

INTERENEF 2025: Croatia at the Center of European Energy Transition

Author: Branimir Kovač **Published:** 14.10.2025. 17:00 **Location:** Zagreb



An AI-assisted digital lexicon authored by Anđelko Milardović has also been presented

The 9th International **Energy Forum INTERENEF 2025**, titled "*New Energy Order: Challenges and Opportunities*," was held in Zagreb yesterday, organized by the Institute for European and Globalization Studies and the Atlantic Council of Croatia, under the auspices of the Ministry of Economy of the Republic of Croatia.

The conference was moderated by **Jadranka Polović** from the Institute for European and Globalization Studies, who emphasized that **energy** today is inseparably linked to **geopolitical changes** at whose center we find ourselves.

Anđelko Milardović, founder of INTERENEF and president of the Institute for European and Globalization Studies, explained the forum's political philosophy.

"We started from Split to Zagreb, as these are two elements of our identity. Geopolitics is destiny, space cannot be changed," Milardović said, adding that the political philosophy of this forum is **energy policy** and the **geopolitics of energy** as the geophysics of power. "Energy has always been at the focus of geopolitics because energy is power," he stressed, presenting an initiative to create a **global energy forum** headquartered in Zagreb, modeled after **Davos**.

Mladen Nakić, president of the **Atlantic Council of Croatia**, emphasized the importance of the energy forum, particularly from a security aspect, whereby energy has become a key word in the geopolitical, geoeconomic, and geostrategic context.

"The forum rightly highlights the significance of energy in creating a new order—not only in terms of energy but also the international order as a whole. Through this, INTERENEF has pointed out that we once again have elements of the Cold War, but this time the reason is not ideology but rather energy sources and their supply routes. Croatia has sufficient infrastructure to optimally utilize its energy potential in this part of the world", he said.



AI Lexicon Presented

As part of this year's INTERENEF, a digital lexicon titled "Fundamental Concepts of Energy Policy and Energy Geopolitics" was also presented. The lexicon is special in that its author, **Andelko Milardović**, prepared it using **artificial intelligence**, which is also co-signed as the author. *"Natural intelligence created the methodological framework, and artificial intelligence answered the questions,"* Milardović said, explaining that the lexicon will not be sold but will be available for free download and use.

Daria Karasalihović emphasized that the lexicon was created to better explain concepts that shape our **energy landscape**, and that it is conceived as a tool for better navigation in a multidisciplinary field such as energy.

Marijan Krpan, president of the **Agency for Hydrocarbons (AZU)**, spoke about exploratory wells and activating Croatia's potential. *"We can say that we have activated our potential and are working to increase our reserve base,"* Krpan said, emphasizing the importance of control over **reserves** and utilizing the strategic position through **Janaf** and the **LNG terminal**.



He particularly highlighted Croatia's **geothermal potential**: *"We have very good geothermal potential. We are drilling and have confirmed the existence of potential, and we will work on connecting these cities to geothermal heating"* – **Velika Gorica, Osijek, Vinkovci**, with **Zaprešić** to follow. He also announced that Ina will soon begin **hydrogen production**.

Dr. Ivan Andročec, president of the **Croatian Energy Association (HED)**, warned of challenges facing the energy sector. *"We find ourselves in an unstable period, there is great uncertainty and unpredictability, yet we are forced to make long-term energy decisions,"* Andročec said. He emphasized that major energy projects have now become part of the critical component of **European energy independence**, and that **energy transition** has become a **geopolitical battlefield**.

Croatia as an Energy Hub

Željko Krevzelj, director of the Energy Directorate at the Ministry of Economy, emphasized that Croatia is strengthening as an **energy hub** in **Southeast Europe** and is committed to **decarbonization** and energy transition. He cited four key areas: **renewable sources, geothermal and nuclear energy**, and **low-carbon hydrogen**. Regarding nuclear energy, Krevzelj emphasized that a working group has been established in the Ministry to consider all aspects as well as the process of training workers for this technology. *"We want to be a leader and an energy hub,"* he stated.



Dr. Theodossios Georgiou, president of the **Association of the Atlantic Treaty**, emphasized that the Atlantic Association supports the conference and that cooperation is necessary. *"Energy is no longer just an economic and technological issue, today it is at the very core,"* Georgiou said, adding that **energy security** is national security for **NATO**. *"We must take care of collective responsibility, we are witnessing a new energy order,"* he emphasized, stressing that the Alliance must be ready for strategic changes in energy supply.

H.E. Anar Imanov, Ambassador of the Republic of **Azerbaijan** to Croatia, emphasized that today we are at a turning point in global **energy transformation** and that Azerbaijan is proud to contribute to this transformation. Azerbaijan's strategic position as an energy producer and transit country directs them toward the energy future. *"Solar energy, hydropower, and wind energy – these are the areas we are focusing on,"* Imanov said. He announced that they recently began exporting **gas** to Europe and that this **gas corridor** is worth **33 billion euros**. Azerbaijan has committed to doubling gas supply to Europe in **2027**.

and increasing the capacity of the trans-Atlantic gas pipeline. "Croatia has also become a transit partner for us, and we are happy that this is the case," the ambassador stated.



Davor Ivo Stier, Member of the **European Parliament** from the Committee on Industry, Research and Energy, spoke about energy as a **geopolitical weapon**. "Energy is used to achieve political goals, and in this way one power can impose its will on another state. This is not new, but what is new is the way it is done, without seeking alibis but directly and straightforwardly," Stier warned. "The existing order is collapsing before our eyes, the logic of spheres of interest is increasingly used to justify certain moves. The world is becoming less globalized and more fragmented," he stated.

Stier emphasized that **Germany's** and the EU's growth model was based on cooperation with **Russia** and its cheap energy sources, but that Europe only became aware after the war in **Ukraine** and **COVID** that this model had become history. "If the EU wants to achieve strategic autonomy, it must adapt to new circumstances. Already now, the EU must revise policies adopted in different times and circumstances," he said, adding that this particularly applies to the **green transition**, which needs to be redefined. Today, no one questions the **LNG terminal on Krk**, nor **Janaf's** strategic position, Stier emphasized.



Global Strategic Shift

Julian Wieczorkiewicz from **NATO headquarters** in **Brussels**, dealing with energy security, warned of a strategic shift at the global level. *"There is a strategic shift happening globally – China has an excellent position to help the energy transition because it controls 90 percent of the key minerals needed to achieve this, as well as solar panel production,"* Wieczorkiewicz said. He warned that a certain **strategic dependence** already exists, and the Chinese have announced critical restrictions on the export of **strategic minerals**.

Wieczorkiewicz also spoke about military aspects of energy, emphasizing that new military equipment and aircraft consume more fuel due to advanced performance and that **jet fuel** will be needed for a long time.

"Today we can produce synthetic fuels, but costs are very high. However, this is still interesting to us because if technology enables the military to produce fuel, that is a very important element from a strategic perspective," he explained.

At the first panel on **challenges and opportunities for energy corporations**, the introductory presentation was given by **Tonči Tokić**, project director from the Gas Department of EA Gibson company from Singapore.

"With the emergence of new participants in the traditionally established energy sector—particularly in LNG—the industry is witnessing significant changes. The global market for LNG is expected to expand further due to rising demand, which may prompt some current exporters to become importers (due to domestic industry demand or production shortages). Established oil companies are increasingly transitioning from crude oil production (getting out from crude oil processing) to LNG, positioning it as their primary energy source for the foreseeable future. Additionally, many experienced industry professionals are shifting between companies, often appearing at new entrants as a direct response to evolving opportunities in the LNG and energy sector indicating new market direction", said Tokić.

Vladislav Veselica from the **Adriatic Oil Pipeline (JANAF)** spoke about challenges facing the company. *"Janaf, as part of the overall EU energy structure, is a victim of these circumstances. We have no influence on events related to NIS, we did what we could and hired American lawyers, and with the help of the Government of the Republic of Croatia, extended the contract by 8 months,"* Veselica said. He emphasized that cooperation with **NIS** brought them 40 percent of revenue and that there is no magic that will compensate for this. *"There is great responsibility on Janaf's management to create new paradigms, that is currently the most important thing,"* he stressed.



Veselica: MOL Will Get Competitive Prices

Veselica also spoke about the relationship with the **MOL group**: *"This also changes the paradigm with the Mol group. Politics is what must help us. Based on all inputs, if the Mol group utilizes Janaf, I responsibly claim that they will get competitive prices."* He emphasized that **MOL**, as a smart company, is surely thinking about buying a stake in **NIS**.

Ahmet Türkoğlu, Executive Director of **Turkish Petroleum Corporation** from Istanbul, highlighted significant investments in their own production sources. *"We have invested heavily in our own production sources in addition to cooperation with Azerbaijan. Everyone criticized us,"* Türkoğlu said. He emphasized that they have significant discoveries, including a major well in the **Black Sea**. *"We are investing heavily, but we do not forget environmental protection goals. We are trying to reduce carbon emission sources already during production,"* he added.

Viktor Lučić, Director of the Corporate Strategy and Business Development Sector at **Končar**, spoke about the company's growth. The growth of Končar's revenues is driven by both internal and external factors, one of which is the change in the **energy mix** and the electrification of numerous segments of society. Companies like Končar have recognized their opportunity in ensuring infrastructure functionality. Lučić highlighted an interesting fact: *"Data centers today are expressed in energy units; 60 percent of the investment is energy-related."*

Dr. Leon Stille from the **Netherlands**, an expert in innovation in the energy industry, stated that traditional companies are struggling to adapt, but that it is mostly a good change. Speaking about emission reductions, he warned: *"If you look at climate targets, companies often promise something that is very difficult to achieve in practice. This can only be achieved if the political level is on the same page because you cannot expect companies to do this on their own, as their main motive is profit."*



Artificial Intelligence in the Energy Sector

At the second panel on the modernization of energy corporations and the use of artificial intelligence, Professor **Andrej Pustišek** from **Hochschule für Technik in Stuttgart** warned that more education will be needed for the development of **AI** in the energy sector. *"In other countries, they don't think about regulation – there, development happens first, and then regulation, and that's how it should be in Europe as well,"* he emphasized.

Dr. Marat Terterov from **Oxford University**, Chief Representative of the Brussels Energy Club, pointed out that one should consider the impact of **geopolitics** on oil prices because it is precisely this price that determines further investments. The impact on prices is short-term, but markets have adapted quickly. *"Energy companies shape their investment strategies in the medium and long term, and do not think about short-term fluctuations in oil prices such as when Israel attacks Iran,"* Terterov explained. He emphasized that **gas** is still the main driver of the **EU economy**, especially for large countries. He also warned that the data on which AI systems in the energy sector are built are often of questionable reliability.

Associate Professor **Tomislav Capuder** from **FER** explained two main reasons why AI has not yet been adopted in the energy sector. *"The energy sector must have a database that would be used for AI, but in the distribution system there is not enough data for now because we had old meters. We need data to predict consumption patterns,"* Capuder said. The question is how to know what is happening in **distribution networks** because it is extremely complex to collect this. *"In the energy sector, there are more walls for AI than, for example, in medicine,"* he warned.

Prof. Dr. Mario Vašak, also from **FER**, emphasized that **AI** should also make new decisions, and therefore a decision-making method must be formed that will, along with prediction functions, include decision-making. *"Very good knowledge of components is still needed, the human factor is important and necessary although AI can analyze a larger number of variables,"* Vašak said. AI is important to make a rational decision in changed circumstances without generating business losses.

Davor Aničić, director and co-founder of **Velebit AI** from Zagreb, warned about the importance of **data management**. *"Data is easily accessible and easily copied, and AI takes this to a new level. For any company that has a lot of data, it is very important to manage it well,"* Aničić said. Setting up processes and models is important because they entered many companies spontaneously, so different data goes where it perhaps should not. *"Energy is an area where data is sensitive and this must be taken into account. There will always have to be a person who will supervise the systems,"* he concluded.



New Energy Order

At the third panel on the energy market in the new energy order, the opening address was given by **Aleksandar Halavanja**, head of the Systematic Energy Management Service at the **Environmental Protection and Energy Efficiency Fund**. Halavanja emphasized that Europe must find a balance between **climate goals** and production and that Croatia can be a smart player in this. He recalled the Fund's activities and emphasized how Croatia has the opportunity to position itself in the area of **green transition**, all to achieve the goal of **energy self-sufficiency**.

Dražen Jakšić, director of the **Energy Institute "Hrvoje Požar"**, emphasized that energy transition brings us self-sufficiency and independence from major powers, but that it will take time to achieve this. *"China is moving forward tremendously, today China has advanced technologically and is more advanced than Western countries in certain technologies. They are technologically advanced, have resources, and in that sense are the greatest power,"* Jakšić said. He added that he thinks the **USA** will also return to the path of **climate neutrality** at some point, but we will have to wait a long time for that.

Later in the discussion, Jakšić spoke about Croatia's role. *"Croatia can be an energy hub and can play a role there. There will still be oil for some time, but less and less. Southeastern EU has potential, sun and wind, there is more of that here than in the rest of the EU,"* he said. He also emphasized the topic of system resilience to crises: *"We are one of the countries in the EU that has the best interconnections with other countries, better than we are connected within the country. Hydroelectric power plants are very good storage, efforts should be directed toward building reversible hydroelectric power plants,"* Jakšić concluded.

Prof. Yu Hongyuan from the School of Political Science & International Relations at China's **Tongji University** emphasized that since the early 1990s, things have been changing in the global market. *"Energy transition presents challenges not only in terms of production but also demand,"* Yu said. Cooperation is needed to achieve this, and demand should be encouraged. *"The EU should work on convergence rather than divergence in the future. We must create greater political coherence to create a green future,"* he stated.

Do We Know the Price of SMRs?

Ninoslav Mandić, director of the Mandatory Oil and Oil Product Reserves Sector at **AZU**, spoke about domestic resources and **geothermal energy**. He emphasized that such discoveries reduce dependence on imports and energy insecurity. *"Geothermal energy works 24/7, domestic content is present,"* Mandić said.

Mandić also commented on the situation with **NIS**. *"Hungarians and Slovaks are under exemption. Serbia is now in trouble, they must replace the amount of oil they will now not receive. By mid-December, they will consume their reserves. They will have to rearrange all their supply routes,"* he explained. *"We are not in trouble here. There will be no disruptions in Croatia,"* Mandić assured.

Prof. Dr. Saša Žiković from the **European Center for Business Research** at **Pan European University** in **Prague** was critical of **hydrogen**. *"Hydrogen currently makes no sense, but in the future, we see sense in local use. Hydrogen is not cost-effective, but that doesn't mean it won't become so due to political decisions,"* Žiković said.

On the question of building a **small modular reactor** in Croatia, Žiković was skeptical: *"The problem is that we don't know the price, conventional nuclear plants have the same price that small modular reactors (SMR) reached only in projections, and conventional nuclear plants are already proven technology,"* he said, adding that he doubts Croatia has the necessary knowledge.



New World Order

At the fourth panel on Croatia as the EU's new **gas hub**, the opening address was given by **Assoc. Prof. Dr. Miro Kovač**, former Minister of Foreign and European Affairs. *"An emerging new world order is happening. Putin has made Russia a power again, based on energy,"* Kovač said, adding that **China's** intelligent development policy has made them a superpower that today rivals the Americans.

"Taking energy resources from Russia was the shortest path for many European countries. Americans tried to prevent this earlier but couldn't replace it," Kovač said, explaining that **fracking** in the USA finally enabled Americans to become exporters. The EU has now largely rid itself of Russian energy sources with the idea of weakening Russia, but Russia, Kovač said, has reorganized, is relatively stable, and has shifted exports eastward.

"Croatia is now becoming interesting as a country that can deliver gas. We listened to the Americans and built LNG," Kovač concluded.

Danijela Šimović from **LNG Croatia** emphasized that the terminal's capacity has been increased and that work on the additional module has been completed. *"We had the first auction of additional capacities, significant interest was shown, and we continue to receive inquiries,"* Šimović said. *"We can provide supply, but we cannot influence demand,"* she added.



Štern: Pipeline to Albania Would Be a Real Deal

Robert Bošnjak from **Plinacro** emphasized that Plinacro has been developing plans for its transport system with the idea of increasing **diversification**. *"We will build 215 km of pipeline,"* Bošnjak announced, adding that they ensure that pipelines are usable in the future as well. *"The pipes we purchased are certified for hydrogen transport as well,"* he emphasized.

Zvonimir Šibalić, board member for trade and development of new business opportunities at **PPD**, spoke about diversification. *"Croatia made the transition without problems, it was very easy for us to change the supply flow, which is not the case with some other countries that do not have access to the sea,"* Šibalić explained.

Davor Štern from the Economics Department of **Matica hrvatska** was clear in his messages. *"Croatia must strive to be independent and self-sufficient when it comes to energy. It is very important that Croatian Energy deals with itself,"* Štern said. *"We must strive to become important to our geographic environment because such is our position,"* he added. He also warned that Russia will not disappear from the map and will remain a large energy reservoir. *"If we extend our pipeline to Montenegro and Albania, that would be a real deal for Croatia,"* Štern concluded.