

## **Risk Assessment Results in Biogas Production from Agriculture Biomass**

**Authors :** Sandija Zevverte-Rivza, Irina Pilvere, Baiba Rivza

**Abstract :** The use of renewable energy sources incl. biogas has become topical in accordance with the increasing demand for energy, decrease of fossil energy resources and the efforts to reduce greenhouse gas emissions as well as to increase energy independence from the territories where fossil energy resources are available. As the technologies of biogas production from agricultural biomass develop, risk assessment and risk management become necessary for farms producing such a renewable energy. The need for risk assessments has become particularly topical when discussions on changing the biogas policy in the EU take place, which may influence the development of the sector in the future, as well as the operation of existing biogas facilities and their income level. The current article describes results of the risk assessment for farms producing biomass from agriculture biomass in Latvia, the risk assessment system included 24 risks, that affect the whole biogas production process and the obtained results showed the high significance of political and production risks.

**Keywords :** biogas production, risks, risk assessment, biosystems engineering

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