

#EUSEW2025





WOOD

ECOLOGICAL FUEL

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SOLID PARTNERS



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POLISH CLIMATE FORUM



MOTTO

"When everything fails Wood is still at hand"

anonymous

I WHY WOOD

- 1. We all need energy to heat house, generate electricity, or move to distant place.
- 2. In place of fossil fuels we can use wood.
- 3. Wood is energy of the Sun stored in solid mass.
- 4. Wood in process of photosynthesis converts CO₂ into O₂ and biomass.
- 5. It can be stored over long time without loosing energy.
- 6. Technology enables us to burn or gasify wood without emitting too much solid particles Ecodesign standard developed in Poland.
- 7. In process of gasification it is possible to achieve up to 65 % BioCCS.

AXIOMS

boilers, fives, fireplaces



Ecostandards!

Biomass



The only one renewable fuel!



II ENERGY SECURITY

- 1. To ensure stable supply of energy we need diversified sources.
- 2. When fossil fuels are not acceptable, we can revert to renewables.
- 3. Wood is the cheapest source of energy.
- 4. Biomass can be used in many forms solid, gaseous or liquid.
- 5. The cheapest form is solid in form of wood chips or logs.
- 6. Technology is known for many years and available on demand.

ENERGY SECURITY











Biofuels – gaseous, liquid, solid - support energy safety

heating

industry

Renewable energy sources: solar energy, wind energy, biomas (biofuels)







SOLVED PROBLEMS















We know how to process biomass into biofuels We know how to build ecological burning systems

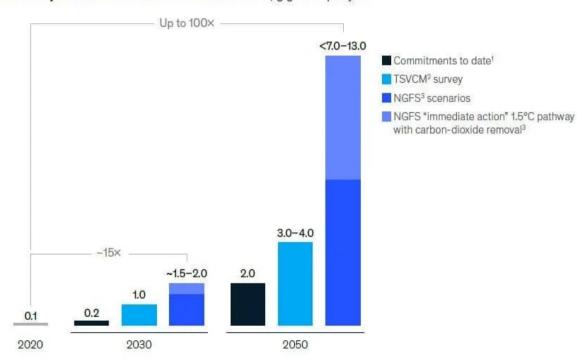


IV NET ZERO THROUGH WOOD

- 1. No other fuel can give us negative carbon footprint.
- 2. We can have zero emission energy and at the same time store up to 65 % of carbon from wood in process of BioCCS.
- 3. For that purpose we can use forest residual biomass or agro biomass.
- 4. We can generate Carbon Credits by growing biomass.
- 5. In 3- year rotation, Paulownia Shang Tong can absorb 75 Mg CO₂ / ha / year.
- 6. We can get carbon footprint free energy heat, electricity and mobility.
- 7. We can get up to 65 % permanent carbon sink through biochar BioCCS.
- 8. We need to plant these trees on approx. 2 % of territory of Poland now 5 % lies in waste.

Global demand for voluntary carbon credits could increase by a factor of 15 by 2030 and a factor of 100 by 2050.

Voluntary demand scenarios for carbon credits, gigatons per year





There is steadily growing demand for Carbon Credits

POLISH CLIMATE FORUM



Thank you very much for your attention

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