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Context and Goals

The impact of biomass sustainability guidelines and possible binding extensions on Canada-EU solid biomass trade has not been examined in detail. This report explores the potential barriers to trade between Europe and Canada as a result of conflicts between the Renewable Energy Directive and existing and potential biomass supply chains. It presents an analysis of EU RED in comparison with existing forest certification systems, operational definitions, criteria, and best management practices associated with biomass harvest in Canada. These systems are compared and contrasted, and analyzed to determine whether conflicts may arise due to differences in intent or choice of terminology.

Compared to EU policy criteria: – Meets or exceeds the criteria;
 – Partially meets the criteria; – Does not meet criteria

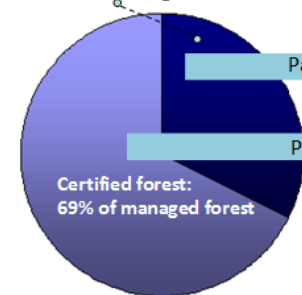
EU CRITERIA	EU policies		Canadian provincial policies and guidelines								Certification systems in Canada				
	RED	Guidelines for solid biomass	AB	BC	MB	NB	NL	NS	ON	QC	CSA 2809-08	FSC BC	FSC Boreal	FSC GLSL, Maritimes	SFI
Primary forest															
High conservation value area															
High carbon stock area															
Undrained peatland															
Waste															
Greenhouse gas balance															
Greenhouse gas calculation															
Direct land use change (GHGs and/or loss of forest)															
Indirect land use change (GHG calculation)															

 – Mandatory standards for best management practices (BMPs) exist for the issue;
 – Non-mandatory BMP guidelines exist for the issue; – Does not mention BMPs for the issue

BEST MANAGEMENT PRACTICES	EU policies		Canadian provincial policies and guidelines								Certification systems in Canada				
	RED	Guidelines for solid biomass	AB	BC	MB	NB	NL	NS	ON	QC	CSA 2809-08	FSC BC	FSC Boreal	FSC GLSL, Maritimes	SFI
Considerations at site, stand, and landscape levels															
Protection of high conservation value areas															
Protection of soil values															
Protection of water quality and quantity															
Retention of standing/downed biomass															
Whole tree harvesting															
Stump harvesting															
Ash recycling															
Clearcutting															
Forest management plans															

Managed Crown forestland in Canada

Non-certified forest: 31% of managed forest



Provincial policies and guidelines

Voluntary certification

EU standards

Path 1
Uncertified; complies with Best Management Practices

Path 2

100% certified Sustainable Forest Management

EU markets

Paths indicate the stringency level of SFM criteria met by Canadian biomass feedstocks. Provincial policies and guidelines, and voluntary certification systems **do not meet** the sustainability criteria potentially applicable to solid bioenergy feedstocks under the European Union Renewable Energy Directive. Therefore biomass originating from these systems will likely be eligible for trade on EU markets, but **ineligible to count towards EU Member State renewable energy production targets**.

Adapted from Kittler, B., W. Price, W. McDow and B. Larson. 2012. Pathways to Sustainability. Environmental Defense Fund. 54 pp.

Results

National and regional certification standards, provincial policies, legal standards, and recommended management guidelines were analyzed to determine the extent to which the EU RED criteria and listed best management practices are addressed by Canadian provincial forestry policies and voluntary certification systems.

The proposed creation of sustainability criteria for certain aspects of solid bioenergy feedstock production are **at times based on concepts of sustainability that conflict with current Canadian policies and practices related to primary forests and greenhouse gas accounting**.

Best management practices specified in the proposed EU criteria are met or exceeded in most provinces, and provincial policies often include dimensions of sustainability not covered by proposed EU criteria.

Conclusions

Fundamentally conflicting perceptions of sustainable procurement may potentially result in barriers to solid bioenergy feedstock trade and market development between Canada and the European Union, if not addressed by the involved parties.

If the EU applies the existing Renewable Energy Directive policy on **primary forest preservation** to solid forest bioenergy feedstocks, it may not effectively identify Canadian intensive biomass harvesting as sustainable, due to conflicting notions of sustainability with regards to primary forest use.

As well, Canada does not currently apply a **greenhouse gas accounting system** to the forest bioenergy feedstock supply chain, which may prevent certification to the EU RED standard.