



FROM ENERGY FOES TO FRIENDS: A Love Story between Renewable Energy and Fossil Fuels in Texas

By Alan Lammey

Over the past decade or longer, as the renewable energy industry in Texas has vastly expanded, there was a time when there used to be no love lost between green energy and the oil and gas industry. In fact, any sort of union between the renewable energy niche and the fossil fuel sector would seem like an unlikely match. However, that relationship has evolved over the last few years, and apparently, what's good for renewable energy—chiefly, wind-energy—in the Lone Star State is now, by and large, good for the oil and gas industry.

It wasn't that long ago that the topic of renewable energy in Texas seemed to rub many die-hard oil and gas industry folks the wrong way. After all, from a competitive fuel perspective, it seemed logical that wind, solar, and other forms of renewable energy sources would take market share away from the industry that has created vast amounts of wealth in the state for many decades.

Not only that, but a large amount of renewable energy initiatives in the U.S. were viewed by many energy market participants as being forced upon the states by the federal government in order to meet questionable global warming or

climate change mandates. When renewable energy projects started up in earnest well over a decade ago, they weren't exactly met with open arms.

Fast Forward to 2016

These days, most Texans are still not aware that when they support the renewable energy industry, they are actually helping to expand the Texas oil and gas industry as well. This is not only good for the energy market as a whole, but it also brings a multitude of opportunities for a vast amount of businesses that serve these gigantic industries.

How can this be? It's all based on federally-mandated, clean energy programs. In a nutshell, the U.S. government charges the oil and gas industry carbon emission penalties on oil and gas production. However, the Fed provides credits, subsidies, and tax incentives to the renewable energy industry.

With this in mind, the oil and gas industry began to see the writing on the wall regarding this sort of trend many years ago. Being a forward-looking industry, U.S.-based oil and gas companies began to invest tens

of billions of dollars into renewable technologies such as wind, solar, and biofuels. As such, Texans who participate in the energy industry—be it renewables or fossil fuels—are beginning to see a tighter union between these star-crossed industries continue to blossom. This is partly because the benefits and credits given to renewable investments help to mitigate penalties imposed on oil and gas production endeavors.

There's a reason why Texas is one of the most prolific states in the union when it comes oil and gas production and has the most wind-power generation capacity of any state in the U.S.

Renewable Energy Connects to the Strength of Texas Oil and Gas Industry

Investments in renewable energy projects by the oil and gas sector get to enjoy the years of energy market insight, technology know-how, mega-project management excellence, rock-solid credit, and community engagement experience. Renewables also offer a means for diversification in the face of volatile energy input costs and a hedge against peaking oil demand

in key markets. As aforementioned, renewable energy investments can often earn oil and gas companies favorable political capital among climate-conscious community members and decision makers.

The oil and gas sector's key financial partners, which include institutional shareholders, banks, and insurers, are also demanding aggressive carbon management specially focused on the oil and gas industry. Finding cost-effective or profitable ways to shift carbon off the balance sheet is becoming downright urgent as the federal government increases the intensity of its muscle power over the oil and gas business.

Making investments in renewable energy by the oil and gas industry isn't exactly a new thing. Oil and gas companies have been dabbling in the renewables business for a long time. In the wake of the oil shock of the 1970s, the U.S. membership in the Organization for Economic Cooperation and Development (OECD) established a range of incentives and subsidies for energy independence. This sparked a first wave of stand-alone renewable business ventures by the oil patch and focused on solar, wind, and geothermal energy. Today, Chevron is the world's largest private producer of geothermal power.

But government matchmaking proved a fickle friend. When public incentives for renewable technologies were withdrawn in the 1980s, most companies abandoned their alternative technology investment and refocused on their core petroleum business.

Historically Rocky Roads for Renewables

A second wave of oil and gas companies got into renewables in the late 1990s and early 2000s as momentum built around reaching a global climate agreement. When the global economic downturn hit and industrialized countries failed to match rhetoric with action, ventures in solar and wind by some oil majors were sold off or quietly shuttered. However, around 2007, the trend started up again with the oil and gas industry pouring billions into renewable projects.

The relationship between oil and gas companies and renewable ventures

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is likely to continue to ebb and flow with the economics and politics of the times. Yet there's no doubt that these two industries have tremendous opportunity for synergy in the future as the integration of new, renewable energy opportunities are made by the oil and gas companies.

Another area of renewable energy interest by the oil and gas industry has been in solar energy, to a smaller degree. Solar use by the Texas oil and gas industry has been utilized in remote applications via small-scale solar photovoltaic (PV) systems. These systems have been successfully applied in remote oil and gas operations to

power monitoring systems, compressors, pipelines, and pumping stations. Additionally, oil and gas companies have implemented the use of solar-powered supervisory control and data acquisition systems in the last five years or more.

Even offshore oil and gas infrastructure has jumped on the bandwagon with the development of platforms that are fully powered by solar and wind. Today, several platforms are in use in the Gulf of Mexico and the southern North Sea gas plays, reducing operating and capital costs and improving safety.

To enhance the likelihood of continued success between the fossil fuel and renewable energy industries, oil and gas project design engineers continue to develop new, state-of-the-art designs for renewable energy technology performance and find new ways of integrating these technologies into operations.

One thing is for certain: the Texas oil and gas industry will be around a long time, so it only makes sense that renewable energy remains a key part of that mix. After all, when it comes to all energy resources, nothing is really part of the problem; it's all part of the solution in moving our society forward. **N**

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