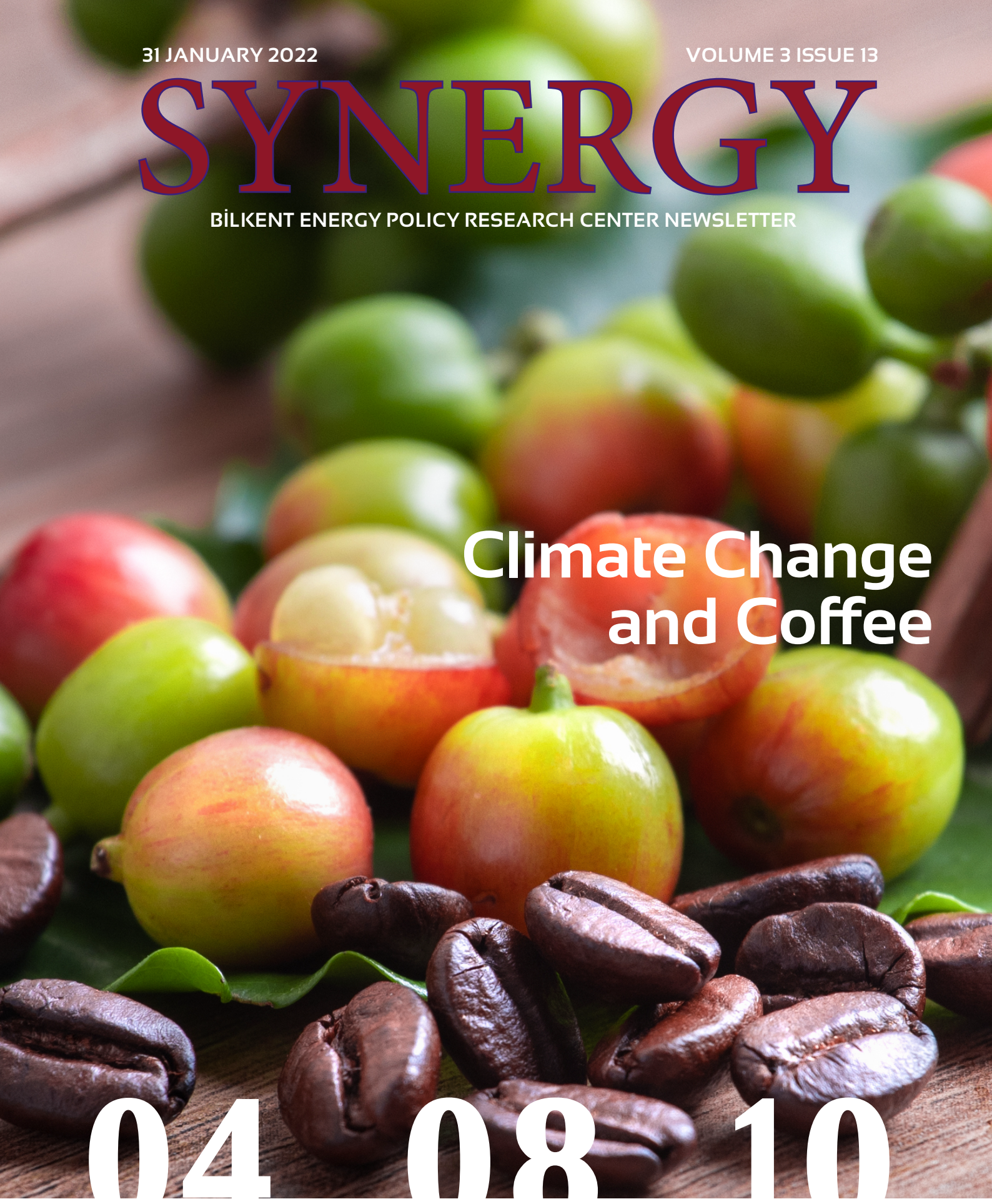
31 JANUARY 2022

VOLUME 3 ISSUE 13

SYNERGY

BİLKENT ENERGY POLICY RESEARCH CENTER NEWSLETTER



Climate Change and Coffee

SYNERGY
31 JANUARY 2022 **VOLUME 3 ISSUE 13**
#74

In This Issue...

BRENT OIL	89.34 $/BL	GASOLINE	14.14 ₺/LT
USD/TRY	13.42	DIESEL	14.39 ₺/LT
EUR/TRY	14.98	FUEL OIL	10.73

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ABOUT US

Energy Policy Research Center

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Possibility of a Prolonged Energy Crisis

Barış Sanlı

Every crisis is different. But practically, all public responses to crisis are the same. Whether a global war or demand/supply shock doesn't matter for the public. They receive the bill from the local company. That is why it is easy to weaponize energy internationally. At the end of the day, the crisis actors can be invisible from the local perspective, and all blame is shifted to local actors. It always happens this way will be that way.

But now, there is an interesting political context hard to ignore. West can be simultaneously tested by Russia in Ukraine and China in the Pacific. Meanwhile, Europeans are saving the planet because from their angle, and it is not the West being tested. Some rather see it as a test of the strength of Pax Anglo-Saxonica. This explains part of the inertia on the European side.

But there are dimensions to how this crisis may evolve. The first parameter is the duration. From an energy point of view, winter and summer energy prices are more problematic. During the spring and autumn, demand is lower. Therefore, we see price peaks in winter or summer. This is also the most vulnerable period for consumers. The car sales in the western world are more SUVs-bigger vehicles. They may be much more efficient, but they are heavier. The car stock is a product of post-2015 low prices: 50-70$/barrel. Short spikes are not a concern. Sustaining high prices is an invitation for consumer discomfort. And consumer reflects this discontent to the closest authority: Local politicians. US mid-term elections are in November 2022.

The second parameter is the depth of a crisis. Western historical leaders are well studied in the eastern part of the world. It is tragic sometimes these words are referenced more by the rest of the world than their originating countries. One such saying is Churchill's "Never let a good crisis go to waste." We generally assume positively that a crisis is a chance for progress. What if it is otherwise? Like, use a crisis to start and deepen another crisis. But why? Because these things happen very rarely and if you have the information on the future of it then you can play with it with some bruises to yourself too.

Only Russia knows whether it can increase oil production after May, when demand will kick in. China has made huge stocks of various commodities. Also, China has tested domestic market measures on price limitations since last winter. Russian foreign currency reserves are at their highest level. On the other hand, OECD and US stocks are the lowest of the last five years. Numbers show that one side is prepared, the other is completely empty-handed. We have to be careful about how we end up like this. Saudi Arabia and OPEC+ specifically targeted oil stocks in the OECD because they believed this is a major determinant of price.

There is also another story called food prices. Fertilizer prices are even denting western farmers. A drop in agriculture production will impact everyone. So production and producers will have the final say. Is this again lead us to a semi-global recession with high prices?

The third parameter is how the actors will behave. But this may not be the right question. Because there are central actors like the US, EU, Russia, and China, and there are peripheral actors like North Korea Iran. The peripheral actors may also want a victory for themselves in this war with cyber capabilities targeting infrastructure because every virtual/physical victory is a positive moral for their own domestic public and military.

The weaponization of energy is a perfect crime. Global actor shutdowns the tap, but the local public blame local politicians and punish them. Then these local punishments create more local volatilities. But these local resentments are silenced by some other victories, whether invented or deep-frozen before. Energy is a dangerous game in times of short-sightedness and the age of disinformation wars. Luckily we are not in one of them.

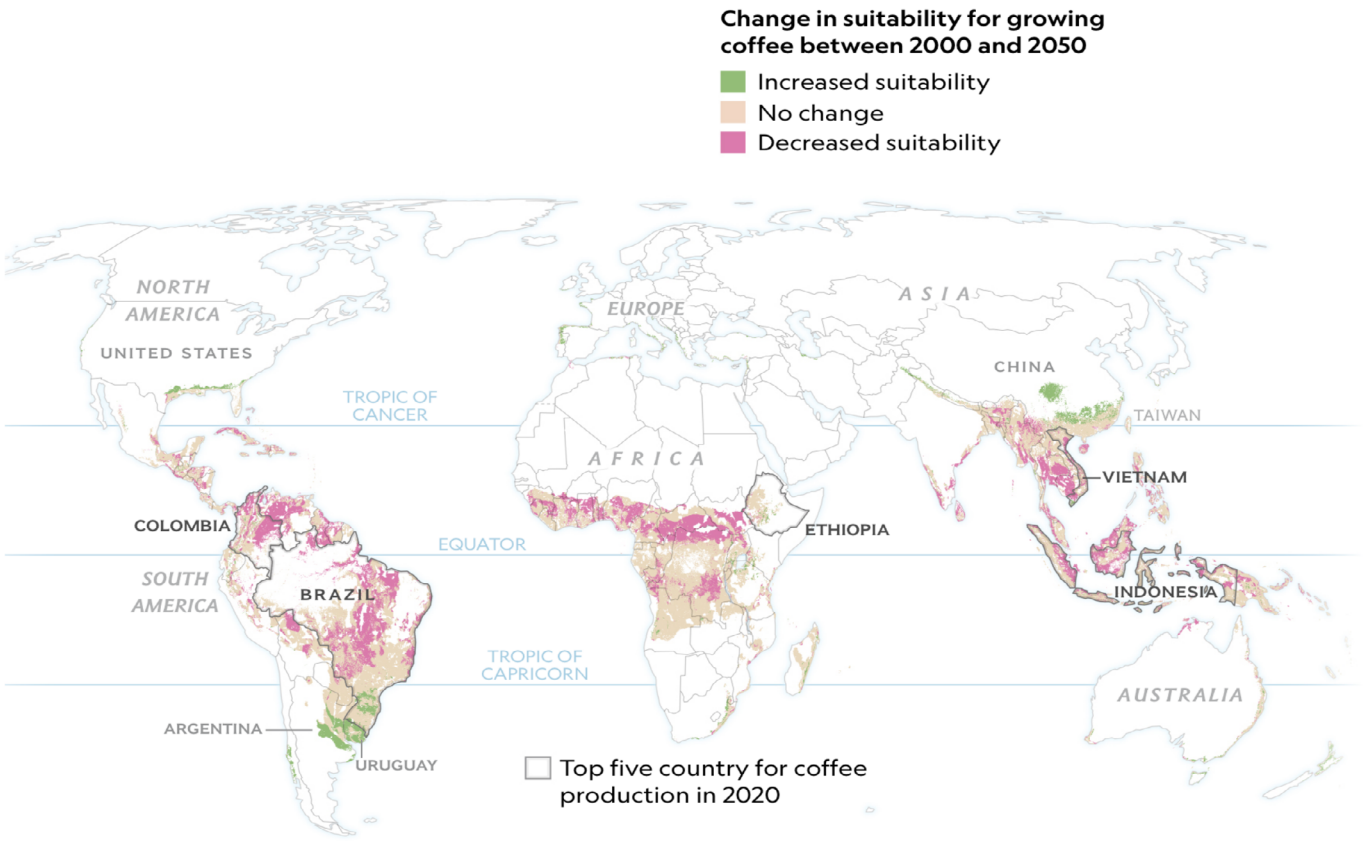
Climate Change and Coffee

Başak Bozoğlu

For most people, the best moment of the day is when they drink coffee. Coffee has a different place for many people, both as a means of socializing, increasing productivity, relaxation, and motivation. Thanks to its different types, tastes, smells, and aromas, the habit of drinking coffee is an indispensable habit for most people in their lives. Unfortunately, this situation is about to change. Climate change has begun to affect coffee production dramatically, as well as affecting the entire balance in the ecosystem.

We can see the problems that climate change has created, specifically through the example of coffee. A coffee bean is a plant suitable for growing in hot regions. But as temperatures rose, producing coffee became more and more difficult. Coffee has large and small growing areas in farmland in the equatorial region of the world. But by 2050, coffee-growing conditions will be one of the areas that will be most affected by climate change, and there will be a 50% decrease in coffee-growing regions. The equatorial region, where the air temperatures are above seasonal normals, is becoming less and less suitable for coffee. In the measures to be taken against climate change, there will be a 76% reduction in the most suitable regions of Brazil for coffee in the lowest temperature scenario. In Colombia, this is estimated to be a 63% decline. It is expected that 60% of coffee varieties will disappear in the future, with temperatures not falling below the average level due to climate change.

Brazil, Vietnam, Indonesia, and Colombia are the regions where the most coffee is produced in the world. The areas suitable for growing coffee in these regions are decreasing day by day. This is a serious problem not only for those who consume coffee but also for the economy of the producers. In addition to being one of the most important beverages in the world, coffee is also a source of income for millions of small farmers. Small agribusinesses began to turn to avocado and cashew plants instead of cultivating coffee trees. However, transferring the agricultural diversity in a region from one species to another negatively affects many factors such as ecological diversity, soil structure, and humidity in the region. In a study published this month by Roman Grüter at the University of Applied Sciences in Zurich, climatic factors include long dry seasons, variation in average temperatures, low minimum temperatures and spikes and decreases in annual precipitation, low soil



Source: National Geographic

pH, changing the structure of regions of unfavorable soil texture, and coffee grounds. It has been shown to severely constrain the ecosystem conducive to The time required to grow the highest-quality version of a crop takes place after 30 years of adaptation to weather conditions. For this reason, farmers producing for major coffee brands in the region are encouraged by the brands to continue their coffee production. For example, Starbucks distributes climate-resistant coffee varieties to farmers and works to protect at-risk forests in key coffee-growing areas. The reason is that four of the world's five largest coffee producers (Brazil, Vietnam, Colombia, and Indonesia) are expected to reduce drastically over the next ten years the size and suitability of their agricultural land area.

According to the Food and Agriculture Organization, smallholders produce one-third of the world's agriculture needs. The importance of coffee in climate change is that it is much easier for small farmers to make a living from coffee instead of wheat and corn, and the demand for coffee is high. Besides other agricultural products, coffee is a crop that does not need to be cultivated years before harvest, has a very short waiting period, but is very sensitive to seasonal conditions. For this reason, the loss of millions of people to form their livelihood indicates that there may be a serious farmer and coffee shortage in the future. For this reason, the Food and Agriculture Organization (FDA) is trying to encourage the cultivation of different coffee varieties that can tolerate higher temperatures, not replacing coffee fields with avocado, cashew, or tropical fruits so that small producers can overcome this change financially and morally.

With climate change, our access to many products is being restricted day by day, and agricultural products are getting more expensive day by day. Research shows that increasing temperatures, heavy rainfall, and severe drought will reduce coffee quality and diversity, causing coffee lovers to drink low-quality coffee. Along with the increasing supply and cost problems during the pandemic period, coffee prices increased by more than 40 percent in 2021. Along with these problems, coffee is probably waiting for its turn to take its place among luxury consumer goods in the coming years.

Eastern Gas Program and Russia's Expansion to Asia-Pacific Region

Erkin Sancarbaba

It is indisputable that multinational energy investments led by Russia envisage a sustainable partnership among various countries. On the other hand, the issue of energy as a weapon, which is controversial and still up to date, is not the subject of this article. It is not easy to make a definite comment on this issue for the time being. It is used as a counter-argument that the projection presented by Russia's energy projects focuses on common interests and promotes joint energy policies. The basis of the aforementioned argument is the realistic, stable, and long-term approach that Russia has established with its partners in the field of energy. The Eastern Gas Program can be considered as the pioneer of such a partnership formed by Russia in the Asia-Pacific region. The foresight of the project and accurate identification of long-term common interests increase the probability of success.

The mega project can be considered as the symbol of Russia's expansion to the neighboring Asia-Pacific region. The great interest of Russian energy companies in European countries has generally been discussed at the political level in Europe. This situation posed an obstacle to European decision-makers impartial evaluation of Russian energy investments. In addition, it is clear that Europe is still unable to pursue a joint energy policy. Evidently, this situation reduces predictability for Russian policymakers and companies. In this respect, Russia's entry into new and stable markets is vital for the country's future vision. The Asia-Pacific region is one of the leading markets for Russia due to its increasing energy demand and strategic importance.

To understand Russia's interest and approach to the Asia-Pacific region, it would be useful to examine the dimensions of the project. The scope and large capacity of the project are a requirement of the long-term interests of Russia and Russian companies in the region. Moreover, it is very crucial to meet the increasing energy needs of the Asia-Pacific region. Particularly, China's orientation towards new, sustainable and stable energy has encouraged Russian companies to implement the project. Responding to the increasing demand of the region can only be possible and feasible with stable energy production and transmission policy. Otherwise, the current energy crisis will not be the last one. In this direction, the projects of the Eastern Gas Program, which have large-volume energy generation capacity and include solid investments, offer long-term and permanent solutions to Russia's neighbors.

Power of Siberia project, with a length of three thousand kilometers and an annual export capacity of thirty-eight

billion cubic meters, is one of the projects within the scope of the Eastern Gas Program. The promising project delivers natural gas to Russia's Far East and has the potential to give a new impetus to the country's energy exports to China. The construction of the USD 55 billion worth project began in September 2014. In May of the same year, a thirty-year Sales and Purchase Agreement was signed between Gazprom and China National Petroleum Corporation (CNPC). In addition, Amur Gas Processing Plant was built to process the gas to be transported thanks to this project. This new complex is Russia's largest and one of the world's leading gas processing plants in terms of capacity. This facility, which is unique in Russian history, was built to process gas to be exported directly to China. The facility can process 42 billion cubic meters of natural gas annually, as well as high amounts of helium, ethane, propane, butane, and pentane-hexane. Firms from many countries, including Rönesans Holding of Turkey, contributed to the construction of the 800-hectare facility. When evaluated in terms of their large capacity and dimensions, these two projects clearly demonstrate Russia's confidence in the Chinese energy market and its long-term targets for China.

Another project of the Eastern Gas Program is the Sakhalin–Khabarovsk–Vladivostok Natural Gas Pipeline which aims to transport the Sakhalin's gas to the most populated and industrialized regions of Russia's Far East region. However, the construction plan of the pipeline makes it possible to expand this line to be able to export energy to China, South Korea, and Japan in the future. With an agreement to be made with the aforementioned countries, Russian gas might be transferred to these countries in the coming period. In this case, Gazprom will be able to meet this need by increasing the capacity at Sakhalin offshore fields.

The political pressures that Russia has been exposed to, especially in the European energy market, have prompted the Russian government and energy companies, which can be considered representatives of Russian national interests, to seek alternatives. The Eastern Gas Program has symbolic importance in this respect. This program is the product of the will of Russian policymakers to implement new alternatives. It is a reality that Russia's activities in the Asia-Pacific region will gain momentum thanks to the Eastern Gas Program. Currently, there is an atmosphere in the region where the parties look out for each other's long-term interests. It is obvious that the aforementioned cooperation in the energy field will increasingly continue as long as Russia's determination in energy supply and stable demand in the Asia-Pacific region continue to exist.

Is the British Royal Family Really "Eco-Friendly"?

Gülce Özdilekcan

Inevitably, the most famous family globally is the British Royal Family. Besides the political effects on the United Kingdom, they symbolize a family that should be an example for the citizens. Therefore, every effort they make towards a public topic is widely publicized. In other words, they live their lives in front of the camera, which makes them a public figure that is taken as an example. We often talk about how social media is influential for most age groups today. It has overly increased in the last ten years and the way we perceive information has moved slowly towards social media. The way we use social media is by "following" what other people are doing, which has moved towards following influential people. Therefore, people worldwide can reach the British Royal Family and follow what they are doing. As we see celebrities promoting products and services to their followers, we often see that the Royal Family is doing the same by using their fame and their name. One of their duties is to promote social issues such as peace, unity, and many more, as we have seen throughout the family's reign.

Sustainability and promotion of it have been one of the scopes of the family as well for many years. Raising awareness is the primary goal for influencing the public for the Royal Family. "For more than four decades, The Prince of Wales has used his unique position to champion action for a sustainable future." His way of raising awareness is defined as making speeches, articles, books, and films. He aims to reach his goal of ensuring sustainability is by reaching the people and changing their minds towards the necessity of sustainability. He also defends that economic and social sustainability and development can be reached by not using up the natural sources but sustaining them. In my opinion, his claim about sustainability is fair; however, are they sufficient to change the way people see sustainability? As mentioned, they are the most famous family in the world, and they have influential power over the people all over the world, which makes them hold huge power over creating awareness over their followers. Have they done the best they could do to ensure a sustainable future, or is there anything more that they can do?

What have they done so far?

COP26

Towards the end of 2021, the COP26 conference was held in UK, Glasgow, to set some goals towards climate change and sustainability. 197 countries have attended the conference to discuss what could be done to change the way climate change is happening. “The package of decisions consists of a range of agreed items, including strengthened efforts to build resilience to climate change, to curb greenhouse gas emissions and to provide the necessary finance for both." They have set some goals for both the short and long term and revised what has been done before to control climate change and sustainability. The Queen of England has talked about this issue in an interview. She criticized the COP26 countries as "they are talking, but they are not reflecting their promises into acts." Prince Charles has agreed that they are only talking, but how they implement their promises will go towards a catastrophic end. However, there is a contradiction that both the Royal Family and the UK government have attended the COP26 conference, and they have done the same. They have discussed what can be done and promised some of the changes. These types of conferences were done before. However, were they promising enough that they would have a huge impact? The current situation shows that they are not.

Sustainable Markets Initiative and Council

“In response to the increasing threats posed by climate change and biodiversity loss, the Prince of Wales created the Sustainable Markets Initiative and Council, in collaboration with the World Economic Forum, in September 2019.” As a usual way of solving problems, they have created a 10-step action plan. As the Prince of Wales has stated, it has a goal of optimizing the global future benefit. These steps can be summarized as using social media for awareness, investing in nature, making sustainable goods reachable and popular, etc. Prince Charles often states that the acts that should be taken regarding climate change should be revolutionary. The decisions taken by Sustainable Markets Initiative and Council should be revolutionary as well; however, in my opinion, they are not something new or revolutionary. In fact, it is pretty similar to the UN Sustainable Development

Goals, No.13, which is called "Take urgent action to combat climate change and its impacts," and its targets. Therefore, in my opinion, it is not revolutionary enough to reach Prince Charles' promises.

What can they do furthermore?

Observing what they have done so far, they have mostly organized conferences, meetings, set goals, etc. Above, I have given two near past acts that they have done regarding sustainability and climate change. Even though they criticize other countries and institutions as just talking without taking any actions, the acts that they are doing seem to be similar. As I have mentioned, they live in front of the public eye and, they don't have the power for legislation. Therefore, they have the most power to influence the public by being an example since they cannot change legislation. They should be an example with their acts to change the mind of the public and create public awareness themselves rather than setting a goal for raising awareness.

I think that, even though they have been defending the environment and sustainability for decades now, they are not a perfect example themselves. They are not living in a way that is sustainable and completely environment-friendly. For example, the British Royal Family holds a huge amount of land in their hands. However, it is said that they are deforested and sometimes used for industrial reasons. "Prince Charles's Duchy of Cornwall, which has just six percent tree cover, compared with a European Union average of 37 percent." These lands are seen as "ugly-looking," which is the opposite of the goals set by the Royal Family. Also, it is known that the Queen and her family loves hunting; therefore, the lands that she hunts often are set on fire to create a clearer landscape for bird hunting. Also, it is a well-known fact that there is a huge amount of energy used for the Palace, which is not eco-friendly.

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