

# What It Costs To Protect Your Nitrogen



Nitrogen fertilizer costs have risen sharply in the past year. Reasons for this price surge include increased global demand created by higher commodity crop prices; reduced product supply due to a spike in natural gas prices globally causing plants to cease production for extended periods of time; and rising transportation costs due to the increased cost of fuel. Many growers are asking if they can afford to protect their nitrogen (N) during times of high N prices. The answer to this question is “YES!”. With the higher costs of N, it becomes even more important to protect this valuable investment. Any N lost at a higher price will ultimately cost the grower more in the end.

Growers have a variety of options to protect N against loss. Inhibitors and stabilizers will protect N for a given time, however the cost of these products increased 10-15% recently in addition to the increase in urea prices mentioned above. Another option for protecting N is ESN. ESN is a controlled-released granule N fertilizer that releases N over time. It provides the longest protection of any agricultural grade fertilizer product on the market. As illustrated in the chart below, the cost of protecting N with ESN is unchanged relative to the cost of urea. This means growers are protecting a higher-value commodity for the same cost they have always paid. When comparing the calculated return for 2020 and 2021, the expected return for ESN blended nitrogen sources is higher because the commodity prices (ie. urea) in 2021 are so much higher than 2020, but the price difference between urea and ESN in 2020 is similar in 2021 (Figure 1).

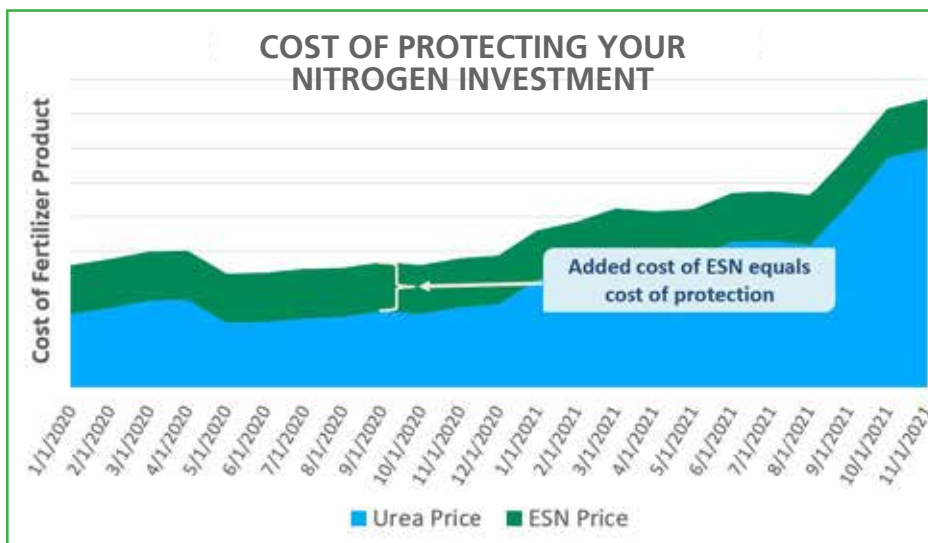
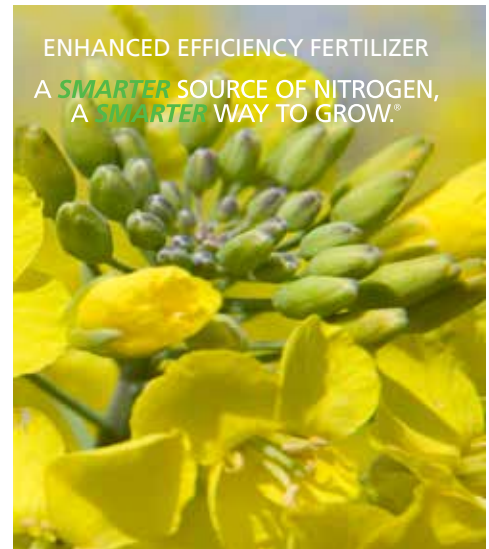


Figure 1. As the cost of urea increases, so does the cost of ESN. However, the cost to protect your nitrogen investment remains the same. As the cost of nitrogen increases, the value in protecting it increases.



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A **SMARTER** SOURCE OF NITROGEN,  
A **SMARTER** WAY TO GROW.®

## How can we help?

To make ESN a part of your nitrogen management program, contact an authorized retailer or ESN representative.

For more information:  
[www.SmartNitrogen.com](http://www.SmartNitrogen.com)



Using current commodity prices and the results from a recent Fertilizer Canada Trial below, would result in an average increase in return of \$64.00/ acre (Figure 2 and 3) and an average Return on Investment of 6.7x (Figure 4).

There is more financial incentive to protect your nitrogen investment with today's economic realities. (Figure 5).

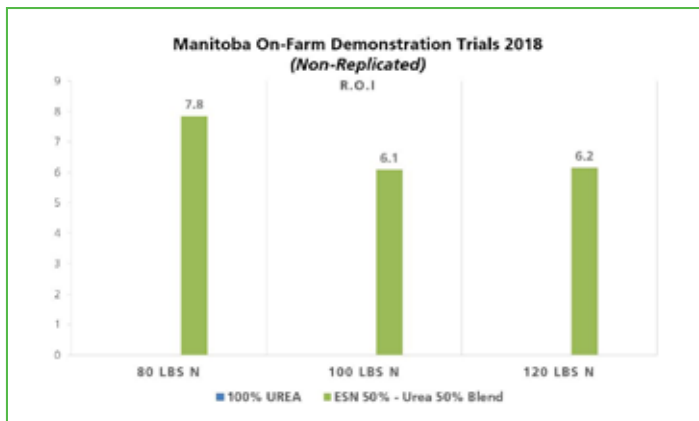
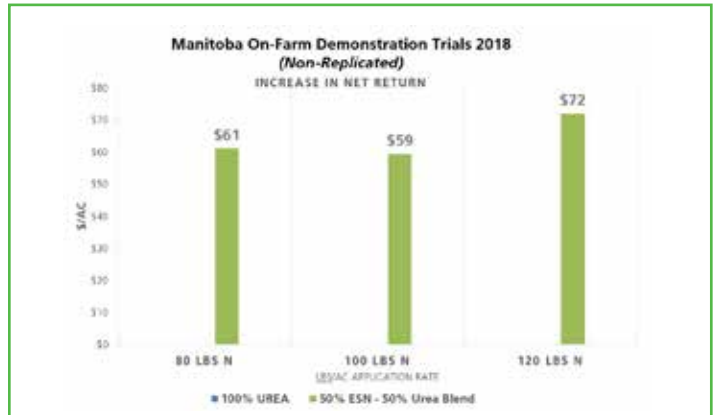
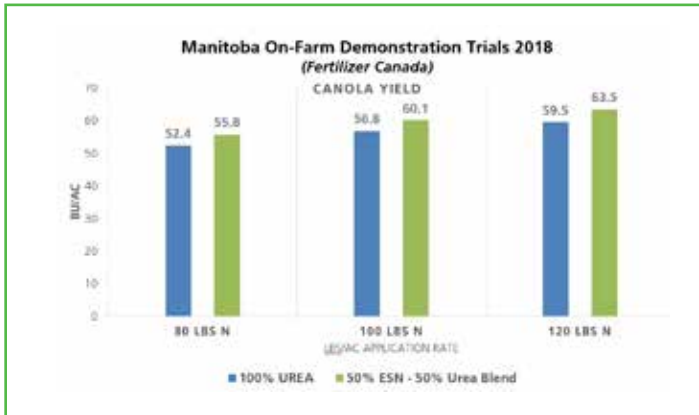


Figure 2, 3, 4. Return in dollars per acre for 100% urea, 50/50 urea/ESN applied at 80 pounds, 100 pounds and 120 pounds of nitrogen per acre. Estimated canola price for Nov. 2022 crop - \$18.00/bu, Estimated current average urea price for Western Canada - \$900/tonne. Estimated current ESN price for Western Canada – \$1050/tonne. Average base yield of 50 bu/acre. Prices presented are for illustration purposes only. Actual retail price will vary from retailer to retailer and in different geographies. Figure 4 shows the theoretical average ratio of return for every dollar invested in using ESN for each of the treatments identified.

Figure 5. The cost of investment increases as nitrogen rates are increased, yet blended urea and ESN maintain excellent return on investment and delivers excellent profit margins. Prices presented are for illustration purposes only. Actual retail price will vary from retailer to retailer and in different geographies.

**Contact your local retailer or ESN Marketing Representative for details!**