



# Canadian Wood Pellet Industry Update

European Pellet Conference 2011

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# Outline

- Canadian pellet production
- Existing markets
- Distribution
- North American market situation
- New market focus: Republic of Korea
- Torrefaction project



## Canadian annual pellet production capacity as of January 1, 2011 – tonnes

	<b>Plants</b>	<b>Average</b>	<b>Largest</b>	<b>Total</b>	<b>%</b>
Western Canada	16	118,000	400,000	1889,000	71%
Eastern Canada	18	43,000	120,000	774,000	29%
All of Canada	34	78,000	400,000	2663,000	100%



## Canadian pellet shipments – tonnes

	<b>2010</b>	<b>2011F</b>
Europe	1,350,000	1,750,000
North America	90,000	90,000
Japan	60,000	100,000
	<b>1,500,000</b>	<b>1,990,000</b>

\*estimates only – Statistics Canada does not track wood pellets as a separate product and producers are reluctant to share data



## Overseas Pellet Distribution Chain

- Pellets loaded on rail cars or truck at plant site
- West: rail to Vancouver or Prince Rupert
- East: truck to Belledune or Halifax
- Unloading and temporary storage at terminal
- Pellets loaded on bulk carrier

# Canadian pellet shipping routes





# European markets for Canadian pellets

- Belgium – power generation
- The Netherlands – power generation
- United Kingdom – power generation
- Denmark – power/district heating
- Italy – residential heating
- Canadian market share in Europe ~ 15%



## North American Market Situation

- GHG reduction is not a top political priority
- No political or industry support for biomass energy in US or Canada
- Pellets can't compete with low natural gas and coal prices
- Pellets are cost competitive only in areas not served by natural gas



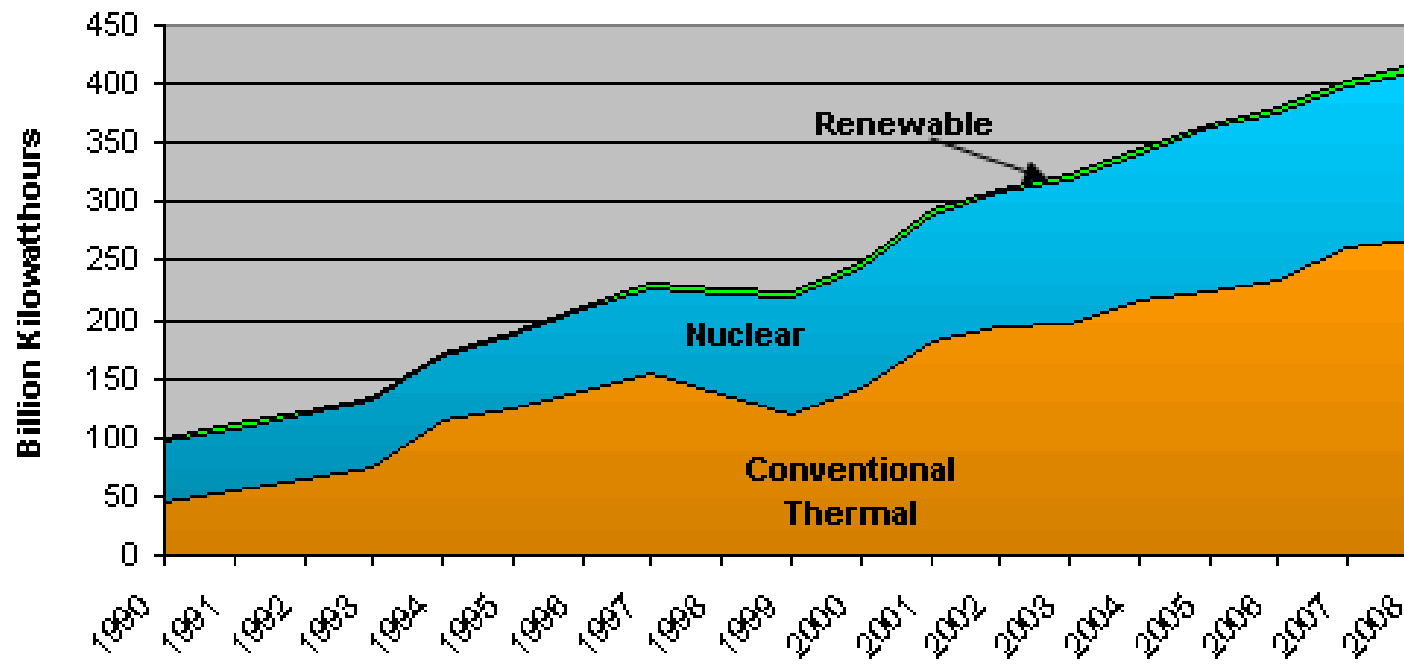
# Market focus: Republic of Korea

- Rapid economic growth
- World's 10<sup>th</sup> largest energy consumer
- 5<sup>th</sup> largest crude oil importer
- 2<sup>nd</sup> largest coal importer
- 64% of electricity is thermal



# Electricity generation by type

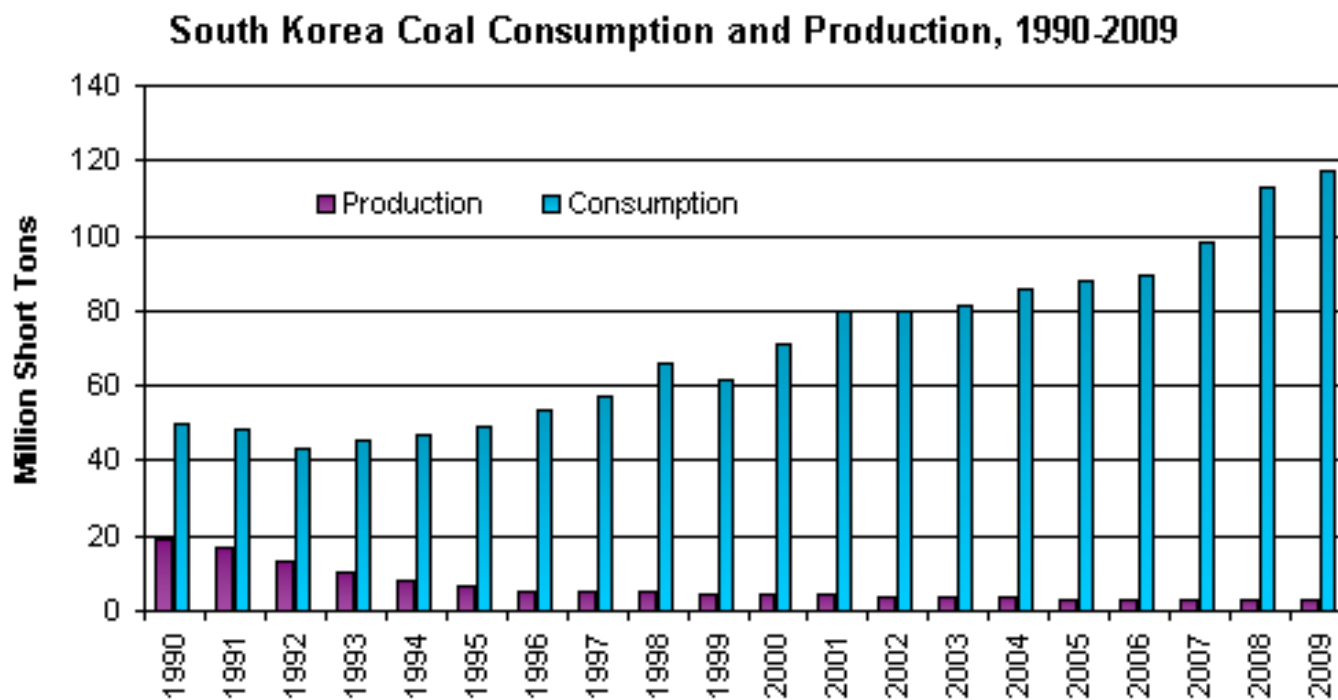
South Korea Net Electricity Generation by Type, 1990-2008



Source: EIA



# Korean Coal Consumption is Growing



Source: EIA



## Korean coal consumption (2008)

- Power generation: 64 million tons
- Steel mills: 58 million tons
- Total: 122 million tons
- Co-firing 5% with wood pellets would require 6 million tons of wood pellets (assuming 1.5 tons pellets per ton of coal)
- Equals 3 times Canada's current capacity



# Korean GHG strategy

- Nov 2009: announced 30% reduction from projected level by 2020
- Sep 2010: announced 374 companies must meet government GHG reduction targets
- RPS for power generation: 2012 – 2%
- Increase ½% annually until 2020 – 10%



# WPAC torrefaction project

- 2010 – review of 50+ technology providers
- Ranking and technology selection
- 2011 – capital raising and plant construction in British Columbia
- Target 5 tonnes/hour – 30,000 tonnes/year



Thank  
you!

