



# Intensity-Based Targets: Not the Solution to Climate Change Dale Marshall February 26, 2007

Canadians are being told that solving the global warming problem requires an intensity-based approach, or intensity-based targets, for our greenhouse gas (GHG) emissions. Emissions intensity targets, even when met, do not ensure that total greenhouse gas emissions actually go down, which is the only solution to climate change. The federal government and all provinces need to, once and for all, abandon the concept of intensity-based GHG targets and get on with the admittedly challenging problem of tackling climate change. This means true emission reductions.

# What is Greenhouse Gas Intensity?

Greenhouse gas intensity is a ratio of greenhouse gas emissions per unit of economic activity (GDP or unit of production such as barrel of oil). Because economies and many industries grow, GHG intensity can decline while GHG emissions continue to rise. In the absence of effective climate change policies, such as a true cap-and-trade system for Canadian industry, this is exactly what happens in most cases. For example, between 1990 and 2004, Canadian industry improved its GHG-intensity by 6 per cent while its emissions grew by 13 per cent. In other words, improvements in emissions intensity were more than overwhelmed by the growth of polluting activities from Canada's industrial sector.

Setting—and even reaching—intensity-based targets does not ensure that climate change is addressed. The only way to do this is through true emission reductions.

### **Fighting Global Warming: True Emission Reductions**

The atmosphere cannot be protected with improvements in emissions intensity. How much carbon dioxide (and other GHGs) is in the atmosphere is determined by how much people are emitting. Right now, the high volume of GHGs humans are emitting is increasing their levels in the atmosphere. We must reverse this trend if we are to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."

The science on climate change is clear: to avoid dangerous climate change, atmospheric GHG concentrations will have to stabilize very soon. This means decreasing GHG

<sup>&</sup>lt;sup>1</sup> Natural Resources Canada. 2006. Energy Efficiency Trends in Canada 1990-2004.

<sup>&</sup>lt;sup>2</sup> United Nations Framework Convention on Climate Change. 1992. Text available at <a href="http://unfccc.int/essential-background/convention/background/items/1349.php">http://unfccc.int/essential-background/convention/background/items/1349.php</a>

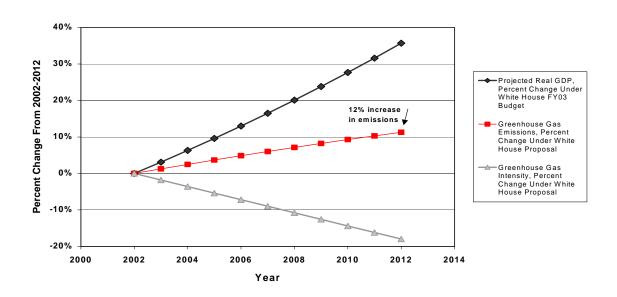
emissions as soon as possible and achieving deep GHG emission reductions of at least 50 per cent over the next half century. (For Canada and industrialized nations, to accept our fair share would mean even greater reductions, 80-90 per cent over the same timeframe.)<sup>3</sup>

The Kyoto Protocol, agreed in 1997, is a small first step. It requires true emission reductions, not emissions intensity obligations, for 36 industrialized countries. All key emitting countries are expected to take on GHG emission reduction targets within the next two commitment periods of the Protocol.

## The Effect of Intensity Targets

Intensity-based targets for greenhouse gases are put in place when jurisdictions don't take climate change seriously. For example, a year after pulling out of the Kyoto Protocol, U.S. President George Bush announced the U.S. would reduce greenhouse gas intensity by 17 per cent over the following 10 years. According to the administration's numbers, this would mean a 12 per cent *increase* in greenhouse gas emissions over that period (Figure 1).

Figure 1: Projected Change in GHG Emissions Intensity and Emissions for the U.S., 2002-2012



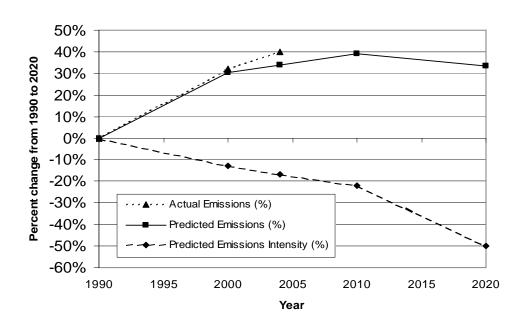
Also in 2002, Alberta Premier Ralph Klein established intensity-based GHG targets. Alberta's goal of a 50 per cent improvement in Alberta's emissions intensity between 1990 and 2020 sounds impressive. The Alberta government's own plan, however, shows absolute GHG emissions in the province will *increase* by 33 per cent over that period. As

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<sup>&</sup>lt;sup>3</sup> Bramley, Matthew. 2005. *The Case for Deep Reductions*. David Suzuki Foundation and Pembina Institute.

of 2004 (the latest data available), Alberta's true emissions were rising even faster than what was predicted in their plan (Figure 2).

Figure 2: Projected Change in GHG Emissions Intensity and Emissions for Alberta, 1990-2020



The previous federal government, in its April 2005 Project Green, also used an intensity-based approach to emissions from Canada's industrial sector. The Liberals lost the January 2006 election without having put the Large Final Emitters (LFE) system into place but it would have failed as well to reduce GHG emissions. Documents from Natural Resource Canada in fact show that, had all industrial sectors met their target to reduce their emissions *intensity* by 15 per cent, emissions from LFEs would still have increased by 27 to 55 per cent.<sup>4</sup>

#### **Some Economic Realities**

There are at least two more reasons why using real emission reduction targets for Canadian industry would be favoured. First, intensity-based reductions cannot be integrated into carbon markets because they are set up to buy and sell true reductions. The TSX has already formally communicated to the Conservative government that intensity-based targets will hurt the Canadian economy instead of maximizing economic opportunities. This is because using intensity-based targets will prevent Canada from joining the EU emission trading system or any other international carbon market.

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<sup>&</sup>lt;sup>4</sup> David Suzuki Foundation. 2005. Briefing Note: Access to Information documents on Canada's progress on implementing Kyoto.

<sup>&</sup>lt;sup>5</sup> Woods, Allan. 2007. "Traders ready to battle over emissions plan." *Toronto Star.* (Feb. 19).

Second, there are transparency and accountability problems associated with whether companies have actually achieved their intensity-based targets, since that would require companies to disclose production data. Since 2004, in ongoing discussions between government, industry, and environmental groups on a federal registry for industrial GHG emissions, industry representatives have steadfastly argued that production data is confidential. (This is, of course, after most industry representatives argued for intensity-based targets.) Without production information, there is no way for the public to ensure that companies are meeting their commitments.

#### The Way Forward

The total amount of greenhouse gas emissions from Canada has to level off and start going down in line with the Kyoto target. Clear targets and timelines for true emission reductions need to be set...and then met.

The current federal government has unfortunately decided to use industrial targets based on emissions intensity rather than true emissions. The government's *Notice of Intent* to regulate under Bill C-30 uses intensity-based targets until at least 2020. Though a new direction was apparently taken after its first year in office, the Prime Minister and new Minister of the Environment continue to suggest that intensity-based targets can do the job. This is not so.

Instead, Canada needs true emission reduction targets for the short-, medium-, and long-term. In fact, we already have short-term targets, those by which we are bound under international law, the Kyoto Protocol. Canadian industry is responsible for almost 50 per cent of Canada's greenhouse gas emissions and should therefore be held accountable for 50 per cent of the solution. That means true emission reductions that will put us on track to the medium-term (at least 25 per cent below 1990 by 2020) and long-term (80 per cent below 1990 levels by 2050) targets that are required for Canada to assume its fair share of responsibility in avoiding dangerous climate change.