





Product Carbon Footprint Pilot Project from Québec

Maxime Alexandre

Industrial development adviser Government of Québec

Sophie Fallaha

Senior Analyst Interuniversity Research Center for the Life Cycle of Products, **Processes and Services (CIRAIG)**



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Québec

Outline



Québec

- The largest of 10 Canadian provinces (2,2 x larger than Chile)
- Population: 7.9 Million (2nd most)
- Official language: French
- Abundance of natural resources
- Main industries include:
 - Agrofood, mining, aerospace, energy and forestry
- Main export partner: USA (70%)
- Electricity production: 96% from hydropower (2009)





Context of the PCF Pilot Project



- 2010 provincial budget
- 24 M\$ over 3 years



Encourage the commercialization of products made in Québec that have obtained a carbon footprint certification



No mandatory scheme planned



Objectives of Québec's government

Add value to low carbon Québec made products

- Through the promotion of carbon footprint labeling
 - Focus efforts on efficiency improvements and cost saving opportunities through GHG reductions
 - Gain competitive advantage
 - Drive innovation
 - Prepare businesses to new requirements and legislation
 - Promote low carbon consumption





International Context of Product Carbon Footprint



National Programs:

- Thaïland
- South Korea
- Japan

Pilot Project:

- Germany
- France
- European
 Commission

Certifications:

- Carbon Trust
- SGS

Why a Pilot Phase ?

- Context:
 - Numerous calculation methodologies
 - Multiple inventory databases
 - No uniform requirements
 - Verification
 - Certification
 - Communication





- Guide the roll out of the subsidy program
- Harmonization of international best practices



Key players



Participating businesses

Product	Size		Product			Supply chain			Market			PCR	
	SME	Large	End	Intermediate	Service	Simple	Intermediate	Complex	Local	National	International	Existing	No existing PCR
Aluminum ingot													
Cloud computing													
Food packaging													
De-inked kraft pulp													
Yogurt													
Medication packaging													
Wood product													
Ferro-Silicium													
Biomethanol from biomass													
Natural disinfectant													





Verif.

Certif.

• Core of the pilot: Assess reproducibility of the results

- Baseline methodology:
 - GHG Protocol Product Life Cycle Accounting and Reporting Standard (WRI & WBCSD, 2011)
- Product Category Rules (PCRs):
 - If available, use 1 or more PCRs
 - Evaluate the compatibility of PCRs with GHG Protocol Product Life Cycle Standard









Certif.

Comm.









Two-fold approach : Critical Review and Source Data Auditing

- Critical review:
 - All reports are submitted to critical by an independent external reviewer (LCA expert)
- Objectives
 - Verify the consistency and compliance of the study with the requirements of the methodology (Program guidelines, Protocols, PCRs)
 - Give an overall appreciation of the quality of the study







Two-fold approach : Critical review and Source Data Auditing

- Source Data Auditing:
 - Companies audited by BNQ
- Objectives



- Apply ISO 14064-3 principles to scope 3 GHG assertions
- Issue a verification statement of the calculated PCF based on a « reasonnable » assurance level (highest level)

Decide on the overall *auditability* of PCF assertions Issue recommandations on required auditing mechanisms for PCF





Main question:

or

- Develop a certification specific to Québec ?
- Provide guidance towards to most relevant existing certification according to target markets?
- To get a better insight, address the following questions:
 - How long does it usually take to get a certification ?
 - How much does it cost?
 - How long is it valid ?
 - What is the usual certification process?
 - What does a program operator needs to endorse (administrative details, verification process, etc.)?





Certif. Comm.



- Absolute number
- Contribution of the life cycle stages
- **Benchmark**



Verif.







Certif.

Comm.



- On the product
- At the store
- Internet
- QR codes for smartphones •







Schedule



Quantif.

Verif.

Comm.

Use of 4 PCRs : up to 40% difference between PCF

• Not the same system boundaries



Quantif.

Verif.

Certif.

Comm.

The importance of the business context

North America: Producers must wash their eggs which strips them of a protective coating protecting the egg from bacteria ig Refrigeration necessary







Verif.

Comm.

Parameters where PCRs should bring prescriptiveness





Quantif.

Verif.

Certif.

Comm.

Parameters where PCRs should bring prescriptiveness



Specify requirements for recycling modelling

 Up to -7 % of global PCF depending on the product from cut off rule assumption to system expansion assumption

Specify a baseline scenario for transportation from supermarket to consumer

 - 13 % on global PCF if product transported by car over 2 km instead of 15 km

Specify the processes for which primary data are needed

 - 6 % if generic data are used instead of primary data for milk protein

Conclusions

- PCF pilot project from Québec
 - Bring forward the limitations of best practices regarding:
 - quantification
 - verification
 - certification
 - communication
- Contribute to the harmonization of international best practices
- Participative initiative: feedback and input are welcomed, results will be shared
- Final results early 2013



Thank you for your attention!

Québec 🏽 🕯







www.carbonfootprintquebec.org



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