

НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ БІОРЕСУРСІВ ТА ПРИРОДОКОРИСТУВАННЯ УКРАЇНИ



- Науково-дослідний інститут економіки і менеджменту
- Факультет аграрного менеджменту
- Навчально-наукова лабораторія економічної теорії та біоекономіки
- Кафедра економічної теорії

МАТЕРІАЛИ ДОПОВІДЕЙ

V-ГО МІЖНАРОДНОГО НАУКОВО-ПРАКТИЧНОГО СЕМІНАРУ

«РОЗВИТОК БІОЕНЕРГЕТИЧНОГО ПОТЕНЦІАЛУ В СІЛЬСЬКОМУ ГОСПОДАРСТВІ»

7 - 8 лютого 2020 р.



м. Київ

**НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ БІОРЕСУРСІВ
І ПРИРОДОКОРИСТУВАННЯ УКРАЇНИ**

**НАУКОВО-ДОСЛІДНИЙ ІНСТИТУТ ЕКОНОМІКИ І
МЕНЕДЖМЕНТУ
ФАКУЛЬТЕТ АГРАРНОГО МЕНЕДЖМЕНТУ
НАВЧАЛЬНО-НАУКОВА ЛАБОРАТОРІЯ ЕКОНОМІЧНОЇ ТЕОРІЇ
ТА БІОЕКОНОМІКИ
КАФЕДРА ЕКОНОМІЧНОЇ ТЕОРІЇ**

**МАТЕРІАЛИ ДОПОВІДЕЙ
V-ГО МІЖНАРОДНОГО
НАУКОВО-ПРАКТИЧНОГО СЕМІНАРУ**

**РОЗВИТОК БІОЕНЕРГЕТИЧНОГО
ПОТЕНЦІАЛУ В СІЛЬСЬКОМУ
ГОСПОДАРСТВІ**

**7 - 8 лютого 2020 р.
м. Київ**

УДК 620.9:63

ББК 31

С 64

Розвиток біоенергетичного потенціалу в сільському господарстві:
матеріали доповідей V-го Міжнародного науково-практичного семінару
(м. Київ., 7 – 8 лютого 2020 р.). – К.: Видавництво «Наукова столиця»,
2020. – 142 с.

Відповідальний за випуск д. е. н., професор **М. П. Талавири**

Відповідальність за достовірність матеріалів несуть автори.

© Національний університет біоресурсів і
природокористування України, 2020

The complexity of the technology, combined with misinformation and a backlash against science, academia and expertise have created misunderstandings and unfounded concerns about biotech. To be successful, Europe's core values of progress and solidarity need to be applied. An open and transparent dialogue is critical to reinstating trust in sound science and policy making. The new mandate of the European Parliament and Commission for 2019-2024 will represent an opportunity to reset the ambition for biotechnology in Europe.

References:

1. About the Sustainable Development Goals. URL: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.
2. United Nations Development Programme / Sustainable development goals [<https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>].
3. The European Association for Bioindustries. Resetting the ambition for biotechnology in the EU. URL: <https://www.europabio.org/cross-sector/publications/resetting-ambition-biotechnology-eu>.

Hutsol Taras, ScD in Engineering, vice-rector, State Agrarian and Engineering University in Podilia, Kamianets-Podilskyi, Ukraine

Jurczyk Michał, Eng. M.Sc., Department of Power Engineering and Environmental Protection, AGH University of Science and Technology in Krakow, Krakow, Poland

POLISH 2040 ENERGY PLANS

In the end of 2018 Polish government has announced energy plans till 2040 in official document: Polityka Energetyczna Polski do 2040 (PEP2040). Information inside can surprise in terms of current energy state which can be described as energy from coal. As the answer from EU requirements in field of environment protection Poland has to make long term changes.

In previous years (till 2020) Poland had to full fill goals of so called 3x20% plan brought to the life in 2009 by European Commission:

- 20% cut in greenhouse gas emissions (from 1990 levels)
- 20% of EU energy from renewables
- 20% improvement in energy efficiency

According to PEP2040 Poland obligated to:

- increasing energy efficiency, by saving 13.6 Mtoe primary energy consumption in 2010-2020 compared to the 2007 forecast of fuel and energy demand;

- increasing the share of renewable energy in the total final energy consumption to 15% and to the 10% share of biofuels in the total consumption of transport fuels by 2020;
- contribution to the EU-wide reduction of greenhouse gas emissions by 20% (compared to 1990) to 2020 (calculated in 2005 levels: - 21% in EU ETS sectors and - 10% in non-ETS sectors).

Main statement of PEP2040 document is: The goal of the energy policy is energy security, while ensuring the competitiveness of the economy, energy efficiency and reducing the environmental impact of the energy sector, with optimal use of own energy resources. Where phrase “with optimal use of own energy resources” is key to understand upcoming changes. It could quickly turn out that without own technology and resources quick and radical changes may cause Poland's energy dependence on another country. Natural gas is a good example for Poland. Currently, Poland uses around 16 billion a year, of which only 25% comes from its own extraction. So the rest we import, of which about 70% is Russian gas, imagine a hypothetical situation that due to the numerous sanctions against Russia they decide to turn off the tap - this is very unlikely for financial reasons, but still. At this point, Poland ceased to function normally. Of course, appropriate actions to diversify supplies are taken, but all this takes time.

With all this in mind Poland has set the following goals:

- 60% coal in electricity generation in 2030 (currently it is around 80%)
- 21% RES in gross final energy consumption in 2030
- implementation of nuclear energy in 2033
- 30% reduction in CO₂ emissions by 2030 (compared to 1990)
- 23% increase in energy efficiency by 2030 (compared to 2007 primary energy forecasts).

PEP 2040 will be implemented through the implementation of 8 directions presented in the graph below. The directions and activities cover the entire energy supply chain - from obtaining raw materials, through energy production and supply (transmission and distribution).

Coming years should bring a lot of changes in Poland some of them are already visible for example new Waste-to-Energy Plants in main cities for another we have to wait a bit longer but for sure it will change polish energy sector for better.

References:

1. Polityka Energetyczna Polski do 2040 (PEP2040). Ministerstwo Energii, Warszawa. – 2018.
2. Pająk T., Jurczyk M. Initial operating experience with the new Polish waste-to-energy plants, Waste management. Vol. 6. – 2016. p. 189-199.
3. Kucher O., Hutsol T., Zavalniuk K. Marketing strategies and prognoses of development of the Renewable Energy market in Ukraine. Scientific achievements in agricultural engineering, agronomy and veterinary medicine. Krakow Poland. – 2017. – 100-121.