

# Animal By-products: Optimising Returns & Reducing Environmental Impact

**Stephen Woodgate - Chief Executive FABRA**

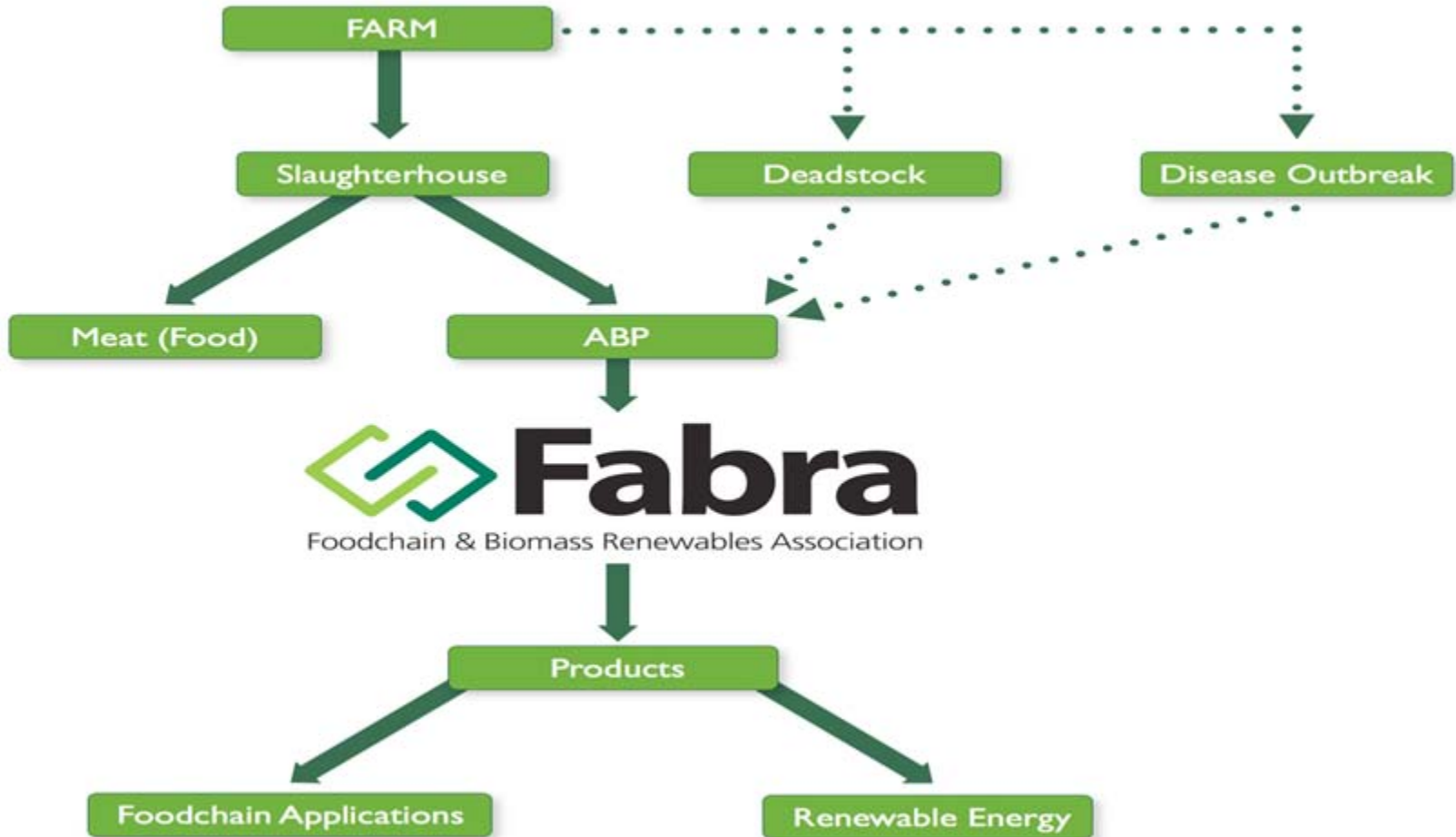
**FIFTH QUARTER: GO GREEN FOR MORE PROFIT**

**Ramada Coventry 8<sup>th</sup> September 2010**

# Presentation Overview

- Introduce Fabra
- What are ABP?
- Challenge
- Practical Example
- Outcomes
- Summing Up

# Introducing Fabra



# Animal By-Products:UK

UK Animal By Products\*

Total ~ **2.25 million** Tonnes pa

Production (Tonnes pa) & Main Uses 😊

Protein Meals  
= ~**500,000**

Solid Fuel 😊

Fertiliser 😊

Pet Foods 😊

[Animal Feed]

Rendered Fat  
= ~**300,000**

Liquid Fuel 😊

Biodiesel 😊

Animal Feed 😊

Soap/Chemical 😊

\* All ABP Categories as defined by ABPR 1774/2002

# Challenge: How to improve the financial return on animal by-products

## Example:

- Upgrading Category 2 Pig ABP to Cat 3 ABP

## Purpose of upgrade?

- Use porcine ABP to produce PAP for use in aquafeeds

## Benefits of upgrade:

- Higher £ value of Porcine ABP by the use of 'sustainable' Porcine PAP in aquafeeds

**WARNING !!!!**

Animal Co-Products (ACP)

are **NOT**

Animal By-Products (ABP)

**Why?**

**INTENTION is the Key!**

# ACP vs. ABP

ACP are {mainly} intended  
for human consumption

If intended for Human Consumption  
they must be handled hygienically

ABP are not intended for human  
consumption, so ABP rules apply

# ABP Rules (*in brief*)

ABP Categories [C1, C2, C3]

- ONLY “Downgrading” possible

**ACP >> Cat 3 >> Cat 2 >> Cat 1**

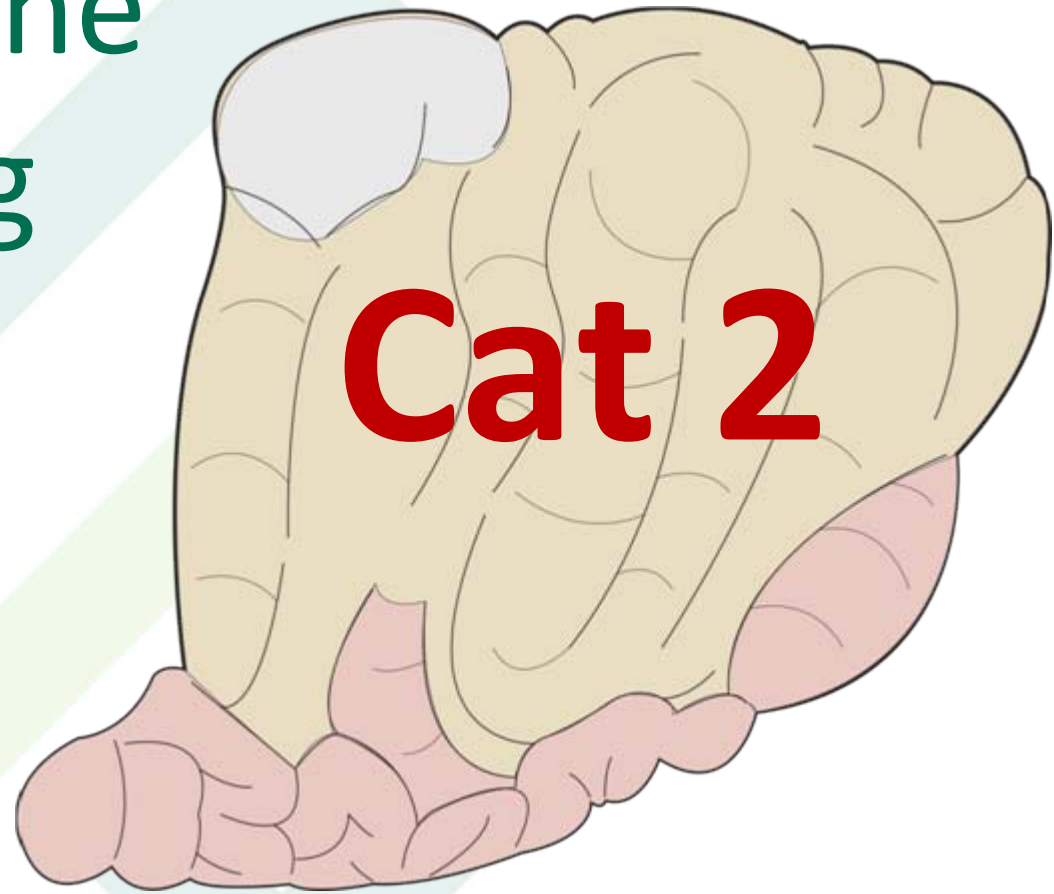
- Use or disposal options
- Processing methods & standards



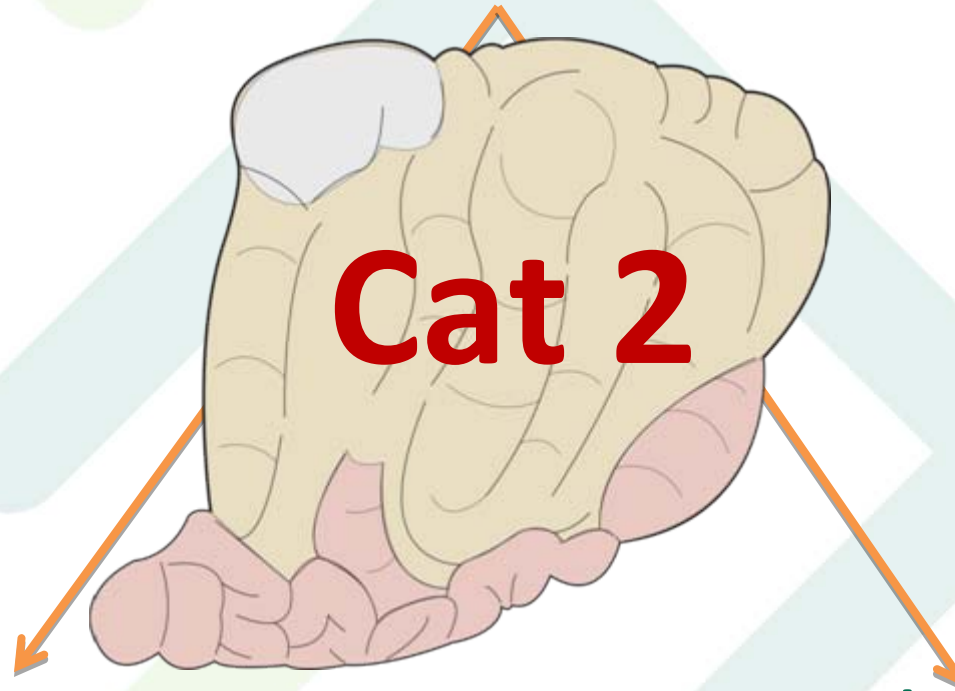
# How to upgrade Animal By-Product?

## **Example: Pig Guts?**

Pig Intestine  
containing  
Digestive  
Tract  
Content  
(DTC)



# Options for Cat 2

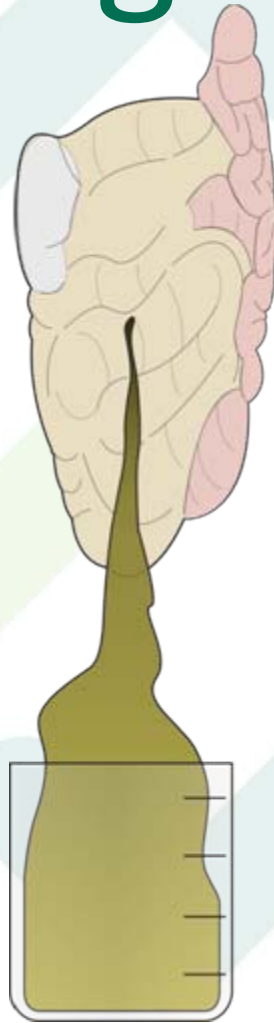


Rendering  
( but probably)  
processed as Cat 1

AD...but first  
**MUST** be  
pressure processed

# Emptying Pig Guts

Manual



Automatic

# Two 'Products'

DTC

Empty Pig Gut

Cat 2

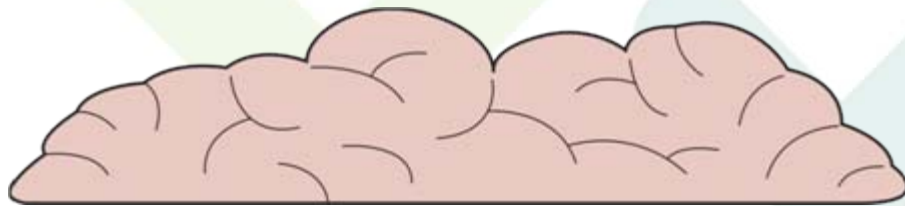
Cat 3



# Cat 3



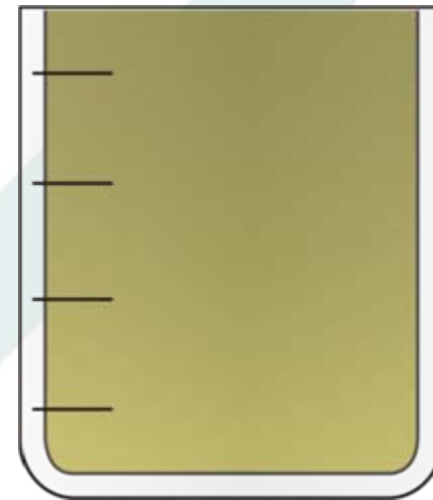
Render >>>PAP  
(Pet food, Animal Feed\*)



# Cat 2



Anaerobic Digestion [AD]  
No pressure process



# How to achieve an upgrade?

- Financial Incentive
- Economical Viability
- Communication
- Research
- Education

# Fabra: Communication



**Fabra**  
Foodchain & Biomass Renewables Association

Fabra Website Search

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**Archives**

- August 2010
- July 2010
- February 2010

**PDM confirm investment in AD**  
The PDM group have announced a new investor into the company which will allow them to progress the opportunity to bring Industrial-scale Anaerobic Digestion to the UK. The investment will fast track their plans to base the first ReFood UK AD plant at their Doncaster plant; work will start this summer. ReFood is a network of plants which collects leftover and [...] [click here for more details](#)

[< Previous Story](#) [Next Story >](#)

**Latest Press releases**

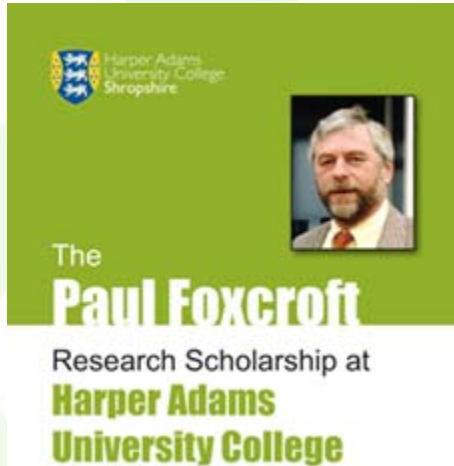
- Fabra** 27/7/2010 - Unlocking value from the fifth quarter
- FSA** 20/7/2010 - Food Standards Agency to keep crucial safety role
- DG-Sanco** 19/7/2010 - Commission outlines future steps regarding BSE/TSE in the TSE Roadmap 2
- PDM** 19/7/2010 - PDM strengthens relationship with European counterpart
- PDM** 17/2/2010 - Tesco and Stobart join forces with PDM Group to run on renewable energy

# Fabra and Research

Paul Foxcroft Research Scholarship

*First Award - January 2009*

*Angel Ramirez. A: Carbon Footprint  
"Toolkit" for the Rendering Industry*

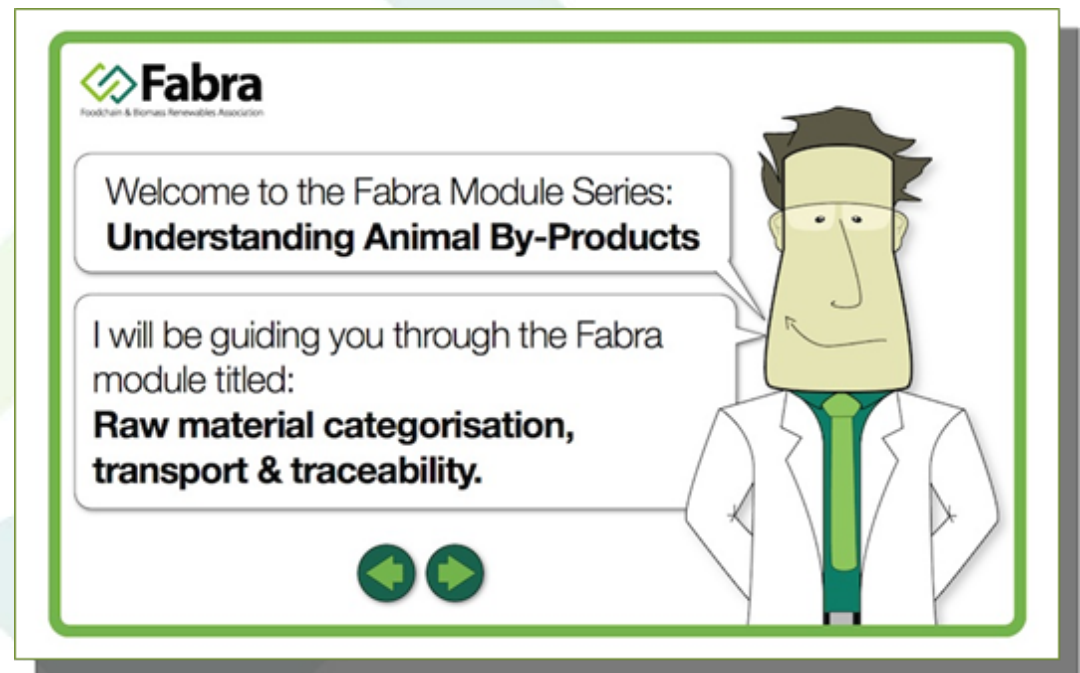


# Fabra and Education

Education and training for sector stakeholders  
On-line modules, testing & certification



Accredited Continuous Education



Example: One of four Modules being planned

“Approve” the message.....



“Education” Partners (level 2 or 3 /NVQ )



# Fabra: Best Practice



## Fabra Initiative:

To advise and educate on achieving best practice. Going beyond minimum legal requirements to attain added value solutions for members of the Foodchain and Biomass industries

# Upgrading Outcomes

- DTC used in AD for Combined Heat & Power (CHP)
- Empty pig gut used to produce monoPAP
- What is monoPAP?
  - Processed Animal Protein produced from Category 3 ABP *from monogastric species* i.e. Poultry and Pig ABP.

# Why is monoPAP 'Green'?

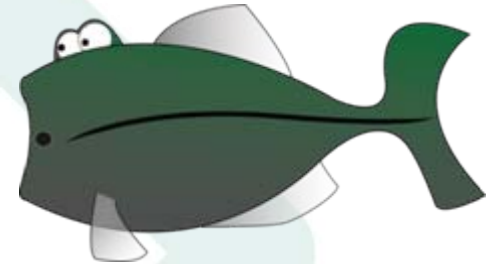
*[Or Why does it reduce Environmental Impact?]*

- Key is to use the “Rendering” process...  
Using a Carbon Neutral Fuel...“Tallow”
- Use monoPAP in diets of farmed animals  
requiring high protein, high energy diets
- Focus: Aquatic/ fish farming ~ in particular  
omnivorous species \*\*

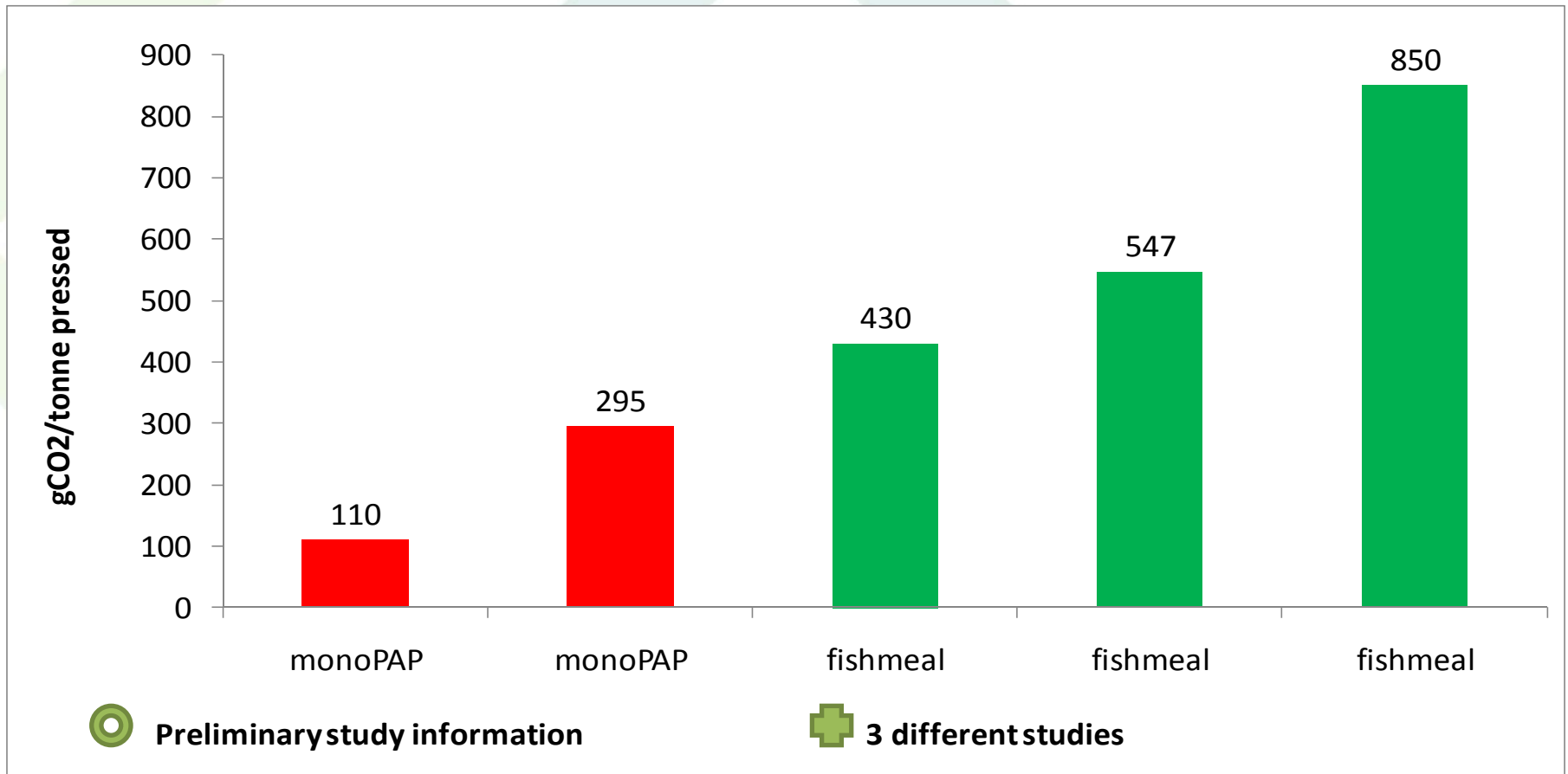
*\*\*subject to EU Regulation change ...expected 2011*

# Why is monoPAP 'Green'?

- Focus is to use monoPAP in fish feeds, mainly as a substitute for “fishmeals”
- Already established;
  - PAP safety: for animals farmed for human food
  - Nutrition, production and Health
  - Economics in feedstuffs
  - Sustainability ?????



# Comparison of Carbon Footprint ☺ monoPAP<sup>○</sup> vs. fishmeal<sup>+</sup>



☺ Based upon processing boundary

# Fabra: Research & Relationships

## Carbon Footprinting in the Meat Chain

**BPEX**

**Renewable  
Energy**



**Primary  
Producers**

**ADHB**



 **Fabra**  
Foodchain & Biomass Renewables Association

**Carbon Footprint of  
Rendering Industry**

**AIC  
[Animal Feed]**

**EBLEX**

# Summing Up

- Clear Objectives: Upgrading of all 5<sup>th</sup> Quarter components [ACP & ABP] is a Foodchain aspiration
- Adding Value.... by using processed ABP in.....
  - Biomass: Heat, Power, Energy ~ Generation & Use
  - Foodchain: Safe & Sustainable products
- Education and Communication are essential to profile this vital link in the meat sector