



Conclusions from the 14th TIME Economic Forum *On digitization, the Green Deal, and the threats of ignorance*

The latest, 14th TIME Economic Forum, organized by the biggest and most active ICT organizations, provided an opportunity to present the main barriers hampering the use the potential of digital innovations to increase the competitiveness of the Polish economy. The main topic discussed was a Green and Digital transition as the basis for establishing circular network economy. The Forum's focus was on a raft of digital concepts and solutions that increase the innovation and competitiveness of the economy in the times of peace and its resilience to cyber-threats involving digital warfare, energy blackmails, and armed conflicts.

Since 2012, KIGEiT has repeatedly warned about the dangers of relying on fossil fuel-based energy, becoming obsolete and compromising strength and resilience of the economy against various threats. We noticed that after 2020 the costs of generating electricity from RES would be lower than from coal. In 2019, the costs of energy production from RES became competitive to those related to previously used technologies, thus heralding an energy conflict. We notified the stakeholders that cyber-attacks on power grids involved and would continue to involve the use of advanced IT weapons, and informed that countries dependent on fossil fuels would increasingly counteract the energy transition, which has become a fact. Cyber-attacks are now targeting all elements of the circular network economy framework. Therefore, this year's Forum was entirely dedicated to the issues of increasing energy, digital, industrial and network security. The topics of the conference were the problems that must be resolved to increase the resilience of the Polish economy to power and information warfare and improve its functioning.

On the short-sightedness of economic policy

In the program presentation, we indicated that the weakness of Polish economic policy is its short-sightedness. The organizers intended the presentation to be a warning against the impending conflict, yet it turned out to be its foreshadowing. Bringing together the facts and arguments discussed during the presentation and discussion part of the Forum, it is especially noteworthy that the success of the 3x20 climate & energy package and the adoption of the Green Deal strategy means a rapid and steady decline in fossil fuel sales for global energy companies. Bearing in mind that most wars are fought over raw materials and markets, we can assume that the Russian energy oligarchy treated the Green Deal as a threat to its interests. The Russian-Ukrainian war has been going on for years. The escalation of the conflict is likely to reflect the level of fear of the Kremlin authorities about the political consequences of losing markets for energy resources. The main causes of the war were explored by the representatives of enterprises in a document published before the conference on the KIG's¹ and KIGEiT's² websites.

Assumptions of the energy market reform

During the Forum, the key assumptions of the energy market reform developed by the KIGEiT expert team for the Ministry of Climate and Environment (2021) were presented. They were delivered in the form of a package of

¹ <https://kig.pl/kig-i-kigeit-apeluja-do-calej-polskiej-klasy-politycznej/>

² <https://kigeit.org.pl/2022/03/01/list-otwarty-kigeit-i-kig-do-calej-polskiej-klasy-politycznej/>

recommendations based on a detailed analysis of the systemic weaknesses of the energy policy of the past 30 years. The reform project was carried out with public funds and should be widely available. However, even though over 3 months from the date of its receipt have passed, it remains unpublished. The report indicates the reasons for the increase in energy costs, brings a substantive criticism of the Energy Policy of Poland until 2040 (PEP2040) and proposes a digital reform of the energy sector. The reform should include several activities accelerating investments in distributed energy, and thus accelerating development of Polish districts and communes.

Emphasis was placed on the implementation of Directive 2019/944, allowing for giving high-voltage and medium-voltage distribution systems to the hands of citizens, via citizen energy communities (CEC). It is one of the system solutions that activates the financial resources, competences, and entrepreneurship of local communities. The concept of a safe legal environment encouraging private and prosumer investments in local networks has been supported by dozens of detailed solutions. The proposal to launch a dynamic tariff system as a digital mechanism rationalizing the choice of location, technology and size of each investment elevates it to a whole new level of innovativeness. **The postulates of digitization and decentralization of finance and economic trading based on standardized blockchain technology are consistent with the concept of creating energy accounts.** It means a practical application of digital decentralization of finance and settlements, dedicated to entities and citizens active within CEC. The necessity of simultaneous development of all layers and types of networks based on data and information from **smart metering of power grids and real-time data transmission** was justified as the technological and information basis for the automation of distributed energy networks and industrial networks of the circular network economy framework.

The role of telecommunications, AI, IoT and financial decentralization in building a network economy

In the discussion on the development of 5G networks and migration towards PPDR connectivity in Poland, it was pointed out that the acceleration of investments should be based on creating conditions for their profitability resulting from the simultaneous use of distributed energy, the circular network economy industry, digital decentralization of finance and universal services, as well as development of systems of e-commerce, health, education, and lifelong learning. The presentation on the security of critical infrastructure pointed to the need to create conditions that motivate cooperation and the sharing of resources through synergy mechanisms and network dispersion. This requires the consistency of ad hoc measures with the concept of long-term development, and also applies to the planning of physical architecture, software, and security systems. For this reason, several presentations were dedicated to the need to base the digitization of networks and plants on a standardized operating system for industrial IoT (IIoT). The use of the system can contribute to cost reduction and increasing the security of industrial networks necessary to activate the synergy of local, industrial and grid energy. Without such a system, it is impossible to seriously think about implementing the circular network economy.

The development of digital and energy technologies has reached a level of maturity, which guarantees that the costs of energy from RES and SMRs (small nuclear reactors) will be lower than from fossil fuels and large nuclear power plants. The digital system shaping market energy prices in wholesale and retail markets will continuously optimize the local energy mix. The combination of green hydrogen and electric power markets will allow for optimization of investments in a balancing system based on demand management services, allowing for dynamic control of electrical power collectors. The electrification of the circular network economy means the growing capacity of energy storage (e.g., in cars), an increase in the capacity of company and home uninterruptible power systems and digitally controlled electrical power collectors with high demand flexibility (e.g., heat pumps, refrigerators, etc.). Assuming that within 20 years even 90% of the installed electrical power collectors' capacity can be controllable, it is possible to abandon power sources using fossil fuels very quickly, thus completely resigning from importing related raw materials for energy purposes. The development of stabilization systems for smart power grids will increase the efficiency of investments in industry 4.0, accelerate investments in industrial data transmission networks (5G, 6G, ...), electrification of transport and production technologies, and the development of digital

services based on the mass implementation of artificial intelligence modules. The development of AI, driven by economic mechanisms, will trigger a chain development of digital innovation in industry and services that will completely change the culture of life and the forms of consumption.

The New Financial Deal and the application of the Polish payment system in humanitarian aid

Digital and Green transition is also a challenge for the broadly understood financial sector. The New Financial Deal brings, on the one hand, significant and urgent obligations for banks and other financial institutions, which, due to the so-called ESG, i.e., considering environmental, social, and corporate governance in their business activities, will be forced to act for sustainable development, and thus also to significantly reduce their own carbon footprint. Consequently, many of the changes required will impact their operations, e.g., result in the elimination of some of the applied technologies or their modernization or implementation of new ones based on green energy. On the other hand, it is the financial sector, with banks at the forefront, that will be responsible for distributing public, including EU, funds and acquiring other private means for crediting Green and Digital transition projects in the economy and social life. The related processes, e.g., risk assessment, modification of the existing and creation of new sectoral regulations or supervision over the disbursement and settlement of funds, are issues to be tackled as soon as possible. Unfortunately, analysis of the practice of institutions already observed in Western European countries leads to a conclusion that our local entities are still insufficiently prepared in every respect, such as strategic thinking and modification of their business mission, human resources, technology, and finance. This situation requires the fastest possible change, i.e., integrated actions, either by state bodies such as the government, the Ministry of Finance, or the Polish Financial Supervision Authority, but above all by individual banks and other financial institutions and their industry representations.

During this year's TIME Economic Forum, in the part dedicated to the world of green finance, we discussed the issues related to the development of open banking - with the participation of the European Commission - central bank digital currencies (CBDC), green technologies in banking and financing the implementation of the Green Deal goals. The postulates coming from both the business world and from the scientific community should as soon as possible be considered by national and EU politicians as well as by institutions and companies that make up the financial sector.

Given the current war in Ukraine and the influx of many refugees to Poland, at this year's Forum, a package of immediate, emergency solutions for the transfer of foreign aid to refugees in the form of cash transfers through the Polish banking system was initially presented. We call for measures to be taken by relevant institutions in Poland to implement information and financial systems supporting refugees from Ukraine.

On the ignorance and conflict of interest of the emerging green circular network economy framework and sectoral oligopolies

The presented development path of the circular network economy framework aims at eliminating energy poverty and digital exclusion. This requires increasing the level of common technical knowledge about the possibilities of energy and digital automation at home and in the workplace, as well as universal access to the necessary data and information. In this way, citizens' resources can fuel investments in digitization, AI modules, energy devices and circular network economy enterprises. This is the way to popularize entrepreneurship based on local cooperation. At the same time, new factors will arise, involving the competitiveness of the economy and its resistance to crises and conflicts.

The media feed us with images of war. We see its victims - the citizens of Ukraine, and the aggressor - the Russian army. Switching between the speeches of some politicians, we learn that due to the war in Ukraine, we must suspend climate policy, return to coal, and look for new sources of gas and oil supplies. It is surprising how many Polish and European politicians have proposals that are in line with the goals and expectations of the Russian oligarchy. It turns out that despite the fact that they have just collided with the consequences of their short-sightedness, they are still trying to solve the problem without elementary reflection on its origin. Apparently, they had not heard Einstein's declaration that if he had only one hour to save the world, he would have spent fifty-five

minutes defining the problem, and only 5 minutes finding the solution. He also emphasized that we cannot solve our problems with the same thinking we used when we created them.

Unfortunately, these are not manifestations of deficiencies in basic knowledge on how to solve problems, but an illustration of the sharpness of the conflict of interests of the emerging green circular network economy framework and sectoral oligopolies, which are a relic of the ending industrial era. People dying on both sides of the Russian-Ukrainian war are, in fact, victims of another war. It is the war of interests between capital groups in a linear economy and a circular network economy that is growing in strength. Its victims are also miners and employees of energy companies, who have been blocked from the possibility of professional development and work and live in cleaner, healthier places. Its effect is also the persisting energy and economic poverty resulting from the digital exclusion and disinformation in the current economic and technological reality. According to the report "Disinformation through the eyes of Poles", as many as 8 out of 10 adult Poles have experienced disinformation, and the most susceptible to fake news are young people who trust social media, who are not able to independently discern true and false information. The disinformation concerns not only the alleged harmfulness of the 5G and PEM networks, green transition, solar panels, but also vaccines or the recent war in Ukraine. The purpose of disinformation in Poland is to delay the development of our country and to divide our society. This conflict is a source of increasing social tensions within countries as well as in international relations. "Domestic" conflicts are most acute in countries where the communities of the old and new economy are roughly equal. The radicalization of the political struggle shatters social cohesion and reduces development capacity, a reference example of which is Poland.

The hopes that the cause of the war is Putin's "madness", and that Russia will remain with no allies are unfounded. We are facing a clash of interests of democratic communities with a pro-development culture and conservative communities which, feeling the threat of the consequences of accelerated development, accept authoritarian rule. There is no point in continuing the armed struggle because this war cannot be settled by a military victory of either side. The economic war will be decisive. It may be longer or shorter, but its final outcome is predestined, just as is the final outcome of the Civil War.

On green transition and economic war

Most participants of the Forum supported the proposal to accelerate the green transition and digitization of the Polish economy³. They consider it a good way to increase the resilience of enterprises to the coming economic war (with a possible threat of armed conflict) and the most economically effective way to weaken the aggressor. The proposed energy reform, the postulate to intensify network investments, cyber-security, and the postulate to disperse the network's production potential, are just some of the elements of the defense strategy of transitioning forward. The decision to select this path also stems from the shock therapy that we experienced at the turn of the 1990s. Comparing its effectiveness with the strategy of the "evolutionary" revolution adopted in the 1990s by Ukraine strengthens our conviction that the prepared recommendations and reforms are accurate.

Winning an economic war requires austerity and the same consolidation of society as in the case of an armed conflict.

It seems that the winners in the war will be those societies that will treat the construction of the circular network economy as the key to success. Independence from imported fossil fuels is likely to ensure long-term peace. Winning an economic war requires austerity and the same consolidation of society as in the case of an armed conflict.

³Several postulates were also included in the appeal "It's time for a digital economy!" signed by nearly 20 institutions.

We hope that the conclusions drawn during the discussions held and presentations made during the 14th edition of the TIME Economic Forum will reach the politicians that we expect to adopt a long-term strategy of action as soon as possible. We propose a political pact beyond divisions, necessary to face the challenge of Green and Digital transition.

All presentations and speeches delivered at the Forum are available at www.fgtime.pl

On behalf of the organizers of the 14th TIME Economic Forum

Organizer: Polish Chamber of Commerce for Electronics and Telecommunications.

Co-organizers: Digital Poland Foundation, Foundation of the Polish Promotional Emblem “Teraz Polska”, Lewiatan Confederation, National Chamber of Ethernet Communication, German Association of Producers of Electrical and Electronic Equipment ZVEI, Polish Chamber of Information Technology and Telecommunications, Polish Chamber of Electronic Communication, Nicolaus Copernicus University in Toruń, ZIPSEE “Digital Poland”, Polish Bank Association.

A detailed report on the 14th edition of the TIME Economic Forum, which will be delivered to senators, MPs of the Republic of Poland, and the European Parliament, will be prepared by the end of March 2022.
