



Development Projects in the State Forests as element of the circular economy

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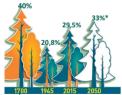


The significance of the Polish forests

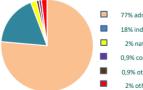
- ☐ Forest area in Poland: 9,4 mln ha
- ☐ Under the management of the SF: 7,4 mln ha
- ☐ Forst cover: ca 30% of the total land area
- ☐ Growing stock of the Polish forests 269 m3/ha
- ☐ Biomass of Polish forests contains 822 milion tonnes of carbon



FOREST COVER



OWNERSHIP STRUCTURE



- 77% administrated by the State Forests
- 18% individual ownership
- 2% national parks
- 0,9% comune owned
- 0,9% other state-owned
 - 2% other privately owned

Jesy, gov.pl





Energy modernization of buildings in the State Forests





NEW EDITION started in 2021

□ Decision of the Director General of the State Forests No. 140 from 2021 - launching the development project "Energy modernization of the buildings in the State Forests State Forest"





fot. Nadleśnictwo Okonek (RDLP Piła)

"Project cards" approved by the General Director on 01/02/2022.





Continuation of the project
"Thermomodernization of SF
buildings (including the use of
renewable energy in
buildings)"

The aims of the project:

- 1. improvement of energy efficiency in buildings managed by the State Forests,
- 2. counteracting climate change due to the reduction of energy consumption in buildings and the reduction of greenhouse gas emissions, in particular CO2 into the atmosphere,
- 3. gaining benefits in the expenditure on heat and electricity used in buildings managed by the State Forests, increasing their standard of use,
- disseminating knowledge in the field of renewable energy sources and shaping the habits of its rational use.
- 5. an element of the social responsibility of the State Forests, being their contribution to the energy transformation of the economy to a low-carbon model.



Main tasks

- 1. "deep" thermal modernization of buildings
- 2. use of renewable energy installations in buildings and energy storage (including hydrogen) in order to ensure self-sufficiency
- 3. optimization of energy use in buildings after thermal modernization, identification of areas of increasing energy efficiency (e.g. installation of PV cells)
- 4. introduction of energy use and management control systems, air pollution monitoring
- 5. adaptation to the applicable regulations on anti-smog resolutions, obligations related to the use and removal of asbestos-containing products and other areas related to environmental protection

Research and development cooperation with an external partner

- 1. development of guidelines for energy audits
- analysis and development of full documentation of innovative solutions increasing the energy efficiency of selected 5 buildings (prefabricated elements for thermal modernization, solar roofs, photovoltaic glass)
- 3. appointment of a team of specialists to develop a defined billing system for energy produced from RES in buildings









THE FOREST OF ENERGY







The aims of the project

- Development of an energy strategy for the State Forests National Forest Holding.
- ➤ Production of energy from renewable sources (RES) [in particular photovoltaic (PV) installations, wind turbines (TW), energy storage using green hydrogen along with the modernization of electricity and gas transmission infrastructure on the land of the State Forests.

- Purchase vehicles powered by electricity and alternative fuels, and the construction of charging station infrastructure.
- Increasing energy efficiency through the use of innovative energy management methods (including the creation of a central energy management system and integrated purchases of energy carriers).
- Popularizing zero-emission transport and disseminating knowledge about energy from renewable sources and innovative technologies for its effective use.

Polish Wooden Houses -

(initiative of the SF developing by business





Participants: RDSF, Forest Districts, regional departments

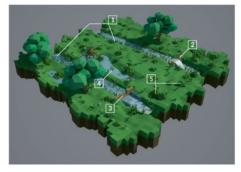
The aims of the project:

- Development and implementation of technical standards for energy-saving wooden construction being created in the State Forests
- 2. Protecting architectural heritage and vanishing professions related to wood processing by supporting vocational education
- 3. Popularising energy-saving wooden construction on Polish market by cooperation in creating financial instruments and in removing legislative barriers



Small retention in lowland & mountain areas 2016-2022

- Renaturalization of wetlands, streams, bank-side reservoirs
- Construction, reconstruction or restoration of 2300 small retention reservoirs and other hydrotechnical facilities
- ✓ Storage of additional 2.5 million m³
 of flood or rain water
- ✓ The total cost of 120 million USD from
 the State Forests and FII.



RENATURALISATION OF WETLANDS

This is a process of metering distinct folia of animaged changing experim verticate to a good condition, through the construction of mail water facilities on old canals and disched. It is energies to be in a middled venter courses II impound water to the required level, and thanks to water goes III it is possible to regulate and maintain a specified foften variable in timely water level in the disch. Thanks to these measures, soil reterion increases, the water level in the water level in the materials of the discharacteristic of this habitat, grows II, and were and manta blinds thrive.



We protect nature

- ✓ Natura 2000: 38% of SF area
- ✓ Nature reserves: 1,6% of SF area
- ✓ Protection zones for chosen species: 2% of SF area
- ✓ 11 million euro for a complex European bison protection project in SF (2017-2020)
- ✓ 44 million euro support from SF for national parks in the years 2016-2020





Thank you for your attention