

# Mining and shipping traffic in the Canadian Arctic

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Gravel loading, Kirkenes (Norway), September 2014.  
F. Lasserre



BORDERS IN  
GLOBALIZATION

**Borders in the North Summer Conference**

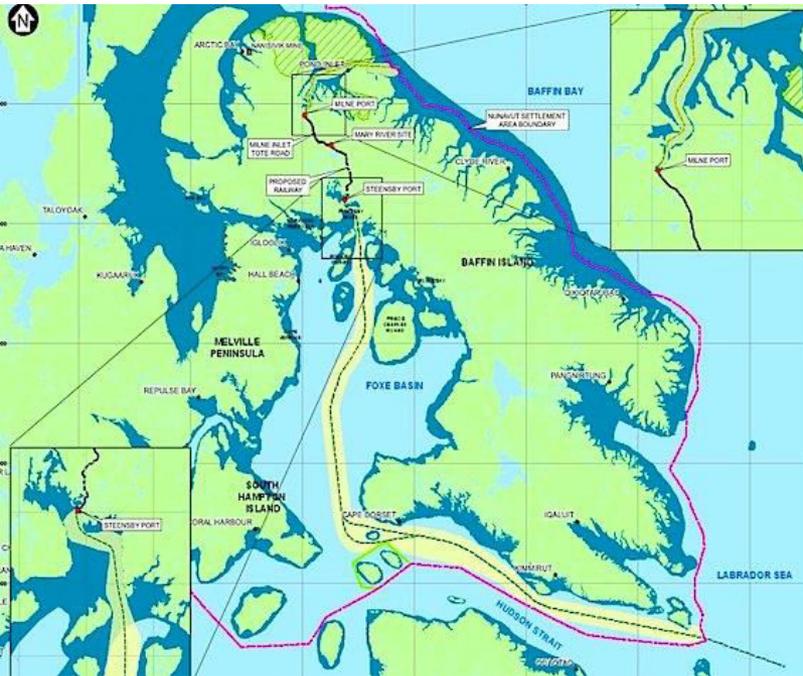
June 16 – 18, 2015

Yukon College, Whitehorse, Yukon

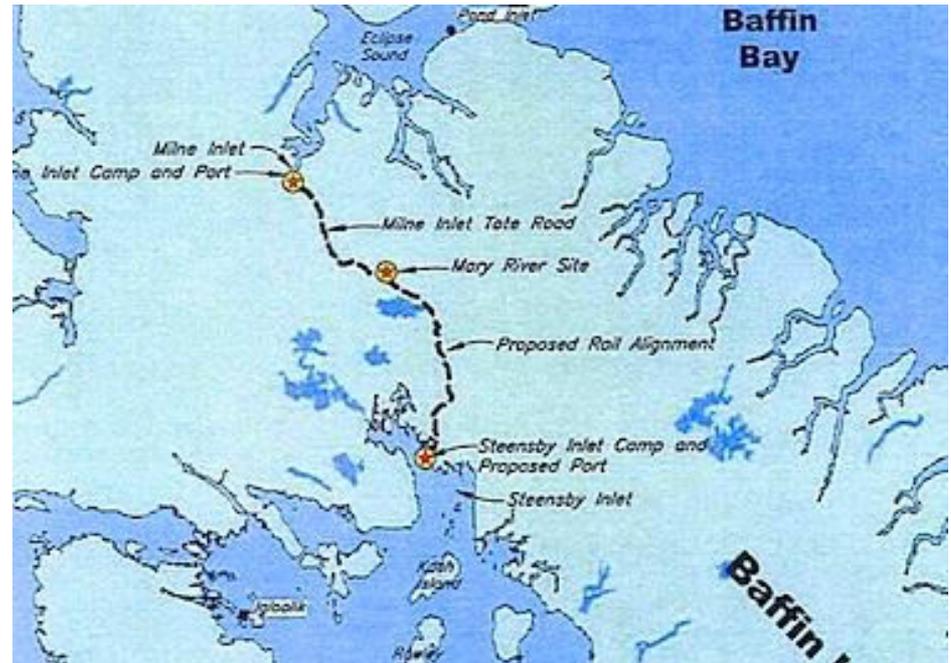


# Arctic mining implies complex logistical solutions

## Example of Mary River iron mine



*Nunatsiaq News*



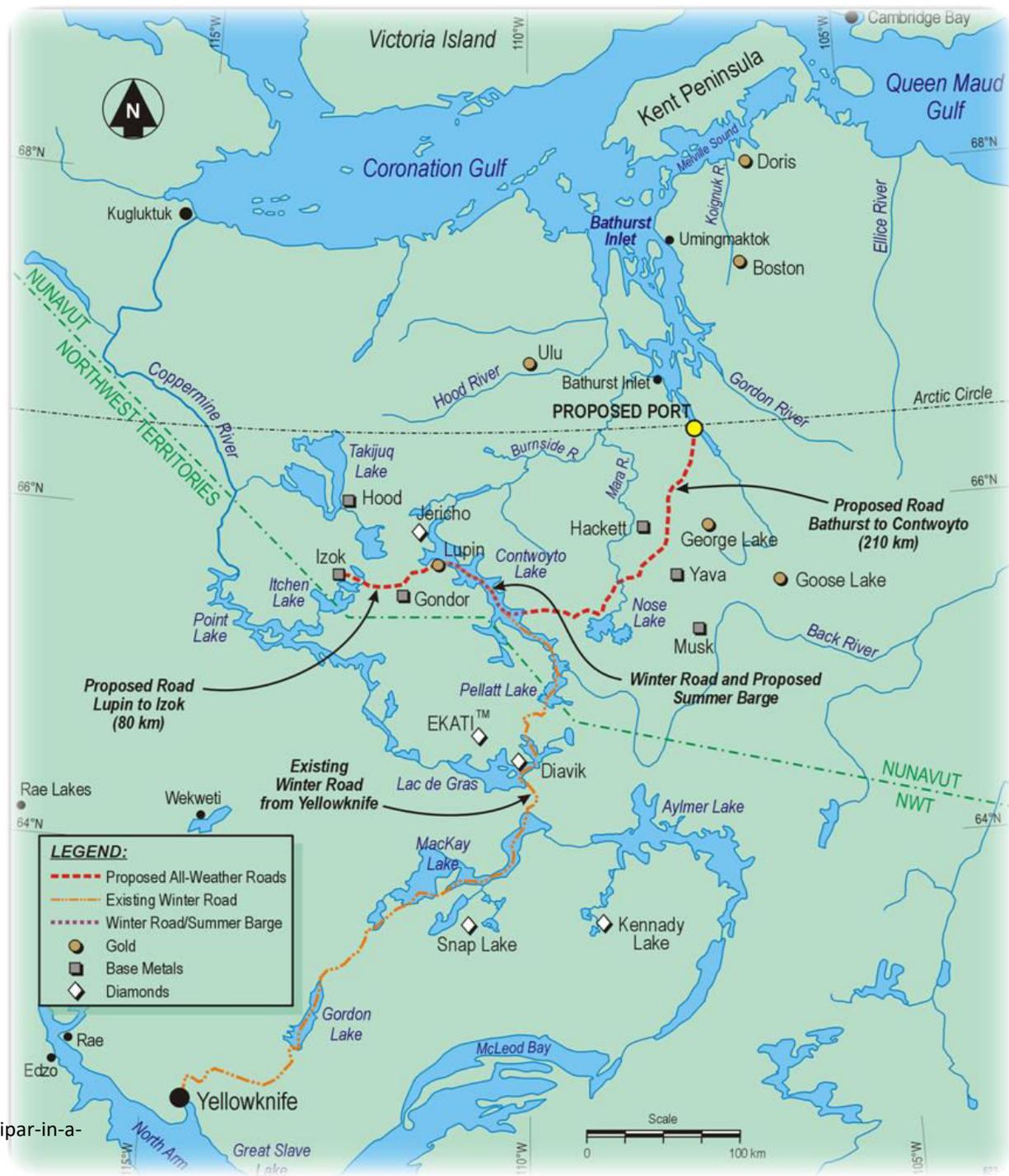
Mary River (ArcelorMittal), site discovered in 1962  
Railway construction started in 2012 towards Steensby Inlet for year long shipments  
2013: world prices dip -> road solution through Milne Inlet and summer shipments

## Problem :

- organize the logistics
- of remote continental mines
- in a harsh climate

## Dilemma :

- overland solution southwards,
- or short overland connection to a port with sea logistics ?





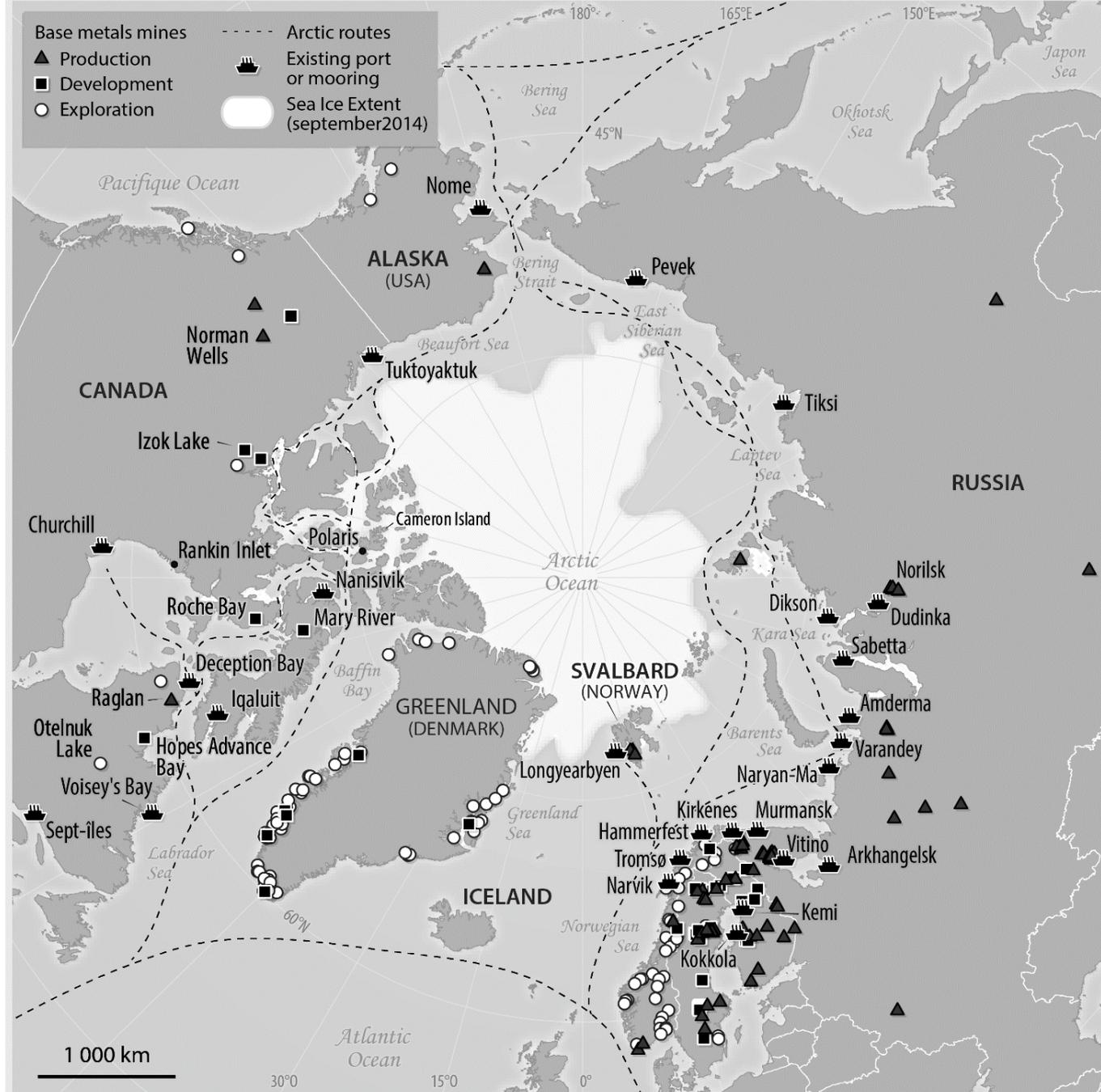
Ice road: easy to build  
Dangerous as thinner with warmer winters  
Shorter season with CC  
-> No longer a solution

High costs of road construction in the Arctic  
No gravel  
Remoteness

-> More than 1 M\$/km against 300 000 \$ in the south (ice road about 80 000\$/km)

Several mines have long been operated in the Arctic, especially in the European Arctic

- Advantage of ice-free ports
- Railway connections to major ports
- Remoteness sometimes a factor for sea solutions : Norilsk with Dudinka



Realized by: Pierre-Louis Tétu, Université Laval, 2015

Graphic editing: Department of Geography, Université Laval, 2015

New railway projects  
in Scandinavia to  
connect mines and  
Arctic ports :

- Narvik (already connected to Kiruna), Tromsø on Norwegian Sea,
- Kirkenes on the Barents Sea)

Why ?

- Ice free ports unlike Baltic Sea
- Congestion of rail links southwards
- Port saturation



Railway projects in northern Scandinavia

Source: THE WESTERN ARCTIC RAILWAY - Kolarí - Muonio - Kilpisjärvi - Skibotn

In the Canadian Arctic:

- Rise of mining projects despite crisis
- Logistical question pointing more often to rail or road solutions,
- A few mining projects opting for sea port solution

-> mining could be an engine for increased destinational shipping in the Canadian Arctic

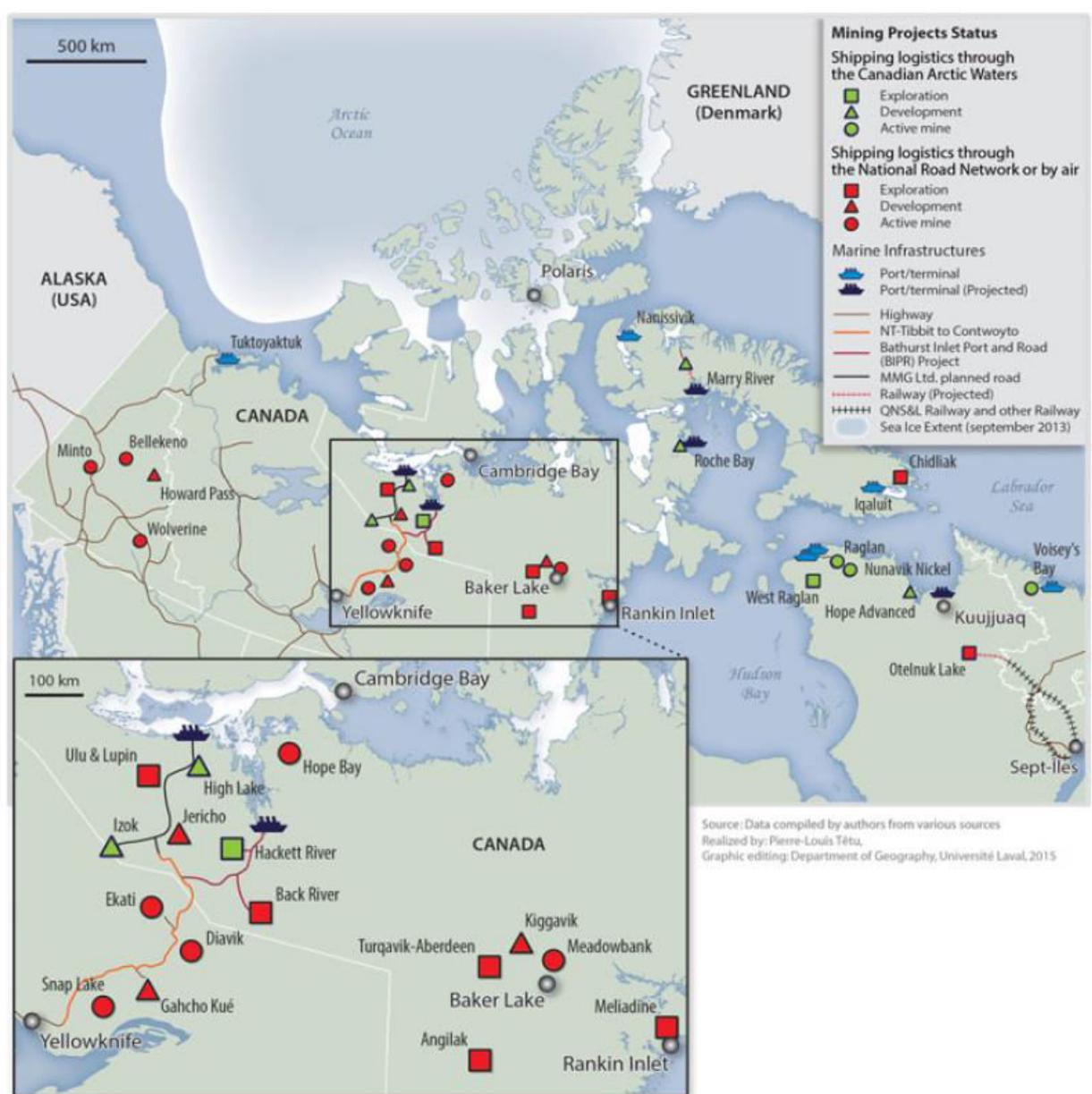


Figure 1. Location mining projects in the Canadian north by status.

Thank you !

Port of Churchill  
F. Lasserre

