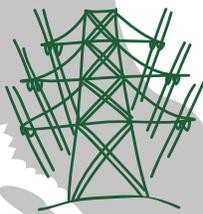


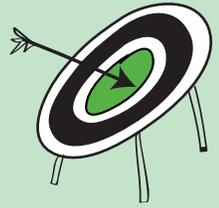
Energy
GREENJOBSBC
 BUILDING A GREEN ECONOMY

BC's largely **HYDROELECTRIC** electricity system means that the province...



has one of the **cleanest** and most **affordable** electricity systems in **NORTH AMERICA.**

With the right **POLICY CHOICES,**



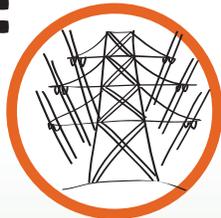
BC can build on this legacy to become a **GREEN ECONOMY LEADER**



FOCUSING ON:



Energy conservation



Renewable energy generation



Manufacturing and Development 'clean technology'



Energy Conservation and Efficiency



Energy conservation & efficiency



frees up 'clean' BC **ELECTRICAL POWER**



to use as a substitute for **FOSSIL FUELS**

which means

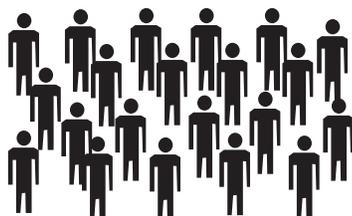


Less GHG greenhouse gas emissions.

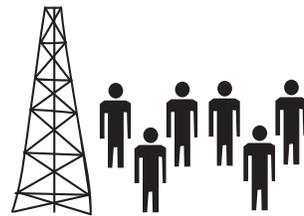
Economic activity associated with **ENERGY EFFICIENCY** and **CLEAN TECHNOLOGIES**



creates significantly **MORE JOBS** per \$1 million in increased output



than activity in the **FOSSIL FUEL SECTOR.**



From the perspective of job creation, investments targeting growth in energy efficiency and clean technology are likely to be more cost-effective than ones focused on stimulating the fossil fuel sector.¹

1. Sources: BC Stats (2008), Provincial Economic Multipliers and Lee and Carlaw (CCPA, 2010) Climate Justice, Green Jobs and Sustainable Production in BC

Moving to a low GHG
FREIGHT and
PASSENGER
transportation model...

TRANSPORTATION



1 can create **JOBS**
10,000s of



TRANSPORTATION EMISSIONS are moving in the **WRONG DIRECTION.**

2 can improve **HEALTH**,
the **economy** and
quality of **LIFE**

by reducing problems associated with traffic congestion and long commutes.

Fortunately, **TRANSPORTATION** that is **GOOD** for the **ENVIRONMENT** is **GOOD** for the **economy.**

TRANSPORTATION is the single largest source of **GHG emissions** in BC.

since 1990:



HEAVY DUTY DIESEL

almost DOUBLED

38% OF ALL EMISSIONS. 28% above 1990 baseline levels



almost as much carbon as gasoline trucks in 2010



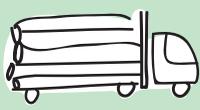
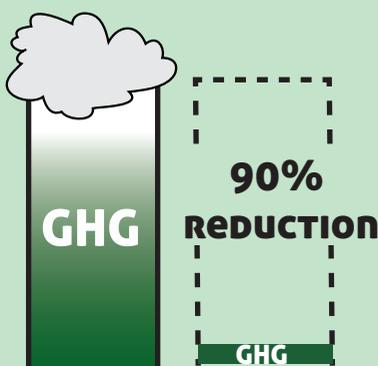
LIGHT DUTY TRUCKS
(pickups and SUVs)

more than 2X

LIGHT DUTY GASOLINE
(cars and motorcycles)

\$1 m **JOBS**

Investments in mass transit and railways in North America create between 9 and 22 jobs per \$1 million.²



Moving freight by rail reduces GHG emissions by almost 90% compared to moving the same goods with conventional fossil fuel powered trucks.

Public transit use can reduce GHG emissions by 90% or more per person compared to automobiles travelling the same distance.¹



bus and train drivers



warehouse & shipping work



vehicle manufacturing & maintenance



trades & construction³



Investments in needed public transit and railway upgrades in BC could create **230,000 TO 270,000 PERSON-YEARS** of employment

CONGESTION



wasted fuel



GHG



lost productive time



Traffic congestion costs Vancouver's economy between \$400 - \$628 million annually.

An example: Policies to reduce commuting distances in Portland Oregon = **\$2.6 billion in savings per year.**⁴

1. Canadian Urban Transit Association (2010), The Economic Impact of Transit Investment: A National Survey.

2. See Canadian Urban Transit Association (2010), The Economic Impact of Transit Investment: A National Survey and "Measuring Success: the Economic Impact of Transit Investment in Canada,"; Pollin, Heintz, and Garrett-Peltier (2009), The Economic Benefits of Investing in Clean Energy: How the economic stimulus program and new legislation will boost U.S. economic growth and employment. Center for American Progress.

3. Thompson and Duffy (2010), Jobs, Justice, Climate: Building a Green Economy for BC.

4. Joe Cortright/ CEOs for Cities (2007), "Portland's Green Dividend."



At the same time BC forests will be impacted **BY** climate change, **HOW** we manage our forests will also have an impact on climate change.



We need to start strategizing now to ensure **HEALTHY FORESTS**



and a **SUCCESSFUL** and **DIVERSE** BC forestry sector



for the coming **DECADES.**

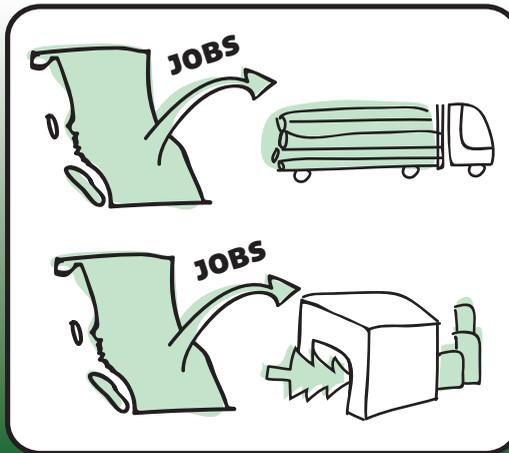


The National Roundtable on the Environment and the Economy estimates:



The RAW LOG EXPORT FOCUS

of BC's forest sector



has meant that the province has in effect been

EXPORTING THOUSANDS OF JOBS

in wood processing and manufacturing every year.



BC 3 icons **JOBS**
Quebec 12 icons **4x JOBS**
Ontario 15 icons **5x JOBS**

Ontario's forestry sector creates more than five times as many jobs as BC per cubic metre and Quebec performs about four times better than BC for forest sector jobs intensity.

With targeted policies, more than **15,000 new FULL TIME** forestry jobs and thousands of **ADDITIONAL seasonal POSITIONS** could be created while boosting the health of BC's forests.²

Green Job Creation: one estimate

2630 JOBS



Solid wood, pulp & paper, bio-energy products

10,100 JOBS



Higher value forest product manufacturing

5200 JOBS



Tree planting & tree nursery work

2400 JOBS



Processing usable wood waste

200 JOBS



Reinstating 20% of BC Forest Service positions cut since 2001

(1,000 jobs if restored to pre-2001 levels).

1. The National Round Table on the Environment and the Economy (2011), *Paying the Price: The Economic Impacts of Climate Change for Canada*.
 2. Parfitt/CCPA (2011), *Making the Case for a Carbon Focus and Green Jobs in BC's Forest Industry*

RETROFITS



What are building energy **RETROFITS?**



1 **FASTEST** way to **REDUCE** BC's **GHG emissions**

2 Potential to create **HUNDREDS OF THOUSANDS OF JOBS**



construction



weatherization & insulation



installation



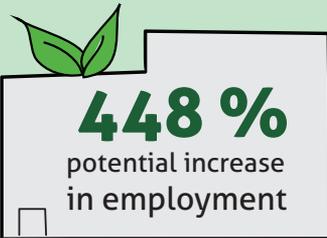
deconstruction & waste management



green building materials

JOB CREATION ESTIMATES

If supportive policies are implemented:



in the energy efficiency and green buildings sector.¹

PUBLIC SECTOR BUILDING RETROFITS



2500 new JOBS



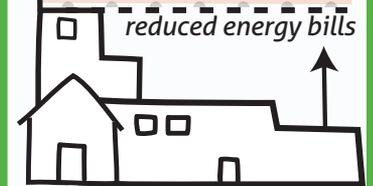
Reduce emissions in line with provincial GHG targets for 2020⁴

OTHER environmental & economic BENEFITS

previous energy bills

Financial savings could free up BILLIONS

for other job-creating economic activity and investments. **5**



residential, institutional & commercial

Electricity saved through **Energy Efficiency** would be freed up for other uses

which could help further reduce BC's GHGs.⁵

RESIDENTIAL RETROFITS
4100-6600 JOBS for 2 years
14,000-30,000 PEOPLE directly employed



Basic upgrades
400,000 homes²



Intensive upgrades
100,000 homes/year³

1. The Pacific Coast Collaborative (2012), The West Coast Clean Economy
2. Thompson and Duffy (2010), Jobs, Justice, Climate: Building a Green Economy for BC.
3. Horne, cited in Thompson and Duffy (2010)
4. Calculations based on BC Government PSECA program data (2011)

5. NRCan/Office of Energy Efficiency, "Improving Energy Performance in Canada – Report to Parliament Under the Energy Efficiency Act For the Fiscal Year 2009-2010."