



Cindy Oehmigen

Director of Energy and Corporate Services

It Takes More Than a Village

As I learn more about the world of energy, I continue to find the more I know the less I know. And by world of energy, I do mean the world. Logic would tell us that making a change to electric vehicles (EVs) would be driven by the over-all availability and cost of fossil fuels. What is happening in Norway flies in the face of that logic.

Norway is a major player in oil production. Almost all of it for export. At the same time, Teslas are becoming a very familiar sight across the Norwegian countryside. According to Somini Sengupta in a *New York Times* article, there are many factors encouraging this growth in electric car use. The government waives the high taxes on electric vehicles that it imposed on other cars. EVs can use bus lanes. Toll roads are free. Parking lots offer free charging stations and new stations are being set up on the nation's highways. The goal is to have only EVs sold in Norway by 2025. There is much effort to curb emissions within its borders. In fact, they do not use fossil fuel to produce any of their domestic electricity, it is all hydro power. The Paris Accords only addressed each country's domestic emissions and not how their exports might contribute to the rest of the world's emissions. However, Norway appears to be leading the charge in many ways for a positive global impact.

Statoil is a global, Norway-based energy company with 40 years' experience in the energy field. One of Statoil's most recent efforts is investing in renewables on the east and west coasts of the U.S. Empire Wind is the company's first significant off-shore wind investment. The commercial lease was signed in March 2017 for renewable energy development off the south coast of Long Island and east of the Rockaways. Statoil hopes to leverage their experience in Scotland where they have constructed the world's first floating windfarm. Hywind Scotland is demonstrating the feasibility of future commercial floating windfarms that could be four times larger than this 30MW pilot park. New York's Empire Wind will likely play a key role in meeting the State of New York's commitment to 50% renewables by 2030.

We have touched on wind and hydro—now on to solar. Solar has been receiving a lot of press (including my newsletter article in December). One of the less publicized renewables is gaining traction through Google's Alphabet R&D Facility X. And it is not a world away. Dandelion is a geothermal start-up that is basing itself in the Albany Area. This particular area was selected because of the concentration of homeowners using gas and oil to fuel their heating requirements. There is also a lack of local natural gas. Dandelion has new installation technology that makes it more viable. Through partnerships with other clean energy providers, they are giving homeowners the opportunity to become 100% clean energy households.

You can read more about any of these efforts by visiting the following links:

<https://www.bizjournals.com/albany/news/2017/09/08/googles-latest-spinoff-targets-albany-area-to.html>

https://www.statoil.com/en/what-we-do/new-energy-solutions.html?_ga=2.233359963.412082448.1512746948-1931294479.1512746948