

How does green biorefineries fit into farmer's minds and business models?

Lars V. Toft

Manager, Bioeconomy

SEGES

Project "Innograss" funded by "Green Development and Demonstration Program" under the Ministry of Environment and Food



The agricultural sector's own innovation and knowledge centre



At SEGES, we are experts in all aspects of agriculture.

We work with everything from optimum crop production, efficient milk production, the perfect pig feed to economic sustainability and the best digital tools for farmers of tomorrow.

We are here to provide the knowledge and tools needed for farmers to develop their business.



SEGES

Climate-neutral 2050

SEGES

Danish farmers are very keen on delivering the results needed to achieve climate-neutrality in 2050. It is an ambitious vision. And today, we cannot say exactly how it can be achieved. There are many tools that we need to use in order to be climate-neutral in 2050.

Increased grass production could be one of them



Green protein from Danish fields

Danish farmers would like to produce a local and sustainable plant protein for feed and foods.

SEGES is part of the 'Dansk Protein Innovation' network, which aims to develop business opportunities for sustainable protein produced in Denmark.



SEGES



Green biorefineries can strengthen the organic plant production

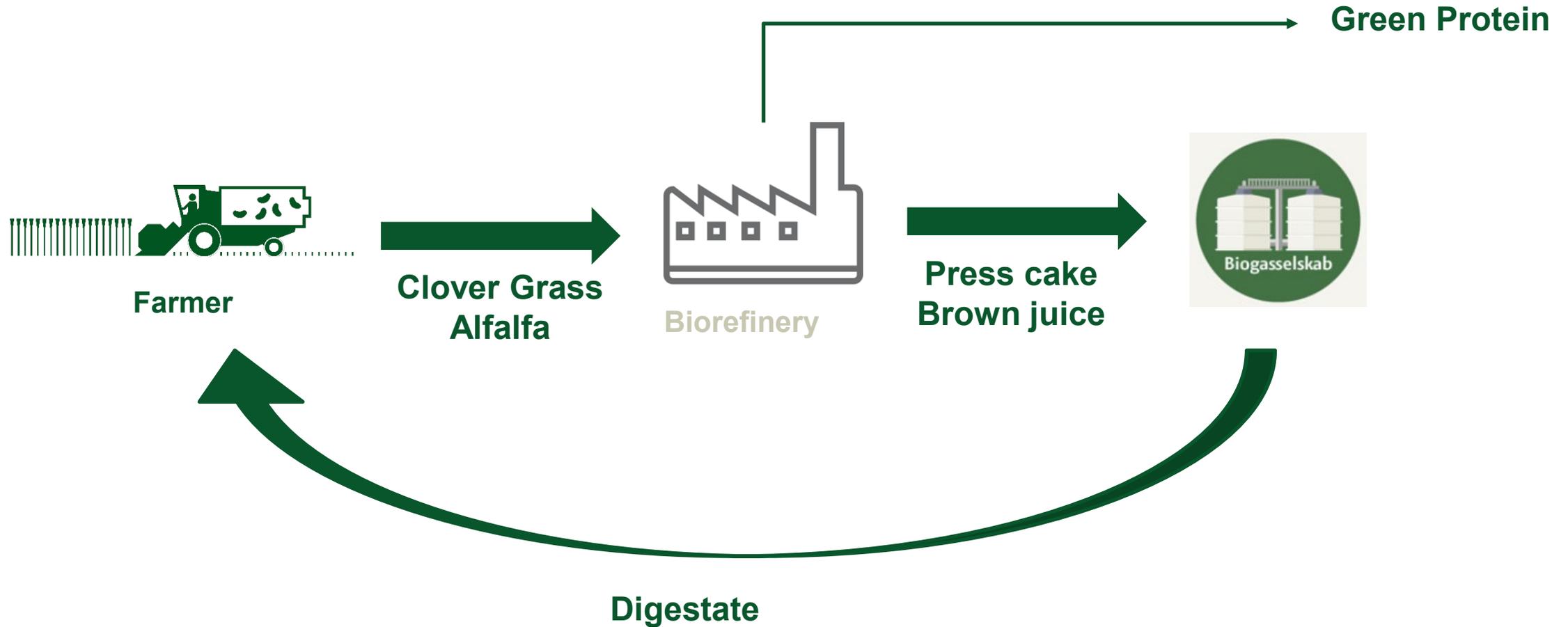
The Danish farmers are extremely interested in green biorefining and they are very eager to participate if its feasible for the farmer.

Organic crop rotations can often be improved with grass clover. But the lack of income from green manure crops discourage the farmer to grow them.

Green biorefineries can create value out of grass and make it financially viable for Danish farmers to increase the amount of grass produced.

Adding value to grass would have huge impact on the organic farm production especially in areas with limited availability of organic accepted nutrients

Green biorefineries can provide the organic farmers with the needed nutrients



The first Danish farmer has already included a biorefinery into his business model

The first commercial green biorefinery was opened at Ausumgaard in the western part of Jutland on the 4th of September 2020

The plant produces an organic grass protein feed

The plant has a capacity of 20 t grass/hour

The co-products press cake and brown juice are used for biogas production at the biogas plant in Ausumgaard.

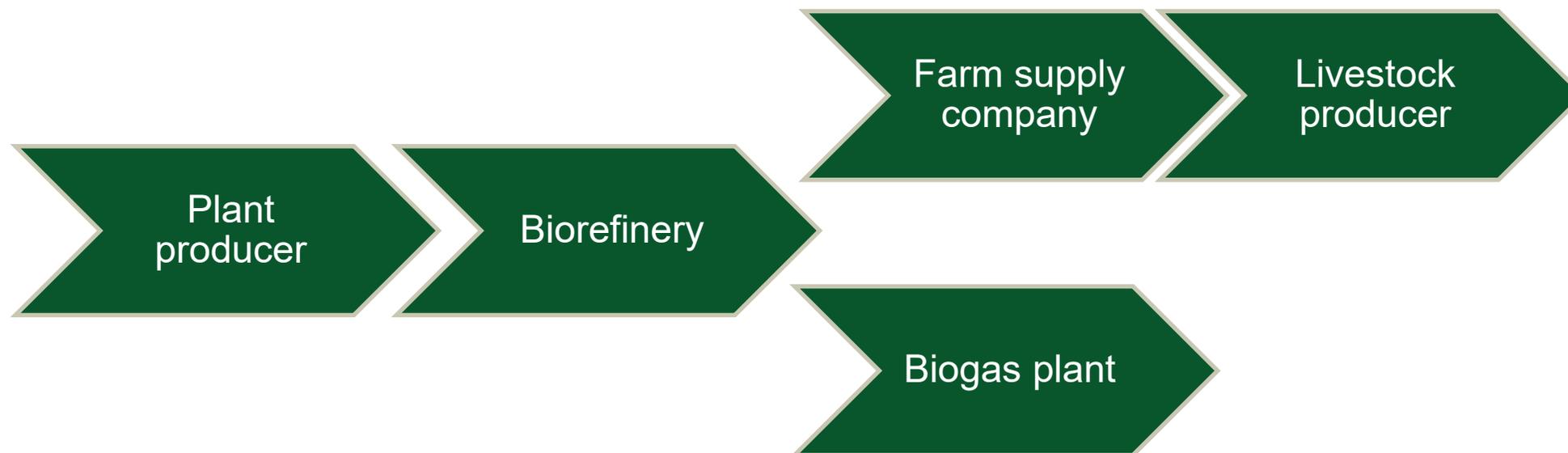
The plant has been built with support from the "Green Development and Demonstration Program" under the Ministry of Environment and Food



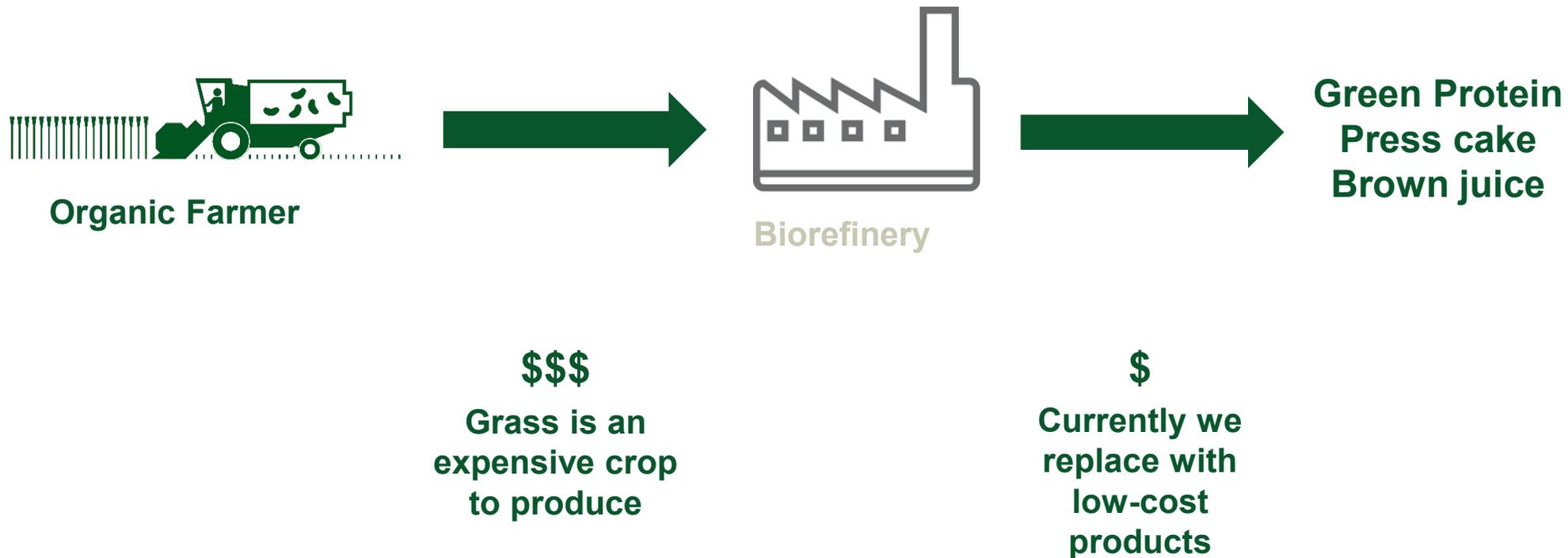
SEGES



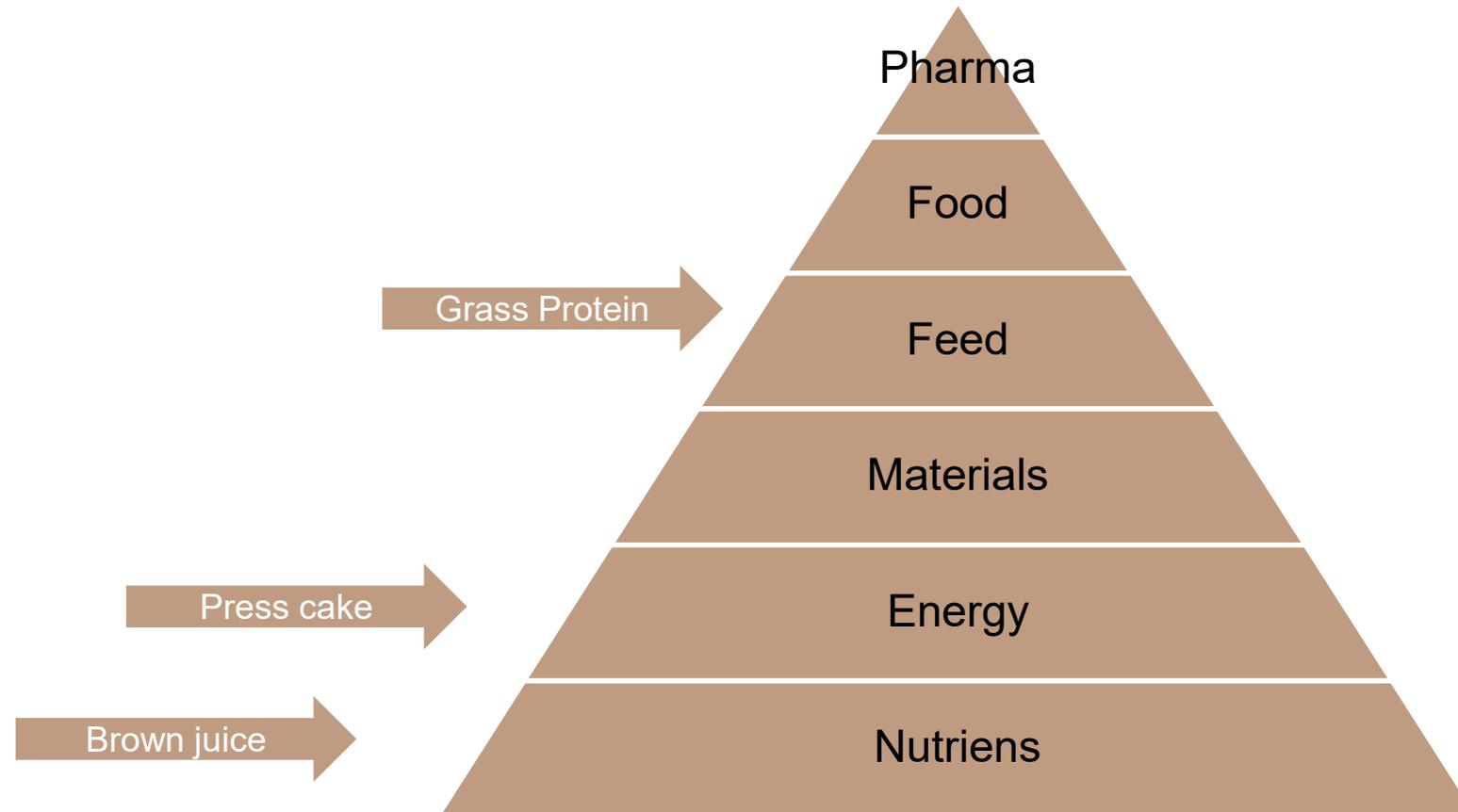
Green biorefineries must create value for the entire value chain



The feasibility of the process must be improved to make green biorefining a real alternative to existing production systems



By moving up in the value chain



while making value out of the eco system services from the green biorefineries

