce the June issue of the monthly sustainability newsletter from the Al-Attiyah International Foundation. In this month's publication, we look at the opportunities for synergy between oil & gas with renewable energy.

At our recent CEO Roundtable series, we discussed "Fossil Fuels and Renewables in respect to Leveraging the Growth of these Two Worlds". In my sum-up of the discussion, I emphasized that the use of both natural gas and renewable energy has grown significantly in recent years. Both forms of energy are often touted as key elements of a transition to a cleaner and more secure energy future. However, much of the current discourse considers each in isolation or tends to concentrate on the perceived competitive impacts of one on the other.

At first glance, if one considers the various sources of energy as elements of one pie, they would seem like natural enemies competing for a larger share of space in the pie. However, the picture is different when you have a pie that is continually growing, allowing each element of the pie to increase proportionally, depending on the ability to innovate and address prevailing challenges. It is therefore, not surprising to see that, for several years, the global oil and gas sector has been investing in renewable energy technologies and projects. Therefore, in this month's sustainability newsletter, we look at the current and future energy mix, the investment in renewables by oil and gas companies and a little bit of history of renewable energy activity. The newsletter concludes with the expected future potential for renewables, in quantitative terms.

THIS MONTH'S HIGHLIGHTS AT A GLANCE

Current and Future Energy mix.

Investment in renewables by the oil and gas sector.

Future potential for Renewables.

Upcoming Events

Sep 12. CEO Roundtable Series 5.

Dec. CEO Roundtable Series 6.

Important Announcement

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CEO Roundtable Series 5

The Implications of the Paris Agreement for Oil and Gas Companies in Qatar.

Date: 12th September 2017

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CEO Roundtable Series 6

Title to be announced.

Date: December 2017

Current and Future Energy mix.

Fossil fuels continue to provide the majority of the world's energy and most independent outlooks predict that this will continue to be the case, well into

the middle of the century.

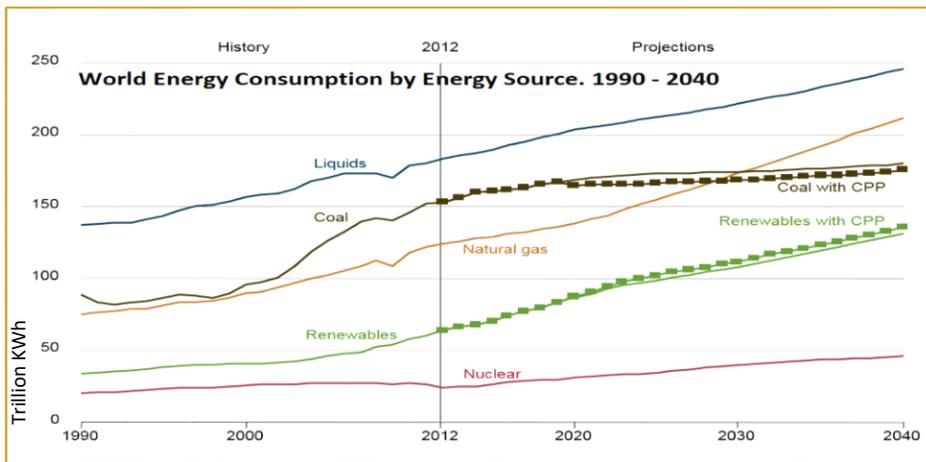
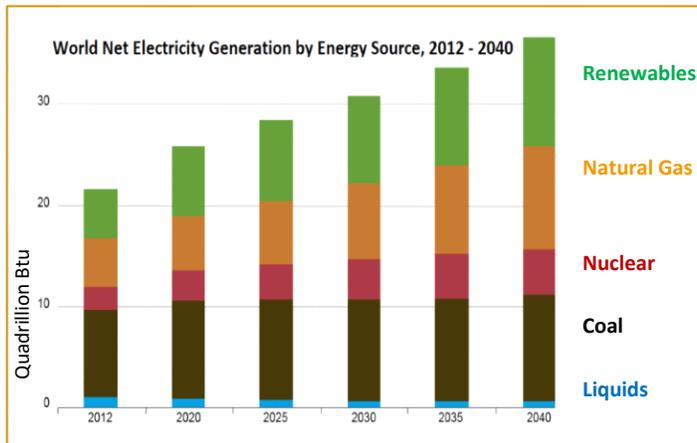
Economic growth strongly influences world energy consumption.

As countries develop and

living standards improve, energy demand grows rapidly.

(www.eia.gov)

The incorporated graphs show clearly that consumption of energy from all sources has been increasing since 1990, and this trend, with the exception of coal, is expected to continue into the middle of the century. Growing concerns relating to the effects of fossil fuel emissions on the environment, and impact of climate change, suggest a transformation of the world's energy consumption pattern that would favour more rapid growth of natural gas and renewables.



As more and more countries introduce policies and incentives to promote the use of non-fossil energy sources, support is gradually expanding for the use of renewable energy sources. Renewable energy has emerged as the world's fastest-growing source of energy, at an annual average rate of 2.6%, in comparison to annual growth rates of 2.3% for nuclear and 1.9% for natural gas. Most analysts have no doubt that this trend of growth in renewables will continue; the only question is who will capture the fruits of this transition.

Pros and Cons of Solar

- Pros:**
 - Most abundant energy source available
 - Long lifespan of systems
- Cons:**
 - Dependant on sunshine
 - Expensive initial cost
 - Space needed for photovoltaic cells

Source: www.leafyenergy.com



Investment in renewables by the oil and gas sector.

It took only 4% growth to make 2015 a record-breaking year for global investment in renewable energy, which topped \$312 billion. The oil and gas industry has played a significant role in renewable energy investment for quite some time. As far back as early 1970, Exxon was studying the first lithium-ion battery, an innovation that would later drive the solar storage industry. Also Chevron was investing in massive geothermal projects and today, Chevron is one of the largest global producers of geothermal power providing, clean energy to millions of people in the developing world.

The major energy companies continue to invest in renewables despite oil and gas remaining their primary focus and interest. In 2016, Total announced plans to invest \$500 million per year into developing clean energy. Investing in renewables helps the industry gain social license, but it is not all about good public relations, as many companies now see this as fitting into their business models. The industry has capital to invest, a wealth of technological expertise, experience with the deployment of mega energy projects, and engagement with the communities where these projects are located. These are all attributes that could make oil and gas companies become the natural leader in the renewable energy space. *(Source: www.altenergymag.com)*

Future potential for Renewables .

We do not need to look too far into the future, to realize that responding to climate change is one of the greatest challenges facing the global energy industry. In reflecting on how the energy industry, as an important sector, could contribute to the global effort to combat climate change, it is appropriate to look at the climate action plans (Nationally Determined Contribution – NDC), set forth by countries under the Paris Agreement. An NDC describes the target of the country, and the means for reaching the target. The NDCs, therefore, provide a good benchmark for the aspirations of many countries with regards to the future development of renewable energy. More than 100, out of the 148, intended NDCs submitted to the United Nations Climate Change Secretariat, include plans to scale up renewable energy supply between 2020 and 2030.

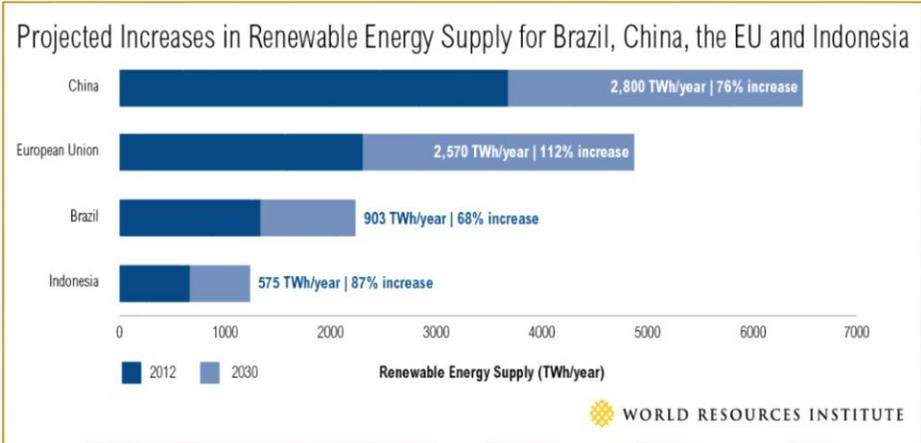
Pros and Cons of Wind



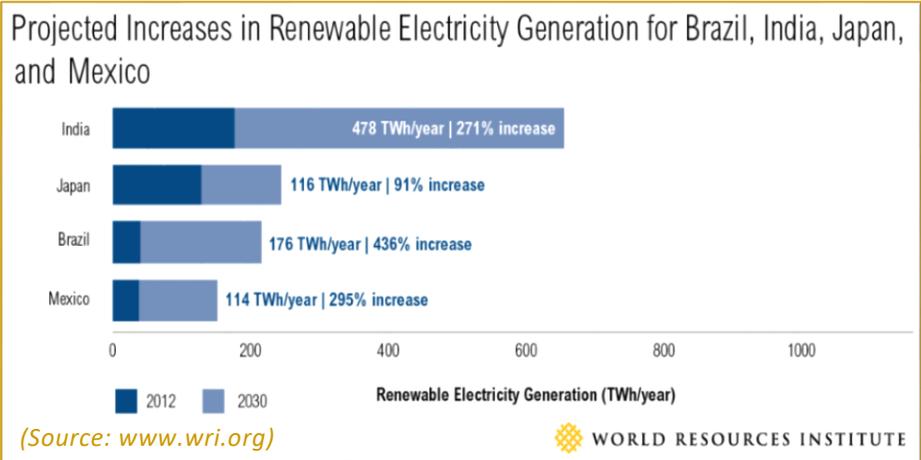
Source: www.leafyenergy.com



Several of the top greenhouse gas (ghg) emitters—China, India, Indonesia, Brazil, and Japan—included clean energy goals as part of their NDCs while the EU and Mexico have already codified their goals through legislation. If all the post-2020 plans are achieved, total renewable energy supply for the top ghg emitters could double by 2030. The graphics show the increase in renewable energy supply suggested by the plans from some of these top emitters.



The vision for the future global energy mix, as suggested by the post-2020 plans from countries, is expected to further galvanize further action and drive investment in renewable energy technologies. This is consistent with the ambitious goal of the United Nations “Sustainable Energy for All (SE4A)” initiative. The SE4A initiative requires commitment and vigorous action from the private sector to drive investment, increase innovation in products and services, and increase operational efficiencies. The oil and gas industry, through investment in renewables, has opportunities both to contribute to the broader social goals of the initiative and to realize enhanced business value in the areas of revenue growth, cost reduction, brand enhancement, and risk management.



Journal Reference
[https:// www.eia.gov](https://www.eia.gov)
[https:// www.altenergymag.com](https://www.altenergymag.com)
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[http:// www.wri.com](http://www.wri.com)

Information
 E-mail: Sustainability@abhafoundation.org
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Pros and Cons of Hydro



Source: www.leafyenergy.com