CLEAN AIR
RENEWABLE ENERGY
COALITION

www.cleanairrenewableenergycoalition.com

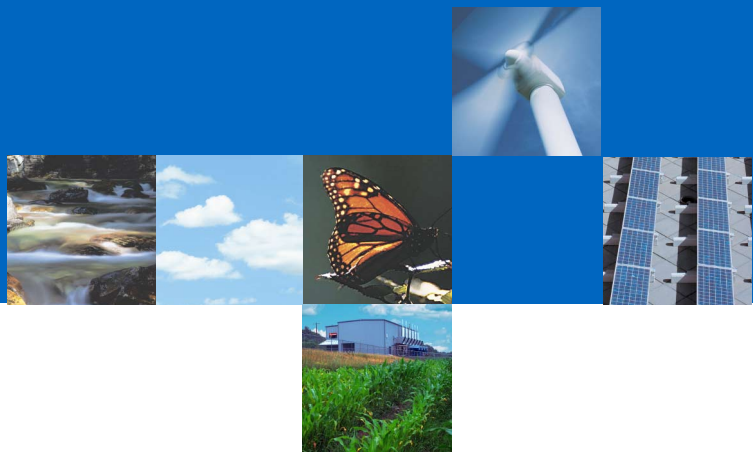
Fact Sheet 7
Geothermal Power

2001 Domestic Capacity	0 MW
Technology Definition	Energy is recovered from geothermal systems, by flowing superheated water to surface from production wells. Single, double flash systems use steam turbines and binary plants use heat exchanger and turbine systems.
Product(s)	• Electricity • Natural hedge against hydrocarbon fuel price • Emission reductions • Environmental attributes not directly associated with ERs
Equipment Manufacturing centers	• US, New Zealand
Technology Stage	• Mature technology
Applications	• Utility scale electricity generation (British Columbia)
Cost estimate for generation	• Cost: C$75-95/MWh[1] Can be as low as $55/MWh
Impacts: Positive	• Low emissions associated • High capacity factor and availability • Reliable, dispatchable power generation
Impacts: Negative	• Potential visual impact • Natural contaminants in water present operational problems
Potential	• BC Only, 185-950 MW • Meager Creek geothermal site exploration underway by private developer.
Existing Barriers in Canada	• High initial exploration costs and resource uncertainty. • Unproven commercial production resource in BC, Canada • Limited high quality resource in Canada.

1. Ref. John Lund, Director of Geo-Heat Center, Oregon Institute of Technology, US$50-65 MWh, converted at C$1.50/US$1

CLEAN AIR
RENEWABLE ENERGY
COALITION

www.cleanairrenewableenergycoalition.com



Axor • BC Hydro • BP Canada Energy Company • Benign Energy Canada Inc.• Dofasco • Enbridge • Federation of Canadian Municipalities • Friends of the Earth • International Institute for Sustainable Development • Ontario Power Generation Inc. • Pembina Institute for Appropriate Development • Pollution Probe • Shell Canada Ltd. • Suncor Energy Inc. • Toronto Environmental Alliance • Toronto Hydro