



COAL CANADA AND CLIMATE CHANGE

BC's Deltaport is the gateway for Canada's coal exports. Photo: Calen Darnel.

IT'S TIME TO KICK CANADA'S COAL HABIT

30 years ago, the people around Hat Creek Valley in BC fought off a major proposed coal mine and coal-fired power plant. The proposal to develop one of the largest coal deposits in the world was stopped in its tracks by local people who were concerned about the air their families breathe and the impacts on the local environment. This amazing victory was won before the terrible impact of coal on our climate was widely understood, and is an inspiration for the growing fight to stop new dirty coal projects that would increase the impact of climate change.

It's not easy to predict what climate change means for us in Canada. We have already seen starving polar bears in the far north, increased droughts in Alberta, forest fires and pine beetle infestations in BC.

Canada is fast becoming a victim of climate change, but we're also quickly becoming one of the world's leading fossil fuel exporters. Carbon pollution from fossil fuels is the root cause of climate change. There has been a lot of talk recently about the impact of Canada's tar sands as a rapidly growing source of climate change related pollution¹, but what

is less widely understood is Canada's growing coal exports.

There is a reason why children don't want coal in their stockings. Coal has been long known as a dirty fuel. Burning coal for electricity produces more carbon pollution than burning the equivalent amount of oil or natural gas², and also contributes significantly to poor air quality, leading to serious health impacts in the communities next to coal fired power plants³.

Proposed new mines, expansions of existing mines, and a massive increase in transportation infrastructure are all in the works. These proposed coal mines would rip up thousands of kilometers of untouched wilderness.

In many places these proposed mines would interfere with critical habitat for endangered and threatened species such as the woodland caribou. Port infrastructure on the West Coast meant to export coal to the world's fastest growing markets⁴ threaten farmland, species

habitat, air quality, and will increase the amount of carbon pollution in our shared atmosphere.

We all have a responsibility to protect our climate. We must decrease the production of climate-destabilizing fossil fuels. The implications of climate change are severe not only for us in Canada but also for people living in the southern hemisphere who are already being impacted by climate change⁵.

We have a tremendous opportunity to build an economy that we are all proud of, one that respects our local environment and helps put the brakes on runaway climate change. Instead of profiting from making climate change worse, we can create good

made-in-Canada jobs that are part of the solution to the climate crisis.

Around the world the fight against coal is growing. Communities, local activists, and environmentalists in the United States, Australia, Europe and Asia are working together to stop coal mining and coal-fired power. From local citizens in the Comox Valley on Vancouver Island fighting a new coal mine to Ontario's government demolishing coal plants to Nova Scotians fighting the expansion of existing coal mines, Canadians are standing up to dirty coal and demanding a truly green future for all of us.



Above: The Sacred Headwaters: the confluence of the Skeena, Stikine and Nass Rivers. This area is threatened by the Mt. Klappan coal mine. Photo: Wilderness Committee Archives; A clearcut by First Coal in West Moberly First Nations territory. Photo: West Moberly First Nations

WHAT IS CLIMATE CHANGE and what are its causes?

Scientists have recorded that the overall temperature of the planet is rising and that global climate patterns are changing. The use of fossil fuels and land-use decisions worldwide have been identified as the leading causes of climate change⁶.

When you burn coal, oil or natural gas you release carbon dioxide (CO₂) into the atmosphere. Even though carbon is a fundamental building block of life, if released into the atmosphere in too large amounts it can become a climate changing form of pollution.

Fossil fuels like coal and oil are the remnants of ancient plant life that have been compressed over thousands of years and are highly concentrated.

Carbon released into the atmosphere traps heat on the planet like a warm blanket. This is why the planet is not a ball of ice; the carbon in the earth's atmosphere has historically trapped just the right amount of heat from the sun on the planet to support life. Since the industrial revolution around 200 years ago, we have burned a lot of fossil fuels and this carbon is trapped in the

atmosphere. Over time, as more and more carbon is trapped it's like adding another blanket trapping more heat and throwing the planets delicately balanced climate systems out of balance and destabilizing the climate⁷.

WHY DOES CLIMATE CHANGE MATTER?

Climate change matters to people because it is very rapidly changing the face of the planet we all live on.

Already people in some countries are experiencing desertification, as well as coastal areas being flooded and more extreme weather conditions. There are also related impacts on crops, species habitat, and a wide range of agricultural and forest pests. One of the most visible climate impacts in BC has been the pine beetle epidemic, where a previously manageable pest has rampaged out of control, consuming a massive area of forest because there has not been a winter cold enough to kill it off.

Scientists tell us that the impacts here at home and worldwide will only get more severe if we don't

stop the root cause of climate change – the production and use of fossil fuels.

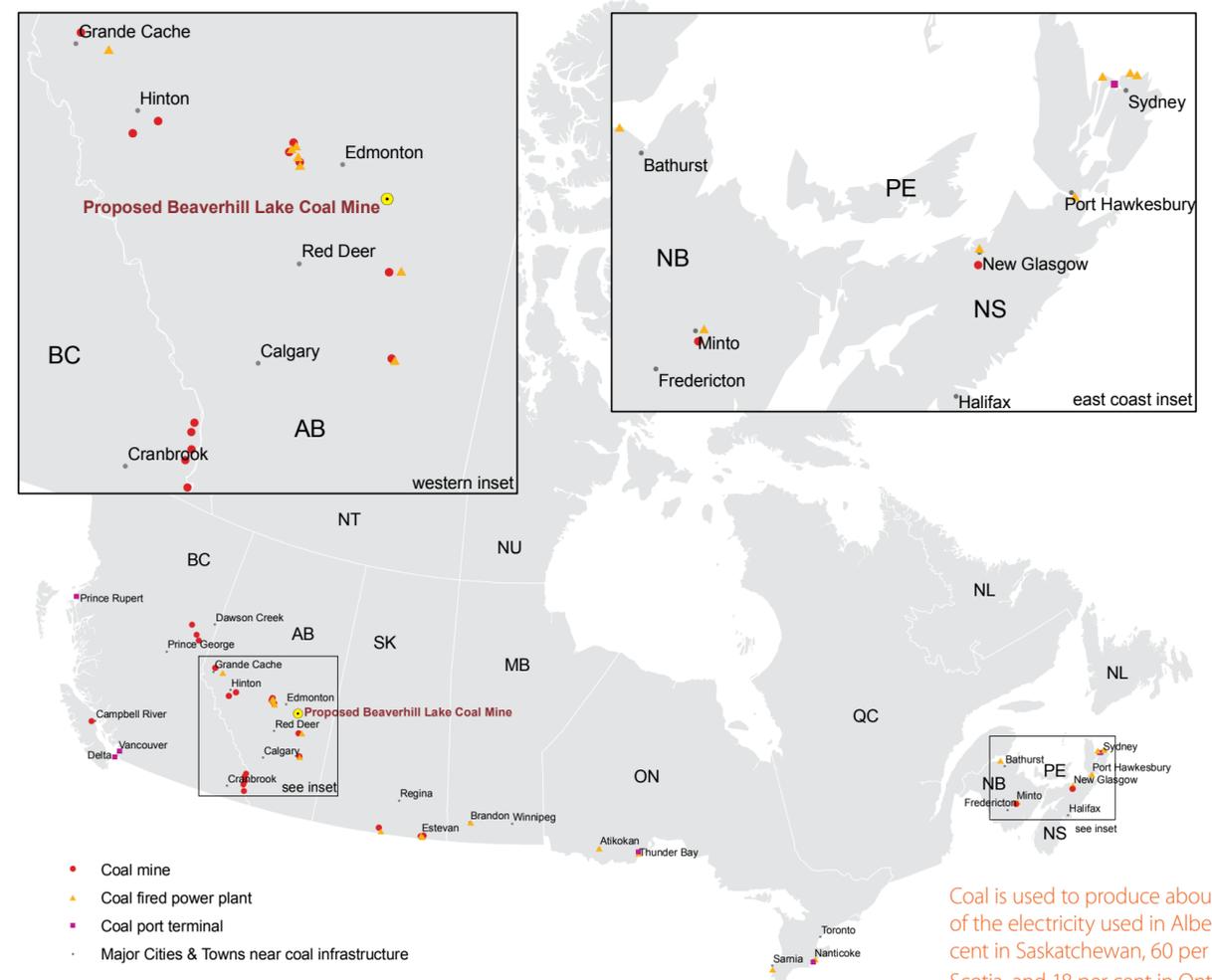
WHAT DO WE HAVE TO DO?

The world's top climate scientists, the UN's International Panel on Climate Change (IPCC), tell us that to avoid runaway climate change we need to get the global economy off fossil fuels⁸. That means aggressively phasing out the use of oil and coal starting today! In Canada we would need to cut global warming pollution in half in the next ten years to meet the targets set by the IPCC to play our part in ensuring a safe global climate⁹.



Woodland caribou are threatened by coal mining. Photo: Wilderness Committee archives; Pine beetle kill in BC, a sea of dead trees. Photo: V Smoothie, used under Creative Commons license.

COAL MINES IN CANADA



Coal is used to produce about 74 per cent of the electricity used in Alberta, 63 per cent in Saskatchewan, 60 per cent in Nova Scotia, and 18 per cent in Ontario¹⁷.

PACIFIC GATEWAY PORT EXPANSION

Most people don't realize how much coal is being exported from Deltaport on the West Coast of Canada. Currently this port is the largest coal exporting facility anywhere in North America¹⁰.

The BC and Federal Governments have a plan to invest billions of taxpayers' dollars in a scheme they call the Pacific Gateway Strategy. The plan calls for an expansion of the existing ports along the West Coast, including Delta, North Vancouver, Prince Rupert and

Kitimat. These expansions would facilitate increased exports of dirty coal and tar sands oil. The Gateway plan would exacerbate the climate crisis by supplying the dirtiest energy sources to emerging economies in the Asia-Pacific region such as China and India¹¹. By expanding Canada's role in fossil fuel exports, our governments are not only being irresponsible at home, but are also profiting from enabling the climate crisis abroad. Canada should be a climate leader, not a climate profiteer.



Railways are a key transportation method for BC's dirty coal. Photo: Scott Granneman, used under Creative Commons license; Coal ready for export from Deltaport at Roberts Bank, BC. Photo: Calen Darnel

CASE STUDY BEAVER HILL LAKE COAL MINE NORTHERN ALBERTA

Beaverhill Lake is a renowned getaway for birds and bird-watchers alike. One of the few federally recognized bird sanctuaries in Canada, it is home to over 270 species of migratory birds, including snow geese and bluebirds¹². These important wetlands are now at risk from a proposed open-pit coal mine just south of the lake.

The proposed Dodds-Roundhill Project in the Beaverhill Lake area would involve digging an open pit to get at the huge coal reserves that surround the internationally renowned birding site.

The proposal calls for the conversion of the coal from the mine to diesel and gas products that would then be used in oil processing plants in the tar sands. This project

could drastically drain local aquifers (underground water sources), potentially pollute ground water and put a sensitive area for migratory birds at risk. If allowed to proceed, it would add a huge amount of carbon pollution to the atmosphere, an estimated 45,000 tonnes of CO₂ per year for 40 years¹³.



The Beaverhill Lake Coal Mine Project will threaten habitat for over 260 migratory bird species, including the western bluebird and snow goose. Bluebird photo: Jim Flynn; Snow goose photo: Mike Baird.

WHY IS COAL DIRTY?

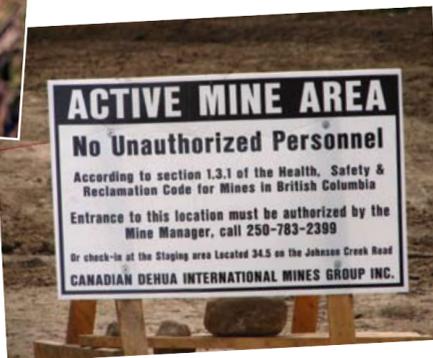
Coal is one of the most harmful fossil fuels to human health. Whenever coal is mined, transported or crushed, coal dust is formed. This coal dust is a major air pollutant in areas near mines, shipping terminals and coal powered generators. When inhaled, it can lead to black lung disease, asthma and other

respiratory problems. People living next to coal production have higher risk of contracting cardiopulmonary disease, hypertension, lung disease and kidney disease¹⁴.

A tremendous amount of

water is used for extracting and cleaning coal. Coal deposits are commonly located close to aquifers. The end result is the potential for exposure to toxins in groundwater, as well as more and more of our water being used for industrial purposes¹⁵.

Burning coal also releases mercury, which is particularly toxic to young children. Mercury can cause memory loss, kidney failure, liver damage, loss of vision, loss of sensation and tremors¹⁶. With all the available medical evidence about how dangerous coal is, there is no excuse for putting people's health and lives at risk.



First Coal's sign attempting to restrict access to West Moberly traditional territory. Photo: West Moberly First Nations; Nanticoke Power Plant, Ontario. Photo: Ontario Power Generation

Key Canadian COAL FIRED Power Plants

ONTARIO: There are five coal-fired power plants in Ontario: Atikokan, Thunder Bay, Lambton, Nanticoke and Lakeview. The Nanticoke Power Plant, is the largest single source of air pollution in Canada, in a province where air pollution kills almost 2,000 people a year¹⁸.

ALBERTA: Coal-fired power supplies almost 74 per cent of Alberta's energy needs¹⁷.

SASKATCHEWAN: There are three coal-fired power plants in Saskatchewan: the Boundary Dam Power Station, the Poplar River Power Station and the Shand Power Station.



WHAT WE CAN DO

If Canada is to play a responsible role in the world and take real action on climate change we need to get out of the coal business. This means stopping the growth of the industry today and strategically phasing it out in the future, all the while focusing on creating good jobs in resource communities to help with the transition. Here are the critical things to do:

1) No new coal mines

New mines and projects proposed in BC, Alberta and Atlantic Canada have significant local health and environmental impacts, from clearcut logging to releasing toxic waste into the local environment. Stopping new coal mines is also a concrete action we can take to fight climate change. There is nothing we could do that would be more counterproductive than to build more coal mines. We need to reduce our dependence on fossil fuels to avoid runaway climate change — it's just that simple.

2) Close coal-fired power plants

Currently just 1% of Canada's energy production comes from coal combustion. However, coal-fired electricity represents about 17% of Canada's current emissions¹⁹. Closing coal-fired power plants an easy way for reducing carbon emissions in Canada. This energy source should be entirely phased out by 2020, the date by which the UN International Panel on Climate Change says we must cut emissions at least in half. Shutting down coal fired power plants would be a big step in the right direction in getting the job done.

3) Getting serious about green jobs

We need to get serious about finding jobs for people in coal and oil towns to help the transition away from fossil fuel dependence. To achieve this we must target investment in the places where people will be most affected by stronger climate change legislation. There are tremendous opportunities to have better recycling measures, more energy-efficient home retrofits and *real* green buildings, create more public transit, and build renewable energy that is both environmentally appropriate and in the public interest.



Citations

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Stone sheep are threatened by coal mining in BC. Photo: Wilderness Committee archives; Comox Valley Coal Watch meeting, citizens opposing the Raven coal proposal. Photo: Wendy Keating; Community members rally for green jobs. Photo: Green for All

TAKE ACTION

Write a letter to Prime Minister Stephen Harper and Natural Resources Minister Christian Paradis, and tell them what you think about kicking Canada's coal habit and building a green economy for our future.

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