



Our Mission: Harnessing the power of people and land in rural/coal communities to combat climate change

How: Grow Miscanthus as a feedstock for biomass derived energy and fuels without displacing food crops

CARBON

PEOPLE

LAND

MISCANTHUS AS AN ENERGY CROP

	CONVENTIONAL JET FUEL	CORN ETHANOL	CORN STOVER	Miscanthus	Switchgrass
YIELD / ACRE (TONS)	N/A	4.8 TONS	2.75 TONS	10-12 TONS	4-6 TONS
GALLONS OF ETHANOL / TON	N/A	98 GALLONS	66 GALLONS	90 GALLONS	
GALLONS OF ETHANOL / ACRE	N/A	470 GALLONS	180 GALLONS	900 GALLONS	450 GALLONS
CARBON INTENSITY GCO ² E/MJ (BY ICAO, CORSIA)	84.5	90.8	37.6	(22.5)	6.6
ANNUAL OR PERENNIAL	N/A	ANNUAL	Annual	PERENNIAL	PERENNIAL
FERTILIZER INPUTS	N/A	High	High	Low	Low
TECHNOLOGY	PROVEN	PROVEN	DEVELOPING	DEVELOPING	DEVELOPING
ACRES UNDER CULTIVATION	N/A	39.8M	90M	Unavailable	Unavailable

Low input requirements: Minimal water, fertilizers and pesticides needed, decreasing environmental impact and cost.

Non-food crop: Miscanthus doesn't compete with food supply or contribute to food price fluctuations.

Adaptability: Thrives in various climates and soil types, suitable for marginal or degraded lands.

SUNFLOWER FUELS

Miscanthus has a unique set of advantages when compared to other feedstocks

Rapid growth and high yield: Miscanthus offers large biomass production per acre for efficient biofuel production.

Carbon sequestration: Miscanthus' extensive root system stores carbon in soil, reducing biofuel carbon footprint.

well suited to be

one of the

primary energy crops

Highest yield (7-15 tons/acre), one of the lowest carbon intensity
(CI) score among SAF feedstocks, highest BTU per acre

Miscanthus is

Qualifies for US Renewable Fuel Standard program's Renewable Identification Numbers (RINs)

Thrives in marginal soils: Requires little fertilizer, minimizes use of farmland for food production; soil rehabilitation

KENTUCKY IS A NATURAL FOCAL POINT



KENTUCKY AND ADJOINING STATES OFFER AN ATTRACTIVE MIX OF LAND, CLIMATE, AND INFRASTRUCTURE

