13 JUNE 2022

**VOLUME 3 ISSUE 29** 

# SILVENT ENERGY POLICY RESEARCH CENTER NEWSLETTER

# A Country in the Center of Hydropolitics Tension: Ukraine

NUCLEAR ENERGY MARKET: A NEW ENERGY CRISIS RECOMMENDATIONS FOR DEVELOPING A SUCCESSFUL RENEWABLE ENERGY POLICY BAKU ENERGY WEEK

SYNERGY 13 JUNE 2022 **VOLUME 3 ISSUE 29 #90** 

# In This Issue...

### 06 A Country in the Center of Hydropolitics Tension: Ukraine

As the war between Russia and Ukraine is in its third month and negotiations are still ongoing, it is essential to examine the war from another perspective to understand its causes entirely. While the war has multiple root causes, it shows that hydropolitical tensions between Ukraine and Russia are at the center of the escalation in violence...

#### 08 Nuclear Energy Market: A New Energy Crisis

Due to the increase in geopolitical crises, countries have sought alternative policies to establish energy security. However, governments and the energy sector have mainly concentrated on feasibility and due diligence on oil and natural gas transmission...

### 10 Recommendations for Developing a Successful Renewable

#### **Energy Policy**

Many countries have increased the share of renewable energy sources in energy production. The most reliable way to solve the climate crisis is possible by ending fossil fuel consumption and developing and integrating alternative energy sources...

#### 13 Baku Energy Week

Azerbaijan is one of the most important energy centers in the Caucasus with its major crude oil and natural gas deposits and many oil and gas pipelines along with the Southern Gas Corridor...

### 16 Development of Turkey - EU Trade

Although Turkey is not in the European Union, it is an essential place for the EU regarding its geographical location, human workforce, and raw material resources. Turkey-EU relations are solid and sustainable based on a "win-win" strategy...

EDITOR: GÖKBERK BİLGİN CONTACT: gokberk.bilgin@bilkent.edu.tr

# **ABOUT US**





Synergy is a weekly online newsletter published by volunteers on bilkenteprc.com. It welcomes feedback from readers. Please submit your letters to eeps@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.



### Weekly Puzzle Prepared by Büşra Öztürk



#### Across

 Saudi Arabia's national oil and gas company
A refinery product that is used as transportation fuel

**9.** An indicator of an individual or population's required source of land and water to sustain an

activity **11.** A device that stores energy from solar arrays or the electric grid

**13.** Discrimination and injustice that occur in environmental policy making and practices

**14.** The measurement system determines the level of air pollution by tracking air pollutants

**15.** The country where the first borehole is opened to use by rotary drilling

**16.** A type of renewable energy source which comes from heat within the Earth's core

 $\ensuremath{\textbf{17.}}$  The situation when there is a bottleneck in the supply of an energy resource.

**19.** A tax to reduce emissions based on the carbon content of the fossil fuel consumed.

**20.** Swedish young environmental activist who states the urgency of combating climate change

#### Down

**2.** Integrating digital technologies to increase efficiency, reliability and sustainability into energy systems in British English

**3.** The country which has the largest crude oil capacity

 A foundation that aims to support member states in the peaceful use and planning of nuclear science

6. A pioneer of alternating current, which reduces the cost of transmitting electricity over long distances

7. The unit for a barrel of crude oil

 ${\bf 8.}$  The property of crude oil that the sulphur density is high

**10.** The class of energy sources extracted directly from natural sources that do not undergo any transformation

**12.** The thrown away electronic goods that cause an environmental problem

**18.** An abbreviation of a universal call of the UN for obtaining sustainable development

# **Previous Week's**

#### **Correct Answers**



#### Across

**4.** The process of replacing fossil-fuel-based technologies with technologies that use electricity as a source of energy

**5.** The country which has had the highest recycling rate since 2016

7. The country which is a major producer and exporter of natural gas, oil and oil products

8. The name of the meeting where climate and energy policies cooperation was also discussed by seven developed countries

**11.** The group of wind turbines used for electricity generation

**12.** The shift from an energy system based on fossil fuels to one based on renewable energy sources that produce low carbon emissions

**13.** A unit of volume measurement that is mostly used to describe amounts of oil and gas by U.S. industry

15. A synthetic fuel that can be produced from water, fossil fuels and biomass to obtain energy by the methods of combustion and fuel cell

17. The term related to concerns about the inequitable outcomes of climate impacts and the fairness of policies to address climate change

**18.** An abbreviation for the group of elements that have diverse energy applications such as use in magnets and electric motors in wind turbines or in petroleum refining

#### Down

1. The conversion of waste materials into new materials and objects

2. The country which has had the lowest recycling rate since 2018

**3.** The term for ensuring a reliable energy supply against the event of collapses such as price increases or fluctuations in supply

5. The city where the 2021 United Nations Climate Change Conference or COP26 was held

**6.** Finnish state energy company that sells the nation's natural gas

8. A refinery product made from a mixture of petroleum liquids used as an engine fuel in vehicles

**9.** A non-profit organization aiming to exchange ideas on key energy issues in Southeast Europe

**10.** Executive Director of the International Energy Agency since 2015

14. An organization that aims to coordinate

and unify petroleum policies of its Member Countries

**16.** The term for achieving a carbon balance in which the amount of carbon added to the atmosphere equals the amount removed

# A Country in the Center of Hydropolitics Tension: Ukraine Yaren Öztürk

As the war between Russia and Ukraine is in its third month and negotiations are still ongoing, it is essential to examine the war from another perspective to understand its causes entirely. While the war has multiple root causes, it shows that hydro-political tensions between Ukraine and Russia are at the center of the escalation in violence. The effects of climate change are increasing more and more every day, and countries like India are experiencing their hottest days. In such an environment, the importance of water rises gradually with the decrease of water resources; on the other side, water is turned into a more powerful weapon to be used in wars by pro-war countries. Peter Gleick of the Pacific Institute, a global think tank with a mission to find solutions to water-related problems, stated that climate change will enhance conflicts as the accessibility of water decreases and drought increases in some geographies. Although the incidents showed that using water as a weapon decreased after World War II, it can be said that water is used as a target and weapon in the war between Russia and Ukraine.

The struggle for control over water resources has created tensions between the two countries for almost a decade. One of Russia's first actions, three days after Russian forces began invading Ukraine, was to restore water flow to Crimea by breaking a dam in the North Crimean Canal that restricted water access to Russia's annexed Crimea. It would be wrong not to say that this was a planned move from a historical perspective. The North Crimean Canal took 14 years to build during the Soviet Union and was completed in 1975. It was built to carry water from the Dnieper River in Ukraine to the arid peninsula of Crimea. The canal, which is connected to a vast reservoir network with a central channel longer than 400 km, has played an essential role in the peninsula's development in many aspects such as agriculture, industry and tourism. It has been meeting 85% of the region's water needs for a long time. This situation changed with Russia's annexation of Crimea in 2014, leading to a growing hydropolitical tension over the years. Crimea, the only region in Ukraine with a majority of ethnic Russians, came under the control of Russia for a very long time, even though various sanctions were imposed on Russia by other countries at that time. Ukraine responded by building a dam next to this canal and cutting off Crimea's access to water, devastatingly affecting farmland. While the cultivated area in Crimea was 140,000 hectares in 2013, it decreased to 10,000 hectares in 2015. Although Russia tried to develop new technologies by drilling new wells and trying to rebuild reservoirs, it could not stop the situation in Crimea. Ukraine's decision to close



the canal in 2021 was called an environmental massacre and genocide by Russia.

Crimea is not the only region in Ukraine where the conflict over control over access to water resources has caused significant tensions. Witnesses in the eastern Donetsk region indicate that Russian-backed separatists deliberately sabotaged critical water infrastructure to undermine Ukraine's defence power. Conflicts in Donetsk have left hundreds of thousands of people without access to fresh water supplies. Attacks on water resources, on the one hand, caused water scarcity. On the other hand, it caused stress and uncertainty by causing psychological effects on the local people. It has also caused people to fear, worry and distrust water resources. The worst-case scenario seems to be that more than three million people will be left without water due to infrastructure collapse. In Mariupol, in southeastern Ukraine, which was captured by the Russians earlier this week, Russian troops surrounded the city, shutting down access to water supplies for residents, and preventing them from accessing drinking water and sanitation. According to Clingendael, a Netherlands-based think tank, Russia's airstrikes on Ukraine targeted Ukraine's water infrastructure, including sewage treatment plants,

pipes and pumping stations. Likewise, the European Union's High Representative for Foreign and Security Policy Josep Borrell and Commissioner for the Environment Virginijus Sinkevičius accused Russia in March of "using the threat of dehydration to force the surrender of and denying access to the most basic needs."

Ukraine is at the center of both a military and a hydropolitical conflict in this context. The country, which is among the three largest grain exporters globally, has 42 million hectares of fertile agricultural lands, the largest on the continent. However, weaponizing and using water as a weapon can significantly damage agriculture and irrigation, especially in countries with poor access to water or in grainexporting countries such as Ukraine. It is a fact that as people's access to water decreases and drought increases, violence related to water is increasing in the world. The steps taken by Russia in its invasion of Ukraine show that climate change affects Russia's aggressive attitude geopolitically.

# Nuclear Energy Market: A New Energy Crisis Erkin Sancarbaba

Due to the increase in geopolitical crises, countries have sought alternative policies to establish energy security. However, governments and the energy sector have mainly concentrated on feasibility and due diligence on oil and natural gas transmission. Of course, the search for alternative oil and natural gas transmission lines is of the essence. It will be in the interests of countries and companies to activate new, diversified and sustainable energy routes.

On the other hand, it is necessary to protect promising energy production methods from the effects of geopolitical crises. The sustainability of energy production facilities that have been implemented or are under construction should be ensured. Nuclear power plants are at the forefront of energy production facilities. It should not be forgotten that after installing nuclear power plants, an uninterrupted supply of nuclear fuel is required to maintain energy production in these facilities. It makes the continuity of the supply of nuclear fuel, namely uranium, an issue of energy supply security.

In the current global energy crisis, due to the problems in natural gas and oil supply and excessive price increases, policies implemented by Russia always take place in the discussion. However, when considering nuclear energy, Russia should not be placed at the center of the current threats when assessing the dangers to energy supply security. It must be admitted that Russia has a sphere of influence in the global nuclear power market because it has built and continues to build many nuclear power plants beyond its borders.

In 2021, 32 countries were operating 439 nuclear power reactors worldwide, producing about 10% of the world's total electricity supply. Of the 439 reactors mentioned above, 38 are located in Russia, and 42 are of Russian waterwater energetic reactor (VVER) type and are in operation in various other countries (15 of them in Ukraine). Besides, by the end of 2021, 15 Russian-designed nuclear were under construction in different countries. In this direction, it is evident that Russian nuclear energy institutions and companies have a production capacity in and outside of Russia and know-how thanks to years of experience.

Uranium fabrication, enrichment, and conversion processes are highly complicated since very few companies have the technical capacity in this field. In addition, the fuels required for nuclear reactors are particular and vary according to the design of the reactors. Therefore, purchasing nuclear power plants from a small number of suppliers can lead to years of



dependency on technology and supply.

When the global uranium suppliers are analyzed, it is revealed that Kazakhstan produces more than 40% of the global uranium supply, while other producers are Canada (12.6%), Australia (12.1%), and Namibia (10%). Russia's production corresponds to 5% of the global uranium supply, which makes Russia a minor actor. Thanks to its geopolitical position, Russia's influence in the nuclear energy market is not limited to reactor production. Most of the uranium ground in Kazakhstan, the leading producer, passes through Russia before reaching the global markets. Other parts of the supply chain also reach the global markets via Russia. Due to the situation above, Russia undertakes the task of being a logistics center in the supply of uranium, which is vital for nuclear power plants.

Another critical issue to be considered is converting ground uranium to uranium hexafluoride to enrich uranium. Very few facilities in the world can perform this process. Russia produced approximately one-third of the world's uranium hexafluoride supply in 2020, with the majority of uranium coming from Kazakhstan. Russia also has 43% of the global uranium enrichment capacity, followed by Europe (33%), China (16%), and the United States (7%).

In light of the developments in the energy sector, there is no doubt that the share of nuclear power plants in energy production will increase. It should not be forgotten that the construction of nuclear power plants and the fuel supply that will be required in the subsequent operational processes involve sophisticated processes. Nuclear energy requires governments and companies to have a dynamic roadmap. While managing the construction and production processes of nuclear power plants, which are a breakthrough for their countries, governments must also fulfill multidimensional and comprehensive diplomatic and political requirements. After the Ukraine Crisis, some countries have turned the current political crisis into an energy crisis by adopting an irrational attitude toward the natural gas and oil supply policies, which are directly related to the balances in their domestic markets. However, energy policies are strategically important, so they cannot be sacrificed to short-term and temporary political upheavals. Therefore, it is crucial for governments and companies to understand the importance of nuclear power plants and not to allow geopolitical crises to get in the way of long-term energy policies and sustainable energy production goals.

# Recommendations for Developing a Successful Renewable Energy Policy Sarper Göksal

Many countries have increased the share of renewable energy sources in energy production. The most reliable way to solve the climate crisis is possible by ending fossil fuel consumption and developing and integrating alternative energy sources. In addition, it is undeniable that the success of countries in the diffusion of renewable energy sources depends on a comprehensive renewable energy policy developed in a stable and planned manner. In this sense, governments must develop more comprehensive and efficient energy policies and implement the policies they have devotedly produced and put into practice.

First, tax reductions for those who produce and consume modern and reliable energy systems as part of the fiscal resource policy tool are indispensable since they accelerate the integration of renewable energy. Additionally, phasing out subsidies for fossil fuels in favor of renewable energy sources can be one of the processes that will facilitate and accelerate the integration of renewable energy. Regulatory policies that will facilitate the renewable energy generation of incentive mechanisms and the widespread use of clean and modern energy systems are crucial. The fact that electric vehicle sales have reached 54 percent in Norway and that the gasoline-powered vehicle era is now easily predicted to end by 2025 proves that Norway's wide range of incentives since 2011 has successfully passed the integration process of renewable energy. To clarify, the exemption of Norwegian citizens from value-added tax when purchasing electric cars and the special purchase tax provided make middle-class electric vehicles cheaper than petrol vehicles. Even though Norway is one of the largest oil producers in Europe and produces 1.82 million barrels of crude oil daily, 54 percent of the cars sold in Norway are related to electric vehicles.

Moreover, the tax exemption and premium support provided to businesspeople or companies that invest in solar and wind energy will increase the incentive for investments in renewable energy. With the increase in investment, the orientation towards alternative energy types will increase positively. President of the Republic of Turkey Erdogan announced that value-added tax and customs duty exemption would be applied to wind and solar energy investments and encourage investors to invest in renewable energy.



According to Erdogan, both local and international investments can be made comfortably in the country thanks to the tax exemption and the support of the employer's share in the insurance premium for six years and the customs duty. Thus, domestic and foreign private companies will mobilize resources for investments in this sector. According to the Association of Solar Energy Industrialists and Industry, there would be no investors in Turkey who did not produce their electricity thanks to these incentives. Zeroing taxes and 18 percent cheaper costs would attract more private companies to the renewable energy sector through those incentives.

On the other hand, laws supporting renewable energy sources are both a deterrent and a means of authorization prohibiting the irresponsible use of natural resources. In addition, governments enacting laws to improve the use of renewable energy can play an essential role in the energy transition. At this point, China's Renewable Energy Law in 2005 can be given as an example. By this law, rapid growth was seen in renewable energy sources in China. According to this law, the Chinese Government has increased offshore wind power generation by 37.8% in its 12th and 13th 5-Year Plans. With the renewable energy law, a national renewable energy target and local renewable energy development in China were planned in a multidimensional and detailed way for the first time. Although China has been ranked first in greenhouse gas emissions for years, or second behind the United States, the law, enacted in 2005, has played a significant role in achieving 100 percent access to electricity and 622 Watts per capita for renewable energy. This law added a compulsory purchasing policy to national renewable energy targets, introducing regulations for cost-sharing and financing renewable energy incentives. In short, although China has not achieved great success in renewable energy compared to its population and potential, the extraordinary increase in greenhouse gas emissions has been stopped by this law. The integration process of renewable energy has started thanks to this law.

In line with the Paris Agreement, net-zero greenhouse gas emissions are committed until 2050 in all loan and investment portfolios. KPGM created a Net Zero Readiness Index to achieve this goal. According to this index, although Norway is oil-rich and the world's largest oil exporter, it is the 'closest' and 'most prepared' country to the zero-emission



target, thanks to its implemented appropriate incentive mechanisms. Thanks to the tax exemptions it has provided investors in recent years, Turkey has ranked among the top 25 countries in the Net Zero Readiness Index. In addition. according to the 2021 Rule of Law Index, China ranks 98th out of 139 countries. According to this index, although China's commitment to the rule of law is moderate, it has made good progress in the transition to renewable energy. Its renewable energy share in total energy consumption has reached 14.4 percent with the contribution of the improved renewable energy law. Although Turkey ranks 117th out of 139 countries in the 2021 Rule of Law Index, renewable energy share in total energy consumption achieved a success rate of 14.1%. The enactment of laws to control and encourage the use of renewable energy in Turkey can quickly raise this figure to a very high level.

As a result, the transition to renewable energy by minimizing fossil fuel consumption at the first stage and ending it is the most crucial step to reducing or stopping the global climate crisis and global warming. There is no doubt that financial resources are critical to the energy transition, but they are insufficient. Switching to alternative systems is vital to improve energy efficiency and reduce energy intensity. At this point, governments can contribute to the fight against climate change by developing innovative and scientific policies and plans that fit their budgets. Improved and updated subsidies should be channeled into the renewable energy sector for continued and expanded development. States should continue to develop mechanisms to promote the use of renewable energy. While not paying valueadded tax and investing in renewable energy, exempting citizens from taxes helps citizens benefit from the same quality at a much lower price and the country's economic development. Besides, developing and protecting laws supporting renewable energy by governments' legislation mechanisms can be critical for deterrent measures to tackle the climate crisis.

# Baku Energy Week Büşra Selin Kartal ն

Azerbaijan is one of the most important energy centers in the Caucasus with its major crude oil and natural gas deposits and many oil and gas pipelines along with the Southern Gas Corridor. This, in particular, at a time when European countries are looking for energy routes other than Russia, gives the country great importance and has a say in new energy dynamics. For this reason, Baku Energy Week, which was held in Azerbaijan, received wide coverage both in the local and international media. Three major events were hosted within the scope of Baku Energy Week held in Baku, the capital of Azerbaijan, between the 1st of June and the 4th of June 2022: the 27th Caspian Oil and Gas International Exhibition, the 10th Anniversary Caspian International Energy and Renewable Energy Exhibition and the Baku Energy Forum.

In the event, which is stated in the media as the most prestigious oil, gas and energy event in the Caspian region, 250 large companies from 31 countries were hosted in the capital as part of the Energy Week. The countries participating in the event, while making a significant contribution in terms of regional energy dynamics, also give the message that the region drew a peaceful and stable porter open to energy cooperation after the Russia-Ukraine war.

The participation of high-level government officials in the event, which was sponsored and participated by large international companies, was intense. Within the scope of Baku Energy Week, which brought together many high-level government officials and influential companies in the world, bilateral meetings, which can be considered as concrete steps toward achieving international peace, were also held. These meetings also provided international economic and political cooperation, cooperation between companies and the opportunity to get to know each other, and innovations in the energy sector.

#### 27th Baku Energy Forum

One of the most important branches of Baku Energy Week this year, the 27th Baku Energy Forum, was held between 2-3 June. Following the Caspian Oil and Gas conference, Energy Forum continues to host executives and experts from key companies in the energy sector. The Forum aims to support the development of the energy industry in the region by



discussing current issues and laying the groundwork for future partnerships. While the conference was on oil and gas in the past, today, the widening of its theme to include all types of energy can be cited as an indication that Azerbaijan is also interested in new forms of energy and is willing to take steps in renewable energy, apart from its abundant resources. In line with that, the plenary session's main topic was "Energy in a transition period - New opportunities and challenges in transforming the world".

This year's special session of the Baku Energy Forum was held with the Agreement on the implementation of the Higher Renewable Energy Program between bp and the Azerbaijan State University of Oil and Industry, with the World Bank initiative. Another notable feature of the event is that the closing ceremony is held in Karabakh, the region which has great importance to Azerbaijan. The session, which took place on the 4th of June, was held in Shusha and different reflections of environmental and energy diplomacy were experienced. The title of the session is "Green Energy Potential and Opportunities in Karabakh Region". It is seen that Azerbaijan has started to take steps by being aware of the renewable and green energy potential of the Karabakh region. One of the speakers of the event, Elnur Soltanov, Deputy Minister of Energy of Azerbaijan Republic, stated in the past months that Karabakh will turn into a zero-waste zone by 2050.

#### The 27th Caspian Oil and Gas International Exhibition

The 27th Caspian Oil and Gas International Exhibition, another step of the energy week, is one of the most important events in the field that Azerbaijan has held since its independence. It also pioneered the energy Baku Energy Forum, which focuses on energy resources and energy security in the Caspian region. The event, which was also supported by the previous President of Azerbaijan, Heydar Aliyev, held the opening ceremony with Ilham Aliyev this year. Congratulatory letters were also sent to the event from the leaders of countries such as Turkey, the USA, and Great Britain for the successful completion of the event and its long-standing success.



The national stands of Germany, Russia, and Romania were included in the exhibition. The theme of green and renewable energy, which has become one of the main topics of the international energy sector this year, was touched upon. In this context, renewable energy pilot projects, green energy zone, offshore wind potential, and green hydrogen topics are innovative. In addition, in the exhibition, where many innovative technologies were introduced, oil production and energy transportation, storage of oil and gas systems and services projects were exhibited by companies.

### Caspian International Energy and Renewable Energy Exhibition

The third major event of the Energy Week was organized to evaluate the future of renewable energy resources in the Caspian region and what possible technologies would be. This year also celebrated the 10th anniversary of the event. While Azerbaijan focused on diversifying its energy resources, turning Karabakh into a green energy region gained great importance. The event was evaluated as an opportunity to attract investors to the region and establish project partnerships.

Although Azerbaijan has large oil and natural gas deposits, it does not want to be dependent on these resources for energy. It is on track to reduce its dependence on fossil fuels by diversifying its sources and investing in renewable energy. Baku Energy Week provides both the development of the energy sector in the country and the introduction and promotion of innovations in the regional and global energy sector. Delegations coming to the country from many parts of the world also have the opportunity to make new project partnerships through bilateral meetings. In this period when energy is frequently on the world agenda, it is possible to say that it is a success for the energy sector that Azerbaijan has brought energy to a platform where it can be discussed peacefully and openly.

# Development of Turkey - EU Trade Nur Durmaz

Although Turkey is not in the European Union, it is an essential place for the EU regarding its geographical location, human workforce, and raw material resources. Turkey-EU relations are solid and sustainable based on a "win-win" strategy. It is possible to see this relationship based on the Ankara Agreement signed between Turkey and the European Economic Community (EEC) in 1963. With this agreement, Turkey-EU trade has advanced one step further. This situation accelerated Turkey's accession to the EEC and enabled the establishment of the Customs Union.

Article 28 of the Ankara Agreement, it is stated that "When the operation of the Agreement shows that Turkey can assume all the obligations arising from the Treaty establishing the Community, the Contracting Parties examine the possibility of Turkey's accession to the Community" and as it is understood from this article, the ultimate goal of this partnership in Turkey's full membership to the EEC. The Additional Protocol, signed on 13 November 1970 and entered into force in 1973, was envisaged to complete the

Customs Union and the condition of free movement of industry, agricultural products, and persons between the EU and Turkey, together with the provisions of the Ankara Agreement. The Customs Union is defined as an economic integration between the partners, which removes all kinds of measures with customs duties, taxes, and restrictions with equivalent effect. It provides common customs activities for the parties outside the union.

Free trade among member states is one of the most important advantages of the Customs Union. The customs union was an important step toward economic integration and closer to the single market. However, those concerned about further integration may see this as a disadvantage. The reason for this is the negative relations that may occur with the increase in integration. Examples of this situation are the "spill-over " and "spill-back" effects, which play important roles in the European Union. Spill-over results from policies that aim to harmonize a limited set of international relations but also need other policies to be reconciled. And this



effect necessitates the harmonization of other policies as a result of subsequent harmonization. For example, removing tariffs on goods moving across national borders in the European Economic Community further increases the need for the European Commission to harmonize national tax laws and regulations that lead to price discrimination and reduce interstate competition. As this shift from national regulatory autonomy to "supranational regulatory capacity" shows, these are aimed solely at promoting national interests, while transfers of power to Europe cause these interests to express themselves in terms of Europe as a whole. Thus, transfers of power to the supranational level are likely irreversible. The backlash shows that reinforcing the negative consequences of deepening and enlargement improves the European integration process. The expansion will lead to production failures and backlash crises.

This situation will not affect Turkey's approaches toward the EU until the 2010s. Turkey's candidacy for the EU was approved at the 1999 Helsinki Summit, and negotiations were started in 2005. Turkey's complete membership negotiations with Turkey are handled under 35 headings (chapters) according to the Negotiation Framework Document. Only 1 of these chapters has been closed so far. It is the Science and Research chapter which was closed in 2009. Turkey's program of harmonization with the EU acquis was announced in 2007, and legislative changes to be made for alignment with the EU were taken into account with this harmonization program. A guide map was created for a 6-year process. Chapters are audited by the Commission every year, and an evaluation report is sent to the countries.

This report includes what should be used and what needs to be done for the country's development and its accession to the EU. When we look at the trade relations between Turkey and the EU, Turkey is one of the most important trade names of the EU. The EU has provided Turkey with a certain amount of money to keep Turkey on the desired path. The total amount of trading between these two in 2020 is approximately 132.2 billion. While 62.3 billion of this was



imported by the European Union, 69.9 billion was imported by Turkey. When we look at the trade areas made by the parties, both sides need each other in mechanization and transportation. Machinery and transportation imported by the EU is 38.5%. This is followed by clothing (13.3%), agriculture, and raw materials (8.5%). Despite this, in the field of transportation and machinery, Turkey is in 4th place with a rate of 9.8% in the countries where the EU imports goods. Turkey, on the other hand, imported 43.8% in this area. Chemicals (18.5%) and fuel and mining products (9.2%) are the areas that dominate Turkish imports after transportation and machinery. However, when we look at the negotiations, Turkey's progress in the transportation and industrial policies is seen only as an average by the EU.

According to the Commission, in 2022, Turkey's prepare a new transport strategy covering all transport modes, in line with the Commission's Strategy for Sustainable and Smart Mobility, to set concrete targets for significant reductions in transport sector emissions by 2030 and 2050; adopt the new rail sector reform and phase out subsidies to the incumbent rail operator: see the European Intelligent Transport Systems (ITS) Framework Architecture as the inclusive ITS architecture, especially in urban areas.

Turkey is a vital commercial resource for the EU. But Turkey should use what the EU provides more efficiently. There is no transport and transport policy as the Commission had hoped, as the goods received from the EU in transport and machinery are not appropriately used enough. Due to the rising foreign exchange prices and the deterioration in the economy, an unexpectedly large channel emerges for families working with minimum wage, as the goods used for fuel and chemical products are purchased in Euro. Better economic policies should be followed for the further development of Turkey's trade and the satisfaction of the Turkish people.



bilkenteprc.com