Nitrogen fertilizer is one of the most important inputs in agriculture, but fertilizer in excess of crop needs can lead to air and water pollution and wasted money for farmers, who spend approximately half of their input costs (seed, nutrients, and chemicals) on fertilizer.

Food companies want to improve transparency with consumers. That means they’re asking suppliers to source more sustainably produced grains.

Many tools are available to help growers use fertilizer more precisely, but little data exists to demonstrate how they work in real life – on the ground, in different regions or soil types.

NutrientStar, an independent, science-based program, reviews the performance of commercially available fertilizer management tools.

Developed and administered by the Environmental Defense Fund (EDF), all assessments are conducted by an independent science review panel of leading scientists, fertilizer experts, and technology practitioners.

Independent science review panel assesses all tools based upon established scientific criteria and their ability to improve nutrient use efficiency (NUE).1

Analyzing NUE involves data from field trials, conducted over two seasons, encompassing a range of agro-ecoregions and three to four soil types.

Results of all field trials and science review panel assessments published on the NutrientStar website.

Farmers gain confidence that the tools they purchase work as advertised. Crop advisors and ag retailers earn a competitive advantage by offering customers scientifically reviewed tools.

Food companies can now guide their suppliers in making purchasing decisions. They can advocate for NutrientStar-reviewed tools to be used by suppliers.

Agribusinesses receive third-party validation of their tools’ effectiveness, recognizing their contribution to reducing nitrogen runoff and being good land stewards.

NutrientStar seeks to spark further innovation from manufacturers for field-tested, effective products. For more information about NutrientStar, visit www.nutrientstar.org.

1NUE is defined as unit of yield over unit of applied nutrient. The reviews involve analysis of publicly available data as well as field trials.