

Teagasc Notes for week ending Friday 22nd October 2021

Know Your Number

As farmers, you are being asked to reduce greenhouse gas emissions (GHG) from your farming system to control global warming. But where do you start? Many dairy and beef farmers have a carbon emissions figure available to them but many are not aware of this information.

After each Bord Bia audit, all certified dairy and beef farmers receive a Farmer Feedback Report from Bord Bia with their farm's carbon footprint as well as an assessment of farm productivity, nutrient management, grassland, animal feeding and farm safety.

The carbon footprint refers to how much greenhouse gases (GHG) are emitted from an activity such as the production of milk or meat or driving a car or taking a flight. The emissions of all GHG gases are expressed as carbon dioxide equivalents (CO₂ Eq). In farming, the production of every kg of milk or meat or grain has a carbon footprint.

How is the carbon footprint calculated?

There are four sources of data required to complete an accurate calculation of a farms carbon footprint, using the Teagasc model.

1. Animal Identification and Movements Database (AIM) – DAFM – Beef and Dairy
2. Daily Live Weight Gain - Irish Cattle Breeding Federation (ICBF) – Beef Only
3. Milk Production Data – Dairy Processors - Dairy Only
4. Sustainability Survey – Scheme Members – Beef and Dairy. The sustainability survey is the only data source required for the carbon footprint calculation that is collected directly from the farmer.

How does the information provided in the Sustainability Survey relate to the carbon footprint?

1. Turnout and housing influences the calculation of manure storage emissions, grazing and digestion related emissions.
2. Manure management calculates the emissions from the application and storage of manure on the farm.
3. Concentrate feeding rates calculates the emissions associated with the production of concentrate feed fed to animals.
4. Fertilizer application data are required to track the emissions from the production of fertilizers and minerals and the emissions related to the application of fertilizer to the land.

It is important to note that inaccuracies in the data provided via the sustainability survey can result in an inaccurate carbon footprint and grass-fed result, and farmer feedback report.

When do you get the Farmer Feedback Report?

The feedback report is posted to the farmer within one week of certification of the Bord Bia audit. It can also be accessed from the audit portal website, farm.bordbia.ie using your herd number and pin (which you can reset if you have forgotten it).

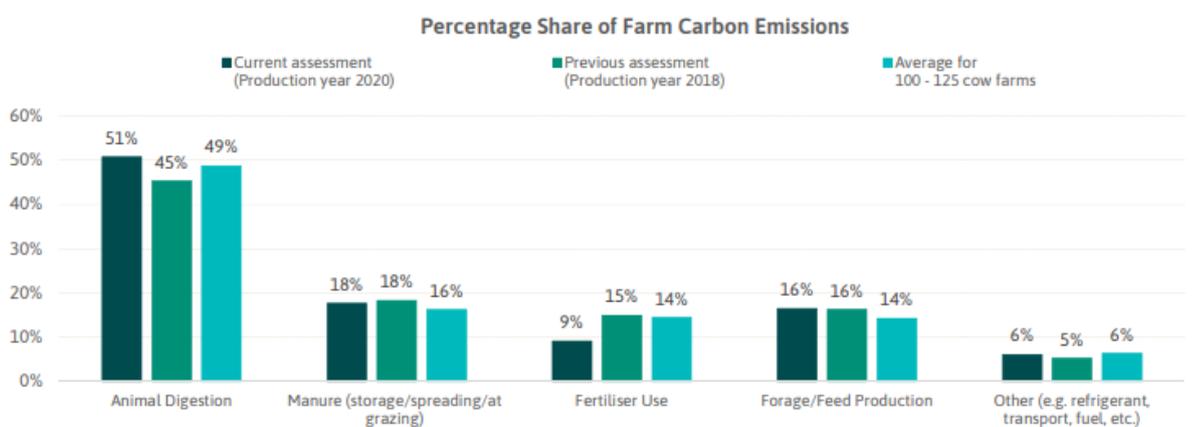
Where do you find the carbon footprint on the report?

Parameter	Unit	Current assessment (Production year 2020)	% Change from previous (Production year 2018)	Average for 100 - 125 cow farms
Carbon Footprint - Dairy Enterprise	kg CO ₂ / kg FPCM	0.84	-19%	0.96

The carbon footprint is displayed on the first page of the report. The example above is for a dairy farm – the carbon footprint for this farm is 1.10 kg CO₂ / kg FPCM which is 3% lower than it was in 2018 and compares well to the national average for herds of 125-150 cows which have a carbon footprint of 1.15. The carbon footprint for beef farms is presented in a similar format but expressed as kg CO₂ / kg live weight.

How do you know what is contributing to your carbon footprint?

On page three, a graph displays the percentage share of carbon emissions on your farm under the following headings and farm activities: animal digestion; manure; fertiliser; forage/feed production; other (e.g. transport, fuel, etc.).



In the information and advice section, there are green and white-shaded bullet points, what do these colours indicate?

The advice is broken down into two levels of activity. The green leaf is related to actions specifically set out in the Teagasc Marginal Abatement Cost Curve (MACC). These actions are provided to encourage farmers to engage with the Climate Action Plan and make farmers more informed on those types of actions. The white leaf relates to more general information.

Please contact your local Teagasc advisor to discuss the carbon footprint for your farm and the actions you might take.