

# Smart Farming

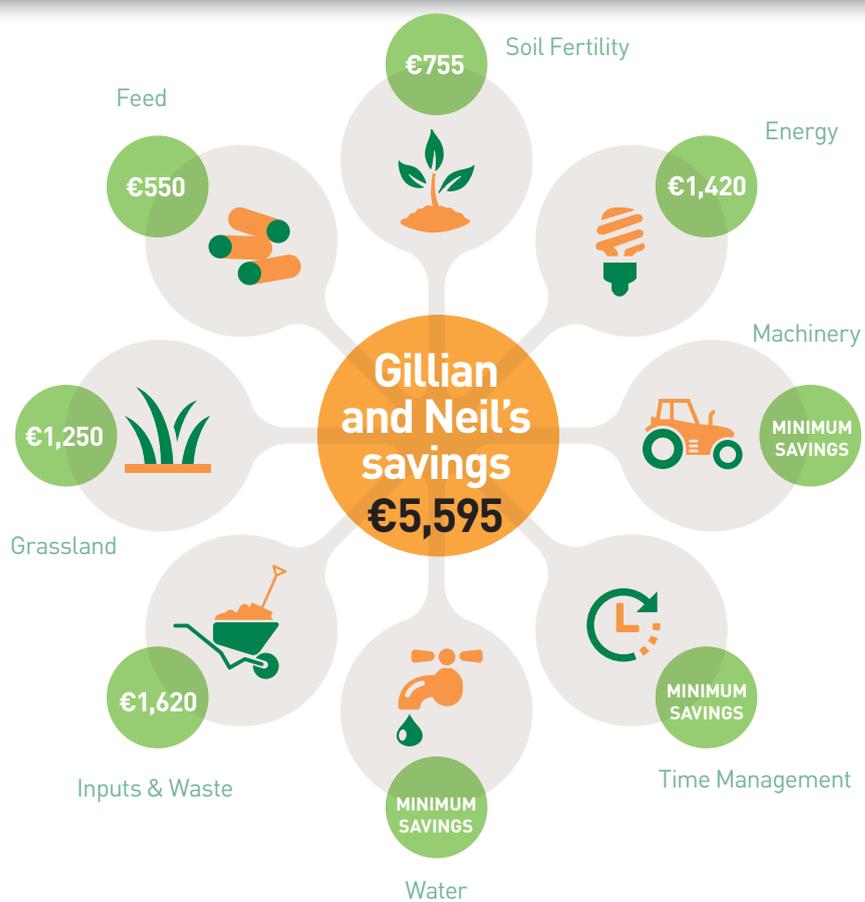
Improving farm returns.  
Enhancing the environment.

## €5,500 savings on Gillian and Neil's farm

Earlier this year Gillian and Neil signed up to take the Smart Farming challenge and so in June the Smart Farming cost saving team did a farm visit to identify cost and environmental savings.

During the farm visit the Smart Farming cost savings team studied the O'Sullivan's' feed, electricity, fuel and fertiliser bills, soil samples and water quality results. They focused on where cost and environmental savings could be identified across the following areas: soil fertility, energy use, grassland management, water use, feed, inputs, waste, time and machinery management.

Let's look at where the €5,500 savings were identified...



### SOIL FERTILITY

- Use soil test results to address pH levels.
- Tailor fertiliser use to NMP recommendations.
- Ensure soil sampling every 3-4 years, to track performance.

### FEED

- Consider bringing forward harvest cutting date.

### ENERGY

- Install plate cooler to do some of the cooling of milk.
- Consider installing a VSD.

### GRASSLAND

- Excellent grassland management plan in place.
- Continue with reseeding plan.

## Reducing the climate impact by 16%

During the Smart Farming Cost Saving Study, a carbon reduction strategy for Gillian and Neil's farm was developed using the Carbon Navigator decision support tool developed by Teagasc and Bord Bia.

Potential to reduce greenhouse gas emissions by 16% was identified. Many of the measures, such as nitrogen efficiency and slurry spreading timing will also lead to other positive environmental outcomes and reduce risks to water quality. Let's take a closer look at the Carbon Navigator results.

Measure	Action	Greenhouse Gas Changes
<b>Grazing season – dairy cows</b>	Excellent grassland management on dairy farms is key to profitability and sustainability. Where weather is suitable consider extending the period that the stock is out at grass.	-0.8%
<b>Breeding strategy</b>	Choose a panel of 5 high EBI bulls that compliment the herd. Focus on the heifers. Breeding heifers to carefully selected high EBI bulls is the fastest way to improve herd EBI and profitability.	-6.2%
<b>Slurry spreading/ timing</b>	Currently 60% of the slurry is spread in the spring. Target to increase this to 80%, using low emission equipment such as the trailing shoe system where possible.	-2.1%
<b>Energy efficiency</b>	Make sure that the plate cooler is working effectively. Measure the temperature of the milk entering the bulk tank and make sure it is not being pumped through too quickly. Consider installing a variable speed vacuum pump.	-1.2%
<b>Nitrogen (N) efficiency</b>	Increase use of clover in swards, to reduce the amount of chemical N used. Ensure that other elements of soil fertility are optimised. Use of N will be reduced if P, K or pH levels are too low.	-2.1%
<b>Total</b>		<b>-16.8%</b>

## The Farmers Speak – Gillian and Neil's view

This Smart Farming study has provided food for thought for us here on the farm. We have things to do and new ideas. It's reassuring to know implementing these changes can make a difference for ourselves and the wider environment. Worthwhile and highly recommended.



Gillian and Neil O'Sullivan from Dungarvan took the *Smart Farming* challenge this month. They identified over **€5,500** in cost savings and ways to reduce their climate impact by **16%**.