GO-GRASS

Grass-based circular business models
for rural agri-food value chains

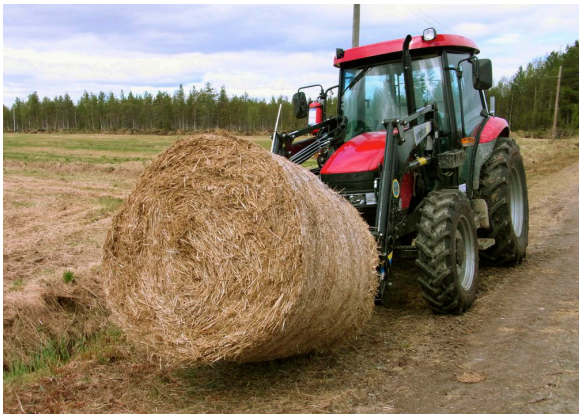
PRACTICE ABSTRACT

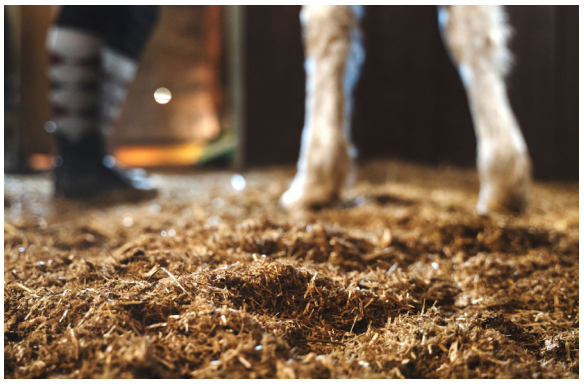
Swedish Demo

The objective of the Swedish GO-GRASS demo-site is to develop a manufacturing plant to produce reed canary grass-based animal bedding that is profitable at farm level. GME and Väståkra Gård are the business owners developing the business with the support of RISE, that coordinates the support activities for the demo development in the GO-GRASS project.

In Sweden large volumes of wood shavings and sawdust are used as animal bedding in stables and barns. By replacing the wood shavings with straw or reed canary grass in the form of shredded briquettes, there is a range of climate benefits. Since excess straw is only found in certain regions and dependent on good weather, straw usage needs to be supplemented in some regions. Reed canary grass is an energy-efficient alternative as it is a perennial grass able to produce harvests every year, across many different soil types and throughout the different regions of the country, including less productive soils. Sweden has large areas of unused, arable land, especially in the Northern region where reed canary grass grows well. There is also a significant potential for carbon capture and storage. Shredded reed canary grass is also more easily degradable compared to wood shavings and allows for the value of the manure to be increased. At the same time, large volumes of wood materials can instead be refined into more high-quality products that replace fossil raw materials in the transition to a bio-based economy.

The main technology applied in the demo is the briquetting of reed canary grass and shredding of the briquettes at local and small scale. These two main components are the process of converting an agricultural crop into uniform shapes, facilitating its handling and storage. Depending on the customer needs, the bedding material can be delivered in different size packages, from a 20kg bag to bulk deliveries. In order to provide this supply, the briquetting technology needs to be optimized with the other technologies such as grass shredding, briquette shredding and packaging in order to create a new affordable production chain that meets the customers' needs.





Further information

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Partners

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