

# Drivers & Barriers to Perennial Grass Production for Biofuels

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The CenUSA vision is to create a regional system for producing biofuels from perennial grasses grown on land unsuitable or marginal for row crop production, while improving the sustainability of existing cropping systems through biomass crops that reduce runoff of agricultural nutrients and increase soil carbon sequestration.

At Iowa State University's 2012 Integrated Crop Management Conference, participants who attended a session on "Understanding the Economics of a System of Perennial Grasses for Bioenergy in the Central United States" learned about research in the expected costs and returns of perennial grass production, storage, harvest and transport. A follow-up survey measured their perceptions of establishing a switchgrass production system.

They were asked to rank positive and negative aspects of or influences on a producer's decision to adopt switchgrass production. Results showed that respondents viewed the two **most important or most influential reasons to adopt** switchgrass production were:

- the opportunity to engage in an emerging market, and
- the conservation and habitat benefits of perennial grasses.

They identified the biggest barrier at this time is the lack of a current market for harvested grasses.

CenUSA researchers continue to discover and quantify the costs and returns to perennial grass production under different production and

technology scenarios with varying amounts of inputs and on varying qualities of land. The information presented to session participants illustrated that perennial grass production can compete with returns to traditional row crop or hay production under specific conditions.

Participants who responded to "What marketing, contracting, or policy mechanisms would need to be available in order for you to consider switchgrass production on land you manage?" indicated they would need:

- a Biomass Crop Assistance Program or something similar,
- government funding of an insurance or risk management product, or
- a minimum price guarantee with a contract.

Feedback from participants showed that producers and farm managers will decide whether or not to adopt a perennial grass crop based on the economics of the system. Perennial grass production must be shown to be economically feasible in their enterprises. At the same time, responses indicated a willingness to take into account the non-market benefits (i.e. environmental advantages and benefits from energy independence).

Risk will play a large role in the adoption decision. Even if perennial grass production can be shown to be economically feasible, producers want the guarantee of a market and price for their production.

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