Producing Pigmeat Sustainably
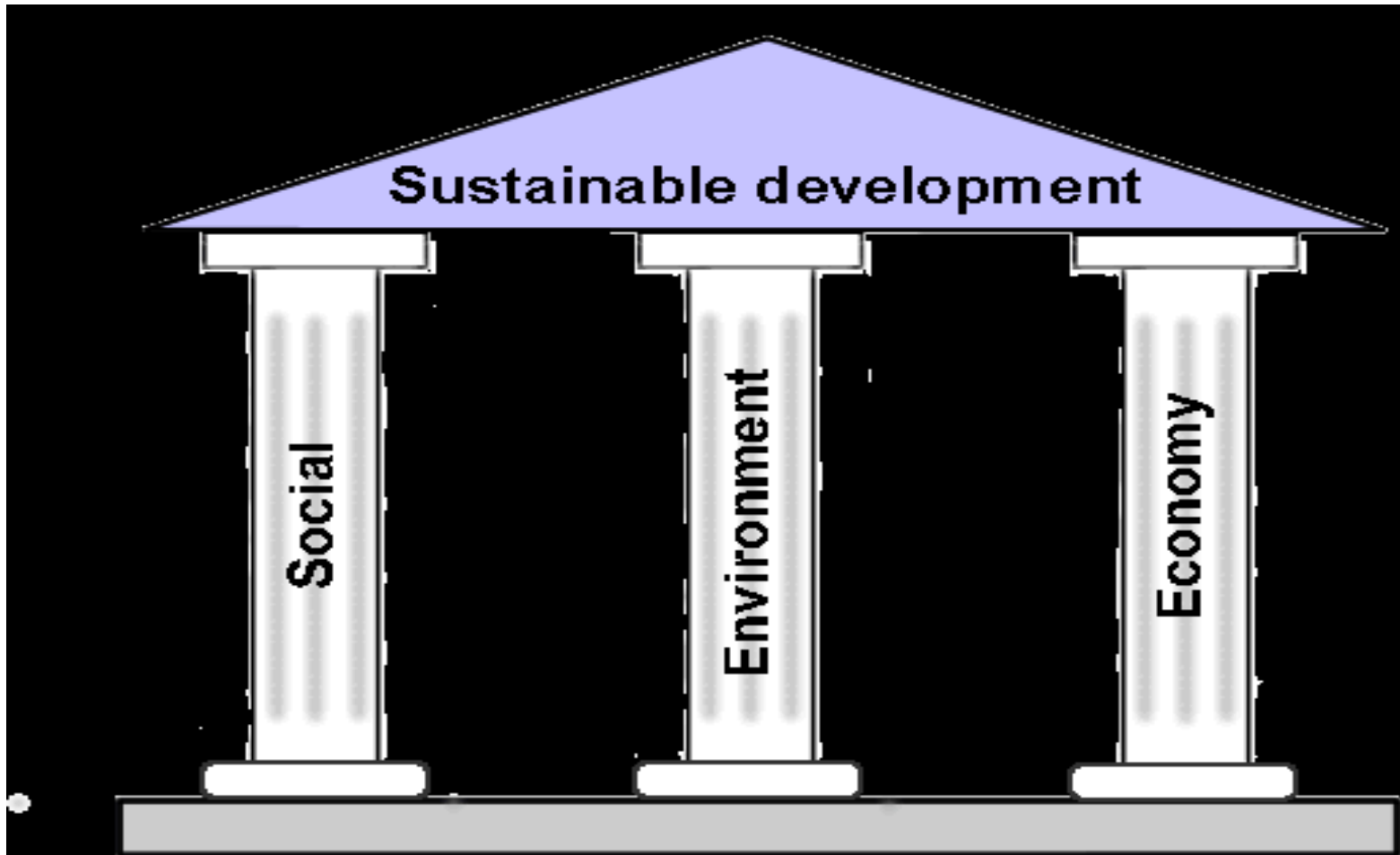
Gerard McCutcheon

World Population

- *1960 3 Billion people*

- *Currently over 7 Billion*

- *9 billion people in 2050*
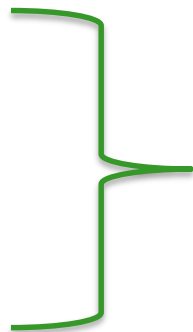
3 pillars of Sustainability

Who wants to be a millionaire

▪Which one of the following gasses contribute most to Irelands Agricultural GHGs

▪(A)   Ammonia

▪(B)   Nitrous Oxide

▪(C)   Methane

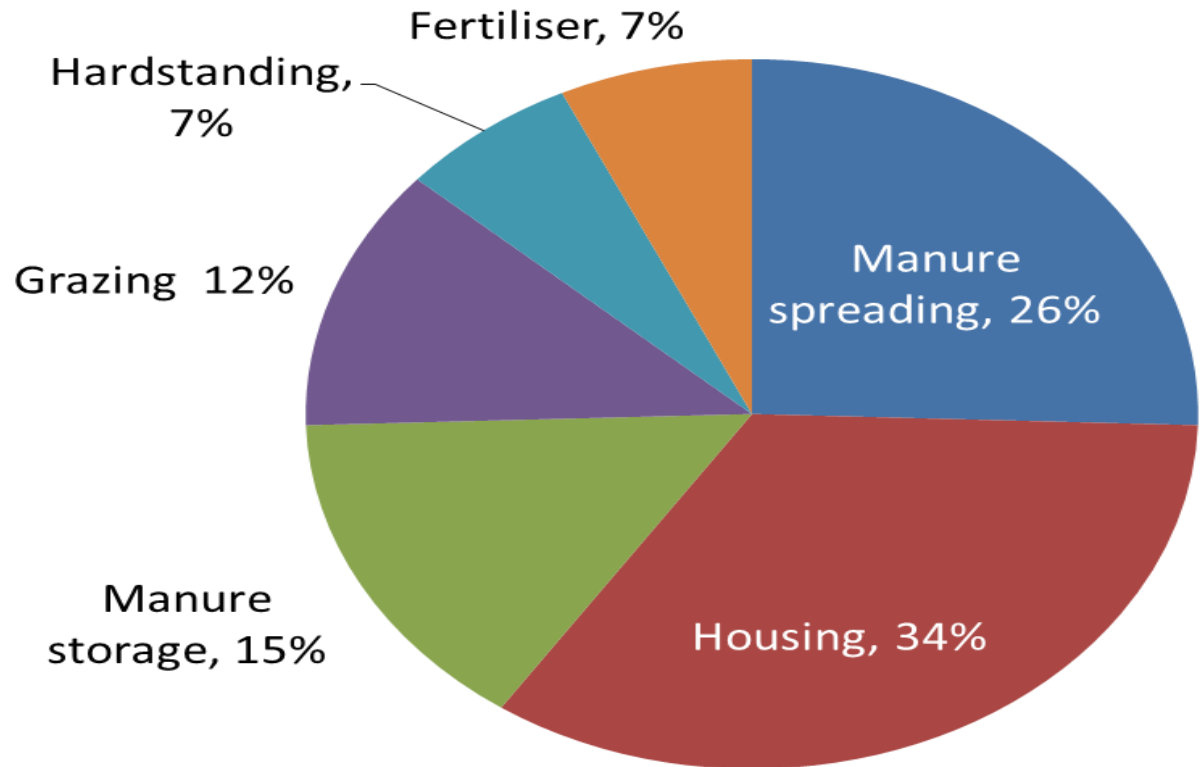▪(D)   Carbon Dioxide

Not GHG – Health and Environment Issues

GHGs

▪Answer

C

AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

Ammonia emissions profile

Ammonia

Challenge

➢ Is the pigmeat production chain sustainable?

➢ How can we prove this?
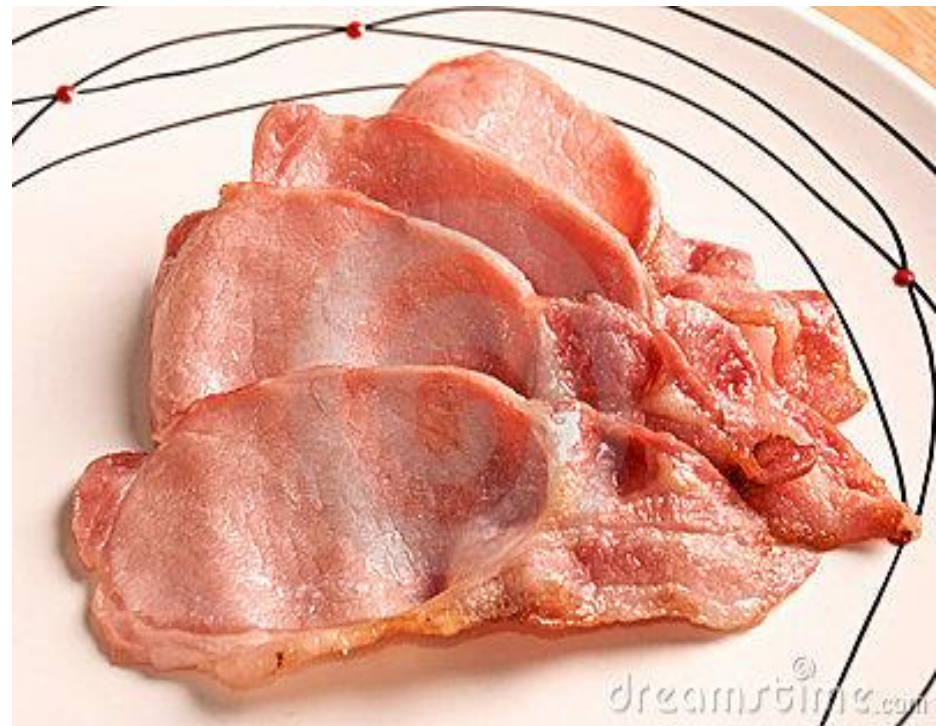
➢ Is this important in the marketplace?????
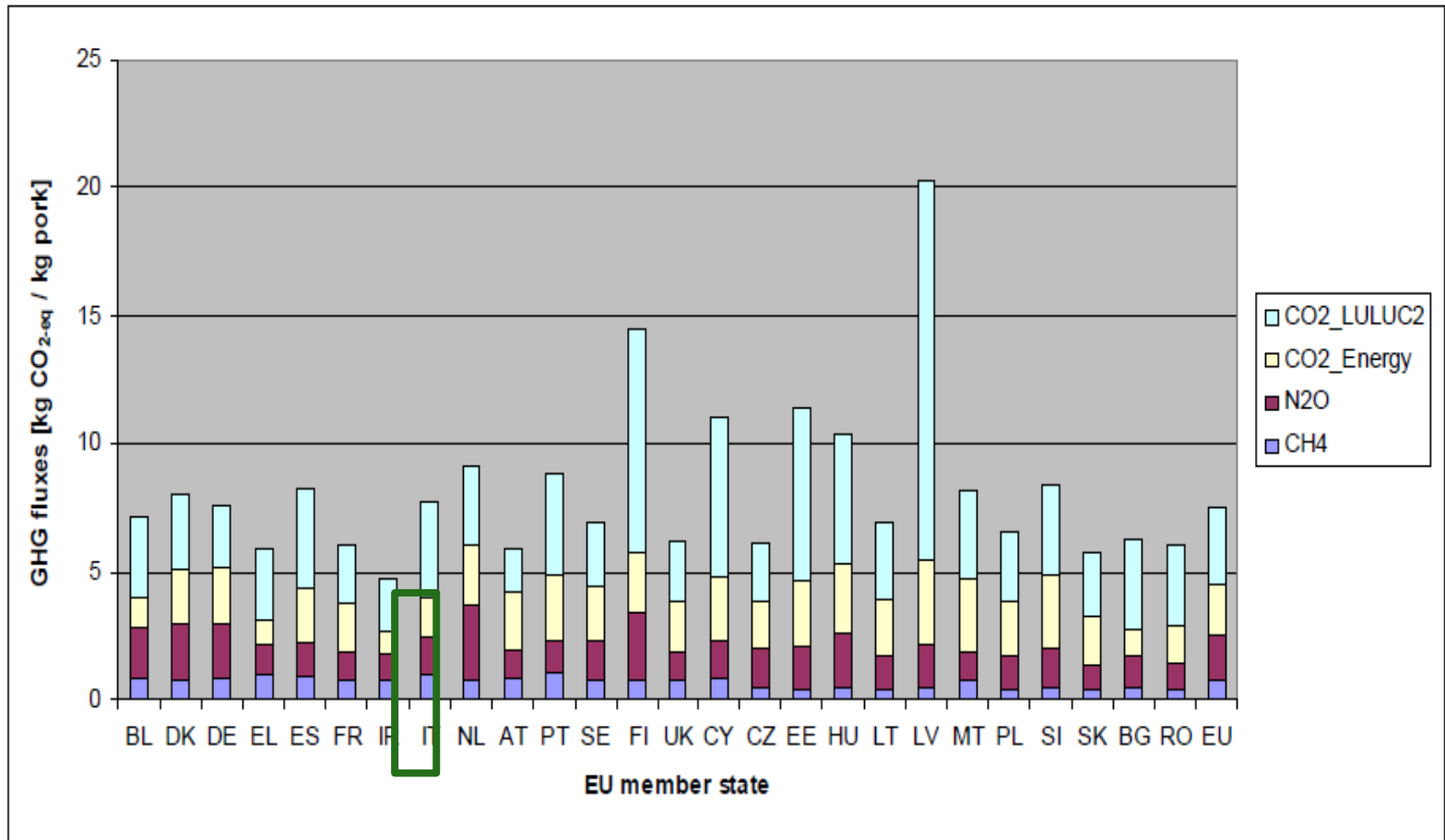
Sustainability of Food Chain

Farm

MARKET

Figure 6.13: Total GHG fluxes of Pork Production in kg CO_{2-eq} per kg Pork by EU member states and Greenhouse Gases

Future market access

- Sustainability will be more of an issue in the future:

- Carbon footprint – calculations vary depending on what you include

- Study in 2017 had a GWP of 3.5 kg CO_2 eqivalent per kg pigmeat.

How can we show the production chain is sustainable?

- **The Carbon Trust has independently validated a model on the beef side,**

- **Teagasc PDD linked with Bord Bia & The Carbon Trust,**

- **Work was done to develop a C Navigator tool for Irish pigmeat production**

Input items

Item	Label	Units / Notes	#	Value	
Name of Pig Farm			1	Joe Bloggs	
NPITS Herd Number			2	ZX0058	
Address			3	DUBLIN	
Start Date		06/04/2015 To	4		5 31/05/2016
Total No. of Pigs Produced			6	23753	
Average carcase Weight			7	87.6 kg	
Total Feed Per Pig			8	**297** kg	
FEED SOURCE			9	Purchased	Home milling or Purchased Feed
Sow Feed Usage	tonne/sow/year		10	1.31	
Weaner Daily Feed Intake	g/Day		11	974	
Finisher Daily Feed Intake	g/Day		12	2269	
Soya Source	DROPDOWN LIST		13	Argentina	
LAND USE CHANGE re SOYA ?	YES/NO Option		14	yes	
IF PURCHASED FEED - Distance to Mill			15	25 km	
Av. Wgt of Weaner at Sale/Transfer			16	46.3 kg	
Kill-out Percentage			17	76.3 %	
No.Sow Deaths			18	40	
No. Piglet Deaths			19	2551	
No. Weaner Deaths			20	508	
No. Finisher Deaths			21	740	

Suggested Report

Bord Bía

Irish Food Board

Farm Name and ID	Joe Bloggs - ZX0058
NPITS Herd Number	ZX0058
Date of questionnaire	? -
Footprinting Year	2015

Total Number of farms in database	2

Emissions

	Selected farm	Average	Ranking
Emissions (kg CO_2e per kg liveweight)	5.36	5.87	Top 25%...
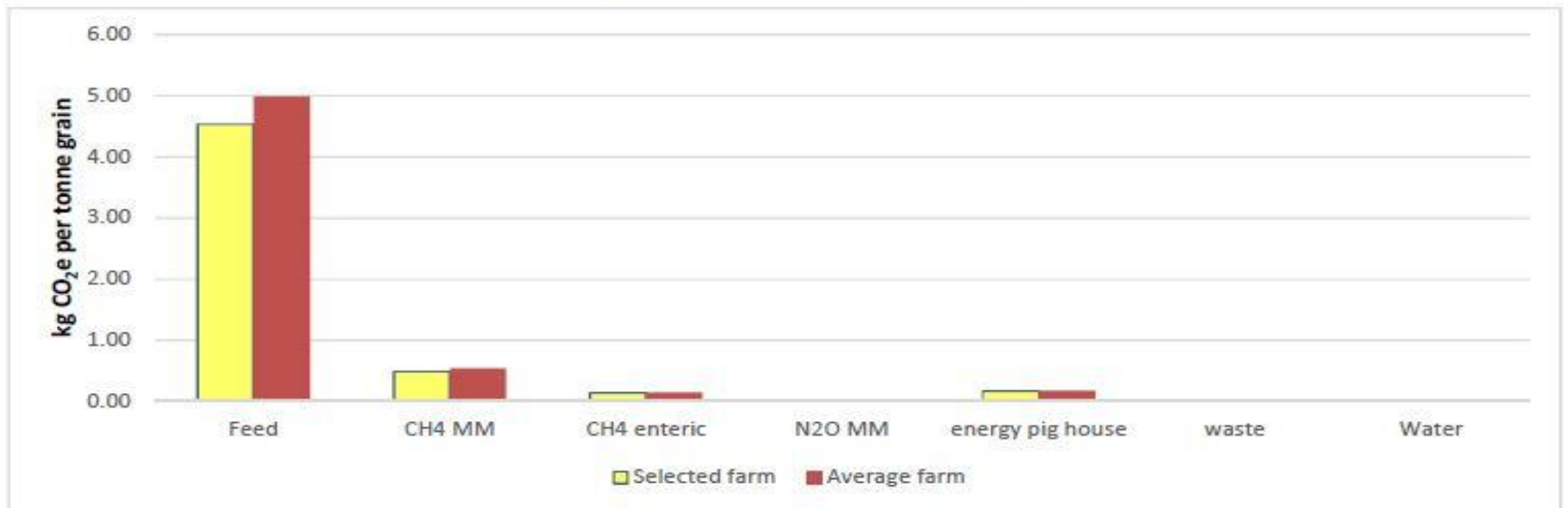
Diet component shown on the

	Selected farm	Average	Ranking
Kg of Feed per Kg of Carcase	3.39 kg	average e.g. 3.5	below average
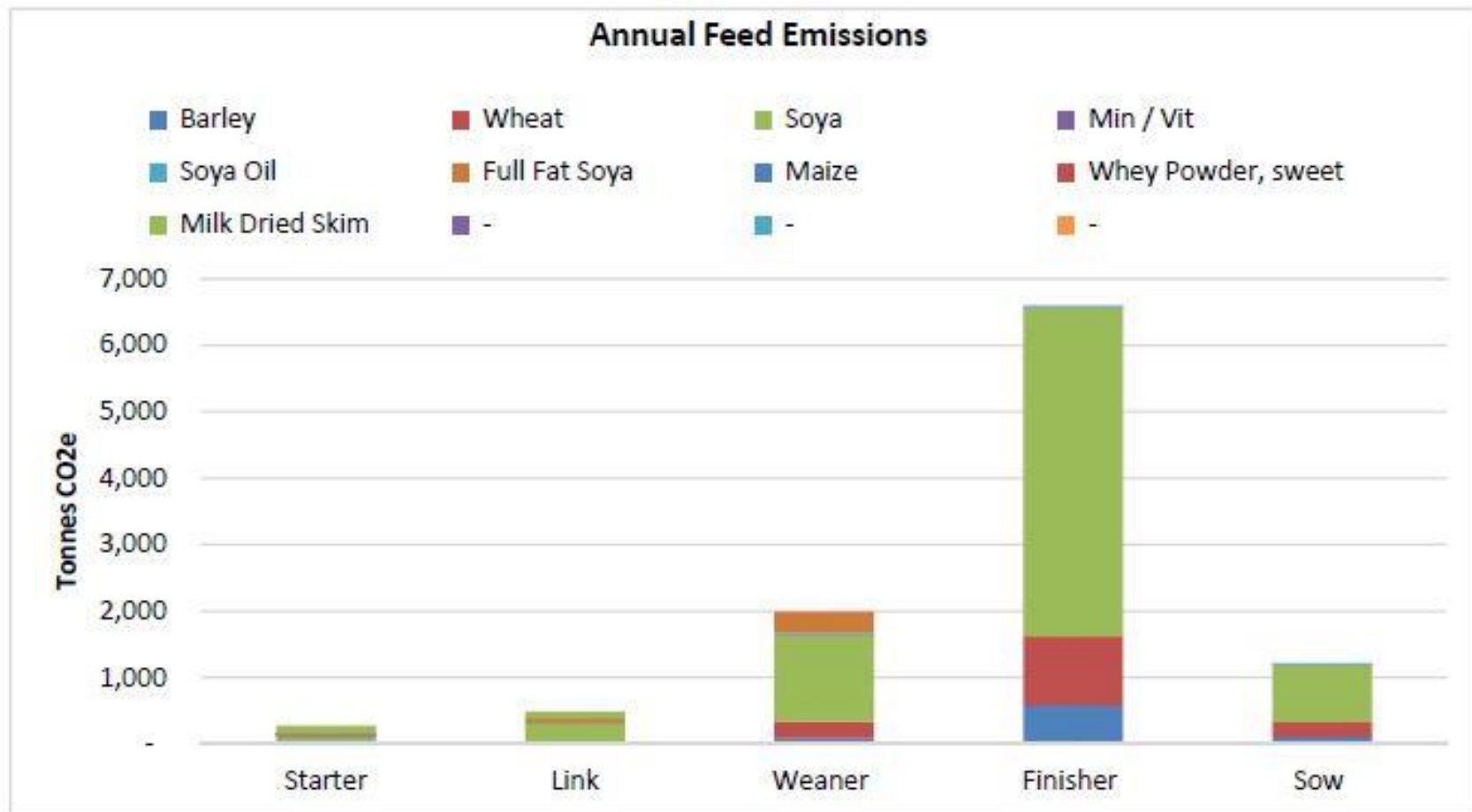
Why should we do this?

1. To help compete in the marketing of pigmeat

2. To show the C footprint of pigmeat to consumers

3. Demonstrate that efficient production systems are good for the environment

2.5 Tonne Sow – ? Tonne Feed

- **Target: to produce 2 tonne pigmeat per sow from 7 tonne feed in 2012**

- In 2021:

  - 2,549kg pigmeat per sow

  - 8,815kg feed (3.46)

Pigs produced per sow per year from 2000, 2010 and 2021

YEAR	2000		
Pigs Produced/Sow/Year	21.6		
Average LW at sale kg	90.1		
Average DW at sale kg	68.1		
Kg Pigmeat /sow / year kg	1,471		
Total feed /sow / year	5,385		
Kg of Feed per kg of Pigmeat	3.66		

Source Teagasc Profit Monitor

Teagasc

Pigs produced per sow per year from 2000, 2010 and 2021

YEAR	2000	2010	
Pigs Produced/Sow/Year	21.6	23.9	
Average LW at sale kg	90.1	103.6	
Average DW at sale kg	68.1	78.9	
Kg Pigmeat /sow / year kg	1,471	1,886	
Total feed /sow / year	5,385	6,966	
Kg of Feed per kg of Pigmeat	3.66	3.69	

Source Teagasc Profit Monitor

Pigs produced per sow per year from 2000, 2010 and 2021

YEAR	2000	2010	2021
Pigs Produced/Sow/Year	21.6	23.9	28.1
Average LW at sale kg	90.1	103.6	118.4
Average DW at sale kg	68.1	78.9	90.7
Kg Pigmeat /sow / year kg	1,471	1,886	2,549
Total feed /sow / year	5,385	6,966	8,815
Kg of Feed per kg of Pigmeat	3.66	3.69	3.46

Source Teagasc Profit Monitor

Thanks for your attention!!

Any Questions???