Category Outcome-based

Objective To demonstrate compliance with the GHG emissions requirements of the EU Renewable

Energy Directive

To provide the carbon footprint associated with the production of 1 tonne of crop in the

Prairie Provinces of Canada

Geographical Canada (Prairies)

Functionalities Provide a footprint value/metrics

General description of the tool applicability

Target

Farmers and food supply chain managers

audience

Developers Agriculture and Agrifood Canada (AAFC) and

Canola Council of Canada - latest update: 2014

Format Excel file to download

Cost (tool and Free

data)

Past or Cargill

current users

Commodities covered	
Canola	
BMPs covered	
None	

Indicators covered

GHG emissions

Data inputs

0	Data requirements	Primary data required	Default values	
	Environmental conditions	Crop type, province, and legal land description (township, range, section, quarter-section, meridian)	n/a - no default value	
	Crop management	No	n/a - no default value	
	Carbon sequestration/storage	No	n/a - no default value	
	Livestock	n/a	n/a - no default value	
	Energy use	No	n/a - no default value	
	Primary processing	No	n/a - no default value	
	Water	No	n/a - no default value	
	Transport	No	n/a - no default value	
	Others	No	n/a - no default value	

V	Scope	✓	Farm level		Supply chain
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Very easy, very quick to fill - all information can be filled quickly and easily by the producer Ease of use for the data collector

Not disclosed

Modelling methods

O Dataset sources used for modelling

0	Consistency of the model with the goal and scope of the tool	Consistent - the model provides a single result for the carbon footprint of 1 tonne of crop to quickly check for compliance with EU Renewable Energy Directive
0	Transparency and quality of documentation	Guidance document: Yes - instructions are given directly in the tool
		Methodology document: No, lack of transparency - no background information publicly available
•	Conformity of the methodology with the current state-of-the-art agronomic and environment sciences	Fairly consistent (according to the information available) - carbon footprint values are approved for the International Sustainability and Carbon Certification (ISCC) sustainability certification scheme
0	Methodology	GHG emissions calculation based on the results of a study done in 2014

Outputs / Results

Final value only Q Results

Analysis No analysis available

O Limits of the tool/model

Only 2 crops are included in the model and the results are only based on the location of the farm. Cannot be specific to a particular farm.







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