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Sustainable Energy Solutions

Analysis of the Government of Canada's April 2007 Greenhouse Gas Policy Announcement

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What Minister Baird announced

National GHG emission targets

- 2010–12
- 2020
- 2050
- Industrial GHG targets and "compliance options" (2010–2020)
- Combination of the industry framework with other measures to achieve the national target for 2020





What we examined

Are the targets adequate?

- national
- industry
- Has the government convinced us that it will achieve the targets?
 - industry
 - national





Adequacy of the national targets

Table 1. The government's national GHG emissions targets relative to the 1990 level and Canada's Kyoto target.³

| | Relative to 2006 | Relative to 1990 | Relative to Kyoto target |
|---------|------------------|----------------------|--------------------------|
| 2010–12 | approx. 3% above | approx. 31% above | approx. 39% above |
| 2020 | 20% below | approx. 2% above | approx. 8% above |
| 2050 | 60–70% below | approx. 49–62% below | _ |

The targets fall far short of

- Requirements based on climate science
- Commitments of leading countries
- Canada's legal obligations under Kyoto
- The 2020 target appears to be arbitrary





Industry targets

- Regulated industry sources represent 45% of national emissions
- Government expects industrial emissions in 2020 to be 12% above 1990, or 18% below 2006 (+ technology fund reductions?)
- But there are serious doubts as to whether this will be achieved:
 - Intensity targets
 - Targets for new facilities not yet defined
 - Scope of exempted emissions not yet defined
 - Some compliance options may not result in reductions
 - The bulk of the reductions are "backloaded"





"Backloading"

Table 3. Reductions in actual annual GHG emissions (Mt), *relative to projected levels in the absence of regulations*, that could be expected to result from the proposed regulatory framework for heavy industry.

| Year | 2010 | 2011 | 2012 | 2015 | 2020 |
|---|--------------|--------------|--------------|--------------|------|
| Total required reductions ¹⁷ | 49 | 54 | 58 | 72 | 88 |
| Of which paper reductions | | | | | |
| Technology fund payments ¹⁸ | -34 (70%) -5 | -35 (65%) -5 | -35 (60%) -5 | -29 (40%) -5 | 0 |
| Early action credit ¹⁹ | -5 | -5 | -5 | 0 | 0 |
| Resulting actual reductions | 5 | 9 | 13 | 38 | 88 |

- Reduces environmental benefits
- Invites brinksmanship (review in 2012)
- Total reductions in 2008–12:
 - This government 27 Mt
 - Previous government 180 Mt





Lenient treatment of oil & gas

- Intensity targets could allow tripling of emissions from oil sands
- Disproportionate emission increases from energy sector during 1990–2006 are largely ignored
- Taxpayers could end up paying for half the cost of carbon capture projects
- "Unintentional fugitive emissions" are exempted from main regulatory framework
- New oil sands facilities are treated more leniently than existing facilities





20 unanswered questions about industry regulations

- 1. "Gaming" base year data
- 7. How will fugitive emissions be regulated?
- 8–9. Targets for new facilities not defined
- 11–15. Technology fund
 - Quantity and timing of emission reductions
 - Governance
- 16. Offset credits: "additionality"
- 20. Public disclosure of compliance information





Achievement of the national targets

2010–12:

- No explanation of how target will be met, just an assertion
- Need to find 8 Mt of extra reductions every year
- Achievement of 2020 target doubtful because of:
 - Serious doubts about achieving industry targets
 - No explanation of amounts of reductions assigned to other government measures
 - Reductions from technology fund will not all occur by 2020
 - Double counting risks technology fund and offset credits





How it's supposed to add up

Table 4. The government's explanation of how it expects to meet its medium-term targetfor national GHG emissions.

| | | (Mt) |
|----|---|------|
| | Reductions in annual emissions in 2020 below the 2006 level: | |
| 1. | Regulatory framework for heavy industry | 60 |
| 2. | Regulations on vehicle fuel efficiency, energy efficiency of energy-using products, biofuels and unintentional fugitive emissions | 40 |
| 3. | Financial incentive programs for renewable energy, technology development and energy efficiency in buildings and transportation | 10 |
| 4. | Actions by provinces/territories supported by the federal government, plus actions by industry supported by the technology fund included in the regulatory framework for heavy industry | 40 |
| | Total reductions | 150 |

Double counting risks

- Technology fund (line 4) could overlap with lines 1–3
- Offset credits (line 1) could overlap with lines 2-4

