# Forest residues and additives in a medium scale CHP-plant – legal framework

Magdalena Sajdak & Wojciech Cichy

Wood Technology Institute, Poznań, POLAND





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### **PROBLEM**

CHP plants in Poland are not allowed to use chemically treated and chemically untreated woody biomass with mineral additives for renewable energy production

- Wood waste with small amounts of chemical contaminants even without mineral additives
- Plant biomass (not only woody) with mineral additives





## **Effect**

Lack of interest on the part of potential users in the implementation of solutions developed in the REFAWOOD project:

- users of CHP plants burning lowest quality biomass,
- users of CHP installations burning wood waste.





## **Effect**

No possibility to take advantage of economic support tools provided for installations producing electricity from renewable sources

- refusal to extend the system of support for electricity generated from raw materials containing non-renewable additives
  - as a contaminant
  - introduced in a targeted manner





# Cause - unadjusted legal regulations

- Environmental Protection Law
- Act on Waste

- Energy Law
- Act on renewable energy sources

#### Implementation acts for the above laws:

- Regulation of the Polish Minister of the Environment regarding emission standards for installation
- Regulation of the Polish Minister of Environment on energy wood (project)





# Polish law doesn't regulate the division of wood waste into classes related to the content of contaminants

- Effect 1 in Poland there is a "black-white" system (clean wood contaminated wood)
  - There are no limit values for potential contaminants
- Effect 2 woody biomass, even with the smallest content of impurities, can be officially burned in installations for thermal treatment of waste





# Polish emission regulations are not related to the diversified content of contaminants

- The smallest content of contaminants in wood (wood waste) results in the use of restrictive technical solutions similar to those used in the case of hazardous waste
  - There are no limit values for potential contaminants
  - Lack of emission standards for medium capacity installations burning wood biomass (including wood waste)





Polish organizations of producers of the wood industry (woodbased panels, sawmill, furniture) are carrying out activities aimed at changing this situation

From the beginning (2002), the Wood Technology Institute participates in these activities





# Conclusions

- Bad legal regulations may prevent the practical application of even, very innovative technological solutions;
- In Poland, the most important are:
  - The implementation of a wood waste classification system which takes into account the content of contaminants,
  - The implementation of an emission standards system which refers to wood waste classes;
- Currently, generation of electricity in Poland using biomass fuels with mineral additives (including wood waste) is possible. However, due to the subsidy system for renewable energy, it's almost not applied;
- Unsuccessful decision of politicians or officials can cross out the many months of work of scientific centres related to the implementation of innovative solutions.





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