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BRENT OIL

94.54 \$/BL

GASOLINE

15.29 ₺/LT

USD/TRY

13.57

DIESEL

15.56 ₺/LT

EUR/TRY

15.36

FUEL OIL

11.72

Turkey-Israel Relations: A Pathway to Eastern Mediterranean Energy Corridor

Erkin Sancarbaba 

Turkey-Israel relations are gaining momentum again after a break. The planned visit of Israeli President Herzog to Turkey in mid-March is an important indicator of this situation. Of course, energy will have an important place in the progress of bilateral relations. The two countries have demonstrated a common will for energy cooperation for years. However, political developments and differences of opinion overshadowed the identity of interests. Nowadays it is better understood that when divergences take precedence over common interests, it is not possible to talk about a winning party.

The prominence of differences in foreign policy encouraged Turkey and Israel to seek new strategic partners. Israel preferred to cooperate with Egypt, Greece, and the Greek Administration of Southern Cyprus on energy. As a result of gas discoveries in the eastern Mediterranean, four countries established the East Mediterranean Gas Forum (EMGF) in 2019. On the other hand, it would be very assertive to say that the cooperation has gained success in creating an energy corridor. Although the agreement for the construction of the Eastern Mediterranean (EastMed) pipeline, which aims to transport gas from the Israeli coast to Europe via Southern Cyprus and Greece, was signed in 2020, the project seems difficult to implement in the current situation. In fact, the search for a new route for the pipeline in line with the plan proposed by Egypt is a clear indication

of the aforementioned circumstance.

The Turkey-Libyan Government of National Accord (GNA) maritime delimitation agreement, which is signed in 2019, has an effect on Egypt's alternative seeking. As a result of the maritime delimitation agreement, the planned route of the Eastern Mediterranean pipeline runs through contested waters.

The unrealistic nature of the agreed-upon project must have been known by Israeli decision-makers and companies so that Israeli state-owned pipeline company EAPC signed an agreement with the Emirati companies for the transfer of offshore gas to Europe. The technical difficulties of the project such as rising construction costs and disputed financial feasibility of the project pose obstacles to the realization of the pipeline.

Furthermore, the US government and the American companies are backing away from the project due to the geopolitical deadlock, financial reasons, and the orientation towards green investments. As a result, this situation raised questions about the future of the gas pipeline project.

On the other hand, another option that is proposed for the transmission of the Eastern Mediterranean gas is the Israel-Turkey Pipeline. The project has the potential of connecting the Leviathan Gas Field to Turkey's Ceyhan port, a gateway



to the European market. Considering the comparatively shorter distance, the aforementioned pipeline project represents the most cost-effective option for accessing the European markets. Thanks to the project, the Eastern Mediterranean energy corridor, which has been dreamed of for a long time, would be realized and regional development would gain momentum at the same time.

The normalization of relations between Israel and Turkey and their cooperation in the field of energy will benefit both countries. In this process, Turkey can play an important role in the transmission of Eastern Mediterranean gas to Europe. Also, with the help of the rising bilateral relations and potential energy cooperation, the resources in the Leviathan and Tamar gas fields, which are located off the coast of Israel, will be exported easily.

Besides, the efforts of Turkish policymakers for improving the country's relations with Egypt and the United Arab Emirates might also contribute to the target of establishing the Eastern Mediterranean energy corridor. In the next stage, a multilateral mechanism might be constituted to ensure regional stability and energy security.

All in all, the gas reserves found in the gas fields in the Eastern Mediterranean can be used for the benefit of the regional economy. It has already been seen that the energy

policies which have been followed so far in the region do not have a chance to succeed due to their exclusionary nature. The abandonment of these irrational policies, which are based on political differences, will contribute to the prosperity and stability of the region. All parties can benefit by evaluating options that will contribute to regional development. Thanks to a participatory and inclusive approach, the energy resources in the region can serve the welfare of the people in the region. When the parties set political differences aside and focus on the determination of common interests, it will be seen that cooperation is the most logical way. Otherwise, it seems unlikely to establish an efficient energy corridor in the Eastern Mediterranean. Finally, the Israeli and Turkish administrations realized the aforementioned necessity and decided to enter into a new era in bilateral relations. It is indisputable that the determination of both parties will have positive results for the region. In the condition which the constructive approaches of the countries in the region continue to gain strength, it may be possible to institute an energy corridor in the Eastern Mediterranean.

Controversial Power Plant: Small Modular Reactors

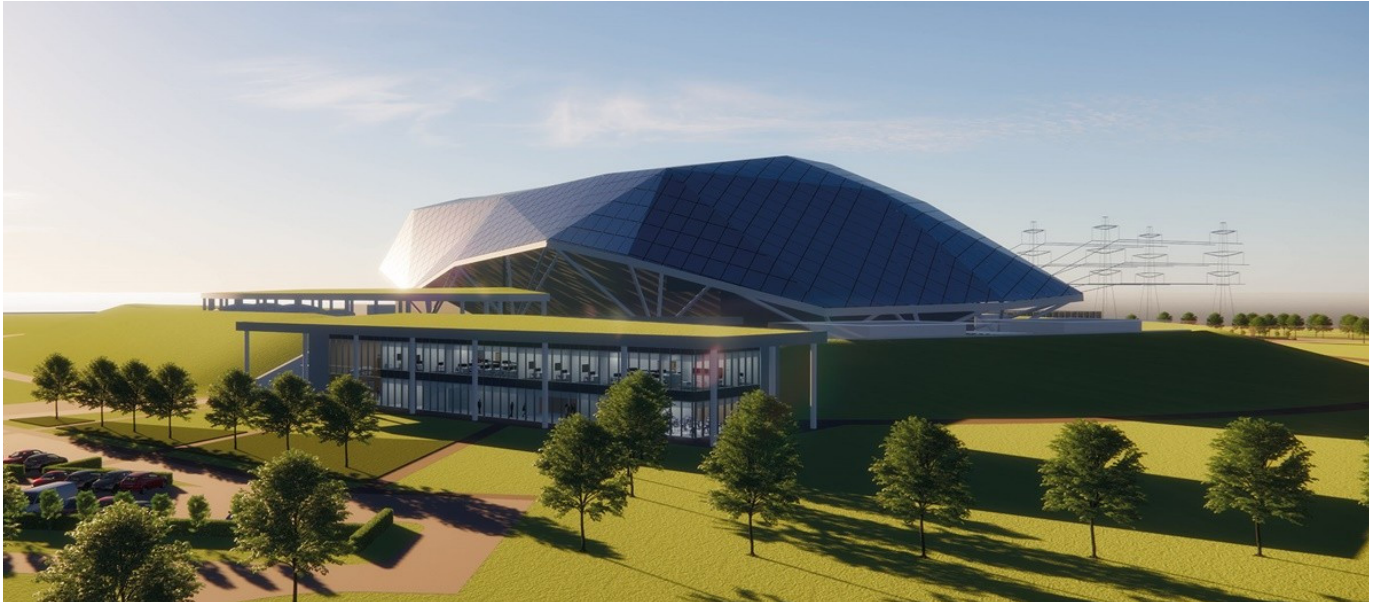
F. Yaren Öztürk 

It was possible to talk about the footsteps of the climate crisis twenty years ago, but today it is not possible to ignore the climate changes brought by the climate crisis. Governments make various decisions about the minimize the use of fossil fuels such as oil, natural gas, and coal to reduce carbon emissions, which is one of the leading causes of climate change. On the other side, some people acknowledge that wind, solar and other renewable energy sources may not be sufficient in this struggle. With the emergence of disagreements, there is an increase in nuclear power and next-generation small modular reactors, which is a controversial issue.

Small modular reactors (SMRs) are specially developed mini-reactors that can produce 300 MW per unit, approximately one-third of the generating capacity of conventional nuclear reactors. Since the early 1950s, they have been used to produce energy safely in a small area for ships and submarines in the US Navy. Due to the accident in Three Mile Island in 1979 and the Chernobyl disaster in 1985, its using status has been severely reduced with the various restrictions. Unlike wind and solar energy, nuclear energy is not affected by weather conditions to produce energy. It has a minimal carbon footprint, unlike gas and coal. Nuclear power is a stronghold in clean energy generation. To increase the reuse of SMRs, minimization of risks, improvement of potential problems, scalability and cost

reduction are essential points.

Small modular reactors also utilize nuclear fission for heat and power generation like conventional nuclear reactors. Compared to the size of these power reactors, they are smaller in size and can be installed in places where access to nuclear energy is problematic. Compared to wind farms and solar power plants, SMRs cover less space. It is possible to produce a large proportion of the components that build the reactors at the factory. It can be sent in components for assembly at the place of delivery. With these features, it is aimed to reduce the cost and construction time compared to large-scale power generation plants. Some SMR models in the process of development have water as the coolant, while some designs have molten salt and metals as the coolant. SMR designs have a more straightforward structure compared to conventional reactors. The safety concept is mostly based on the intrinsic safety features of the reactor, such as operating pressure and low power, and passive systems. Passive systems have an advantage: In case of an emergency situation, there is no need for human intervention or any power to shut down the systems, owing to physical events such as convection, self-pressurization and natural circulation to which passive systems are connected. The possibility of releasing radioactive materials to the environment has been significantly reduced with increased security measures. Moreover, there are studies



on new types of fuel and backup emergency systems that are carried out to reduce possible risks in SMR designs.

The UN report published in August 2021 emphasises that nuclear energy is essential to reduce climate change and achieve sustainability goals. Also, the importance of the role of small modular reactors is highlighted. More than 70 SMRs are currently being designed and developed in 18 countries. The world's first floating nuclear power plant started operating in Russia in May 2020, and power generation is provided from two 35 MW SMRs. China aims to launch studies on the SMR built on the island of Hainan in 2026. Romania aims to introduce SMRs by 2028 and drastically reduce coal use in the country by 2032. Rolls Royce plans to operate the first power plant in the UK in 2030. It is aimed that the UK will gain energy independence and become one of the significant producers of nuclear energy technology with the SMRs to be produced by Rolls Royce. In the USA, SMR, the Natrium reactor project of TerraPower company founded by Bill Gates, plans to operate in Wyoming, the most coal-producing state. At the same time, there are various studies about SMRs in progress in countries such as Canada, South Korea and Argentina.

Even though SMRs continue to be developed and invested worldwide, some people are hesitant and critical of nuclear energy. It is accurate that SMRs are easier and cheaper to

build than regular nuclear reactors, but there is no evidence that they can be more affordable than installing a wind turbine or solar panel. People are afraid that funding for SMRs is putting investments in renewable energy at risk and fear that the main focus is shifting from renewable energy to nuclear energy. The safety of SMRs is also a topic of discussion. There is no consensus on storing the radioactive nuclear waste to be produced and overcoming the jeopardies that may arise in an emergency. There is also criticism that the increased number of reactors means an increased possibility of countries developing nuclear weapons.

While governments continue to try to significantly reduce their greenhouse gas emissions to reach the net-zero target by 2050, the requirement for affordable and safe low-carbon energy sources is increasing day by day. Nuclear power is a noteworthy low-carbon technology, albeit a controversial issue. Nuclear power is not entirely risk-free, but all energy sources have advantages and disadvantages peculiar to themselves. It is a fact that it is impossible to provide all energy in today's world only from renewable energy sources. At this point, SMRs that can regularly generate nuclear power can be a complementary part of renewable energy generation.

Oil Price

Predictions

İbrahim Halil Aslan 

The price of oil has shown a remarkable increase nowadays. On February 12, Brent Oil and West Texas Intermediary oil had increased about 4-5 percent in a day. Brent Oil reached out to 95 dollars, while West Texas Intermediate reached out 93 dollars in the same minutes. With this increase, the oil price has come up to the top level since 2014. In this article, we'll touch upon that increase and its latest reason: The threat of Russia to invade Ukraine.

The explanations coming from Europe and the USA about the tension being on the border of Ukraine and Russia support the increase in oil prices. Therefore, it's worth looking at these explanations one by one.

England has desired its citizens being present inside Ukraine to leave the country as soon as possible or its citizens to not travel to Ukraine. This is because England remarked that Russia's army banking up in the Ukraine and Russia border is most likely to increase the threat of military action. Besides that, the European Union called its workers to leave out Ukraine.

The US President Joe Biden's national security adviser, Jack Sullivan, pointed out that "As we've said before, we are in the window when an invasion could begin at any time should Vladimir Putin decide to order it. I will not comment on the details of our intelligence information. But I do want to be clear: It could begin during the Olympics, despite a lot of speculation that it would only happen after the Olympics." What Sullivan means from this expression is that Russia is ready to invade Ukraine even before what they expect or the world expects. This increases uncertainty. Then, therefore, he called Americans in Ukraine to immediately leave the country; otherwise, they won't do any evacuation operation if the invasion occurred.

Another concern is that when Russia enters Ukraine, whether the supply of oil to Europe by Russia will continue or stop. If Russia cut giving oil to Europe, how European businesses continue to operate is curiosity. In this case, it may be that the USA will be the country that satisfies the need of Europe for oil.



An experienced specialist David Roche foresaw that if Russia attacks Kyiv and the war between these two countries starts, the price of petroleum will climb to 120 dollars per barrel. Another prediction about the price of oil comes from JP Morgan. Oil prices could rise to 120 dollars per barrel due to the tension between Russia and Ukraine. "Any disruptions to oil flows from Russia in a context of low spare capacity in other regions could easily send oil prices to \$120," Natasha Kaneva, JP Morgan's head of global commodities strategy. JP Morgan also warns that if Russia decides to cut its supply by half, the oil price could easily hike to 150 dollars per barrel, which will be the all-time high for the oil price, breaking the record of 147 dollars per barrel in the crisis at 2008. When it is looked at the role, Russia has in OPEC+ and its presence as a second the most producer of oil, any potential cut of oil by Russia can pose a detrimental and shock increase in oil prices. Any war will certainly cause the energy infrastructure to get damaged, which getting difficult to supply oil. Also, sanctions that will come from Western power, about the energy importing, in reply to the attack of Russia, should be considered as

upward pressure on oil prices.

In a report, economists including Joseph Lupton and Bruce Kasman warned that such a shock would be enough to reduce global growth by more than three quarters, to around 0.9 percent in the first half of the year — versus the 4.1 percent, they currently forecast, according to a news published by Financial Post.

There is also one aspect of the issue: soaring inflation. The energy category was the most-weighted item in Consumer Price Index. If the prediction of JP Morgan and others about the price of oil comes true, then inflation will increase, and it will put pressure on central banks in deciding the level of interest rate, maybe about increasing the rate more harshly.

Also, note that even though the recovery in the oil demand has continued, the expectation of the supply of petroleum to much tighten bolsters up the price of oil.

Koalas are Next

Başak Bozoğlu 

Other new species have been added to the long list of endangered animals, such as rhinos, sea turtles, polar bears, penguins, Sumatran tiger, Borneo elephant, gorilla, koalas. Rapidly declining habitats and climate change threaten the extinction of koalas living in Australia. Last week Australian government announced that the koalas living in Australia were classified as "vulnerable species" in 2012 and were included in the endangered species category in 2022 by being taken to the red list of the International Union for Conservation of Nature (IUCN).

The decline of koala species is not only due to climate change and habitat problems. It was announced that a total of 60 thousand koalas died and were seriously injured in the forest fires of Australia, which occurred in 2019, which is remembered as 'Black Summer' all over the world. It was learned that an estimated 143 million mammals, 180 million birds, 51 million frogs, and 2.5 billion reptiles were affected by the fires on the continent. At that time, the fires in the country could not be brought under control for days and had negative effects on the natural habitat and living species. The Australian Koala Foundation, an independent non-profit group, has announced that the koala population in Australia has decreased by up to 41 percent, bringing

the total koala population down to less than 58,000. The koala population is known to be around 80,000 in 2018. This decline in a species in a four-year period is quite traumatic and frightening for the continuation of the species. The foundation stated that if necessary precautions are not taken, the koala species will disappear completely in the wild by 2050.

The Australian government has announced that a recovery plan will be made for the koalas, and plans will be made to prevent threats to the koalas from extinction. However, even before the fire, koalas had difficulty in finding the eucalyptus plant, which is their basic diet due to climate change due to the lack of precipitation. For the last ten years, not only koalas but national environmental laws have defined a plan to protect the species and protect their natural habitats, but until now, the Australian government has not implemented any plan for this situation. Currently, the Australian government, which is known as the center of koalas all over the world and owes some of its tourist visits to it, stated that they had initiated about 200 recovery plans for threatened species and habitats.



In the fire in 2020, it was announced that Australia lost its biodiversity at a traumatic level and had one of the highest extinction rates in the world. One of the biggest controversies was that after such a major disaster, the existing laws were not suitable for environmental regulations to protect species and living things. Of course, I am aware of what this issue means to many people from the koalas in Australia right now. However, trying to increase energy efficiency and creating projects on sustainability is unfortunately not a functional and long-lasting future plan if it means the natural order is being destroyed step by step. The extinction of a species goes on from disruption in the natural life chain to disruption of natural events, human cultivation of natural events, from production difficulties to economic problems and social corruption. As most people know, Australia is a country that has experienced a fire disaster in the transition to summer and takes precautions accordingly. However, the deterioration of the ecosystem in the world and the change in temperatures together with the global climate change caused fires above the expected, causing a fire that could not be stopped for days or months. The chain should never be handled alone. Everything in nature, from human beings to koalas, is a whole, and the extinction of species is the source of a much bigger problem,

contrary to popular belief that a cute living species will no longer exist.

The first move in Australia was to donate \$50 million for koalas. Stuart Blanch of the World Wildlife Fund (WWF) said that koalas could not be protected from extinction unless there were strong laws and incentives for landowners. Money, of course, has a very important place in the pursuit of living species, the provision of food, and the protection of the region. However, unless financial support, funds, and investments are made in projects that can be taken against climate change, the result can only return to the activity of giving money to endangered animals. In this case, both governments and people need to start seeing global climate problems, big or small, as soon as possible and contribute to all the change they can. The biggest change starts with awareness-raising. It is necessary to convey to people as much as possible that the subject is not just losing one or two animal species but also losing their natural life. Otherwise, we may be left with nothing but a barren world, saying koalas today and birds tomorrow.

P&G vs Unilever

Which One is More Sustainable?

Gülce Özdilekcan

While searching for a product to buy, consumers have different criteria to choose the product. These may be quality, packaging, reviews and suggestions, advertisements, and maybe the most important of them all, the price range. We buy and use many products daily, and we don't necessarily think about how environmentally friendly these products are. Does anyone know exactly how much plastic they have used today? Or do they know how many liters of water they have polluted with cleaning agents? I don't think so.

Regarding this matter, there are products that we cannot live without, which are cleaning and personal hygiene products. Thinking of these products, while even reading the sentence, we can name some sub-brands. These sub-brands are mainly owned by Unilever and Procter & Gamble (P&G) globally. Talking with numbers, as Unilever has stated that 98% of the regular households in the UK own their products and 2 billion people buy Unilever goods every day. Battling with COVID, for now, two years, P&G has increased their sales as well, which can be seen in their financial reports at the end of 2020, and still, according to the unofficial sources, P&G covers 14.96% of the market share, whereas other companies have distinctly lower

market shares than them. Even as a consumer myself, there are some brands that I cannot name another dupe than Unilever or P&G. Therefore, we can easily say that these two brands' products are commonly used and well known. They are also competing in some of the markets by their different sub-brands.

Since we are so highly engaged with these brands, I wanted to go deeper into how these companies have engaged with sustainability and being eco-friendly. Thinking of it, we can see that the products that we are commonly using in our houses pose a threat to the environment. Therefore, using sustainable products has huge importance and impacts how we take care of our planet. While researching this issue, I have used the sustainability reports and the financial statements of companies. Starting from the 2000s, large companies must prepare sustainability reports in some countries and Europe and can be publicly reached. I researched these two brands' sustainability reports and compared their efforts to environmental issues.

Unilever: Sustainability Reports

According to Unilever's financial report in 2020, mainly their



goal is to contribute to the goal of zero emissions by the year 2050, and they advocate for the Paris Agreement on Climate Change. They are aware that they are one of the biggest producers in the market for consumer goods; therefore, they are aware that they have a huge responsibility. Also, they are aware that they should be honest about their numbers on the sustainability of their productions. They support the aim of the Task Force on Climate-related Financial Disclosures (TCFD), which advocates that the data they provide is true. Also, their investors can better decide on choosing Unilever by showing that they support TCFD. Also, they have paid attention to palm oil usage, and they have decided to decrease the usage because of the negative environmental effects. Unilever has used the "Unilever Sustainable Living Plan" throughout their production process to reduce greenhouse gas, non-degradable wastes, and water consumption. "Unilever Compass" includes zero carbon operations and maintaining non-hazardous waste to landfills. Since 2008, we have reduced CO₂ from energy by 75% per ton of production, water abstraction by 49% per ton of production, and waste sent for disposal by 96% per ton of production.

Procter & Gamble: Sustainability Reports

As P&G has stated in their financial statement for the year ended 2021, compared to 10 years ago, they have decreased their greenhouse emissions up to 50%, reached zero manufacturing waste to landfill across all production sites globally, and doubled the use of recycled resin in our plastic packaging. Similar to Unilever, P&G has set their eyes to 2030, where they are seeking neutral carbon operations and using 100% sustainable energy. They have also launched a program called "It's Our Home" to show their consumers how to use the products wisely regarding sustainability. They have also decreased their water consumption by up to 25% per 1 unit, using RSPO certified palm oil, and 73% of their packaging is recyclable. They also have a website to publish the latest news about sustainable products and data. Also, P&G started producing organic products to protect the sources and the sustainable environment. However, they are not available in all countries that P&G is producing.

Comparison

To be fair, both companies have shown a great effort in the last ten years. They have changed the way they perceive



production and have leaned onto a more sustainable one. Also, they have paid more attention to environmentally controversial issues such as palm oil. Both have set their eyes on the near future for an eco-friendlier production and tried to encourage the consumers to recycle the packaging by producing recyclable ones. They also have addressed climate-related issues such as greenhouse gases and waste in landfills. There are slight changes in the numerical data they have provided to the consumers and investors. The goals they set ten years ago have succeeded and fully applied, which is good news. Therefore, in the near future, I think that the numbers between Unilever and P&G will match as well. However, it caught my attention that, even though the data they provide is for their products worldwide, they don't pay attention to some parts of the world. For example, the data I have found is mostly related to North American sales (as stated in their financial reports). However, a consumer should be asking the question of what about the rest of the world? As a consumer from Turkey, I have used countless brands from these companies; however, I haven't even heard once about their sustainability goals for Turkey, even

though their goals are publicly advertised in North America. Still, there are many consumers all over the world, and I think that environmental threat is not only for a part of the world. Maybe, the production stage is the same for Turkey as well; however, I think that even recycling is questionable in most countries, it is not a habit. Therefore, the solutions and the goals that they have set some question marks about the way they are going to work, even if I believe in them and find them promising.

Is Football Climate Friendly?

Ubaid Ur Rehman 

The impact of sports on climate is complex and difficult to measure. Sport's contribution to environmental deterioration comes from the channels such as associated travel, construction of infrastructure, and intensive energy use. Over the years, fans and organizations have realized that the impact of sports on climate change is considerable, and like all other areas of green, objectives have to be introduced.

Football is inevitably the most famous sport around the globe. Given the game's popularity, the corporate sector has not failed to capitalize on it. Billions of dollars have been poured into the game regarding sponsorships, media, and marketing. Moreover, Football's enormous following around the globe provides a strong platform to raise awareness and act as an example for other organizations in the sports sector.

FIFA, the organization responsible for governing and developing Football around the globe, was the first sports organization to commit to UNFCCC "Climate Neutral Now" campaign in 2016.

Moreover, FIFA pledged support for the UN Sports for

Climate Action Framework in 2018, an initiative to reduce environmental pollution and become greenhouse gas emission neutral by 2050. More recently, FIFA presented its climate strategy in November 2021 during the COP26 conference held in the UK. According to the report, FIFA's vision is to be climate neutral by 2040 while also raising awareness regarding climate change and related actions.

The report lays down four foundational aspects of the strategy, which encompass a global approach for the organization, its stakeholders, sports organizations, and the citizens of the global world. The initiatives aim to educate the fans, adapt the regulations and activities targeted towards sustainable practices, reduce the carbon emissions of the game, and support and invest in the development of technologies and practices that are beneficial for the climate.

Moreover, looking at the efforts done by FIFA in the past decade, we can say that the organization is moving in the right direction. Efforts have been made previously for the world cups by FIFA. To counter the carbon emission of the 2018 FIFA World Cup, FIFA sponsored certified low-carbon projects in Russia and abroad. Similarly, during the 2014 FIFA



World Cup, FIFA synergized with Coca-Cola and local waste management authorities to implement a recycling program that collected 445 tonnes of recyclable waste during all the matches. For the upcoming world cup in Qatar, Much of the focus has been on reducing carbon emissions from operational activities. State-of-the-art cooling technology in the stadium has been installed to reduce energy savings by 45%. It is approximated that total greenhouse gas emissions would amount to 3.63 metric tonnes, the majority of which comes from transportation and infrastructure. Sustainable building certification achieved for all FIFA World Cup 2022 stadiums.

FIFA will publish the ex-post Greenhouse Gas Accounting report for the 2022 World Cup in 2023. The ex-post report will identify what goals have been achieved and the areas that need improvement. This report would play an important role in beefing up the measures for the 2023 FIFA Women's World Cup, which is slotted be to be organized in Australia and New Zealand.

Despite the efforts made by FIFA for the world cups, I think there need to be further initiatives taken at the grassroots

level, such as during the domestic leagues. FIFA and the UN should give much more incentives. Funds should be directed towards university research centers working on sustainable technologies to developing sports technology. Moreover, tax incentives should be provided to the clubs that adapt green practice, similar to the tax incentives provided for development programs for the players and the community. Although an unpopular and probably less profitable practice, some football matches could be scheduled during the day to reduce energy consumption and light pollution. Moreover, popular players should be ambassadors for sustainability awareness programs as they tend to have a huge attentive audience, especially on social media platforms.

To conclude, sports have been an important channel for communication at the mass level. Football is considered the first sport to take sustainability and climate-change initiatives and incorporate them within the game. However, as we all know, it is a long journey, and the stakeholders have to come together to overcome the challenges to achieve the common goal of a clean and better environment.



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