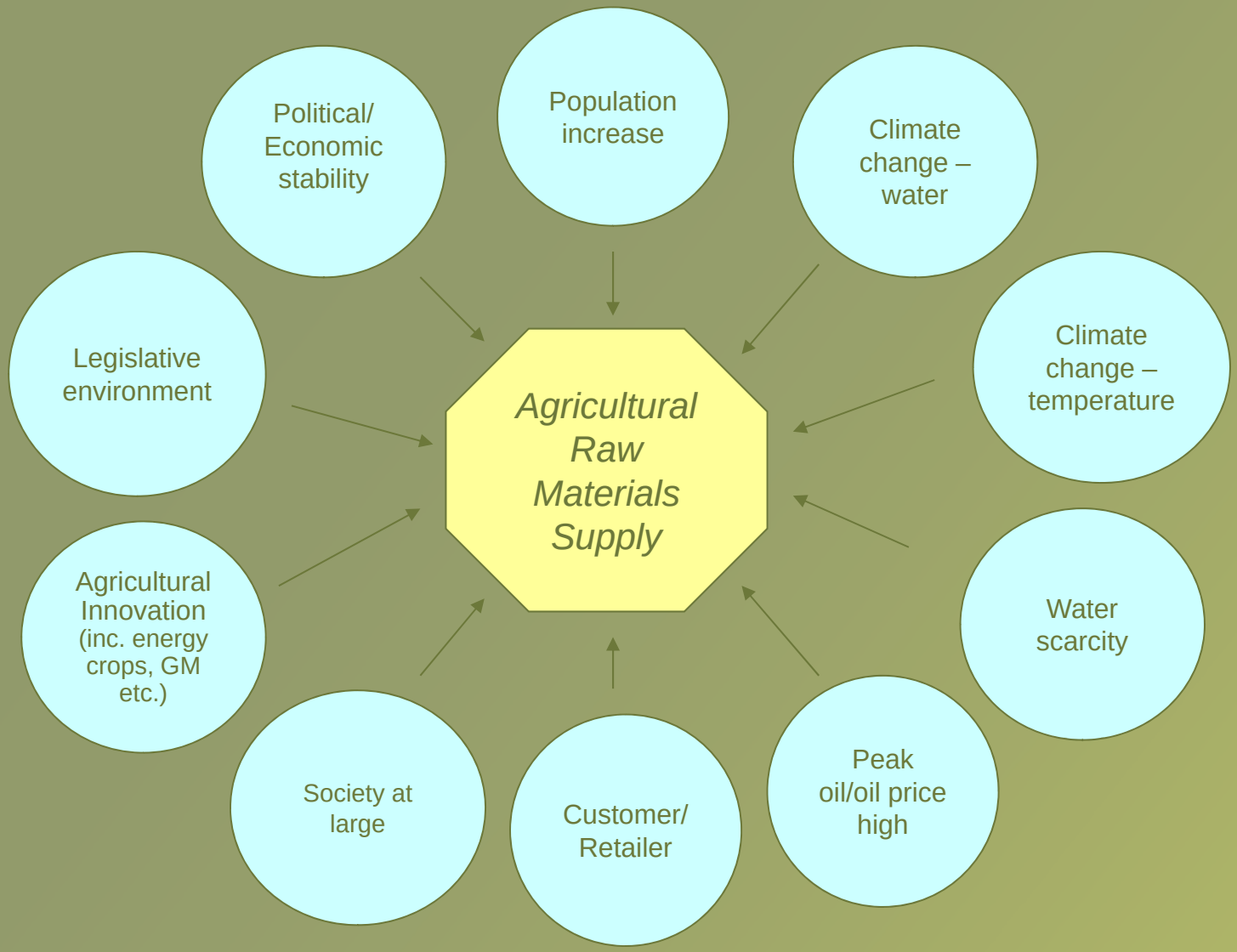

Agribusiness 2015
12 November 2014
Growing the sustainable agrisupply chain
www.agindustries.org.uk
aic
agricultural industries confederation
Will 'Cool Farming' provide a sustainable framework for farmers in the UK and Europe?
Richard Heathcote
Cool Farming Institute

Contents

Challenges

Challenges to be Faced



Agricultural Dilemma

Globally, food production and agriculture is facing a dilemma

TECHNOLOGY DRIVEN

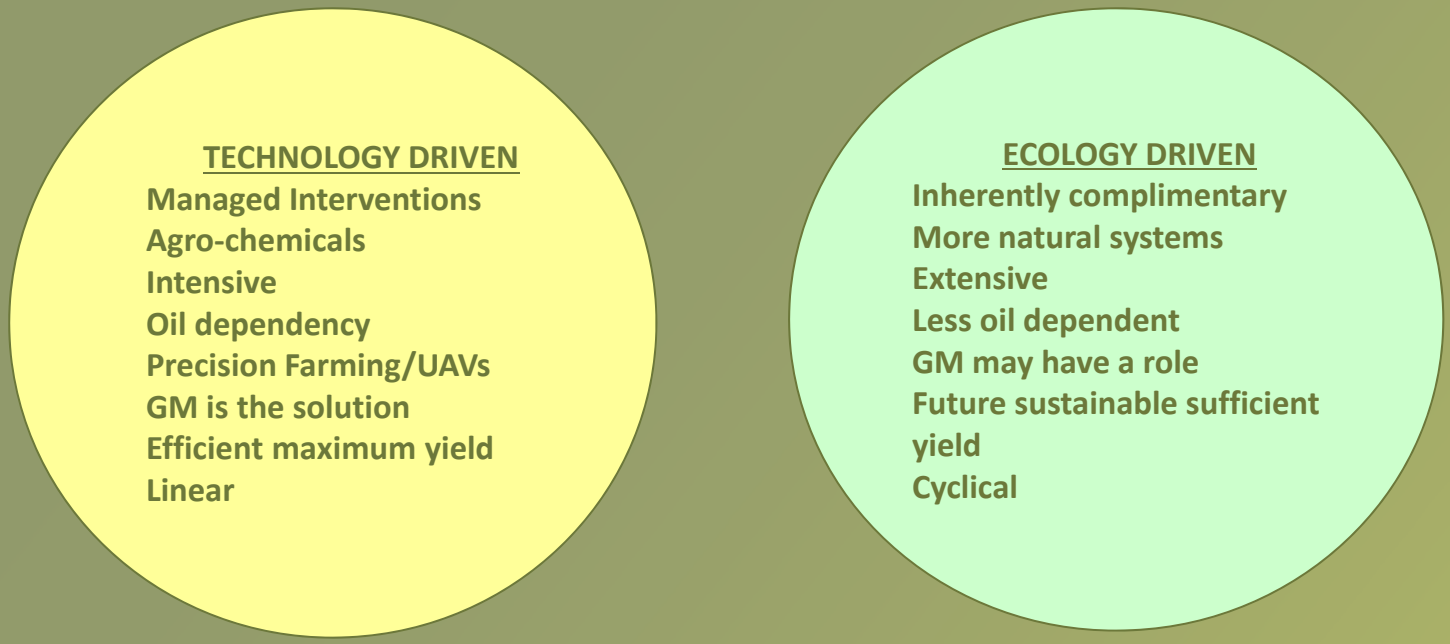
- Managed interventions
- Agro-chemicals
- Intensive
- Oil dependency
- Precision Farming/UAVs
- GM is the solution
- Efficient maximum yield
- Linear

ECOLOGY DRIVEN

- Inherently complimentary
- More natural systems
- Extensive
- Less oil dependent
- GM may have a role
- Future sustainable sufficient yield
- Cyclical

Agricultural Dilemma

The answer will be to use the best from both …



Plethora of Schemes

Just a few of the better known ...

And for the farmer?

I want enough for my family

I want to hand on my farm to the kids

I want to maximise my yields AND I want to protect the land

I want to protect my income

My customer wants to know my carbon footprint

The Government tells me to “go green”

They wants me to save the skylarks

My agronomist provides me with advice – who advises them?

How CAN I know I’m doing the right things?

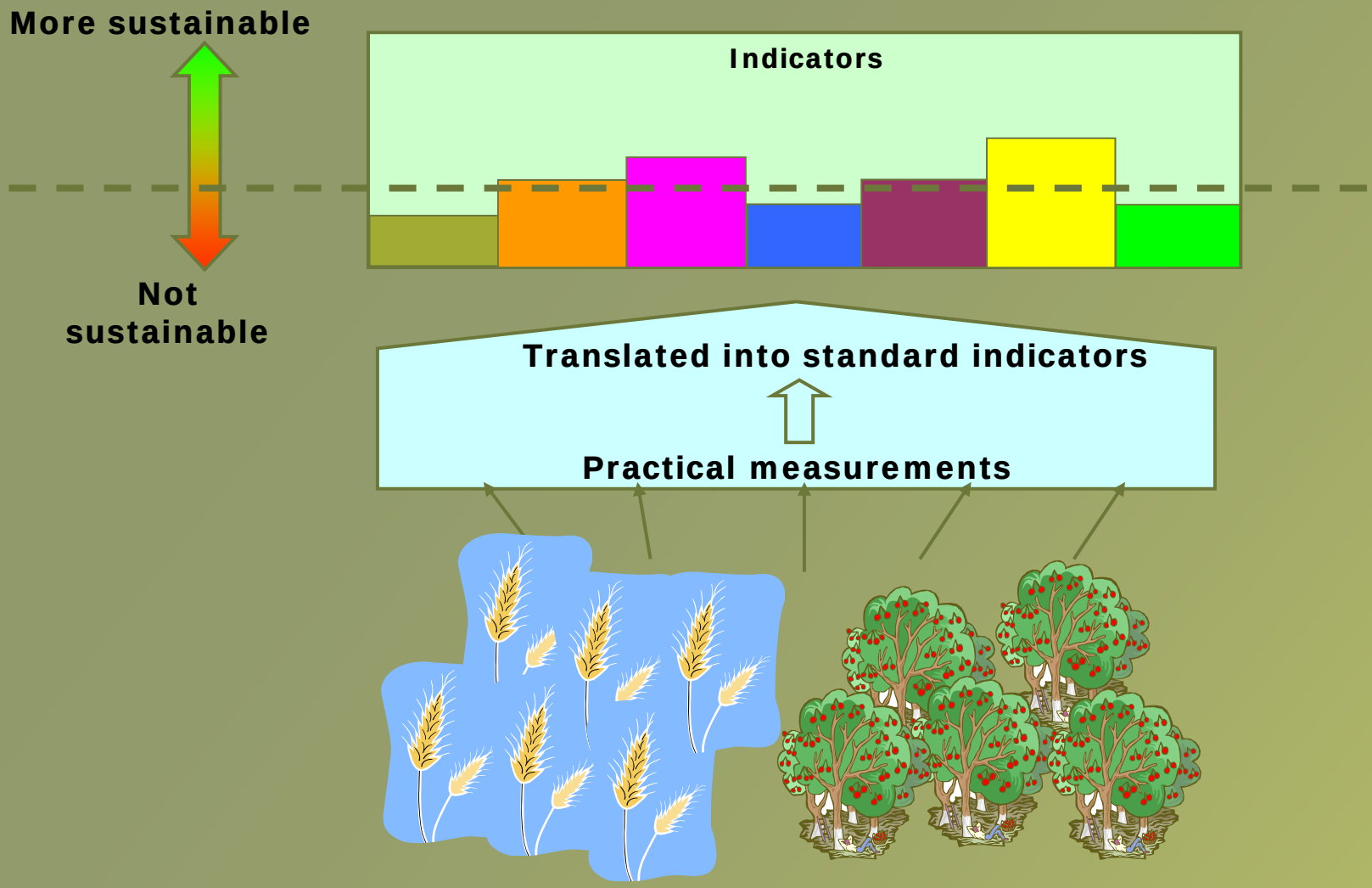
Measure to Manage

Measurement - How will we know we are getting more sustainable?

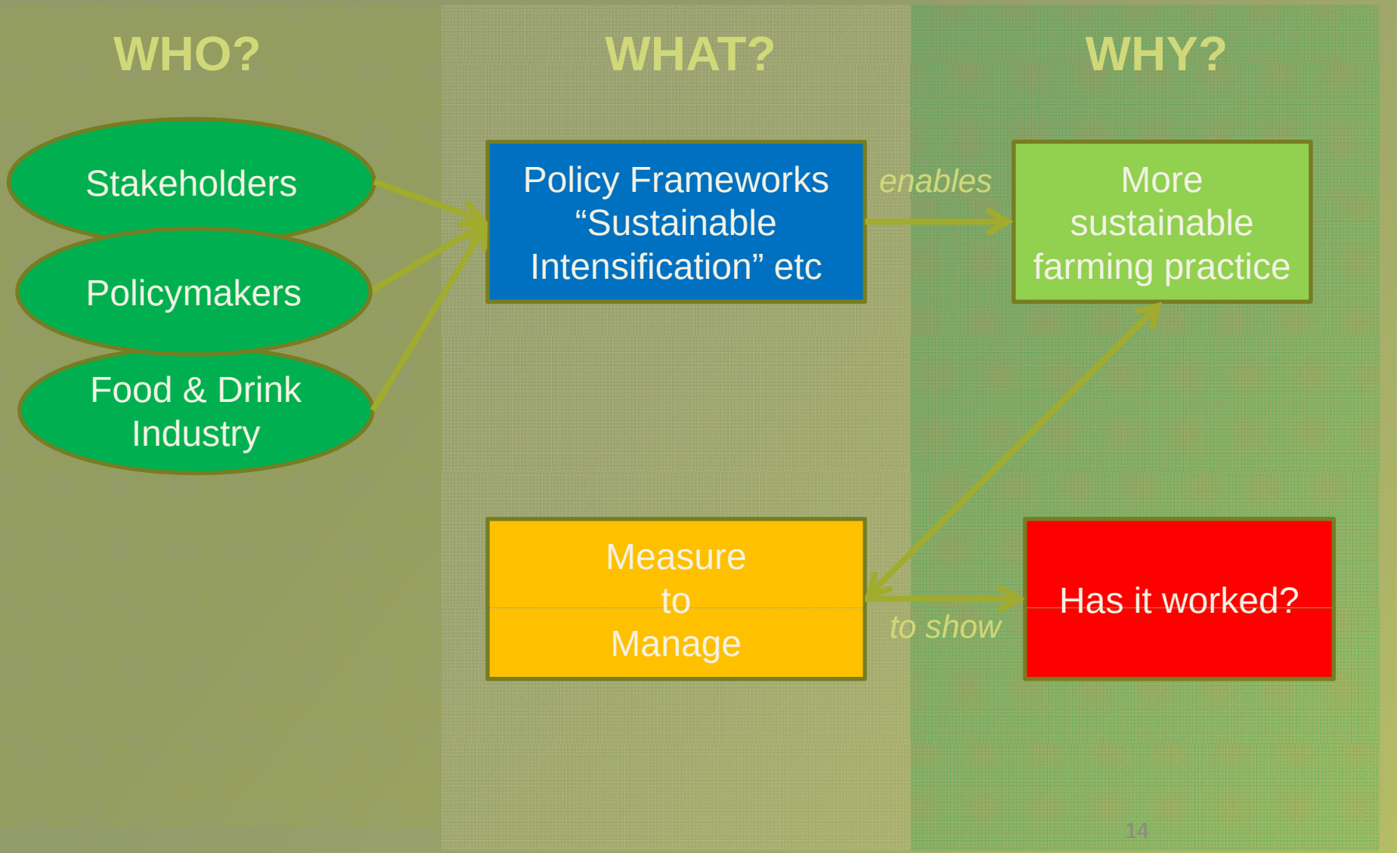
- We know we have to define “sustainable”
- We know we need to measure to manage
- We know we need measures that are scientific AND practical
- We know we need to focus on outcomes

And we know we need to start …

Measurement



Summary


WHO?
WHAT?
WHY?
Stakeholders
Policymakers
Food & Drink Industry
Policy Frameworks "Sustainable Intensification" etc
enables
More sustainable farming practice
Measure to Manage
to show
Has it worked?

Cool Farm Alliance

What is the Cool Farm Tool?

CFA Mission Statement

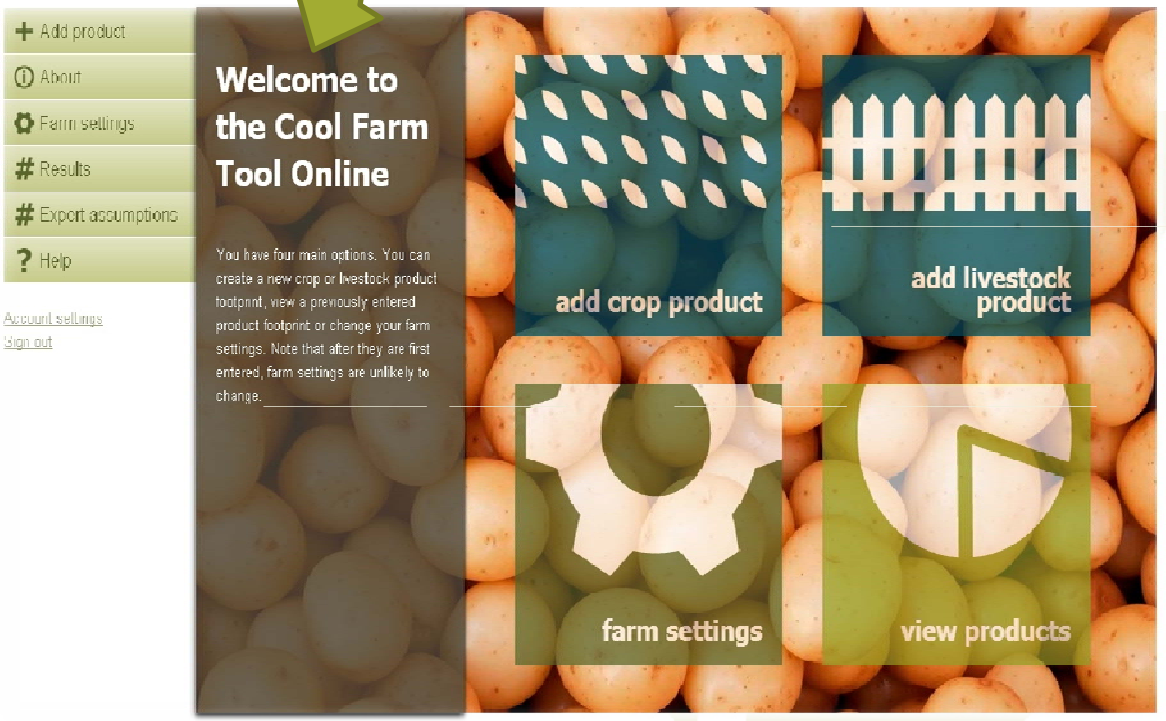
The Cool Farm Alliance will help millions of growers globally to make more informed on-farm decisions that reduce their environmental impact.

Initial Focus: GHG impacts

What is the CFT?

Started as on-farm greenhouse gas emissions calculator originally developed in Excel as a collaboration between Unilever, the University of Aberdeen and the Sustainable Food Lab.

Now managed and distributed as an on line tool by the Cool Farm Alliance; whose membership includes Tesco, Marks & Spencer, Unilever, Yara & Pepsico. The online version is aimed at making it easier for Producers to accurately calculate their footprint



The Cool Farm Tool

An **easy to use** and **standardised** on-line tool for calculating the **on-farm** environmental impacts, currently greenhouse gas emissions, associated with a range of **crop** or **livestock** products, applicable globally

- ✓Scientifically robust
- ✓Farmer-friendly
- ✓Industry-backed

Science-based

- Overseen by experts at University of Aberdeen
- Tool draws on established research, e.g.:
  - Livestock: IPCC Tier 1 and 2 calculations
  - Field N_2O: Bouwman model (used in IPCC)
  - Soil Carbon: Ogle model
  - Fertilizer emissions: Fertilizer's Europe
  - Energy: GHG Protocol, IEA and EPA
  - SAI Platform compliant

Farmer-friendly

- Farm management sensitive
- A scenario tool: what is vs. what could be
- Allows exploration of mitigation options
- 89% of Tesco growers would recommend to others (2013-14 pilot)

"The interactive nature of the CFT is fantastic and the 'what if' scenarios make it very captivating"

Feedback from US processor

Succeeding together – collaboration is key

- Cool Farm Alliance owned by an industry consortium
- Partners, members and supporters are drawn from across industry, academia, not-for-profits and consultants
- Benefit from tackling big challenges together and having a consistent approach to measurement

Multi-product: used in 25+ farm systems

- Navy Beans
- Potatoes
- Wheat
- Sugar
- Eggs
- Canola
- Lentils
- Coffee
- Tea
- Barley
- Cocoa
- Cotton
- Lettuce
- Tomatoes
- Strawberries
- Dairy
- Broccoli
- Rice
- Beets
- Apples
- Oranges
- Beef
- Soy
- Peas…

Usage

- **Unilever**: over 10,000 farms, embedding in its Sustainable Agriculture Code (SAC), as the requirement for the GHG metric.
- **PepsiCo**: >100 potato farmers covering about 800 hectares
- **Costco**: over 60 million dozens eggs p/a
- **McCain**: 15 countries about 30 sample farms
- 7 different partners: coffee 7 countries, 500 farms

>10,000 assessments across at least 33 countries and 28 crops

More case studies available online

Future Intentions

- Always underpin with rigorous science
- Developing (as fast as funds permit)
  - New metrics: water, biodiversity
  - Better decision support inc. financials
  - Analytics and aggregation
    - Field>crop>rotation>farm>landscape
    - Supply chain reporting
  - Improved import/export capability
  - “APP” functionality

Lots of info: www.coolfarmtool.org

info@coolfarmtool.org

@coolfarmtool

Agribusiness 2015

12 November 2014

Growing the sustainable agrisupply chain

www.agindustries.org.uk

aic agricultural industries confederation

Thanks to our sponsors

CULTURA Technologies

kiwa Partner for progress

East of England Agricultural Society

SAL