

## Good Practices – EAFRD projects' template

### Project name/title

**Beef Data Genomics Programme – Carbon Navigator**

### Context

*Why was the project needed? What was the situation to begin with? Do not start talking about the objectives. Just the context. (max.300 words)*

It is estimated that agriculture contributes up to 34% of Irelands greenhouse gas emissions this compares with an average of about 9% from our European partners. Agriculture's high proportion of greenhouse gases is a result of our mild climate with long growing season, ideally suited to grazing livestock and the relatively low level of industrialisation and heavy industry in our economy. Despite this European carbon efficiency measurement show that Irelands Dairy Industry (each kg of carbon used to produce each kg of food), is among the highest in Europe. Our dairy production is the most carbon efficient while the larger beef sector ranks 5th in Europe.

Irelands recent industry vision for Agriculture production, envisages major increases in output in both dairy and beef production. Much of this increased output will arise from increases in efficiency, product mix and pricing but some of the increased output may be derived from increased numbers. European and International Climate Change regulation, agreements and protocols dictate the need for a decrease in our greenhouse gas emissions. Combining increased agricultural output, especially if driven by increased numbers, with the need for reduced greenhouse gas emissions creates an imperative to improve inefficiencies and reduce the carbon footprint of the industry as a whole.

An appropriate starting point is the measurement of the carbon footprint of each individual farm and the setting of targets and measurement of the reductions achieved.

### Objectives

*In response to the context set out above, what did the project hope to achieve and what was its overall approach for doing this? Do not simply list planned activities, which will be covered below. (max 300 words)*

Having decided on the objective of reducing the carbon footprint of the industry DAFM acting through the RDP 2014-2020 adopted a multi-pronged approach. The Beef Data Genomics Programme, the principal thrust of which was the incentivisation of farmers to adopt more efficient herd breeding policies by systematically improving the breeding index of their individual suckler herds was introduced. Over a six year period this scheme targets a significant improvement in quality of the national beef breeding herd, in terms of, age at first calving, calving rate and live weight gain. The scheme is aimed at increasing the efficiency of production rather than increasing production per-se. Farmers are incentivised to join the scheme through annual payments, which are conditional on achievement of pre agreed annual milestones.

The first completion and annual update of a carbon navigator program is mandatory for receipt of payments and continued participation in the BDGP.

As part of the roll out of the carbon navigator tool, DAFM hosted a series of training sessions for advisers and private consultants. These training sessions demonstrated the workings of the online Carbon Navigator Tool and allowed the professional advisers to work through typical examples. It also had the effect of increasing the awareness of professionals in the issues and possibilities around carbon savings.

The Beef Data Genomics Programme was launched in the Spring 2015 with the requirement that the carbon navigator tool be completed by each participant by 31 October 2016. The trained advisor obtains from the farmer the relevant carbon use indicators for the farm. This information (the

output of a 20 point questionnaire) is uploaded to the individual farm file maintained by Bord Bia. Data relating to stock numbers and sales and purchase data relevant to establishing the carbon footprint Can Be obtained from DAFM Animal Identification and Movement System (AIM). This data upload provides the basis of the farmer's individual farm report.

In addition to capturing the actual carbon footprint the navigator tool provides a menu of options which would achieve improvements in the carbon footprint. Options would include actions such as, efficiencies in fertiliser or slurry usage, improving calving rates or extending the grazing season. In addition to carbon savings many of the options have a cost saving advantage so the farmer is highly incentivised to improve his profitability while consequently improving his carbon footprint.

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### Activities

*What did the project do and in what order did it implement its activities? If possible, include: a timeframe; who/which stakeholders were involved; the reasons and logic of the approach taken. The aim is to enable readers to really understand what the project did and how. Do not provide a simple list of bullet points but briefly explain each activity. (max 600 words)*

In order to achieve the desired results of improving carbon efficiency at individual farm level, and thus at National level. It was necessary to coordinate activities between DAFM, a cohort of trained advisers and a sufficient number of beef farmers to achieve worthwhile effects. The carbon navigator is only one of a range of activities, designed under the RDP to improve efficiency through a reduction in the consumption of inputs.

1. The Training of advisers - in order to roll out the carbon navigator program DAFM initially established a training program for professional advisers in the public and private sector. This training program was targeted at advisers involved in the day to day delivery of advice and services to farmers. Participation in the training course was mandatory for advisers who wished to assist their farmer clients in completing the carbon navigator program. Initially the advisers were acquainted with the terms, concepts and practicalities of reducing carbon usage on the farm. In preparation for the roll out of the carbon navigator Bord Bia and Teagasc developed an on line carbon navigator tool. The training sessions thoroughly familiarised the professional adviser with the workings and concepts behind the tool. Advisers were given the opportunity to post specimen farm situations in real time and thus gained an appreciation of various farm practises to the carbon consumption on that farm.

Michael Tennyson a private consultant, based in County Kilkenny was one of the participants, " I found the course of enormous benefit apart from familiarising me with the on line navigator tool it provided a comprehensive relearning and refresher course on my practical knowledge and skills in relation to carbon efficiency."

2. Having completed the introductory courses DAFM now had available to them a cohort of trained advisers. The requirement for each participant to complete a carbon navigator was set out in the Terms and Conditions of the BDGP, at information sessions around the country and highlighted at the mandatory training course that each BDGP had to attend in relation to the BDGP. In addition the DAFM recently contacted all of the participants in the Beef Data Genomics Programme who have not already done so , to inform them of their obligation to have the carbon navigator completed by 31 October 2016. Consultant Michael Tennyson in common with other consultants and advisers then contacted their respective clients with a view to making arrangements for a farm visit and a one to one consultation

3. Frank Mannionis a long term consultancy client of Michael Tennyson. Frank had joined the Beef Data Genomics Programme in 2015 and had learned the concepts of carbon efficiency through the BDGP training programme. He contacted Michael and arranged a consultation to complete the carbon navigator.

4. Bord Bia data files contain an individual file on every farmer. Through this file access can be gained to the Bord Bia records in relation to farm size, stock numbers, fertiliser and slurry usage. To initiate the programme and gain access to an individual's farmers file the consultant applies to Bord

Bia and in response the Bord Bia issue a text code to the individual farm. For data protection purposes it is only with this code that the consultant can access the individual's farmer's file. Having accessed the online file Michael and inputted the required information through providing responses to a series of prompted questions specifically relevant to Frank's Farm.

## Results

*What did the project achieve? What has changed and how was the initial identified need met? Include quantified improvements where possible. Unquantifiable progress can also be described (e.g. increase in revenue, jobs created, number of participating businesses, increase in sales, increase in visitors, etc.). Keep it short – a list is fine (max 300 words)*

The Carbon navigator is a once off initiative aimed at increasing awareness of the need for and the possibilities of achieving real results in relation to carbon efficiency. The stand out results in this case are;

1. First time identification of the approximate carbon usage on this individual farm
2. A major attitudinal change in the awareness and interest of carbon efficiency on behalf of the farmer.
3. An identification of the strong linkages between general efficiency, carbon efficiency, and general profitability.
4. The identification by the farmer of simple management steps that can be taken to improve the carbon efficiency of the farm.

## Lessons

*What factors should be taken into account when transferring the example? What was interesting, unexpected, surprising about implementing the project? What could be done better? Keep them short and to the point. (Max 300 words)*

Frank said " I was surprised at how carbon savings could be achieved. Linking the carbon savings to actual profitability makes improving the carbon footprint of my farm a no brainer for me. Immediately I planned a few simple changes, subject to weather conditions, I'll try to extend the grazing season by ten days, both Autumn and Spring. This will reduce feed costs, slurry storage and carbon footprint while increasing profitability."

As a result of the one to one consultation Frank realised he could achieve increased profitability through better slurry management.

"I was losing money by spreading my slurry after first cut silage and worse still in the autumn thus wasting nitrogen which I was replacing with purchases of chemical fertiliser. From now on the slurry will be used for first cut silage."

These are just a few of the obvious carbon efficiency gains which farmers can achieve. BDGP are required to update the navigator on an annual basis for six years so that we will remain aware of the potential for increased profits through carbon savings.

## Project general info

<b>Name</b> (project title or short name)	
<b>Dates</b> <sup>1</sup> (Indicate both start and end dates <sup>2</sup> )	
<b>Member State</b> (or region if regionalised RDP)	
<b>Type of beneficiary</b> (public/SME/farmer/NGO etc.)	
<b>Measure</b> <sup>3</sup> (or measures)	
<b>Priority &amp; Focus Area</b> <sup>4</sup> (for 2014-2020 projects)	

## Funding<sup>4,6</sup>

<b>Total budget in EUR</b>	
<b>EAFRD contribution in EUR</b>	

<b>National/regional</b> co-financing in EUR	
<b>Private</b> funds in EUR	
<b>Other</b> sources (in EUR)	

### Contact details

<b>Project beneficiary name/organisation</b>	
<b>Contact person</b>	
<b>Contact Email</b>	
<b>Telephone</b>	
<b>Other contact details</b>	

### Further information

<b>Website</b>	
<b>Additional info sources, links</b>	

### Quotes from beneficiaries/participants

(if available) Obviously choose ones that really highlight the key message of the project


### Project photos with information on copyrights

A number of 2-3 photos, as available, would be sufficient. Copyrights maybe the name of the photographer, or in general the owner of the photos' copyrights as indicated by the provider of the project's content.

#### Additional note

<sup>1</sup> Both a starting and end date are needed.

<sup>2</sup> On-going projects are not eligible.

<sup>3</sup> Always indicate which measure(s) were used.

<sup>4</sup> Both the Priority & Focus Area are needed for the 2014-2020 programming period projects.

<sup>5</sup> In case more than one measures where used then please provide the above financial data for all measures involved.

<sup>6</sup> The total and EAFRD budget are required as a minimum.