



COOL FARM ALLIANCE

Introduction to 'Cool Farm Tool 2.0'

September 2018



Welcome to the Cool Farm Tool

Select the pathway for the crop or livestock product you want to assess.
Alternatively, view your existing assessments by clicking "My assessments" on the menu bar..

Home page

Top menu navigation bar

Cool Farm Tool 2.0 New Features include: new pathways and metrics, enhanced user interface, better results, improved integration and much more.

CROPS



Potato



Rice



Other crops

LIVESTOCK



Beef




Dairy



Other livestock

WHOLE-FARM ASSESSMENT



Biodiversity

New beef
Pathway added

Quick start
new assessments

My assessments



My assessments

New assessment ▾

Aggregation

My projects

Demo2 ▾

| ?

English ▾

Welcome to the Cool Farm Tool Online!

You have 5 assessments

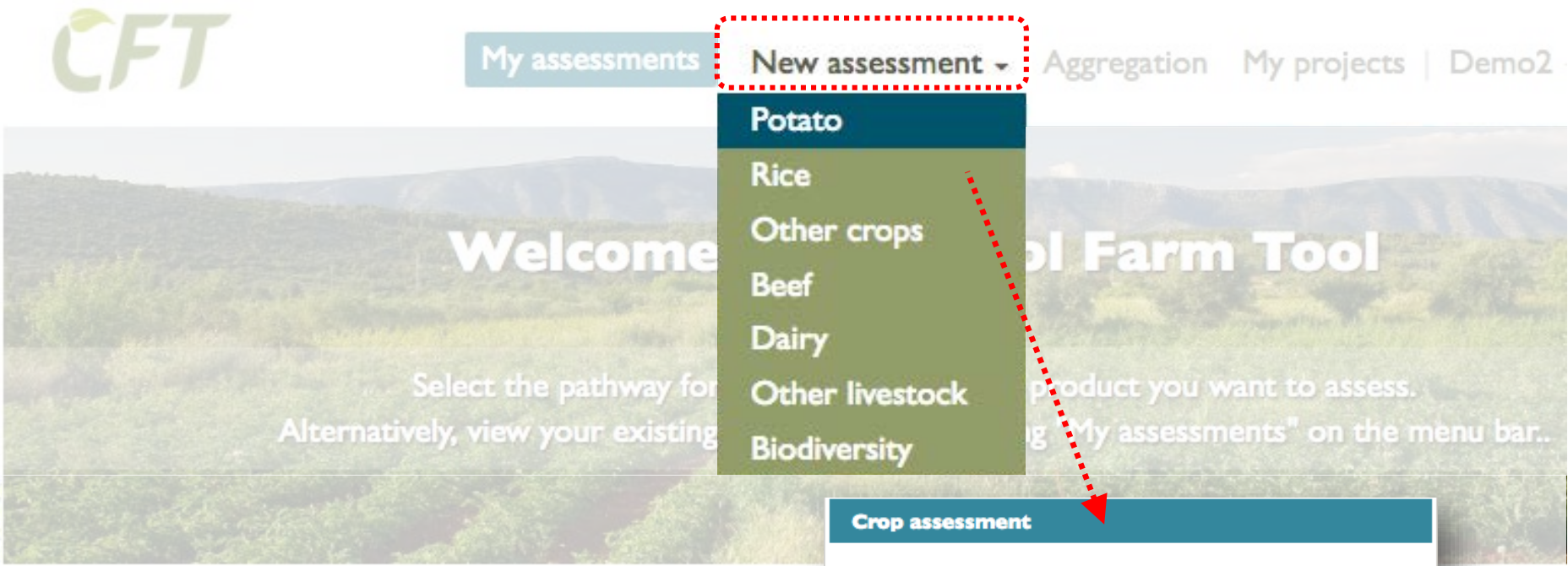
Note, crop footprints which are used as feed items in Dairy assessments cannot be deleted.

Assessment name	Pathway	GHG	Water	
rice_2018	Rice			<input type="checkbox"/>
potato_2018	Potato			<input type="checkbox"/>
cotton_2016	Other crops			<input type="checkbox"/>

All existing user assessments transferred to CFT2.0

Header arrows for sorting alphabetically

New assessment





First select product...

Cool Farm Tool 2.0 New Features include: new results, improved integration and much more.

Crop assessment

The following metrics are available for this pathway. Select all those that you require:

<input checked="" type="checkbox"/>  GHG	<input type="checkbox"/>  Water
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OK

...then select the metric(s) to be included



My assessments

New assessment ▾

Aggregation

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English ▾

Share

More...

potato_2018

Potato • Potato • Finished product: 35 tonnes • Yield: 35 tonne / ha

Crop

Soil

Inputs

Fuel & Energy

Irrigation

Carbon

Transport

Results

100%
Complete

I. Crop details ⓘ

Enter basic details about your crop to get started.

Crop name	Potato ▾ ⓘ
Harvest year	2018 ▾
Crop area	1 <input type="text"/> hectares ▾ ⓘ
Gross yield	40 <input type="text"/> tonnes ▾ ⓘ
Seed amount	2 <input type="text"/> tonnes ▾ ⓘ
Net yield	35 <input type="text"/> tonnes ▾ ⓘ
Assessment name	potato_2018 ⓘ

Summary

Crop	Potato
Year	2018
Finished product	35 tonne
Product yield	35 tonne / ha

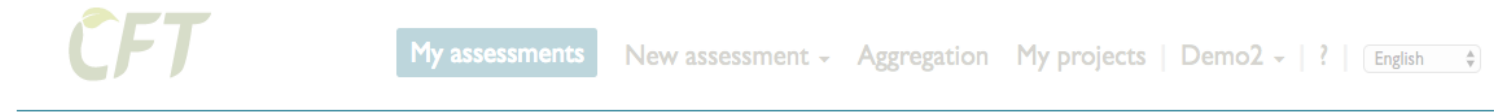
GHG emissions

Total ▾ **1,350 kg CO₂e**

Residue mgmt	8%
Soil / fertilisers	55%
Crop protection	6%
Land management	0%

Data entry page

Assessment name & descriptors



My assessments New assessment ▾ Aggregation My projects | Demo2 ▾ | ? | English ▾

potato_2018
Potato • Potato • Finished product: 35 tonnes • Yield: 35 tonne / ha

Share More...

Approximate completion status

Tabs for completion

Crop Soil Inputs Fuel & Energy Irrigation Carbon Transport

Results **100% Complete**

Data entry

I. Crop details

Enter basic details about your crop to get started.

Crop name: Potato

Harvest year: 2018

Crop area: 1 hectares

Gross yield: 40 tonnes

Seed amount: 2 tonnes

Net yield: 35 tonnes

Assessment name: potato_2018

Summary Results (see next slide)

Summary

Crop	Potato
Year	2018
Finished product	35 tonne
Product yield	35 tonne / ha

GHG emissions

Total: **1,350 kg CO2e**

Residue mgmt	8%
Soil / fertilisers	55%
Crop protection	6%
Land management	0%

Summary results

Assessment descriptors

Summary

Crop	Potato
Year	2017
Finished product	30 tonne
Product yield	30 tonne / ha

GHG emissions

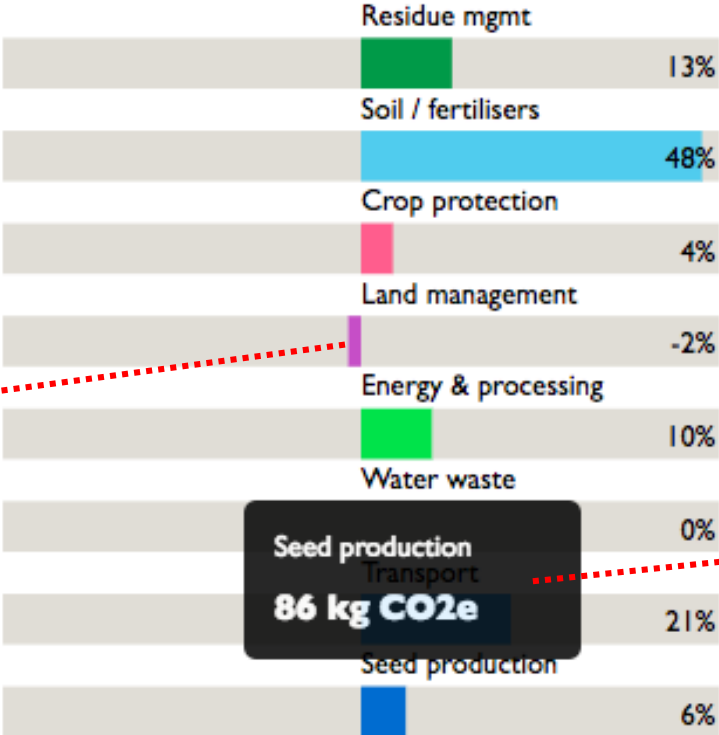
Water results

Click to see 'Total', 'By area' or 'By unit' results

Total

1,383 kg CO₂e

Negative values for sequestration visible

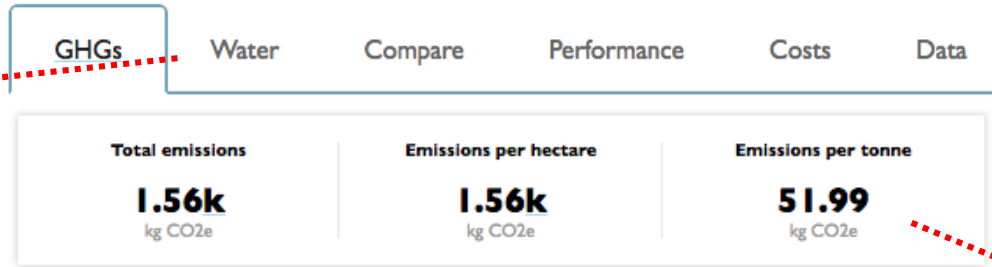


Click to switch between GHG and water results

Hover cursor to see value pop up

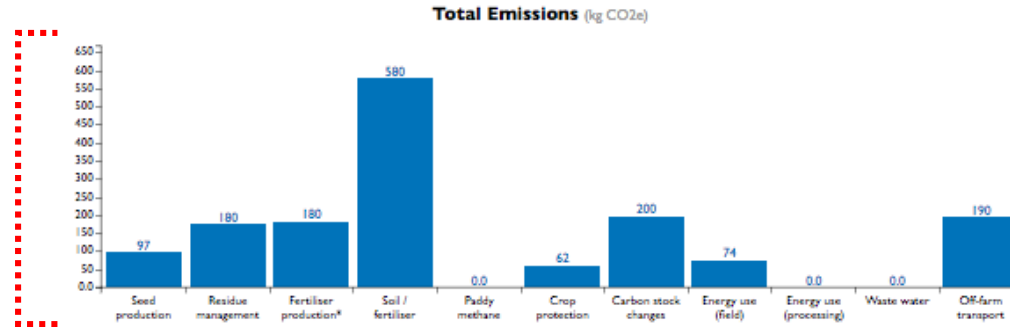
Seed production transport
86 kg CO₂e

Tab views
(see next slide)



Full results

Graph of emissions by category



Headline results

Detailed data (all values in kg) Hide data

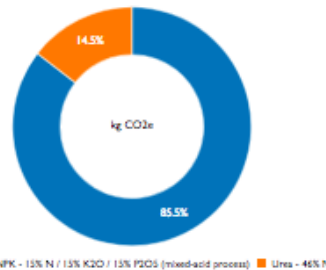
Sources	CO ₂	N ₂ O	CH ₄	Total CO ₂ eq	Per ha	Per tonne
Seed production	97.48	0	0	97.48	97.48	3.25
Residue management	0	0.59	0	175.59	175.59	5.85
Fertiliser production*	181.39	0	0	181.39	181.39	6.05
Soil / fertiliser	22	1.86	0	577.72	577.72	19.26
Paddy methane	0	0	0	0	0	0
Crop protection	61.50	0	0	61.50	61.50	2.05
Carbon stock changes	196.92	0	0	196.92	196.92	6.56
Energy use (field)	74.26	0	0	74.26	74.26	2.48
Energy use (processing)	0	0	0	0	0	0
Waste water	0	0	0	0	0	0
Off-farm transport	194.86	0	0	194.86	194.86	6.50

* Calculated with validated default values for fertiliser production.

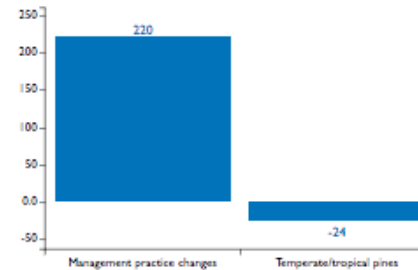
Detailed emissions by category and greenhouse gas (CO₂, N₂O, CH₄)

Emissions broken down within categories

Fertiliser production emissions



Carbon stocks and sinks



Energy, fuel and water emissions

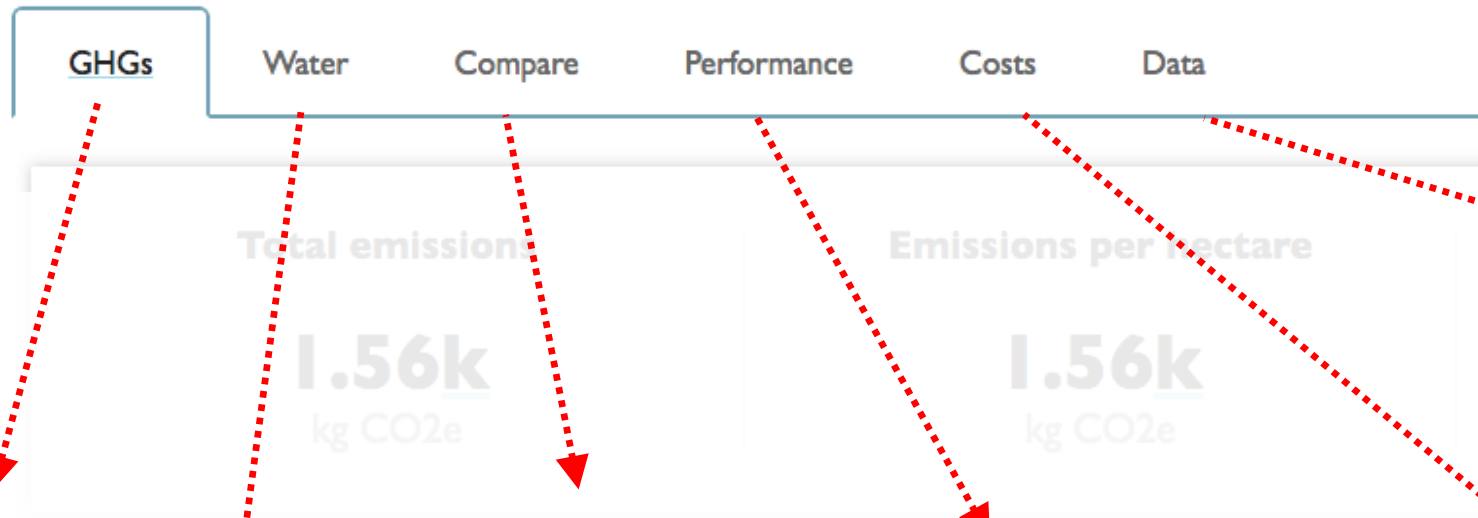


Transport emissions



Full results – tabs explained

Crop	Soil	Inputs	Fuel & Energy	Irrigation	Carbon	Transport
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See previous slide

Detailed water results
(only visible if dual metric pathway chosen)

Compare two assessments side by side

List of performance KPIs based on entered data

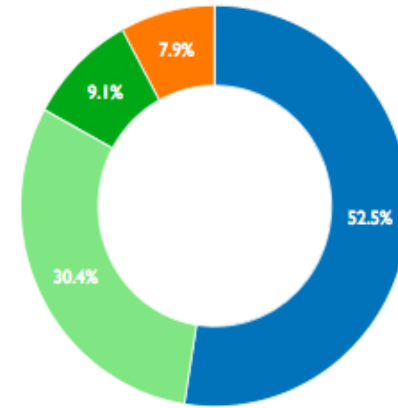
Calculate product profitability (see next slide)

Detailed view of all input data on one screen

Income		
Total	Per hectare	Per tonne
£8.22k	£8.22k	£274
Expenditure		
Total	Per hectare	Per tonne
£6.57k	£6.57k	£219
Profit		
Total (margin)*	Per hectare	Per tonne
£1.65k	£1.65k	£55

* Profit figures are estimated based on the data entered

Breakdown of expenditure



■ Crops and inputs ■ Energy, fuel and water ■ Product ■ Transport ■ Other

Costs

...then Tool calculates Income, Expenditure and Profit

Information on this page may be sensitive and WILL NOT be shared with other assessment information that you choose to send to your customers.

Currency: Sterling (£)

INCOME

Product	Net amount	Value (£)	Units	Total (£)
potato_2017	30 tonnes	274	Per tonne	£8.22k
Income sub-total				£8.22k

EXPENDITURE

Crops and Inputs	Net amount	Value (£)	Units	Total (£)
Seed	2 tonnes	500	Per tonne	£1k
Compound NPK - 15% N / 15% K2O / 15% P2O5 (mixed-acid process)	250 kg / ha	5	Per kg / ha	£1.25k
Urea - 46% N	30 kg / ha	10	Per kg / ha	£300
Post-emergence		900	Total value	£900

User can enter income and expenditure values of all data entered...

Financial data are NEVER included if other results are shared using share codes

Top menus

[Members only]
Information for
special projects

Edit user
settings

Help

Change
Tool
language

[Members only]
Aggregate data
received
via share codes



My assessments

New assessment ▾

Aggregation

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English ▾

potato_2017

Potato ▸ Potato ▸ Finished product: 30 tonnes ▸ Yield: 30 tonne / ha

Share More...

[Members only]
Enter code to
share assessment
to other user(s)

Data export & send
crop data for use
as animal feed

Results

100%
Complete

Crop	Soil	Inputs	Fuel & Energy	Irrigation	Carbon	Transport
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We value your feedback!

The Cool Farm Tool is an agile development, so we can quickly make updates based on user feedback.

Please email us with your feedback:
info@coolfarmtool.org