

SYNERGY

Bilkent Energy Policy Research Center Newsletter

**Energy
Policy
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Center**

Energy Markets After Vaccine

The celebration of the COVID-19 vaccine has cheered up the usual grim mode in the energy industry. Although the short term is complicated, the long term should be better than radical uncertainty created by the COVID-19 pandemic. Nevertheless, we should never forget that energy markets are addicted to uncertainty.

In the short term, a greater possibility is the higher prices for fossil fuels in the first half of 2021. My primary concern, as I mentioned in other comments, is food prices. Chinese and Indian import strategies may create food-related problems. As commodity prices surge, we should expect all to increase. But this may not even save the lowest cost producers; as today's FT has mentioned, even Saudi Aramco is looking for loans.

One important aspect is how digitization has evolved due to pandemic. One tweet claims, not CEO or CTO, but COVID-19 has completely transformed the pace of digitization. Enron was one of the first companies to digitize energy trade. They created products and initiated new ways to trade, but they were a disaster. But having these ways internalized and normalized took a long time. And then, it created the medium for further speculation.

My take on this story is that COVID-19 has radically increased the penetration of new methods in our conventional way of doing business. We will have more digital customers and services. These services will need new enablers to work. From this



digital perspective, we may move toward more human-less energy services. But with an increased number of services.

Coal may see some record growth increases next year. The sudden drop in fossil fuel consumption was due to economic activity. Even a vaccine can be invented in 2 years, but a non-fossil economic activity growth will take years. The renewables' victory was due to non-market-based guaranteed contracts; the pandemic didn't test them with market prices.

Natural gas is emerging as a bridge fuel, whatever anyone says. We may see a record increase in FIDs for LNG projects by 2021. The real cost cuts in LNG projects has not been achieved yet. More modular projects can create a solar moment for LNG projects. This will further improve coal to gas switching in major economies.

But the only problem of the energy world looks like energy

transition and climate change. This creates a comfort zone as if we are all happy with dealing with these problems. The 2020s very much look like the 1970s. And 1970s were very turbulent. The growth in green movements around the world has lost its momentum due to the oil crisis. Therefore we have to be careful there.

The certainty a vaccine brings will lift the veil on other problems. The world has lost close to 1 year in struggling with a pandemic. Energy markets lost a year in terms of investments, cash flows, and sustainability. This will be reflected in the post COVID-19 era by favoring lean structures. With more AI and digitization, the employment prospects will shift. But we should be careful about the unexpected events that may still wait for us. Seeing a black swan is not a guarantee for white swans for the rest of our lives.

Bariş Sanlı

Social Media and Energy Companies

Social media have become a new phenomenon in the last five year. Although the purpose of various social media platforms in its first establishment was to increase the interaction between people, it is now a network system that connects the whole world. Social media have a crucial part of people's everyday life. Social media have changed people's media usage habits in their everyday life. People not only produce their content on their platforms but also fundamentally consume others' contents. People can share what they wear, write what they consider, or follow celebrities but the most significant issue for social media, its new place in business marketing.

According to Statista, Facebook currently owns four of the biggest social media platforms, all with over 1 billion monthly active users each: Facebook, WhatsApp, Facebook Messenger, and Instagram. So, the number of people who are using, improving, reacting, and responding through social media has a massive impact on social media.

Facebook, Twitter, Instagram, LinkedIn turned into a new generation billboard. Whether local or global, companies are now trying to show their brand's identities to people and potential customers through social media. This situation has led to changes in the public relations and marketing departments of all sectors, large and small, and almost all companies have started to determine social media strategies. What is the best practice for a company to have an efficient social media strategy?

Determine Your Target: As a company, it should be defined the target profile. One of the social media strategies is finding your target age, gender, or socio-economic group and create content to influence more effectively to change people's actions and thoughts. For all companies and industries, there are some questions you should ask



first; Who is your target audience, which age group do you want to address, or to whom do you want to sell your products? If you are in the fashion industry, you cannot be successful by marketing baby clothes to the 50-60 age group on social media.

Educate Your Audience: After determining the target audience, the next step is educating your target. Social media seem like an entertainment platform in general, but actually, the crucial thing is to impact people's actions. As a solar energy company, your main priority is to convey to your customers their questions. Why should we use solar energy? What is the benefit of using solar energy? What is its contribution to the world and climate change? How does it benefit you economically? The significant thing is that informing people who are the actual consumer and educate them in that area. Or, people cannot have enough background information about your products or your services. It should be provided that people keep updated and provide sufficient details about the related industry; in this way, the industry or company create an awareness of what is happenings within the renewable energy or oil and gas industry.

Make Sure to Communicate: When the issue comes to social

media, the most important thing is to contact people; otherwise, it will be no different from traditional media. The thing that strengthens social media so much is that people can interact. When a company builds up a robust communication system in social media strategies, it causes people to show habitual behaviors. LaRose (2010) argues that over half of all media behaviors are habitual (p.194). It has become a habit to follow someone's life regularly.

The significant element is keeping people in the application and showing them the options, others' and advertisements, and creating frequency to build up habits. When a person asks questions and writes a comment on LinkedIn, Instagram, or Facebook, it is much more useful to see the responses given by a company. The other issue is keeping updated as a company. When the company's social media strategies allow connecting people, people also inform them with feedback, rumors in the industry, the positive or negative side of the product, service, or system.

According to Energy Marketing Conference's data, a powerful strategy to keep in mind is consistency in posting to all platforms.

Each has a different best practice in terms of the number of times per week that is ideal:

- Facebook=1 to 4 times per week
- Twitter=2 to 10 times per week including re-tweets and replies,
- YouTube=Weekly or when applicable
- Instagram=1 to 7 times per week

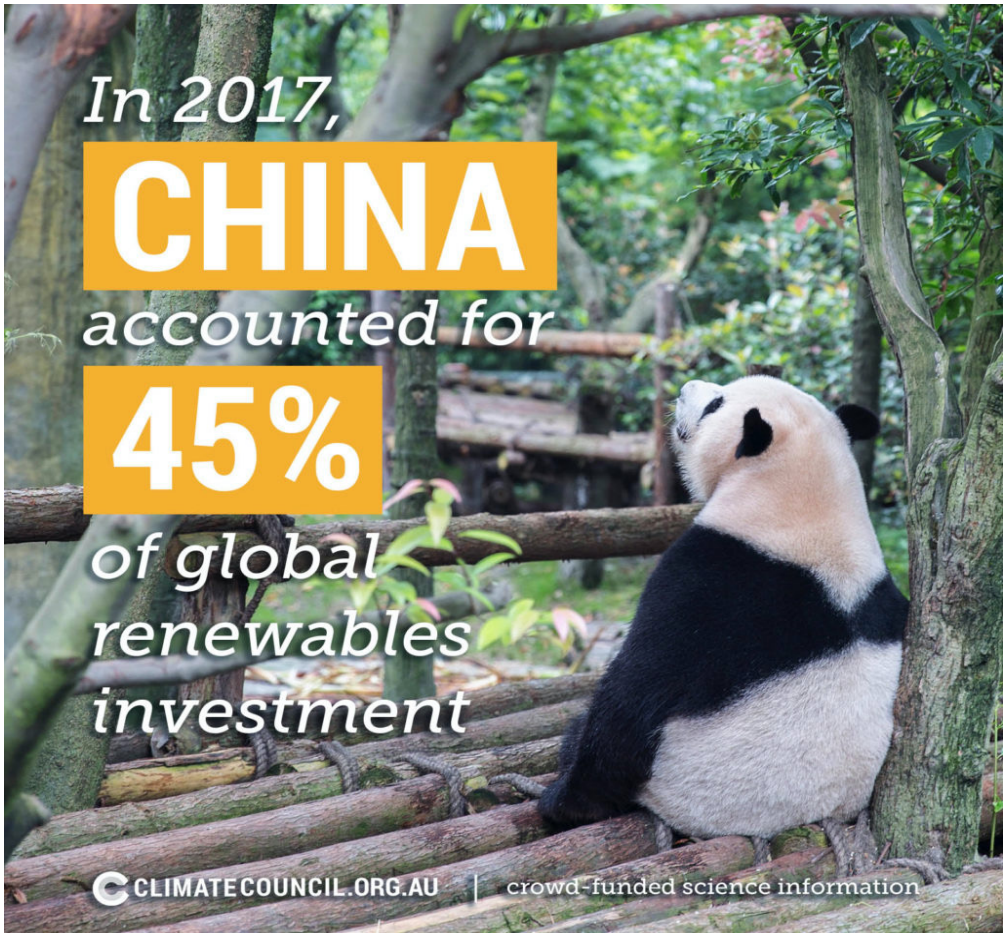
Another feature of social media is that it has brought a new direction to the competitive environment. Companies now compete not only in their own sectors but also with the number of followers and interaction rates. But what about the struggle between fossil and renewable energy companies?

When renewable energy’s power and importance rise, oil and gas companies are rebranding their companies through social media to prevent negative reviews against themselves. According to CNBC’s interview with the young generation, where oil once represented progress and prosperity for a broad swath of the public, today, young people panicked about climate change regarding the industry with suspicion and contempt. Companies are keenly aware of this fact and have responded with ads and social media campaigns to win over the next generation of workers and consumers.

For instance, Shell promotes a video on its YouTube channel to attract young generation awareness. In the video, two young women with neon hair talk about their solar panels and their hybrid car, how they’re trying to go vegan, and how they love natural gas, a key driver of climate change. They said that ‘because it’s the most sustainable way to fuel their life.’ Surprisingly, this move of the company was met with young people’s reactions between the ages of 14-17 and commented on the video that she was not believable.

After different trials, the general tendency among oil and gas companies using teenage, successful dancer, hockey champion, athlete, and supermodel who are not actors to take people’s attention on social media accounts.

According to Vouge’s news, in 2018, top oil and gas companies devoted only around 1 percent of their budgets to clean energy. That same year, the five most prominent firms, including Shell and BP, spent approximately \$200 million on branding to persuade the public they care about climate change. They not only try to look good in the eyes of people but



also manage social media in line with their political interests. Their strategy mostly depends on their history, power, and capital. NRDC (Natural Resources Defense Council) shows that oil companies in the U.S spend 2 million dollars on Facebook/Instagram to promoting the benefits of increased fossil fuel production and supporting successful opposition to several critical climate-related ballot initiatives.

On the other hand, renewable energy companies make their social and media strategies by keeping their target audience focused on the younger population, using more dynamic, highly credible, and malicious scenarios. Their strategy, mostly, depends on keeping in touch with the young generation and use short videos rather than creating substantial advertisement campaigns; they connect people via Instagram and YouTube channels. Also, by creating future-oriented content, they present the information they have done to people. The social media strategies more optimistic and more humanist planet-based promotions and campaigns.

Moreover, oil and gas companies or renewable energy companies do not deny that, rather than traditional media usage, both consumers and producers try to use social media effectively and increase their follower numbers. In the second quarter of 2020, Facebook reported over 3.1 billion users monthly. If companies want to make their voices, they should use social media’s power before it’s too late.

Başak Bozoğlu

BRENT OIL	44.45 \$/BL	GASOLINE	7.02 ₺/LT
USD/TRY	7.74	DIESEL	6.35 ₺/LT
EUR/TRY	9.14	FUEL OIL	3.97 ₺

Awakening of Stored Methane

A team of scientists from a Russian-Swedish research ship observing the Arctic for 15 years from an ecological perspective has released new results that appear to be witnessing the beginning of methane emissions from the “sleeping carbon cycle giant” and the Arctic Ocean. This is worrying because methane is often more harmful than carbon dioxide in the context of climate change. For example, for twenty years, methane released into the atmosphere heats it as much as 80 times stronger than carbon dioxide.

According to the Guardian, the process of releasing methane into the atmosphere was observed along the continental slopes of the eastern Siberian coast, where large deposits of this gas were discovered at a depth of 350 meters in the Laptev Sea near Russia. Scientists worry that this process will significantly increase global warming. And U.S. scientists have gone a step further, the Guardian writes, and the U.S. Geological Survey says the release of greenhouse gases stored in Arctic ice is one of the four most serious scenarios that could cause sudden climate change.

Scientists from the Russian-Swedish team point out that most methane bubbles are currently dissolving in water, but the amount of methane recorded on the water's surface is four to eight times higher than expected, and part of it has undoubtedly already ended up in the atmosphere. Moreover, at one point on the slope of the Laptev Sea at a depth of about 300 meters, they found methane concentrations of up to 1,600 nanomoles per liter, which is 400 times more than would be expected if the sea and atmosphere were in balance. The consequences of the process have not yet spilled over into society, but it is also a matter of time, more than uncertainty. It should be noted here that, according to some scientists, the process of releasing deposited methane



trapped in the Arctic Ocean began 8000 years ago, but in negligible amounts, which now appear to be increasing rapidly due to global warming.

Temperatures in the Arctic Circle are rising twice as fast as the global average, and warming averaged 5 degrees Celsius this year. This means that the water trapped in the soil (i.e., on land) does not freeze completely even below 0 degrees Celsius because it is located between two warm layers. The top layer of soil, known as the active layer, thaws in summer and freezes again in winter, and while it freezes, it experiences a kind of sandwich effect. When temperatures are approximately 0 degrees, the active layer's top and bottom begin to freeze, while the middle remains isolated. Microorganisms in this frozen middle layer continue to decompose organic matter and begin to release methane.

According to some other scientific research, the warming of the Arctic Ocean melts the ice, and the ocean absorbs even more solar energy and warms up. Thus, the ocean becomes warmer than the former ice sheet, and much more water vapor evaporates into the atmosphere. When the land is colder than the sea (in winter), the warm air rises above the sea and creates a wind in which the colder air from the land sends even more into the atmosphere where dew is created, clouds forming which then release that dew and heat stored in it. For the

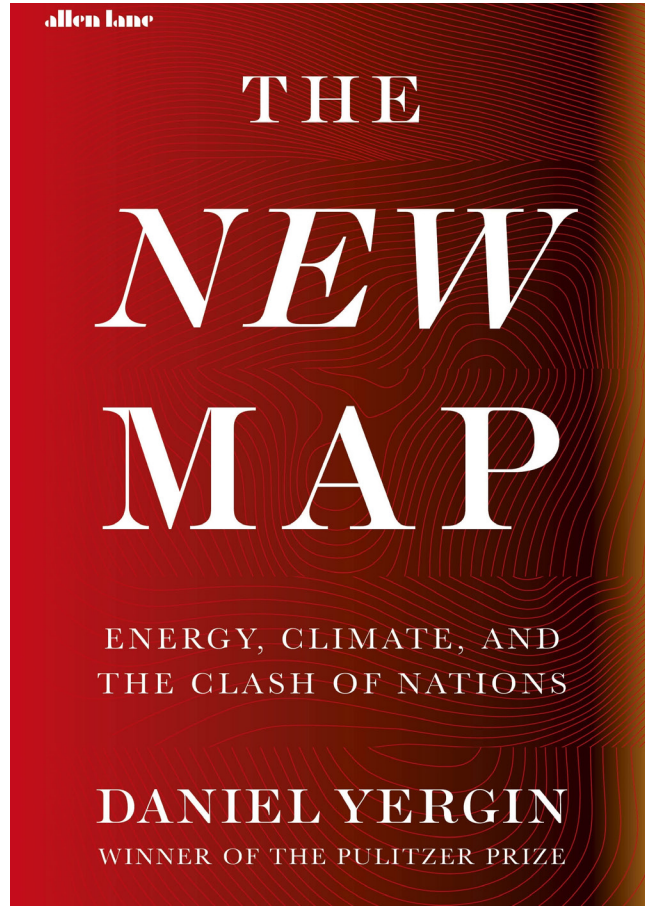
tundra, this means that instead of the current situation where cold winds blow from the sea to the land (from north to south), new warm winds blow from the land to the sea (south-north), difficult or impossible to freeze the soil. This leads to the further dissolution of the permafrost and the additional release of methane stored in the soil into the atmosphere.

These processes make it difficult for our concrete present to extract shale gas in Siberia and lead to the fires we have witnessed recently. This is a confirmation of the efforts of German scientists and some politicians who oppose Nord Stream 2 because of the damage that this project - since the gas it is supposed to transport was obtained from a shale surface mine - is doing to the climate. In the context of climate change, the beginning of a statistically significant release of methane into the atmosphere represents another limit, not only psychological but also ecological, which has now been crossed, and the political changes necessary for climate rehabilitation are still lacking. Last week's events in the EU parliament, as well as this week's news that the World Bank is financing coal-related projects in the background, only confirm the chronic global lack of political and economic will and courage to make decisive moves. However, science has clearly stated in which direction to go next.

Book Review: The New Map

If you are a person that has an interest in the current developments of the energy sector in different commodities and you have a lack of information, this might be the book to start reading. Daniel Yergin, the Pulitzer winning author and worldwide known energy expert, published his new book, *The New Map: Energy, Climate, and The Clash of Nations*, in September 2020. The book discusses the world's current energy issues by focusing on different regions such as United States, Russia, China, and the Middle East. After that, it focuses on technological developments in electric cars, robotics, and hydrogen. Finally, he discusses the energy transition projects and what awaits us in the future.

Daniel Yergin has an extraordinary way of explaining complicated issues in a broad range from technical details of oil and gas issues to foreign policy motivations of related countries in a simple way. His narrative helps readers to digest information regardless of prior knowledge. In the first part of the book, Yergin explains the recent shale developments in the United States. He focuses on how and why the shale sector's developments happened and how it has completely changed the world. While explaining these issues, Yergin uses each major company's stories that played a role during that period. The chapter is beneficial for anyone who is interested in the US Shale Revolution and its impact on American society. After I read this chapter, I do not think that limiting fracking in the United States will be a policy as it is stated in Biden's campaign since the operations are tied with many other sectors



in the American economy. The investments in these sectors are meant to be designed as long term, and the United States will use its power on being as a major oil and natural gas producers. The role of oil and natural gas would remain important in the next few decades if a major technological breakthrough did not happen.

After discussing the United States, the book focuses on Russia and China cooperation and how the economic rise of China shapes the relations with Russia that are facing setbacks with western countries through sanctions. Other major issues of the South China Sea and Belt and Road Initiative is also being discussed in the book. In these chapters, the author gives the historical background and the motivation of the countries following current policies. A similar analysis was also made for the Middle Eastern countries. Here we see how the terrorist groups are formed and affected energy issues throughout the 20th and

21st centuries and how the OPEC countries and Russia dealt with the shale revolutions.

After discussing the conventional energy sources, Yergin moves on with technological innovations and provides information about electric cars, robotics, and how technology evolved businesses. Finally, the author discusses the climate issues and energy transition by giving similar historical examples from previous meetings between the countries.

Discussing too many and very broad subjects in the same book allows Daniel Yergin to build a map and unite the pieces, and it helps readers to connect the links between the topics that seem not very relevant at first sight, which is the outcome of a global and interdependent world.

Overall, Daniel Yergin provides a macroeconomic perspective of energy developments by showing micro-details from different parts of the world. As a person who is interested in the energy sector, I already know some parts of the book due to my previous readings, yet I learned many small important details along the way as well. In the parts where I did not have prior information, it was pleasant to understand the topics easily with Yergin's explanations.

In the future, I believe that the book will be used in many studies regarding the geopolitics of energy issues as a reference point and help researchers to build advanced analyses that will help us understand the world.

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