

26 APRIL 2021

VOLUME 2 ISSUE 29

SYNERGY

BİLKENT ENERGY POLICY RESEARCH CENTER NEWSLETTER

Leaders Summit On Climate



10

WHAT WILL A SMART
GRID MEAN FOR
TURKEY?

12

YEMENI CIVIL WAR
AND
SOLAR ENERGY

14

2021 AS A REBOUND
YEAR FOR FOSSIL
FUELS

In This Issue...

04 US Climate Summit: Unity or Masking Divergences?

US President Joe Biden's two-day virtual Leaders Summit on Climate took place on 22-23 April. While the summit certainly drew much attention to the way in which the US is trying to put itself forward in a leadership role when it comes to climate action, it also highlighted the difficulties in getting other countries to commit to more ambitious climate targets...

06 Leaders Summit On Climate

Last Thursday was Earth Day, and Biden's virtual climate summit kicked off on that day. The United States hosted this virtual event on climate, namely the Leaders Climate Summit for two days...

10 What Will A Smart Grid Mean For Turkey?

A smart grid is a system that uses information and communication technologies to integrate, in an intelligent way, all users connected to the electrical power system considering their behavior and actions...

12 Yemeni Civil War and Solar Energy

Yemen has been the center of a bloody civil war since March 2015. It can even be said that this civil war is one of the bloodiest civil wars human history has ever seen...

14 2021 As A Rebound Year For Fossil Fuels

This week we will see oil companies' quarterly results. Just like the record losses during 2020, we may see a jump in profits and free cash flows...

BRENT OIL

64.39 \$/BL

GASOLINE

7.15 ₺/LT

USD/TRY

8.28

DIESEL

6.51 ₺/LT

EUR/TRY

10.00

FUEL OIL

5.41

EDITOR:

GÖKBERK BİLGİN

CONTACT: gokberk.bilgin@bilkent.edu.tr

ABOUT US



Energy
Policy
Research
Center

Synergy is a weekly online newsletter published by volunteers on bilkenteprc.com. It welcomes feedback from readers. Please submit your letters to eeeps@bilkent.edu.tr. The Editorial Board will review the letters and print them as space permits. The contents of this newsletter are the author's sole responsibility. They do not necessarily represent the views of the Bilkent Energy Policy Research Center or any of its Members.

US Climate Summit: Unity or Masking Divergences?

Selin Kumbaracı 

US President Joe Biden's two-day virtual Leaders Summit on Climate took place on 22-23 April. While the summit certainly drew much attention to the way in which the US is trying to put itself forward in a leadership role when it comes to climate action, it also highlighted the difficulties in getting other countries to commit to more ambitious climate targets.

A significant factor behind these difficulties lies in the uncertainty surrounding the feasibility of the climate pledges made by the US itself. Despite the Biden administration arguing that the recently proposed controversial infrastructure bill—which faces significant challenges in Congress—isn't absolutely necessary for reducing emissions by 50-52% until 2030 (the US target), many are doubtful of this stance.

As such, given the slim chances of the bill passing, many experts are questioning whether or not the US will be able to reach its climate target. This uncertainty—on top of the US' turbulent track record when it comes to following through on climate action, as evidenced by the setbacks during the Trump administration—does not make for a conducive atmosphere when it comes to convincing other nations to increase their targets.

While the US President Biden has had some successes, like the new commitments secured from Canada, Japan, and South Korea (among others), the countries that are major emitters—such as China, Russia, Brazil, and India—did not indicate they would be unveiling any new plans.

As one official from the Biden administration described China's approach, "What you got from Xi Jinping is, 'Let me tell you all about a 1992 treaty that still defines China as a developing country,'"—an argument used by Xi to avoid further concessions on climate. Indeed, the only 'concession' made by China was quite modest, with the country committing to a "phase down" of coal consumption between 2025-2030. While this is the first time Xi has promised to lower coal consumption, it should be noted that this would still allow such consumption to increase until 2026.

These more explicit divergences were not the only ones that marked the virtual summit. Perhaps less noticeable but much more pervasive a difference can be seen in the varying methods taken to combat climate change in the United States and Europe.

While the US has adopted a much more technology and innovation-focused path toward reaching net-zero emissions by mid-century, the EU has taken on an approach that is much more systematic. As put forth by the French



environment minister, “It’s great to develop hydrogen, as we are doing, and carbon capture. But I think we have an extra ingredient in France and Europe. We’re going further because we’re also looking at our ways of life.”

This reliance on green technological advancement as well as innovation and investment by the private sector is quite evident in the discourse of many in the administration—such as with US climate envoy, John Kerry, likening such green technology developments to going to the moon: “We are the country that went to the moon. We didn’t know how we were going to get there when President Kennedy announced the goal, but we did it”

While it is not that the EU doesn’t have investment into green technology, the US far surpasses the EU’s potential in this area, especially given the way in which spending on this matter would be determined nationally by the 27 Member States. However, the EU has the regulative power that the US sorely lacks: while the US continues to depend on market-driven methods, the European Green Deal—with it touching upon so many different areas of life, from automobile emissions to building renovations—has been dubbed an industrial policy.

While the difference in approach is something that could perhaps be overlooked, the sophisticated carbon pricing system the EU has—and that the US refuses to implement on a federal level—is much more of a tricky topic, especially in terms of how it will impact the future trade relations between the two powers.

Indeed, one particular point of heavy contention between the two sides is that of carbon pricing—especially as it relates to the EU’s carbon border adjustment mechanism (CBAM). While the EU utilizes its Emissions Trading Scheme (ETS), the US has no equivalent carbon pricing system. This creates a particularly delicate situation with regard to the EU’s CBAM—a tax of sorts that is to be applied to imports from countries without a carbon pricing mechanism equivalent to the EU’s, such as (potentially) the US.

Overall, despite many welcoming back US leadership on climate action, especially underlines the importance of its convening power, many divisions still remain. While some of the major fault lines are between the US and China, there are other existing uncertainties as to how serious the US is this time, particularly with its unreliable track record with regard to climate action. For the EU, though, the split lies in the methods applied and how potent these are in achieving the ambitious targets the US has expressed.

In the words of a former Obama administration official, Kelly Sims Gallagher, “A key difference is that many European countries have passed climate legislation, and this gives them much more authority to design and implement policies consistent with their international commitments,” as opposed to the US which “lacks this comprehensive legislation and instead has pursued a patchwork approach with limited authorities.”

Leaders Summit On Climate

Fatih D. Oral 

Last Thursday was Earth Day, and Biden's virtual climate summit kicked off on that day. The United States hosted this virtual event on climate, namely the Leaders Climate Summit for two days. Leaders Summit on Climate is also the most notable event before the 26th U.N. Climate Conference (COP26) in Glasgow on 1-12 November 2021. More than 40 world leaders, including European Leaders, U.N. Secretary-General António Guterres, China's Xi Jinping, Russia's Vladimir Putin, and Turkey's Recep Tayyip Erdoğan, attended this event as they declared after the Biden's invitation. Pope Francis, Bill Gates, Michael Bloomberg, 19-year-old climate activist Xiya Bastida, NGO leaders, and CEOs also participated at the virtual summit. The two-day climate event is essential for the Biden administration to reestablish the U.S. as a reliable global leader on climate change after the official return to the Paris climate agreement.

At the inaugural session, The U.S. Vice President Kamala Harris underlined the importance of combating the climate

crisis by saying, "it is imperative we act." Then, the U.S. President Joe Biden exposed his ambition on climate change on more time by calling climate crisis "the existential crisis of our time" and asked world leaders to fight climate change altogether by saying, "We are here at this summit to discuss how each of us, each country, can set higher climate ambitions that will, in turn, create good-paying jobs, we have no choice, we have to get this done.". The U.S. President Biden also pointed to steps the U.S. would take to reestablish U.S. leadership and put the U.S. back to the center of the global struggle to address climate change after the Trump administration. "The signs are unmistakable, and the science is undeniable that the cost of inaction, it just keeps mounting. The United States isn't waiting. We are resolving to take action, not only our federal government, but our cities and our states all across our country, small businesses, large corporations, American workers in every field," he said. German Chancellor Angela Merkel responded to Biden's new attitude by

saying she is delighted to see the U.S. as a global leader for climate change. The U.S. President also declared an aggressive new commitment on greenhouse gas emission, which pledges to cut greenhouse gas emission of the U.S. by 52% at the end of the decade. This agreement roughly doubled President Obama's goal set in 2015 as a part of the Paris Climate Agreement. However, Biden's promise might be deceiving because the U.S. pledges to reduce greenhouse gas emissions between 50% and 52% by 2030 compared with the 2005 level. Taking 1990 as a baseline, the U.S. now aims to cut its greenhouse emission by 41%-44% until the end of the decade. European Union has already taken 1990 as a baseline to achieve a 55% emission cutting goal by 2030.

President of the People's Republic of China Xi Jinping was the first national leader to speak right after the inaugural speeches of the vice president and the president. However, Xi Jinping did not announce any modified commitment as his peers



did. President Jinping only reiterated the previously announced goals of China at the summit by underlining the plan to cut carbon dioxide emissions at the peak before 2030 and achieve carbon neutrality before 2060. China is the largest greenhouse gas emitter worldwide, but China's previously announced targets were behind other developed countries that promised to decrease emissions as soon as possible. President Jinping stated that China's dramatic development means performing carbon neutrality in such a short period is still challenging. "China has committed to move from carbon peak to carbon neutrality in a much shorter time span than what might take many developed countries, and that requires extraordinarily hard efforts from China," he said. The president also announced that the Chinese government would stringently manage coal energy plans; coal energy is one of China's most significant carbon emissions sources. Xi Jinping also underlined China's dedication to collectively combat climate change by saying that "China looks forward

to working with the international community, including the United States, to jointly advance global environmental governance".

When it comes to the Russian president Vladimir Putin, there was a technical problem, and he stared at the camera in silence while the U.S. secretary of state Antony Blinken was introducing him repeatedly for two minutes. Putin stated the need for unity, and he also pronounced that Russia is genuinely interested in global cooperation to fight climate change and carbon neutrality "should certainly unite the efforts of the international community as a whole." Russia's Putin said. Last week on Wednesday, right before the Biden's summit, President Putin gave a national speech and declared that Russia would significantly decrease its greenhouse gas emissions by 2050 despite Russia's size, geography, climate and economic structure. He also pronounced the goal to reduce to keep Russia's greenhouse gas emissions to be less than the European Union's over the next 30 years. Briefly,

Russia's Putin restated a commitment he had made on Wednesday during a nationwide address at the summit.

Prime minister of Great Britain Boris Johnson was also delighted for returning the U.S. as a global leader in combating the climate crisis. Prime minister Johnson stated the importance of technological solutions which people in future will need. Moreover, prime minister Johnson proclaimed that struggling with climate change would grant new economic opportunities. Then, he said that "It's vital for all of us to show that this is not all about some expensive, politically correct agreement of bunny hugging, and this is about growth and jobs."

U.N. Secretary General António Guterres and his words were quite pessimistic and alarming on Thursday. He urged global leaders to request more urgency in their efforts to reduce climate change and said that "racing toward the threshold of catastrophe" unless it moves more quickly to slow the Earth's warming. Secretary-general



Guterres also noted the past decade was the warmest on record, greenhouse gas level in the atmosphere have stood at threatening levels, and scorching temperatures and epic wildfires have become more common and more intense. He called on leaders to put a price on carbon emissions, end fossil fuel subsidies, ramp up investments in renewable energy and stop funding coal activities in the future.

Canadian Prime Minister Justin Trudeau announced that Canada would raise the climate ambition and plan to reduce its 2005 emission levels by 45% by 2030. "We will continually strengthen our plan and take even more actions on our journey to net-zero by 2050," Trudeau promised. He added that "If all governments and Indigenous peoples and different sectors can come together and work together, then we should be able to find solutions and create real change, and that is why we're here today."

Japan was another country modifying

its ambition and goal to fight climate change. Japanese Prime Minister Yoshihide Suga announced that Japan had set a goal to decrease greenhouse emission, with a significant reduction of 46% by 2030 compared with 2013. Previously Japan had a plan to reducing greenhouse gas emission by 26%, so roughly, Japan doubled its target. However, Japan Climate Initiative (JCI), which includes 300 Japanese companies, local governments, research institutions, and private groups, showed a reaction to the newly announced goals of the Japanese government. They declared that 46% of the reducing plan was just 1% higher than the JCI members had requested. "We expect the government to increase the target to 50% without delay," JCI said in a statement, noting that such a goal would be more in line with those set by the United States and the European Union.

Recep Tayyip Erdogan appreciated U.S. President Biden for organizing this meaningful event and his invitation.

"Our moral and conscientious duty is to leave the world entrusted to us in a more livable way to future generations. Climate change affects not only the significant states that pollute the world the most but all of humanity," he said. President Erdoğan stated that "Turkey is also one of the most affected countries by climate change, although Turkey has nearly no historical responsibility on the rise of greenhouse gases in the atmosphere." President Erdoğan also mentioned the renewable energy developments of Turkey by saying that "Currently, the installed power capacity has a share of 52.3% of renewable energy. At this rate, we rank sixth in Europe and 13th in the world. In terms of installed hydroelectric power, we rank second in Europe and ninth in the world," Erdoğan also noted that "Turkey will increase its electricity generation from solar power to 10 gigawatts until 2030 and from wind energy to 16 gigawatts," additionally said, "Thanks to the steps we will be taking, we aim to have 66.6 million tons of carbon dioxide emission

reduction by 2023."

Brazilian President Jair Bolsonaro gave various commitments; Bolsonaro was a vocal ally of former President Donald Trump, who previously pulled Brazil back from the Paris climate agreement. On Thursday, he offered a more conciliatory tone at the Biden administration. President Bolsonaro said that he moved forward his pledge to achieve carbon neutrality by transforming it from 2060 to 2050. He also said that his government had made a "commitment to eliminate illegal deforestation in Brazil by 2030 with full and prompt enforcement of the Brazilian forest code."

According to young climate activist Xiye Bastida, those commitments given by world leaders during the virtual global summit on climate are inadequate to combat climate change. Bastida condemned world leaders because of their unambitious, non-bold, so-called solutions and added the event does not entirely express the communities

most at risk of climate change disaster. "I don't want to stand here and read a list of our concerns and demands because if you had been listening, you would know what they are," she said. "The climate crisis results from those perpetuating and upholding the harmful systems of colonialism, oppression, capitalism and market-oriented brainwashed solutions." She also added that world leaders should know it is the end of the fossil fuel era.

The billionaire founder of Microsoft, Bill Gates, asked global society to develop new technologies for climate change. Gates said, "Climate change is an incredibly complex issue. We can't reach our goals in this matter using the technologies currently available." According to Gates, conventional energy sources are now cheaper and more popular than "green" ones. However, he believes it is possible to create and make affordable climate-friendly energy sources available. He also thinks that international cooperation is needed to solve the problem of global

warming. "I believe that if we take these steps together, we can prevent a climate catastrophe," Gates said. Mike Bloomberg targeted coal plants and added: "The enterprises that contribute the most to climate change are coal-fired power plants. They emit toxic, deadly pollution to the air." Bloomberg, who holds city governments and businesses responsible for the majority of emissions, also addressed governments and investors: "We cannot beat climate change without a historic amount of investment," he said.

In his closing speech, the host, President Biden spoke optimistically about the two-day summit: "In America, there has never been a challenge that we could never beat if we put it in mind and do it together. I hope countries feel the same. I know we can do this." Referring to Russian President Vladimir Putin, whom he called "the murderer" before, Biden said they could meet on a common ground on climate change even if there is a geopolitical enemy.



What Will A Smart Grid Mean For Turkey?

Can Arihan 

A smart grid is a system that uses information and communication technologies to integrate, in an intelligent way, all users connected to the electrical power system considering their behavior and actions. Smart metering, prevention of prolonged electricity outages, advanced infrastructure, employment of Internet of Things and big data, active participation of the consumers are important aspects of a smart grid. Integration of renewable energy resources plays a major part in smart grids as well.

Turkey, a country that gives the utmost priority to providing its citizens with reliable and cheap electricity, has been investing considerable financial resources and time in making its grid "smarter." Still, there are many steps to be taken to transform Turkey's traditional grid into a "smart grid." In a developing country like Turkey, a smart grid can yield huge benefits. For example, Turkey has been suffering from electricity theft, especially in the east of the country. Smart grid technologies can significantly help prevent that problem by integrating advanced monitoring technologies into the current system. According to the "Turkey Smart Grid 2023, Vision and Strategy Roadmap Summary Report" prepared by the Energy Market Regulatory Authority ("EMRA"), with the help of the smart grid applications, theft of electricity will be eliminated by 2035.

Thanks to better infrastructure and improved technologies, people living in Turkey experience fewer power outages every year. Nevertheless, even in urban areas, there are occasional power cuts, and in rural areas, such power outages are happening much more often. Smart grid technology will be critical in tackling this problem. Outage Management System ("OMS"), an essential system in a smart grid, will enable the system operators to detect and solve power outages much faster and efficiently. Fast notification feature of OMS and the rapid communication that OMS enables radically decrease the duration of the power outages.

Active participation and involvement of the consumers in the system is one of the most noteworthy advantages of replacing the existing grid of Turkey with a smart grid. Consumers have virtually no participation in the current system, and they only pay their electricity bill from month to month. When the smart grid is fully established, consumers will monitor their electricity consumption in real-time and see when the electricity is most expensive (cost of electricity rises when the consumption is the highest, i.e., in peak hours). Smart meters have a key role in supporting the participation of the consumers in the system. This useful tool, which will give the consumers access to key data, is already being used in Turkey. However, the number of consumers that have smart meters is still very low. Authorities (e.g., EMRA, Ministry of Energy,



and Natural Resources) shall boost this number by providing incentives to consumers and distribution companies. Even if the whole grid of Turkey is renovated, benefits will be much limited without the participation of the consumers. Like any other market, the electricity market consists of supply and demand, and technological improvements in the supply side must certainly be accompanied by improvements in the demand side (e.g., increasing the number of smart meters).

Another benefit of establishing a smart grid would be to enhance the system's security against both physical and cyber-attacks. Turkey is a country that faces many geopolitical challenges and that carries out operations against many terrorist groups (e.g., PKK, YPG, ISIS), and an attack by one of those groups on Turkey's electricity services is a threat that must always be kept on mind. Such attacks may both be in the form of physically destroying electricity transmission routes or attacking the software behind the grid. A smart grid will help counter each of these attacks and maintain the secure flow of electricity to residents in Turkey.

The establishment of a smart grid will also support the development of a microgrid. A microgrid is a self-sufficient energy system that serves a discrete geographic footprint, such as a college campus, hospital complex, business center, or neighborhood. The advanced technologies that are to be

used in the smart grid will make the development of microgrids much easier. Two distinct advantages can be achieved by installing microgrids: widespread use of renewable energy resources in microgrids, guaranteeing the secure access of geographically remote areas of Turkey to electricity. Renewable resources, such as solar panels and wind turbines, are the most common electricity generation method in microgrids. Therefore the carbon emissions can be lowered with micro grids. Besides, the existing grid in Turkey covers 100 percent of the population, but as mentioned above, remote rural areas may experience many power outages during the year. Microgrids can solve this problem. When microgrids are established in those remote villages, these villages will not be affected by the failures of the national or regional supply lines, and they will produce their electricity securely and from environmentally friendly resources like solar power.

All in all, replacing the existing grid with a smart grid will strongly benefit Turkey. Nonetheless, Turkish authorities have many actions to take before such benefits can come about. In these quickly changing times, those actions must be taken swiftly.

Yemeni Civil War and Solar Energy

Atahan Tümer 

Yemen has been the center of a bloody civil war since March 2015. It can even be said that this civil war is one of the bloodiest civil wars human history has ever seen. The war, in which many different groups were involved, caused many tragedies. So much so that even the most basic needs could not be met from time to time during the war. This situation has had an extra impact on Yemen, where poverty and poor living standards prevail. From a broad perspective, the war takes place between three main groups: Iranian-backed groups, Saudi-backed groups, and Jihadist Salafist groups. However, the fact that almost everything in this war is based on capturing strategic resources makes him even more inhuman. This is the most crucial reason behind the emergence of the humanitarian crises we see. So much so that there were hunger crises from time to time in Yemen. Outbreaks such as cholera are also at the top of the problems affecting the country. The Covid-19 virus, which affects the whole world, has the highest mortality rate per case in Yemen. This shows us the state of the health system in the country. From time to time, there were even situations where water was not available in hospitals.

The decrease observed in global economic aid due to the financial crisis in the world also affected the country very badly. According to the reports of the United Nations, 80% of the country requires aid.

After the start of the war, an energy crisis broke out in the country. Yemen was not a prosperous country in energy before the war, either. Yemen had the lowest electricity access rate in the Middle East, according to World Bank data. Access to electricity was 40%. It should not be forgotten that this rate is 40%, primarily thanks to the cities, and the rural areas are in much worse condition. Although Yemeni governments have developed projects for years to increase this rate, it cannot be said that significant improvements have been made. This situation in access to electricity only got worse after the war started. Already experienced power outages have become the usual situation. People were worried about the power outage created by the Houthis in the capital at the beginning of the civil war. The fact that currently available generators work with petroleum-based resources has led people to look for alternatives. Renewable energy sources



came to the fore as the most important alternative. The most important and popular of these was solar energy.

Solar energy has become a kind of primary energy source since the civil war. Due to the situations mentioned earlier, especially strategic places such as hospitals have started to use solar energy. So much so that some sources call this transition a solar energy revolution. However, it would not be correct to say that the situation is very revolutionary. Because the transition that emerged was not optional, it was a transition that occurred in order to meet energy needs. Indeed, after the war started, Yemen began importing vast quantities of solar panels. These panels, specially imported from India and China, have become a strategic product by meeting a significant amount of energy needs. Because of this situation, it became vital to control the ports. This proves how effective solar panels have in meeting the energy needs of the country.

Yemen also has 3 billion barrels of oil reserves. Although this feature of Yemen is not as prominent as other Arab countries, it is a situation that should not be forgotten in the evaluations. We should remember that the oil consumption of Yemen, which has such a vast reserve, is also very low. Yemen's oil reserves are 129 times higher than oil consumption. This shows us the inequality in the country and the backwardness in energy consumption.

Civil wars, of course, bring about humanitarian crises. Women and children are most affected by this. In conflicts like this, where even the most basic human needs are not met, solar energy panels the size of a book become a luxury. While every person needs to drink liters of water a day, even reaching a drop of water becomes a daily challenge. This reveals the scale of the tragedy happening in Yemen. I hope the war in Yemen will come to an end and the humanitarian crisis will be resolved. It seems that this will only occur when the world's attention is drawn to Yemen.

2021 As A Rebound Year For Fossil Fuels

Bariş Sanlı 

This week we will see oil companies' quarterly results. Just like the record losses during 2020, we may see a jump in profits and free cash flows. Then there will be comparison charts between oil companies and new energy technology companies. In summary, we may see Covid19 as a reinforcer of fossil fuel dominance.

Change does not happen overnight. The effects of the 1970s energy crises have been felt in the short term and the long term. It changed investment decisions, paved the way for Feed-in tariffs, natural gas liberalization in the US, the strengthening of trading companies. Hybrid cars, lithium batteries are all products of that era. From the 1970s to the 2000s, it took 30 years to have mature technologies. AI and numerical methods may accelerate this time to 10-20 years.

IN COVID19, WE ARE EXPERIENCING PEOPLE BEING BORED AND GETTING ANGRY WITH CRISIS CHORUS FROM POLITICIANS TO DOCTORS. CLIMATE WILL BE NO DIFFERENT. THE LOW-HANGING FRUIT CAN EASILY BE REACHED WITH MORE SOLAR, WIND, AND ELECTRIC CARS. THE REST WILL TAKE SOME TIME.

But the short term is not that rosy. IEA's latest report on global energy trends shows a rebound of fossil fuels. The only big hiccup is India for now. Emissions are expected to increase 5%, coal demand to rebound by 4.5%, natural gas to bounce by 3%. These are gains from 2020. If we compare these numbers to pre-covid 2019 levels, the increases are limited.

It might be much bigger if covid was sorted out.

Electricity demand is estimated to grow by 4.5%, where renewables will rise by 8%. The only missing piece is the aviation sector. Qatar Airways is not optimistic about a rebound in

aviation demand. But domestic flights in the US and UK may return to normal. Just like the security procedures after 9/11 became a norm for airport travel, the covid procedures are expected to stick for a long time.



The growth of fossil fuels is mostly from emerging countries. Coal is a beast that is harder to manage in developing economies. It is interconnected with regional economies, power balances, and industries. It took more than 40 years for the UK to get rid of coal and its power alliances. In developing countries, it may take longer due to the weakness of institutions.

Electric cars are increasing Europe at an unprecedented rate. The trend is expected to persist. Norway is the leader in EV sales, and the share of EV sales has surpassed 50%. But there is a hitch. Norway's officials claim that EVs are the most popular second car in the country. That is to say that if households have two or more cars, the primary vehicle is still gasoline. The one on the bench is electric. According to Statistics Norway, total oil product sales dropped 7.2% from 2019 to 2020. Gasoline is decreased by 5.6%, and auto diesel is down 5.2%. But EV sales are 50% of all sales. It worthy of thinking once more.

The Chinese coal market is the future warzone for coal demand and emissions. The Chinese leadership is showing a desire to

limit coal growth but after 2025. The 14th five-year plan was not that hopeful, but we heard promises of more aggressive targets for the 15th five-year plan.

We hear that "it is our last chance to reverse the course on climate change" with attached urgent timelines. Climate policies have shifted the whole urgency to crisis status. In Covid19, we are experiencing people being bored and getting angry with crisis chorus from politicians to doctors. Climate will be no different. The low-hanging fruit can easily be reached with more solar, wind, and electric cars. The rest will take some time.

The rebound in emissions, fossil fuels, and oil companies in 2021 should teach us a key lesson in a major crisis. You are either a marathon runner or a sprinter. For a big crisis, you should better be a marathon runner. Because as the challenge grows, so does the number of obstacles and their endurance.



Energy
Policy
Research
Center

bilkenteprc.com