

## **GATEWAY TO SCIENCE ETHANOL EXHIBIT**

**Status Report: Contract R-027-036**

**Provided Feb. 1, 2017**

**For the period of Sept. 1-Dec. 31, 2016**

**Provided by the North Dakota Ethanol Council**

### **Objectives**

The objectives of this project are: 1) to increase the long-term use of ethanol in North Dakota by educating students, parents and educators in the region on the benefits of ethanol to the economy, environment and energy independence; and 2) to ensure the future of the ethanol industry workforce by engaging students, parents and educators in the lifecycle of ethanol production, specifically the scientific process of converting an agricultural product, which is a growing source of sustainable energy, into high-value co-products, including ethanol and distillers grains.

In addition to the North Dakota Ethanol Council (NDEC), partners in the program are Gateway to Science (GTS) and Science Museum of Minnesota (SMM), as well as ethanol industry stakeholders including: CTE Global Inc, Dupont, Gaviion, Growth Energy, Lallemand and New Age Cryo.

The strategy that will be implemented to meet the objectives is the installation of a hands-on, interactive, ethanol-specific exhibit to be utilized as a pilot at the current facility and then permanently installed at the new GTS facility in Bismarck, ND, which is scheduled to open in 2018.

### **Strategy Progress**

During this reporting period, 2,285 guests visited the gallery and interacted with the ethanol exhibit, including field trips from Turtle Mountain Community Schools, White Shield School, Hazen Elementary, Grimsrud Elementary, Miller Elementary, Theodore Jamerson Elementary and a group of homeschool students.

GTS continues to collect exhibit feedback from visitors through an online survey. Center guides are also conducting interviews and recording observations of guests' reactions to the exhibit. When asked what they liked most about the exhibit, 45 percent of respondents answered the exhibit is based on reality – ethanol production and use is part of daily life in North Dakota. Another 33 percent said feeding the cows and powering the cars were their favorite parts. Other respondents mentioned they liked the exhibit design and graphics and the ability for multiple people to engage with the exhibit at once (i.e., working as a team to turn the handles and complete the process).

When asked what improvements could be made to the exhibit, one guest suggested adding a pump or station that dispenses ethanol-blended gasoline to the exhibit display. Another guest recommended having the display lights turn from red to green to make it more obvious when each step in the production process is complete. Finally, multiple respondents mentioned having a button to trigger the cars and cows at the end of the process.

### **ATTACHMENTS**

- Guest reactions to the exhibit can be viewed here - <https://youtu.be/fXoKlpJTj1k>