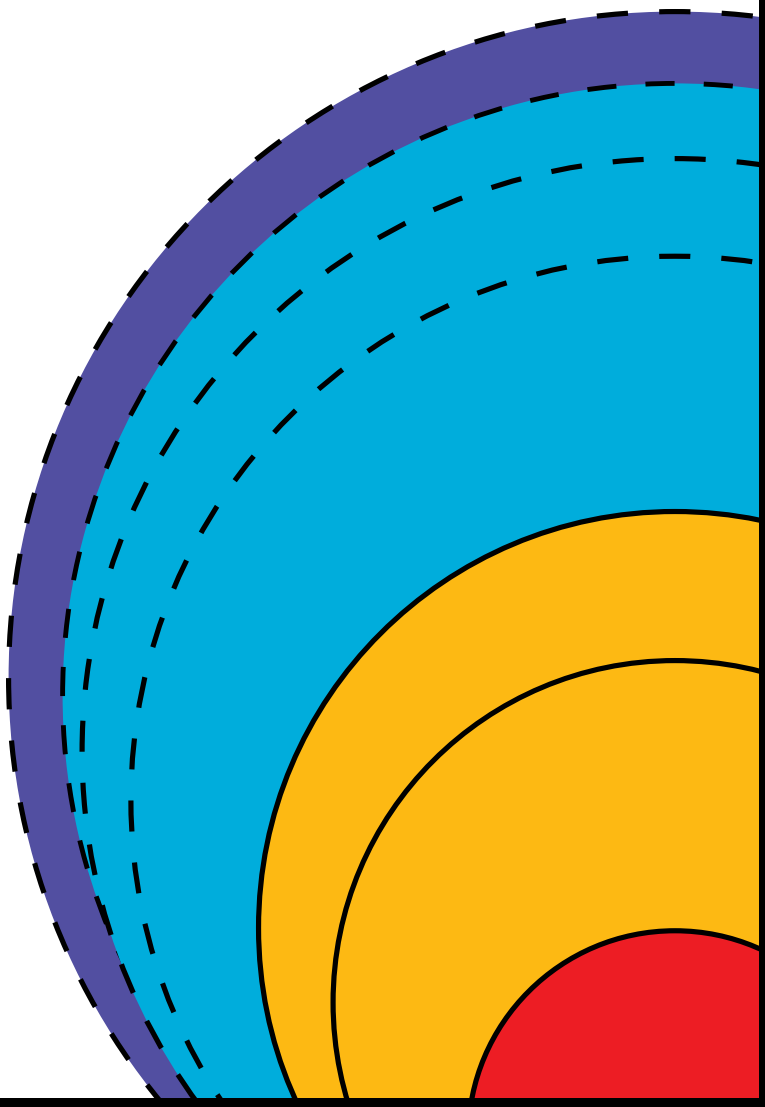
Sierra Club BC

EMISSIONS IMPOSSIBLE?

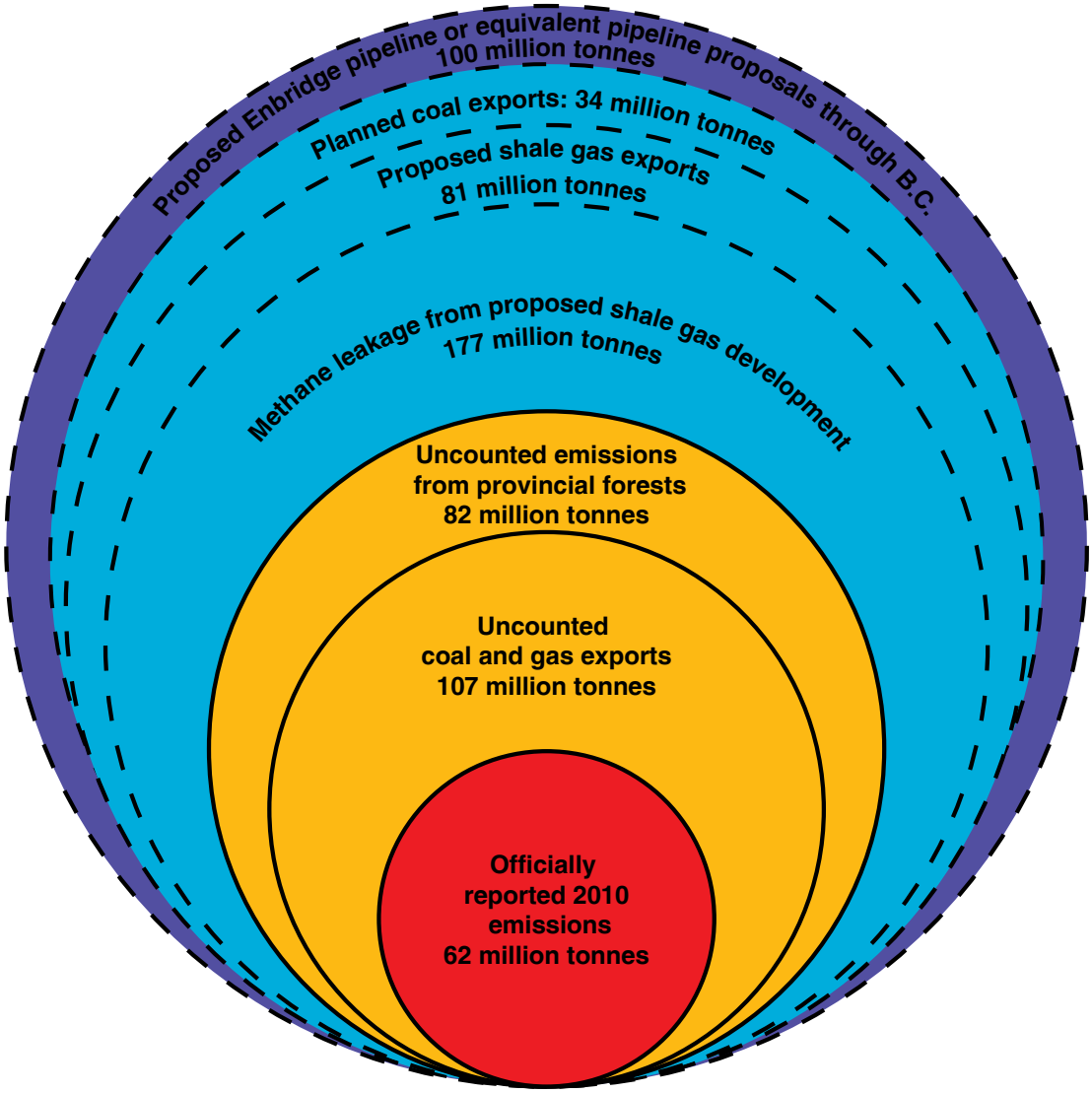
British Columbia's Uncounted Greenhouse Gas Emissions
Executive Summary

Sierra Club BC, September 2012

Jens Wieting, Forest Campaigner, and
Colin R. Campbell, PhD, Science Advisor



Uncounted and Projected British Columbia Greenhouse Gas Emissions



B.C.'s officially reported 2010 emissions: 62 million tonnes

B.C.'s estimated uncounted annual emissions: 189 million tonnes

B.C.'s potential additional future annual emissions, from planned coal and gas development: 292 million tonnes

Potential additional future annual emissions from the proposed Enbridge pipeline or equivalent pipeline proposals through B.C.: 100 million tonnes

Graphic: Nori Sinclair, Sierra Club BC

Emissions Impossible? British Columbia's Uncounted Greenhouse Gas Emissions

www.sierraclub.bc.ca | Phone: (250) 386-5255 | Email: info@sierraclub.bc.ca | Printed on 100% recycled paper

Introduction

Global warming is here, greenhouse gas emissions continue to increase, and climate change impacts appear greater than feared. Despite these alarming trends, here in British Columbia climate policy has lost momentum and the provincial government is not building on its initial steps to fight global warming and reduce emissions in a coherent and adequate manner.

The future of the carbon tax and other mechanisms to reduce emissions remains unclear and key policy decisions like the future development of coal and gas for export, the consideration of pipeline proposals from the tar sands to the B.C. coast and provincial forest management, are not appropriately analyzed in the light of climate change.

In fact, while significant sources of B.C.'s emissions are included in the Provincial Greenhouse Gas Emissions Inventory, the government has not presented any systematic information regarding greenhouse gas emissions from present or planned fossil fuel exports from (or through) the province and it doesn't count the dramatically increasing emissions from B.C.'s forest lands in the official emissions account.

A climate action plan can only be as good as the data it uses. Full disclosure of all greenhouse gas emissions for every sector is a key ingredient for meaningful climate policy and emission reduction targets.

The following overview of B.C.'s uncounted emissions is nowhere near complete and is not of sufficient quality to inform the kind of emergency climate action measures that we need at the global, national and provincial levels. But the information presented here shows that the true scope of the emissions originating in our province is several times higher than the official provincial report indicates and is increasing much faster than the officially counted emissions are decreasing.

Despite the dire facts it is still possible to avoid the worst impacts of climate change if jurisdictions around the world take decisive action today. There is no doubt at this point that we are facing an unprecedented crisis and citizens and governments need to change their ways in almost every area of our lives and economy.

The good news is that our report shows that we have far more opportunities to reduce emissions (and to restore our forests as a carbon sink), than the official B.C. greenhouse gas account leads us to believe.

Overview – B.C.'s full emissions in a snapshot

In June 2012 the B.C. Ministry of Environment released the British Columbia Greenhouse Gas Inventory Report for 2010.[1]

According to the new data, B.C.'s 2010 greenhouse gas emissions were 62 million tonnes of carbon dioxide[2], 4.5% less than 2007.

However, B.C.'s contribution to the global greenhouse gas problem continues to be far more significant than the official inventory suggests. The release of carbon dioxide from B.C. coal and natural gas exports, as well as the uncounted emissions from our forest lands, far exceed the officially reported emissions, and will increase dramatically, if emissions from planned new coal mines, shale gas projects and proposed pipelines go ahead.

Approximately 107.2 million tonnes of carbon dioxide is created annually from exports of B.C. coal and natural gas and another 81.6 million tonnes of carbon dioxide originated in 2010 from B.C. forest lands. If emissions from provincial forest lands and fossil fuel exports are included, B.C. was responsible for approximately 250.8 million tonnes of carbon emissions in 2010 – exactly four times higher than our official emissions.

If proposed coal and shale gas development for export go ahead these projects would result in at least 115 million tonnes of uncounted emissions (81 from gas, 34 from coal) and at least 177 million tonnes CO_2e from leaking methane from shale gas development. B.C.'s influence over the proposed Enbridge pipeline will decide the fate of another 100 million tonnes of annual emissions.

If today's emissions were left unchecked – and there are currently no provincial targets or plans to reduce emissions from fossil fuel exports and forest lands, and little progress in reducing official emissions – the building of new fossil fuel infrastructure would add 392 million tonnes by 2020. The combined emissions for which British Columbia would be directly or indirectly responsible could be as high as 643 million tonnes – more than 10 times higher than the official provincial emissions today.

Conclusions

There is overwhelming evidence that we have little time to do what is necessary to prevent dangerous global warming. Because of the ongoing failure to meet previously set targets we now have to reduce emissions

1. http://www.env.gov.bc.ca/cas/mitigation/ghg_inventory/pdf/pir-2010-full-report.pdf
2. All greenhouse gas emissions in this report refer to Carbon dioxide equivalents. Carbon dioxide equivalent (CO_2e) is a measure used to compare the emissions from various greenhouse gases based upon their global warming potential. For example, the global warming potential for methane over 100 years is 25. This means that emissions of one million metric tonnes of methane are equivalent to emissions of 25 million metric tonnes of carbon dioxide.

faster than discussed in the past. According to a group of leading climate scientists, global emissions have now to decline by 6 per cent annually to stabilize climate by the end of the century. In particular we have to heed the warning of the International Energy Agency (IEA), that new fossil fuel infrastructure built over the next five years will make it impossible to prevent catastrophic levels of climate change.

The B.C. legislative assembly and government should address three critical elements as part of a new coherent climate mitigation policy:

Coherent and complete information

Prominent, transparent reporting system that includes all relevant areas where emissions occur, distinguishing between official emissions (occurring in the province), emissions from burning fossil fuels exported from B.C., and emissions from provincial forests and other ecosystems.

If uncounted emissions from B.C.'s forests and fossil fuel exports are added to the official emissions, the province was responsible for over 250 million tonnes of carbon emissions in 2010, four times higher than our official emissions.

If proposed fossil fuel development and the Enbridge pipeline go ahead these projects would result in nearly 400 million tonnes of additional emissions for which B.C. would be directly or indirectly responsible.

If today's emissions were left unchecked and new fossil fuel infrastructure built, by 2020 British Columbia could be directly or indirectly responsible for over 600 million tonnes, more than double our estimate of today's emissions, and 10 times higher than the current official provincial emissions.

Science-based targets for all areas where emissions occur

Ambitious, science-based emissions reduction targets, distinguishing between the different opportunities to achieve reductions, in each area where they occur. For example, reductions in our dependence on fossil fuel exports can be made faster than the rate we have set to reduce overall emissions within B.C.

Updated provincial emission reduction targets should use the internationally agreed-to baseline year 1990 (instead of 2007).

A new climate action plan

The next-generation climate action plan will need to address all areas where emissions occur, without exception. We see the following as key for a comprehensive plan:

- Expanding the carbon tax to include all fossil fuels in order to achieve effective and fair results and to use revenues to accelerate action to tackle global warming; and pursuing other effective and equitable regulatory pricing mechanisms. Eventually the carbon tax should also apply to fossil fuel exports, coupled with a push for international agreements to price carbon.
- Shifting government support to carefully planned renewable energy projects and energy conservation programs; phasing out subsidies for fossil fuel industries.
- Support for the existing moratorium on oil tanker traffic in B.C.'s inner waters and a ban on new pipelines conveying oil products to and from the B.C. coast.
- Developing new regulations and incentives for increased marine and terrestrial conservation in order to protect natural carbon sinks and allows species a better chance to adapt to a changing climate.

Implementing appropriate climate policy to maintain our civilization as we know it will cause significant challenges for the economy but is without alternative. On the positive side there is a significant potential to reduce our dependence on exporting fossil fuels in the near future, and create new jobs in the emerging green, low-carbon economy.

If we act quickly we can turn most of our forests from carbon source to carbon sink again, before global warming causes more havoc.