**Title: The Signpost Farms and Signpost Advisory Programme: Farmers for Climate Action**

Tom O’Dwyer1\* and George Ramsbottom2

1 Teagasc, Animal and Grassland Research and Innovation Centre, Moorepark, Fermoy, Co. Cork, Ireland

2Teagasc, Oak Park, Carlow, Ireland

\* Corresponding author email: tom.odwyer@teagasc.ie

The Signpost Programme, launched by Teagasc in May 2021, is a whole-of-industry approach aimed at supporting Irish farmers in climate action. With over 60 partners, including major milk and meat processors, farm organizations, the Department of Agriculture, Food and the Marine, and Bord Bia, the programme strives to bridge the gap between researchers and farmers. Its primary goal is to translate scientific research into practical solutions resulting in the adoption of climate mitigation practices.

The programme is composed of three key components. The first is the Signpost Farms Programme, where a network of 125 farms, called ‘Signpost Farms’, play a central role in adopting climate mitigation strategies and sharing their knowledge through farmer-to-farmer learning.

The second element is the Signpost Advisory Programme, where 20 dedicated advisors have recruited approximately 17,000 farmers to participate. These advisors use the AgNav application, which combines data from Teagasc, the Irish Cattle Breeding Federation, and Bord Bia to calculate a farmer’s greenhouse gas emissions. They then help farmers create tailored sustainability action plans to reduce emissions.

The third component is the National Agricultural Soil Carbon Observatory (NASCO), an on-farm research initiative focused on understanding soil carbon sequestration. The Signpost Farms play a vital role in NASCO, contributing to the research that will shape future climate action strategies.

The Signpost Programme integrates research, demonstration, and farmer support to enable the widespread adoption of climate-smart solutions across Irish agriculture, helping the sector reduce its greenhouse gas emissions and enhance sustainability.