



Enogen Corn Enzyme Technology

Creating value for corn growers,
ethanol plants and local communities





A win-win-win scenario

Enogen® corn enzyme technology is an in-seed innovation available exclusively from Syngenta and features the first biotech corn output trait designed specifically to enhance ethanol production. Enogen creates a win-win-win scenario by adding value for ethanol plants, corn growers and rural communities.

Enogen growers are eligible to earn a 40-cent-per-bushel (on average) premium for grain delivered to the ethanol plant. This can mean approximately \$2.2 million for a community served by a 100-million-gallon plant. Growers access Enogen corn enzyme technology through a technology license with Syngenta and a production contract with an Enogen-licensed ethanol plant, or ethanol plant grain partner.

Be an enzyme supplier for your local ethanol plant

Syngenta is currently contracting Enogen to support a growing number of ethanol plants – from California to Ohio – with plans to continue to expand the footprint for this innovative technology. Enogen is rapidly gaining popularity because of the value it delivers and the opportunity it provides corn growers to be enzyme suppliers for their local ethanol plants.

To grow Enogen corn, you can use your existing cultural farming practices (subject to applicable stewardship requirements), including nutrient, insect and disease management programs. Enogen hybrids have proven, high-yielding genetics with breakthrough traits. And, numerous trials have shown that Enogen hybrids perform equal to or better than other high-performing corn hybrids.¹

Making ethanol more sustainable²

In a 100-million gallon plant, Enogen corn-enabled efficiency improvements can save:²

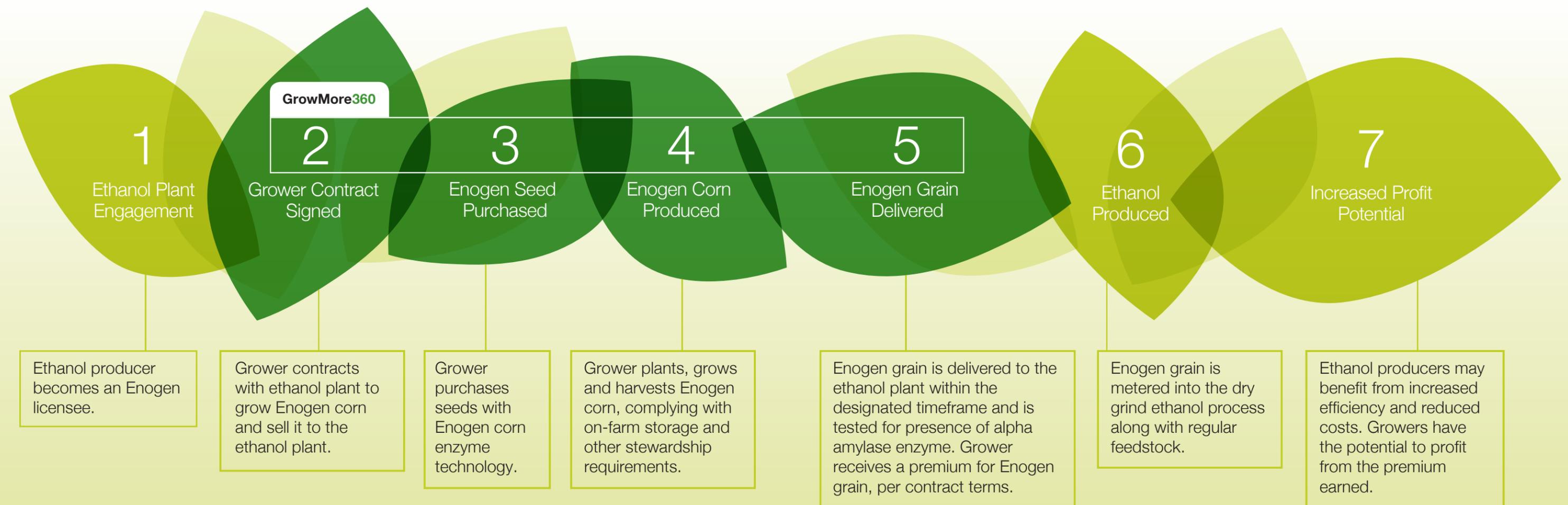
- » More than 68 million gallons of water
- » Nearly 10 million KWh of electricity
- » More than 350 billion BTUs of natural gas while reducing carbon dioxide emissions by more than 100 million pounds

GrowMore360: An online contracting, stewardship and inventory system

GrowMore360™ is an online system for Enogen grain contract management that enables Enogen corn growers to manage their grain contracts and stewardship obligations.

- » Helps growers manage stewardship activities electronically
- » Includes a GPS mapping tool for fields, border rows, Enogen capacity and location of storage systems
- » Plans even distribution of the delivery of grain to the plant
- » Helps plants with inventory management
- » Forecasts premium payments on delivery
- » Assists growers in coordinating the status of their production contracts with their local ethanol plant, Enogen reseller and Syngenta

Enogen adoption timeline





The Ethanol Grower Advantage

Corn feedstock is the single biggest input cost for an ethanol plant, and ethanol yield per bushel is one of the biggest drivers of plant profitability. The Ethanol Grower Advantage is a platform designed to help increase grower profitability and help plants produce more ethanol per bushel through access to high-quality, locally-sourced grain.

With the Ethanol Grower Advantage, you have the potential to achieve higher profits while supporting your local ethanol community. Participation is simple. Enrolled growers use high-yield agronomic protocols tailored to local field conditions and follow best practices designed to mitigate risk and maximize yield potential.

Enrolled Golden Harvest® or NK® Corn growers are eligible to receive a 10-cent-per-bushel premium for bushels delivered to the ethanol plant. Enrolled Enogen growers can receive an additional premium of 10 cents – above the existing 40-cent-per-bushel premium offer (on average). And, in addition to the 10-cent-per-bushel premium, enrolled growers may be eligible for other premium, discount and finance offers available through the Ethanol Grower Advantage.

The Ethanol Grower Advantage contributes to the stability of ethanol plants and local economies by helping plants be more profitable and provides rural communities with a new revenue source through the per-bushel premium. The Ethanol Grower Advantage offers the potential for an additional \$3.6 million for a community served by a 100-million-gallon plant.³

Ask your ethanol plant or Syngenta representative about the Ethanol Grower Advantage or visit www.EnogenCorn.com.

The bottom line

Enogen corn enzyme technology creates increased profit potential for corn growers and ethanol producers while adding significant incremental value at the local level for communities that rely on their ethanol plant's success.

Earth-friendly American ethanol: A true success story

Ethanol is helping America reduce its dependence on foreign oil, lowering prices at the pump, improving the environment with lower emissions and growing the economy with jobs that can't be outsourced. Looking ahead, retail partnerships and new technologies are seen as keys to the ethanol industry's future success.

To help fund that future, Syngenta has announced that it will donate approximately \$600,000 to the Prime the Pump Fund. Prime the Pump is an ethanol industry initiative created to help early retail adopters of high-level ethanol blends by awarding grants to reduce their initial investment in infrastructure and help make these blends more available.

Syngenta is also working with Galva, Iowa-based Cellulosic Ethanol Technologies, LLC, to make cellulosic ethanol a reality through the commercialization of Cellerate™ Process Technology. With Cellerate, the biofuels industry now has the technology available to create 2 billion gallons of additional cellulosic ethanol – all from the same kernel of corn.⁴

Syngenta is proud to support and promote corn ethanol production.

We believe in ethanol.

For more information, contact
your Enogen reseller, visit
www.EnogenCorn.com or call
1-877-4ENOGEN (877-436-6436).



 **Enogen**[®]

syngenta[®]

¹Syngenta production data from over 350,000 acres, 2012-2015.

²Calculations based on Enogen trial and commercial results at Midwest ethanol plants.

³Calculation based on Ethanol Grower Advantage premium potential for corn feedstock to supply a 100-million-gallon ethanol plant.

⁴Cellulosic Ethanol Technologies, LLC

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G&S 406.83000-3539

SLC 7956A 06-2016