

Workshop on Material Flows and Environmental Impacts behind International Trade of
Japan

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Invited speech 1:

Challenges in assessing the environmental impacts of the development of natural resources

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Japan is an important export market for Canadian natural resources. In 2003 the export of Canadian forest products to Japan had a value of \$C2.2 billion [¥ 180 billion] while the export of mineral products was \$C1.3 billion [¥ 110 billion]. Canada enjoys extraordinary economic and social benefits thanks to its rich endowment of natural resources. The natural resource sectors and allied industries have been an engine of economic growth and job creation for generations. In that regard, the development of natural resources implies preservation of the productive capacity for the indefinite future. Strategies to attain sustainability are different between the forestry sector and the mining sector, but in each case the preservation of the environment is an important pillar.

Canada's forest management regulations and policies are based on science and the principles of sustainable forest management that are among the most stringent in the world. In addition to our regulatory framework, the Canadian forest industry has embraced forest certification as a means to demonstrate its commitment to SFM. As a result, Canada is now the world leader in certified forest area by a wide margin. Standard life cycle inventory data for wood products are available.

The Minerals and Metals Policy of the Government of Canada incorporates the notion of using the most efficient, competitive and environmentally responsible methods possible to find, extract and produce minerals and metals, as well as to manage concomitant waste rock and tailings. It is also understood that current investment in human and physical capital benefits future as well as present generations. In regard to the life cycle inventory phase, I will discuss what data are currently available and how to address some data gaps. On the question of material flow, mining activities are associated with the displacement of large quantities of material, which potential environmental impacts cannot be related to. It can be demonstrated that using adequate management techniques, the environmental risk associated with waste rock and tailings can be significantly reduced. Another challenge to be discussed is the current use of apparently overprotective characterisation factors for metals. This issue has been addressed by the Appeldoorn Declaration and a process has been instituted to resolve it. Regulations can be an efficient backstop to reduce environmental impacts. Some aspects of Canadian regulations specific for the mining and metal sectors will also be discussed.