From: James Smith Sent: 03 November 2017 07:49 To: National Planning Framework Subject: Agri-waste | Zero Nitrates

Hi All,

Firstly, the farm should be measured for carbon to the farm gate and not include industry in the measurements. The farm gates have almost 10% forestry and a further 7-8% hedgerows and natural forest plus bogs, waterways, grassland and other carbon capturing features.

The focus for carbon should be on humans and their industry and their transport and their consumer behaviour in producing waste.

Ireland has a rapidly expanding dairy industry and an area the size of Connaught or Ulster can produce the same dairy output as Holland.

All dairy farms are producing at a higher cost base in place like Holland, the middle east and China etc. ensuring Ireland can dominate.

The main issue with farming is the **amount of slurry produced** and the amount of nitrates used on the lands.

Dairy farms collect milk by tanker and produce it for consumers, the same can be done with slurry for use in bio-gas plants and incineration mixes. It needs a demo product with a dairy co-op and a pricing structure for feeding directly into the gas networks.

Nitrates are used for grassland production because **Rye Grass** requires it in large amounts to produce 12t of grass per ha, more focus should be made on using **nitrogen fixing legumes** such as red clover or peas which can **replace chemical nitrogen** and re-seeded regularly using **co-op hired machinery** to ensure the grass/clover/pea balance is maintained and **nitrogen/slurry is kept to a minimum from grazing** while maintaining the yields. The main cost of re-seeding is a contractor with machinery.

With the above outline of machinery access- it would then make sense to tax nitrate seeds and subsidise non nitrate seed mixes such as Grass/Clover or Grass/Peas that require zero nitrogen but more regular machinery work.

Ireland's beef and lamb production is the best in the world-its almost organic and its free range.

More leadership from the Government organisations on these areas please.