

# Climate Action Network Canada Recommendations for Mandatory Reporting of Greenhouse Gas Emissions

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This paper represents the position of the Climate Action Network Canada (CAN Canada), a network of more than 100 organizations across Canada working to protect the environment from harmful human interference with the atmosphere resulting in climate change. More information about CAN Canada is available at <http://www.climateactionnetwork.ca>.

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Key positions and recommendations in this paper are highlighted **like this**.

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## 1. Introduction

Federal and provincial governments have been making formal commitments to take action to reduce Canada's greenhouse gas (GHG) emissions since at least November 1990, when the federal-provincial *National Action Strategy on Climate Change* was published. In December 2002, Canada ratified the Kyoto Protocol, which limits Canada's annual average GHG emissions during 2008–12, net of purchases of international emissions permits/credits and credits for domestic carbon dioxide sinks, to 94% of their 1990 level. The federal government's *Climate Change Plan for Canada*, published in November 2002, outlines in some detail the government's approach to meeting that target.

### 1.1 The need for mandatory facility-level public reporting

Mandatory measurement and public reporting of GHG emissions is a basic, essential element of any effective plan to reduce emissions, because

- the size and growth rate of emissions sources need to be known in order to design and then evaluate public policies and private strategies to reduce emissions;
- emission reduction targets need to be set for emitters, and compliance with those targets must be assessed and enforced;
- public reporting of emissions is necessary to ensure that emitters take public responsibility for their contribution to climate change;
- public reporting of emissions, especially at a facility level, is a powerful tool in fostering public awareness of environmental problems; and
- reporting needs to be mandatory, otherwise it will inevitably be incomplete and inconsistent.

These needs are further elaborated in section 2.

The level of disaggregation of publicly reported emissions data is a key issue. Canada's national GHG emissions inventory, compiled by Environment Canada, covers all emission sources, but only in a highly aggregated manner. This is not adequate for meeting the first four of the five needs outlined above, especially with regard to large GHG-emitting facilities, where it is clear that those needs can only be met adequately by reporting of data at the facility level (as further discussed in section 4.3). Large industrial facilities, in particular, are an appropriate focus of discussions about mandatory reporting of GHG emissions because such facilities are forecast to contribute almost 50% of Canada's total emissions by 2010,<sup>1</sup> and because industrial GHG emissions are rising more quickly than Canada's total emissions.<sup>2</sup> However, Canada needs a good system for public reporting of all its GHG emissions with a high degree of disaggregation.

Mandatory facility-level reporting of GHG emissions is essential for Canada's implementation of the Kyoto Protocol. Most obviously, the federal government's covenants and emissions trading system for large industrial emitters,<sup>3</sup> currently under development, could not function without it. However, mandatory facility-level reporting of GHG emissions is essential to any effective plan to reduce Canada's emissions, for the reasons that are outlined above and further discussed in section 2. Any arguments that

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<sup>1</sup> Government of Canada (2002), *Climate Change Plan for Canada*, p. 30.

<sup>2</sup> Climate Action Network Canada (2003), *Doing Their Bit: Ensuring Large Industrial Emitters Contribute Adequately to Canada's Implementation of the Kyoto Protocol*, p. 1 Available at <http://www.climateactionnetwork.ca/Covenants.pdf>.

<sup>3</sup> See Climate Action Network Canada, *op. cit.*, for CAN Canada's views on the covenants and emissions trading system.

may be made opposing mandatory reporting by invoking doubts as to the Kyoto Protocol's entry into force are therefore irrelevant.

## 1.2 Public right to know

Beyond the utilitarian reasons for mandatory facility-level reporting of emissions outlined above, it is important to emphasize the public's *right to know* the GHG emissions from individual facilities and corporate entities. Environmental public right to know is a widely accepted principle in Canada and elsewhere and has been the strongest driver for national mandatory emissions reporting initiatives like the NPRI and the pollutant transfer and release registries in jurisdictions such as the United States, the European Union and Australia. Just as publicly-traded corporations accept the legal requirement to routinely publish detailed financial data to satisfy the needs of investors, so significant emitters should expect a legal requirement to publish emissions data to satisfy the needs of affected citizens.

It is sometimes argued that the lack of local environmental effects associated with GHGs<sup>4</sup> obviates the need to publish facility-level emissions data. This ignores the critical issue of responsibility for pollution: the public has a right to know the level of responsibility of individual facilities and corporate entities that are significant contributors to climate change (regardless of whether the emissions sources in question are subject to regulated limits). The argument is also invalidated by the fact that the global nature of the environmental impacts of GHG emissions means they affect everyone.

Indeed, Canadian environmental organizations who work with community groups at the local level are now reporting very strong interest from the latter in obtaining information about facility-level GHG emissions in addition to the data for other substances already available through the NPRI.

## 1.3 The need for a single national system

Climate change is a global problem requiring international agreements that are implemented at the national level, and for which the federal government is responsible. Canada therefore needs to implement a coordinated plan of action to reduce GHG emissions involving contributions by all governments but led by the federal government. Mandatory facility-level reporting of GHG emissions, a basic element of that plan, clearly needs to be implemented as a national system with a single set of rules, and will require federal legislative authority (as discussed in section 6). It is clearly not in emitters' interests, and likely not in the public interest, for two incompatible mandatory GHG reporting systems to be in place in a given jurisdiction. Provincial governments (see section 1.4) that have implemented mandatory reporting systems prior to implementation of the national system will have to adjust their systems where necessary to contribute seamlessly to the national system in compliance with the relevant federal legislation. At the same time, the work done by such provincial governments can potentially be quite helpful in designing the national system. Evidence for this is provided by the work now well underway on harmonizing the NPRI and Ontario's mandatory reporting system.

## 1.4 The development of GHG emissions reporting in Canada to date

Formal multistakeholder discussions about mandatory facility-level reporting of GHG emissions from large facilities have been taking place in Canada for a decade. In the early 1990s, "Government, labour, and environmental representatives on MSAC,<sup>5</sup> along with the Canadian Chemical Producers Association,

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<sup>4</sup> In reality, some important GHGs, e.g. methane, do have local environmental effects in addition to contributing to global climate change.

<sup>5</sup> Multi-stakeholder Advisory Committee to the federal Minister of Environment on NPRI.

recommended having a special reporting requirement in NPRI<sup>6</sup> designed to estimate releases of greenhouse gases from different facilities. Although industrial representatives other than the CCPA agreed with this in principle, they recommended delaying the requirement until details of the special reporting requirement could be worked out.”<sup>7</sup> Environment Canada’s NPRI Work Group on Substances has also considered the addition of GHGs to the NPRI.<sup>8</sup> Most recently, in 2001–02 the Work Group discussed adding GHGs to the NPRI for reporting year 2003. Environmental non-governmental organization (ENGO) members of the Work Group strongly supported addition of GHGs to NPRI, while industry representatives opposed addition of GHGs to NPRI pending a broader discussion of Canada’s overall climate change plan and its data needs. In early 2003, the federal government then published the following commitment in the Canada Gazette:<sup>9</sup>

*Consultations were undertaken during 2002 on the issue of reporting of greenhouse gases (GHGs) to the NPRI. The Government is committed to requiring reporting of GHG emissions, beginning with reporting on 2004 emissions. The reporting will be mandatory, verifiable, and include suitable provisions for reporting at the facility level. The Government will consult with stakeholders, including Aboriginal peoples of Canada industry and environmental non-government organizations, on detailed reporting requirements, including options for the reporting mechanism and public availability of the data, recognizing the ongoing discussion on the Climate Change Plan for Canada.*

In the absence of mandatory facility-level reporting, the Voluntary Challenge and Registry (VCR), an industry-government partnership, has encouraged voluntary corporate-level reporting of GHG emissions since 1995. The Pembina Institute has conducted a number of assessments of the reports made by industrial corporate entities to the VCR. The most recent Pembina assessment<sup>10</sup> shows that, after six years of the VCR’s existence, the GHG emissions data reported to it remains

- incomplete — of 494 industrial entities registered with the VCR, only 102, representing less than 55% of Canada’s industrial GHG emissions, reported their emissions for the year 2000 to the VCR within 15 months of the end of that year;
- inconsistent — the assessment presents a list of 13 major and common inconsistencies in the methodology used by entities to calculate the emissions they report to the VCR;
- not readily available to the public — emissions data reported to the VCR is dispersed through thousands of reports stored on the VCR Web site.

Some provincial governments are to be congratulated for taking concrete steps towards mandatory facility-level reporting of GHG emissions while the federal government has hesitated. The government of Ontario introduced mandatory reporting of emissions of carbon dioxide, methane and nitrous oxide (the three most important GHGs covered by the Kyoto Protocol) by industrial, commercial, institutional and municipal facilities, beginning with emissions for the last eight months of 2001.<sup>11</sup> The data reported in Ontario has not, however, been made publicly available in an easily accessible format. The government of Alberta now intends to implement mandatory reporting of emissions of all the GHGs covered by the Kyoto Protocol by large industrial facilities beginning with 2003 emissions, with an extension to other

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<sup>6</sup> National Pollutant Release Inventory.

<sup>7</sup> Chris Rolfe (1994), *Community Right to Know: Issues for the Five Year Review of the Canadian Environmental Protection Act*, West Coast Environmental Law Research Foundation, p.21–22.

<sup>8</sup> Sulphur hexafluoride, one of the six GHGs covered by the Kyoto Protocol, is already included in the NPRI, but the other five are not.

<sup>9</sup> Available at <http://canadagazette.gc.ca/partI/2003/20030104/html/notice-e.html#i2>.

<sup>10</sup> Matthew Bramley (2002), *The Case for Kyoto: The Failure of Voluntary Corporate Action*, Pembina Institute. Available at [http://www.pembina.org/publications\\_item.asp?id=140](http://www.pembina.org/publications_item.asp?id=140).

<sup>11</sup> See <http://www.ene.gov.on.ca/enviromet/onair/splash.htm>.

large facilities the following year.<sup>12</sup> It is not yet clear what level of public access to the data will be provided. The previous government of Québec also stated in a discussion paper published in February 2003<sup>13</sup> its intention to regulate a mandatory GHG reporting system for large industrial emitters. To date, Québec has relied on the voluntary ÉcoGÉSte program for gathering corporate-level GHG emissions data, and only a small portion of the data has been made publicly available in a timely manner.

Statistics Canada collects energy use data from industrial facilities on a mandatory basis as authorized by the *Statistics Act*. In many cases this can be used to estimate GHG emissions data, and it is indeed used for that purpose by Environment Canada in compiling the national GHG emissions inventory. However, the facility-level data is confidential and cannot be made available to the public.<sup>14</sup> The same applies to corporate-level data (see section 6).

The following sections elaborate CAN Canada's recommendations for a national system of mandatory reporting of GHG emissions under the following headings:

- Objectives and needs (section 2)
- Principles (section 3)
- Reporting sectors, boundaries and thresholds (section 4)
- Key elements of reporting (section 5)
- Reporting vehicle (section 6)
- Public disclosure (section 7)
- Timeline (section 8)

CAN Canada is prepared and eager to work cooperatively with government and private sector stakeholders to develop a practical and effective national mandatory GHG emissions reporting system.

## **2. Objectives and needs**

The federal government has proposed the following four objectives/needs for mandatory GHG emissions reporting:<sup>15</sup>

- assessing compliance with the federal government's covenants and emissions trading system for large industrial emitters, currently under development;
- improving the detail and accuracy of the national GHG emissions inventory;
- "public reporting on emissions of concern"; and
- serving provincial and territorial reporting needs.

CAN Canada agrees with these objectives/needs. With regard to the first, second and fourth, the covenants and emissions trading system obviously cannot function without complete, consistent emissions data that can only be obtained through a mandatory system (second bullet in section 1.1). And Canada is required to maintain a high quality national GHG emissions inventory under the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol; there are many areas where the quality of the inventory could be improved. The federal government committed in its *Action*

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<sup>12</sup> See [http://www3.gov.ab.ca/env/air/emissions\\_inventory/GHG\\_emissions.html](http://www3.gov.ab.ca/env/air/emissions_inventory/GHG_emissions.html).

<sup>13</sup> Gouvernement du Québec (2003), *Contexte, enjeux et orientations sur la mise en oeuvre du Protocole de Kyoto au Québec*, p. 34. Available at <http://www.menv.gouv.qc.ca/publications/ENV20030022.htm>.

<sup>14</sup> D. Cope Enterprises (March 2002), *An Analysis as to whether Greenhouse Gases Meet the Criteria for Addition to the NPRI*, Final Report Prepared for the NPRI Multi-stakeholder Ad Hoc Work Group on Substances Greenhouse Gas Sub-Group, p. 60–63.

<sup>15</sup> Government of Canada (2003), *Developing a Domestic System for Mandatory Reporting of GHG Emissions*, deck presented to CAN Canada representatives, September 25, 2003.

*Plan 2000 on Climate Change* to “improve statistics and surveys that provide the basis for reporting energy efficiency and GHG emissions by industry”.<sup>16</sup> Provincial and territorial governments clearly also have their own needs for complete, consistent GHG emissions data, which can be provided to all such governments through a national mandatory reporting system.

Mandatory GHG emissions reporting must, however, play a much larger role than simply satisfying the technical needs of governments. The third objective listed above should therefore be amplified to reference explicitly public right to know (see section 1.2) and public education and outreach (fourth bullet in section 1.1). For example: “satisfying the public’s right to know emissions from individual facilities and corporate entities, and enhancing public education on climate change”.

Enhancing public education and outreach on climate change is a goal that federal and provincial/territorial governments in Canada strongly subscribe to. Public reporting of GHG emissions will significantly enhance public education on climate change by fostering understanding of key GHG emission sources. Public reporting of pollutant releases and transfers through the NPRI has proven to be a powerful public awareness-raising tool, drawing considerable media coverage and galvanizing public pressure to reduce pollution.

There is an additional important objective that the mandatory GHG emissions reporting system should meet. By obliging emitters to measure their emissions and report them publicly, the system can be an powerful incentive for *focusing emitters’ attention on their responsibility for contributing to climate change, and encouraging them to adopt strategies for reducing emissions* (in accordance respectively with the third and first bullets in section 1.1). Recognizing this objective, a mandatory reporting system has an important role to play for all facilities and corporate entities that are significant contributors to climate change, beyond the relatively narrow confines of the federal covenants and emissions trading system, which will exclude a considerable number of major GHG emitters (see section 4.2).

### 3. Principles

The federal government has proposed the following principles for mandatory GHG emissions reporting:<sup>17</sup>

- mandatory
- purpose-driven
- accurate/comprehensive
- consistency with national inventory and international protocols
- harmonized/standard
- transparent
- efficient

CAN Canada agrees with these principles, with the following comments and suggested adjustments:

- There is no doubt that reporting must be mandatory, in light of the second and fifth bullets in section 1.1. Several years’ experience with the VCR, as described in section 1.4, shows clearly that on a national level, voluntary reporting leads to emissions data that is highly incomplete and inconsistent. And data required to ascertain legal compliance with covenants and/or their regulatory backstop, and to create monetary value through emissions trading, clearly cannot be collected on a voluntary basis.
- With regard to accuracy, it is important not only that data are accurate, but also that there is some independent guarantee creating confidence that that is so. In other words, the concept of accuracy

<sup>16</sup> Government of Canada (2000), *Government of Canada Action Plan 2000 on Climate Change*, p. 9.

<sup>17</sup> Government of Canada (2003), *op. cit.*

on its own is insufficient; we also need the concept of credibility or objectivity. The credibility/objectivity concept should be added as a principle here to motivate data verification (see section 5.3) and prevent potential conflicts of interest in the reporting vehicle (see section 7).

- Comprehensiveness is an important principle. One tonne of GHG emissions has the same environmental effect as another tonne, and policies are distorted if more importance is attached to some emissions, because they are measured, than others, because they are not. In practice, comprehensiveness will have to be traded off to some extent against some of the other principles, but it must be retained as a principle in its own right.
- Regarding “consistency with international protocols”, it should be specified that the protocols in question are those adopted under the UNFCCC, by which Canada is bound.
- Harmonization/standardization is also an important principle. As argued in section 1.3, mandatory facility-level reporting of GHG emissions clearly needs to be implemented as a national system with a single set of rules.

The federal government has also proposed these two additional principles for mandatory GHG emissions reporting:<sup>18</sup>

- accessible
- respectful of confidentiality

Since these principles are in direct conflict with one another, they need to be combined to clarify how they will interact. CAN Canada recommends the following formulation or a similar one that places the burden of proof needed for confidentiality on the emitter: “all data subject to reporting will be publicly accessible except where emitters can present a compelling case for confidentiality based on real harm resulting from publication”. A formulation of this kind is needed to respect the objective of public right to know (sections 1.2 and 2). Whenever data is kept confidential, stakeholders outside government are prevented from conducting analysis and proposing solutions that benefit from adequate prior information. That is a serious limitation that must not be allowed on grounds that are frivolous or motivated by an emitter’s wish to avoid taking public responsibility for its contribution to climate change. This issue is discussed further in section 7.

A form of confidentiality also arises, in effect, whenever data is made available only in an aggregated form. For example, data could be presented for a corporate entity but not for its constituent facilities, or on a total carbon dioxide equivalent basis but not for each greenhouse gas. Whenever data is aggregated, its usefulness to the widest possible range of stakeholders and types of analysis is diminished. An additional principle should therefore be adopted of “maximum practicable disaggregation of publicly reported data”.

## **4. Reporting sectors, boundaries and thresholds**

### **4.1 Reporting burden**

Sectors potentially subject to mandatory emissions reporting are naturally concerned about reporting burden, i.e., the time and resources needed to comply with reporting requirements. There are several good reasons to believe that mandatory facility-level reporting of GHG emissions should not be onerous for emitters, in keeping with the principle of efficiency (see section 3):

- Many organizations already report their GHG emissions voluntarily through the VCR. These range from large companies with annual emissions of several megatonnes (Mt) carbon dioxide equivalent (CO<sub>2</sub>e) to several single-facility small- or medium-sized enterprises (SMEs) with

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<sup>18</sup> *Ibid.*

annual emissions of less than 10 kilotonnes (kt) CO<sub>2</sub>e.<sup>19</sup> It is doubtful where voluntary reporting by SMEs would be occurring at all if it was significantly onerous.

- The NPRI is a decade-old mandatory facility-level reporting system involving (for reporting year 2001) 2617 facilities and 266 reportable substances.<sup>20</sup> The NPRI is broadly accepted by industry and there is no evidence that reporting under NPRI represents an significant economic burden.
- For reporting year 2002, the NPRI has added criteria air contaminants (CACs — carbon monoxide, oxides of nitrogen, particulate matter, sulphur dioxide and volatile organic compounds), again with broad industry acceptance. This is expected to double the number of facilities reporting, which will include SMEs as well as commercial, institutional and municipal facilities. Most reporting of CAC emissions, like most reporting of GHG emissions, is based on measurements of fuel consumption. For the thousands of facilities already required to report CACs, the additional burden involved in reporting GHGs will therefore, in most cases, be minimal.
- We are aware of no evidence that mandatory facility-level reporting of GHG emissions in Ontario has been onerous.
- Many emitters need, in any case, to gather GHG emissions data (and data reported to NPRI) for the purposes of their own environmental management systems.

## 4.2 Emissions covered by mandatory reporting

At a minimum, Canada's national mandatory reporting system for GHG emissions will need to cover all sources of emissions subject to the federal covenants and emissions trading system for large industrial emitters (LIEs). There are four further categories of emissions that could reasonably be covered by the system:

- in sectors covered by the covenants and emissions trading system, emissions excluded from the system because of measurement difficulties (notably, fugitive emissions);
- in sectors covered by the covenants and emissions trading system, emissions from small facilities that may be exempted from the system;
- emissions from industrial sectors such as auto manufacturing that have been excluded from the covenants and emissions trading system;
- emissions from commercial, institutional and municipal facilities.

All four of these further categories of emissions should be subject to mandatory, facility-level reporting of GHG emissions in light of four objectives/needs established in section 2: improving the detail and accuracy of the national GHG emissions inventory; satisfying the public's right to know; enhancing public education on climate change; and encouraging emitters to adopt strategies for reducing emissions. Specifically:

- Some kinds of fugitive emissions are unlikely to be covered by the covenants and emissions trading system, because it is difficult to justify attaching a precise financial liability (as emissions trading does) to emissions subject to a large measurement uncertainty. However, the same argument does not apply to emissions reporting. Fugitive emissions accounted for 7.4% of Canada's GHG emissions in 2000, and grew by 42% during the preceding decade.<sup>21</sup> They currently represent well over half the emissions from the upstream oil and gas industry (including pipelines).<sup>22</sup> Despite uncertainties, well-established methodologies exist for estimating fugitive emissions and they are routinely reported on a voluntary basis to the VCR by oil and gas and

<sup>19</sup> Matthew Bramley, *op. cit.*, Appendix B.

<sup>20</sup> See [http://www.ec.gc.ca/pdb/npri/npri\\_dat\\_rep\\_e.cfm](http://www.ec.gc.ca/pdb/npri/npri_dat_rep_e.cfm).

<sup>21</sup> Environment Canada (2002), *Canada's Greenhouse Gas Inventory 1990–2000*, p. 17–18.

<sup>22</sup> See, for example, [http://www.ec.gc.ca/pdb/ghg/canada\\_2001\\_e.cfm](http://www.ec.gc.ca/pdb/ghg/canada_2001_e.cfm).



pipeline companies. Meeting the needs cited above clearly requires that these emissions be included in the mandatory reporting system.

- The federal government currently defines LIEs as including all facilities within selected industry sectors.<sup>23</sup> However, it is possible that smaller facilities could be exempted from the covenants and emissions trading system. The reasons for providing such exemptions may not apply to emissions reporting. This will depend on the selection of reporting thresholds (see below).
- A relatively limited number of sectors are included in the covenants and emissions trading system. The latter do account for most industrial GHG emissions,<sup>24</sup> but some major industrial facilities and companies will not be included. For example, in the auto manufacturing sector, Ford Canada had 528 kt CO<sub>2</sub>e of direct GHG emissions in 2000 and General Motors Canada emitted 463 kt.<sup>25</sup> There is no valid reason for excluding these major facilities from the mandatory reporting system for GHG emissions.
- Commercial, institutional and municipal facilities are significant contributors to Canada's GHG emissions. The commercial and institutional sectors accounted for 4.6% of Canada's emissions in 2001, and waste management (largely municipal) accounted for 3.2%.<sup>26</sup> Major GHG-emitting commercial, institutional and municipal facilities are already required to report CAC emissions to NPRI, and GHG emissions under Ontario's mandatory reporting system. There would appear to be no valid reason for excluding them from the national mandatory reporting system for GHG emissions.

During the 2001–02 consultations on mandatory reporting of GHGs under the NPRI, ENGOs advocated a threshold for facility-level reporting of 20 kt CO<sub>2</sub> per year, and thresholds for other GHGs roughly consistent with the CO<sub>2</sub> threshold on a global warming potential basis. As noted in section 4.1, several SMEs with annual emissions of less than 10 kilotonnes (kt) CO<sub>2</sub>e report those emissions voluntarily to VCR, which strongly suggests that a 20 kt threshold would not be onerous. The federal covenants and emissions trading system could well require a facility-level emissions measurement threshold of significantly less than 20 kt CO<sub>2</sub>e. Since the objectives/needs of mandatory reporting extend well beyond the needs of the covenants and emissions trading system (see above), and for reasons of comparability, CAN Canada takes the position that the facility-level reporting threshold applied to *all* facilities subject to mandatory reporting of GHG emissions should be whichever is the lower of 20 kt CO<sub>2</sub>e and the facility-level measurement threshold adopted for the covenants and emissions trading system.

The upstream oil and gas industry, with its numerous very small GHG emissions sources, demonstrates that facility-level reporting thresholds alone are insufficient. Thus, a facility-level reporting threshold of 100 kt CO<sub>2</sub>e would capture only about 60% of Alberta's industrial GHG emissions.<sup>27</sup> This would represent an unacceptably small proportion, and a step backwards in the case of oil and gas producers who already report corporate-level emissions, including those from numerous small facilities, voluntarily to VCR. The obvious solution — and one that has been proposed by Alberta Environment<sup>28</sup> — is that both facility-level and corporate-level reporting thresholds should be applied. A corporate entity exceeding the corporate-level threshold would be required to report close to 100% of emissions and provide facility-level disaggregation for facilities exceeding the facility-level threshold. If corporate-level thresholds are not implemented in addition to facility-level thresholds, then a special definition of “facility” should be

<sup>23</sup> See [http://www.nrcan-rncan.gc.ca/lieg-ggei/English/industry\\_en.htm](http://www.nrcan-rncan.gc.ca/lieg-ggei/English/industry_en.htm).

<sup>24</sup> Climate Action Network Canada, *op. cit.*, p. 2.

<sup>25</sup> Matthew Bramley, *op. cit.*, Appendix B.

<sup>26</sup> See [http://www.ec.gc.ca/pdb/ghg/canada\\_2001\\_e.cfm](http://www.ec.gc.ca/pdb/ghg/canada_2001_e.cfm).

<sup>27</sup> Alberta Environment (2002), *Framework Proposal For an Alberta Greenhouse Gas Reporting Program*, p. 15. Available at [http://www3.gov.ab.ca/env/air/emissions\\_inventory/GHG\\_emissions.html](http://www3.gov.ab.ca/env/air/emissions_inventory/GHG_emissions.html).

<sup>28</sup> *Ibid.*, p. 10.

used in the upstream oil and gas industry to aggregate several small interconnected facilities and ensure that close to 100% of emissions are captured.

CAN Canada supports the inclusion in mandatory GHG emissions reporting of vehicles that are, in effect, part of a facility (“captive fleets”). This applies most obviously to off-road vehicles used in the mining, oil and gas and other resource industries. Emissions from diesel off-road vehicles accounted for 2.5% of Canada’s GHG emissions in 2000, and increased by over 60% during the preceding decade.<sup>29</sup> They are clearly an important emission source, and given that their emissions can be easily estimated from fuel expenditures, there would appear to be no good reason to exclude them.

### 4.3 Facility-level versus corporate-level reporting

It is clear that governments’ needs for mandatory reporting of GHG emissions (see section 2) can only be satisfied at a facility level or at the very least a sub-corporate level. It is proposed that the federal covenants and emissions trading system use process-level (which in some cases will be sub-facility-level) production data to allocate emission permits based on emissions intensity targets.<sup>30</sup> The national GHG emissions inventory is also organized by type of industrial or other process, and improving its detail and accuracy will require process-level (i.e. sub-corporate-level) data. As discussed in earlier sections, Ontario already requires reporting of GHG emissions at a facility level. Alberta Environment has presented a number of reasons for mandating GHG emissions reporting at the facility level.<sup>31</sup> Corporate-level data collected in a national system for companies with facilities in more than one province or territory would not meet the needs of individual provincial/territorial governments, while facility-level data would.

As for two other objectives/needs established in section 2 — satisfying the public’s right to know and encouraging emitters to adopt strategies for reducing emissions — it is clear that they can only be met adequately by public reporting of data at the facility level. The public has a right to know the level of responsibility of individual facilities that are significant contributors to climate change, and community groups at the local level are requesting information about facility-level GHG emissions (see section 1.2). In addition, as Alberta Environment notes, “reporting strictly at a corporation level is unlikely to provide the information required to identify strategies for emission reductions.”<sup>32</sup> Indeed, corporate entities have to compile data at the facility level in order to produce corporate-level emissions data. If one accepts that governments need facility-level data, then this means that the question of whether a mandatory reporting system should require facility-level or only corporate-level reporting is really just a question about public disclosure, as further discussed in section 7.

As argued in section 4.2, facility-level reporting is needed not to the exclusion of but *in addition to* corporate-level reporting, in order to ensure that close to 100% of emissions are captured.

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<sup>29</sup> Environment Canada, *op. cit.*, p. 16.

<sup>30</sup> *Discussion Paper on the Structure and Issues of Climate Change Covenants*, p. 5. Available at [http://www.nrcan-rncan.gc.ca/lieg-ggei/English/updates\\_en.htm](http://www.nrcan-rncan.gc.ca/lieg-ggei/English/updates_en.htm).

<sup>31</sup> Alberta Environment (2002), *op. cit.*, p. 9–11.

<sup>32</sup> *Ibid.*

## 5. Key elements of mandatory reporting

### 5.1 Reportable parameters

The key parameters that facilities should report under a national mandatory GHG emissions reporting system are:

- emissions of the six GHGs covered by the Kyoto Protocol, fully disaggregated by
  - gas,
  - process type (as defined in covenants and/or their regulatory backstop<sup>33</sup>) and
  - emissions type (stationary combustion, industrial process, fugitive, mobile combustion etc.);
- the quantity of production for each process type; and
- a clear description of, or reference to, the measurement protocols used.

Disaggregation by gas, process type and emissions type is necessary for data to be useful in improving the detail and accuracy of the national GHG emissions inventory. Disaggregation by process type, and process-specific production quantities, are needed to assess compliance with the covenants and emissions trading system. But given federal and provincial governments' and industry stakeholders' emphasis on GHG emissions intensity (emissions divided by production) as the key indicator of performance on climate change, process-specific production quantities should be reported by all facilities, not just those covered by the covenants and emissions trading system.

Maximum disaggregation of data, as noted in section 3, will in general maximize its usefulness to the widest possible range of stakeholders and types of analysis. The level of disaggregation suggested here should not represent a burden to emitters, since data has in any case to be gathered at this level before producing more aggregated statistics.

CAN Canada recognizes that a full assessment of a corporate entity's performance with regard to climate change includes consideration of not only its physical GHG emissions to the atmosphere, but also any GHG offsets it may have acquired, as well as any CO<sub>2</sub> sinks that it may control, and any amounts of CO<sub>2</sub> that it may have stored in geological formations. There could be a provision, in the arrangements for publication of data collected under the mandatory reporting program, for entities to report on offsets and sinks. However, these should be reported separately from physical emissions.

With regard to geological storage of CO<sub>2</sub>, the federal and some provincial governments intend to make significant use of it as a means of avoiding GHG emissions over the next several years (as is evident in the *Climate Change Plan for Canada* and Alberta's climate change action plan). Indeed, CO<sub>2</sub> is already commonly geologically stored in North America through acid gas reinjection and enhanced oil recovery. Canada will claim that geologically stored CO<sub>2</sub> should not appear in the national GHG emissions inventory used for purposes of compliance with international commitments such as the Kyoto Protocol, as it is not emitted to the atmosphere. Geological CO<sub>2</sub> storage nonetheless raises issues of major public concern, such as the permanence of storage and risks to human health and safety. There is therefore an urgent need for comprehensive, systematic tracking of geological CO<sub>2</sub> storage in Canada. The government of Alberta intends to include such tracking in its mandatory GHG reporting system.<sup>34</sup> Implementation of a national mandatory reporting system for GHG emissions is an ideal opportunity to ensure such tracking occurs nationally. Amounts of CO<sub>2</sub> stored geologically should therefore be an additional reportable parameter under the system. Again, it should be reported separately from emissions to the atmosphere.

<sup>33</sup> Covenants and/or the backstop will define a separate emissions intensity target for each process. See *Discussion Paper on the Structure and Issues of Climate Change Covenants*, *op. cit.*

<sup>34</sup> See [http://www3.gov.ab.ca/env/air/emissions\\_inventory/GHG\\_emissions.html](http://www3.gov.ab.ca/env/air/emissions_inventory/GHG_emissions.html).

## 5.2 Measurement protocols

All emissions from a given process type must be measured using the same protocol in order to respect the principle of harmonization/standardization (section 3), maintain equity under the covenants and emissions trading system, and provide data comparability for analysis purposes. Protocols used for the national mandatory GHG emissions reporting system should represent the best practice that can be implemented at a reasonable cost.

## 5.3 Verification

Emissions trading converts emissions into a financial liability and emission reductions into a financial opportunity. This means that emissions accounting for the purposes of emissions trading should, in general terms, be as rigorous as financial accounting. Emissions and production data that is required by the federal covenants and emissions trading system should therefore be subject to independent verification at the cost of the emitter. The rules that verifiers are to apply must be clear and verifiers should be required to subscribe to recognized and reputable professional standards. The United Kingdom's currently operating GHG emissions trading system, for example, requires all participants to have their emissions verified by an independent, officially accredited organization.<sup>35</sup> Independent verification is already used by Canada's leading practitioners of voluntary corporate-level GHG emissions reporting.<sup>36</sup>

With regard to data not required by the covenants and emissions trading system, the broader need for credibility and objectivity of the national mandatory GHG emissions reporting system (see section 3) requires

- that all such data be verifiable (as opposed to actually verified), implying the keeping of records of all information needed to replicate reported data later if desired;
- that a representative sample of such data be actually verified.

## 6. Reporting vehicle

The reporting vehicle used for the national mandatory GHG emissions reporting system must meet the following criteria, which are justified below:

- it must be authorized by federal legislation to collect and publish the necessary data;
- it must be applicable to emissions not covered by the covenants and emissions trading system; and
- it must be publicly accountable, transparent, and avoid conflicts of interest.

The reporting vehicle obviously needs to have legislative authority in order for the system to be mandatory — a fundamental principle established in section 3. For its scope to be national, as we have argued is essential (see section 1.3), that means, in practice, federal legislation. It is simply not practical to wait for all 13 provinces and territories to establish their own regulatory frameworks for GHG emissions reporting. There are three obvious candidate sources of federal legislative authority, namely (i) the *Canadian Environmental Protection Act* (CEPA), by virtue of which the NPRI exists as a mandatory

<sup>35</sup> See <http://www.defra.gov.uk/environment/climatechange/trading/ukets.htm#Reporting>.

<sup>36</sup> For example, Suncor was intending to commission an independent verification of both its GHG Management System and calculation methodologies in 2003. See Suncor Energy Inc. (2002), *Eighth Annual Progress Report* (Canada's Climate Change Voluntary Challenge and Registry Program), p. 26. Available at [http://www.vcr-mvr.ca/challenge/clientdetail\\_e.cfm?No=31](http://www.vcr-mvr.ca/challenge/clientdetail_e.cfm?No=31).

emissions reporting system; (ii) the legislation used as the backstop to the federal covenants and emissions trading system; and (iii) the *Statistics Act*.

The federal government has been very clear, both in the *Climate Change Plan for Canada* and more recent statements,<sup>37</sup> that the covenants and emissions trading system will have a legislative backstop, and this seems likely to be new federal legislation. However, as we have argued in detail in section 4.2, in light of the objectives/needs established in section 2, there are four important categories of GHG emissions that should be subject to mandatory, facility-level reporting that will not be covered by the covenants and emissions trading system. Using the legislative backstop to the covenants and emissions trading system to require reporting of emissions not covered by that system would elicit all manner of objections and would simply not be practical.

The *Statistics Act* cannot be used as the legislative authority for a facility-level or even a corporate-level GHG emissions reporting system because it does not allow facility- or corporate-level information to be made public.<sup>38</sup> Transparency and public accessibility to data are fundamental principles of the system (see section 3), and public access must be to facility-level data, as argued in section 4.3 and further discussed in section 7. Amending the *Statistics Act* in this regard is not a feasible proposition, as it would undermine Statistics Canada's ability to do a large proportion of its work.

By elimination, therefore, CEPA appears to be the only feasible source of legislative authority for the national mandatory GHG emissions reporting system. As already mentioned, the NPRI already exists as a mandatory emissions reporting system under CEPA. In fact, several reasons lead to the conclusion that the NPRI is the most appropriate and efficient vehicle through which to collect company and facility specific GHG emissions data:

- The NPRI is a well-established framework for reporting on facility-level emissions and transfers. Mandatory reporting under the NPRI has been underway for a decade, and facilities are familiar with the reporting procedures under the NPRI.
- The NPRI provides an established infrastructure for the collection, processing and provision of public access to facility-level data.
- Data collected through the NPRI is presented through a well-integrated database system, which facilitates detailed analyses by substances, sectors, facilities and geographic locations by federal, provincial and territorial governments, all stakeholders and the public.<sup>39</sup>
- All six GHGs covered by the Kyoto Protocol meet the NPRI's established "decision factors" for addition of new substances.<sup>40</sup>
- The multistakeholder NPRI Work Group on Substances has a well-established record of being able to develop reporting requirements specific to different types of substances that are acceptable to all stakeholders. This has been most recently demonstrated in the development of procedures

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<sup>37</sup> See, for example, Government of Canada (2003), *Working with Industry and Business to Address Climate Change*, media backgrounder, August 12, 2003. Available at [http://www.climatechange.gc.ca/english/publications/announcement/bg\\_industry.html](http://www.climatechange.gc.ca/english/publications/announcement/bg_industry.html).

<sup>38</sup> Section 17 of the *Statistics Act* requires generally that information not be disclosed in a manner that would identify an individual person, business or organization. The Chief Statistician may publish data "in the form of an index or list of individual establishments, firms or businesses showing ... their names, addresses, telephone numbers, the products they produce, manufacture, process, transport, store, purchase or sell in the course of their business ..." but cannot identify specific quantities of production or emissions.

<sup>39</sup> The ability to undertake multi-pollutant analyses of facility, corporate or sector emissions would be particularly important in investigating and tracking co-benefits of reductions in emissions of CACs which accompany the implementation of GHG reduction strategies.

<sup>40</sup> D. Cope Enterprises, *op. cit.*

for reporting CACs under the NPRI. The NPRI Work Group on Substances has already undertaken initial work on reporting parameters for GHGs under NPRI.<sup>41</sup>

- CEPA provides compliance and enforcement mechanisms to address cases of incomplete or false reporting to NPRI.

In comparison, the establishment of a completely new data collection, handling and publication system for GHG emissions would be costly for government and cause delays that would likely severely challenge the government's proposed timeline (see section 8). It would also likely involve increase costs and burden for emitters, who would have to become familiar with and use a separate reporting system in addition to the NPRI (which they would continue to be required to use for non-GHG pollutant releases). Where the NPRI currently may not provide, for example, a sufficient level of rigour for emissions covered by the covenants and emissions trading system, there is nothing to prevent it from being adjusted to do so. Any specific reporting requirements of the covenants and emissions trading system that may not currently be provided for under CEPA can be specified in the backstop legislation.

In summary, reporting of GHG emissions under the NPRI would build on well-established procedures and infrastructure, minimize the costs to reporting facilities and the government, and facilitate widespread access to and use of the data. No other available option for facility-level GHG emission reporting offers these advantages. CAN Canada therefore believes that the burden of proof must be to show why NPRI is *not* the appropriate reporting vehicle, rather than the other way around.

If NPRI is not used as the reporting vehicle for mandatory facility-level GHG emissions reporting, then the third criterion above — public accountability, transparency, and avoidance of conflicts of interest — requires that it be some other federal government agency. Transparency is a fundamental principle (see section 3). There are established mechanisms for holding governments accountable and gaining access to relevant information that do not apply to arms-length, quasi- or non-governmental bodies.

Delegation of the reporting vehicle to the private sector would not only undermine public accountability and transparency, but also likely cause the appearance of conflicts of interest, undermining credibility/objectivity (another principle established in section 3). Specifically, the VCR, which currently draws two-thirds of its operating funds,<sup>42</sup> and nine out of 15 board members,<sup>43</sup> from the private sector, should not be the reporting vehicle. A leading role for GHG-emitting industry in the financing and governance of the reporting vehicle would severely undermine the public credibility of, and public confidence in the system. In particular, it is essential that the covenants and emissions trading system is seen to be enforced on a foundation of credible, objective data, given that the data will translate directly into financial terms (as a result of emissions trading) and be used to ascertain legal compliance with covenants and/or their regulatory backstop. In addition, as discussed in section 1.4, the VCR does not have a good record regarding the completeness, consistency and public accessibility of GHG emissions data.

Reliance on provincial/territorial reporting vehicles would very likely degrade the harmonization/standardization of the system as well as public accessibility. A national reporting vehicle that is designed to meet all the needs of provincial/territorial governments is a far better option.

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<sup>41</sup> SGA Energy Ltd. (2002), *NPRI Reporting Parameters for Greenhouse Gases*, Final Draft Prepared for The Greenhouse Gas Subgroup of the National Pollutant Release Inventory Multi-Stakeholder Work Group on Substances.

<sup>42</sup> See [http://www.vcr-mvr.ca/about\\_e.cfm](http://www.vcr-mvr.ca/about_e.cfm).

<sup>43</sup> See [http://www.vcr-mvr.ca/people/mem\\_board\\_e.cfm](http://www.vcr-mvr.ca/people/mem_board_e.cfm).

## 7. Public disclosure

The key objectives and principles of a mandatory GHG emissions reporting system, established in sections 2 and 3 respectively, include the following:

- satisfying the public's right to know emissions from individual facilities and corporate entities;
- enhancing public education on climate change;
- encouraging emitters to adopt strategies for reducing emissions;
- transparency;
- public accessibility, with data kept confidential only where emitters can present a compelling case based on real harm; and
- maximum practicable disaggregation of publicly reported data.

Realizing/respecting each of these objectives and principles depends on the fullest public disclosure of data. This includes disclosing facility-level data, as argued in section 4.3.

CEPA (sections 51-53) already has provisions for confidentiality under which information can only be withheld from publication if the emitter can convince the Minister that it “constitutes a trade secret”, or that disclosure “would likely cause material financial loss to, or prejudice to the competitive position of” or “likely interfere with contractual or other negotiations being conducted by” the emitter. Even where these conditions are satisfied, the Minister can still choose disclosure if the public interest outweighs in importance any material financial loss or prejudice to the competitive position of the emitter. These provisions establish an appropriate balance between public and private interests. They have been extensively road-tested, and resulted in only 7 out of 2,419 facilities reporting to the NPRI being granted confidential status in 2000.<sup>44</sup> This situation is broadly accepted by industry. If NPRI is chosen as the reporting vehicle for mandatory GHG emissions reporting, the CEPA confidentiality provisions would automatically apply. If some other reporting vehicle is chosen, it should apply equivalent provisions.

The notion that public disclosure of facility-level GHG emissions or production data raises genuine, widespread confidentiality concerns is highly doubtful:

- We are aware of no evidence that mandatory facility-level reporting of GHG emissions in Ontario has raised widespread confidentiality concerns.
- The NPRI already publishes a wealth of (non-GHG) emissions data by facility, something broadly accepted by industry.
- The NPRI now includes facility-level reporting of CAC emissions. This, like GHG reporting, is mostly based on measurements of fuel consumption. Disclosure of GHG emissions therefore to a large degree amounts to disclosure of information that is already available indirectly via disclosure of CAC emissions.
- Many corporate entities voluntarily reporting GHG emissions to VCR already do so at the facility level. Of the 102 industrial entities that reported their GHG emissions for the year 2000 to the VCR within 15 months of the end of that year, 47 reported facility-level emissions (in 26 cases that was because the entity consisted of a single facility).<sup>45</sup>
- Of the 102 industrial entities that reported their GHG emissions for the year 2000 to the VCR, 90 also reported their production for the same year. Of the 26 single-facility entities, 23 reported their production.<sup>46</sup>

In the case of facilities that are covered by the federal covenants and emissions trading system, public disclosure of production data is essential to enable the public to be able to assess performance against the

<sup>44</sup> See [http://www.ec.gc.ca/pdb/npri/2002Highlights/NPRI2000Overview/2data\\_e.cfm](http://www.ec.gc.ca/pdb/npri/2002Highlights/NPRI2000Overview/2data_e.cfm).

<sup>45</sup> Matthew Bramley (2002), unpublished analysis, Pembina Institute.

<sup>46</sup> *Ibid.*

GHG emissions intensity targets set by covenants and/or their regulatory backstop. The alternative would be an inability for stakeholders and the public to ascertain whether or not emitters were complying with a legal requirement. This would clearly be unacceptable.

An important aspect of public disclosure is ease of access to facilitate the various kinds of analyses that governments, stakeholders and the public may wish to undertake. As noted in section 6, data collected through the NPRI is already presented through a well-integrated database system, which facilitates detailed analyses by substances, sectors, facilities and geographic locations. Regardless of whether or not the NPRI is chosen as the reporting vehicle, data published under the national mandatory GHG emissions reporting system must be made available through the Internet in a timely manner and in a transparent and easily searchable format.

CAN Canada understands corporations' sensitivity to the way their emissions data is presented publicly when this is done through a vehicle or in a format over which they do not have complete control. That is why we suggest, for example, that there could be a provision, in the arrangements for publication of data collected under the mandatory reporting program, for entities to report on offsets and sinks (see section 5.1). We are confident that constructive multistakeholder discussions — through the NPRI Work Group on Substances, for example — can produce consensus on an appropriate format for public presentation.

## 8. Timeline

The federal government has proposed the following timeline for mandatory GHG emissions reporting:<sup>47</sup>

- decision on reporting vehicle: fall 2003
- reporting for some sectors: 2004 emissions (reported in 2005)
- full reporting: 2005 emissions (reported in 2006)

CAN Canada supports this timeline, which is consistent with previous experience with adding substances to the NPRI, with the proviso that the reporting of 2004 emissions should cover as many sectors as possible. The needs for a national mandatory GHG emissions reporting system are well established (see section 2) and go well beyond the requirements of the federal covenants and emissions trading system. Even if the latter system only begins functioning in 2008,<sup>48</sup> there is therefore a clear need for mandatory reporting as soon as possible. As argued in section 1.3, the federal government should lead implementation of nation action to address climate change, of which mandatory facility-level reporting of GHG emissions is a basic element. Instead, the provinces of Ontario and Alberta are currently leading the way on mandatory reporting. The federal government should move quickly to resume leadership.

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<sup>47</sup> Government of Canada (2003), *Developing a Domestic System for Mandatory Reporting of GHG Emissions*, deck presented to CAN Canada representatives, September 25, 2003.

<sup>48</sup> CAN Canada's position is that it should begin full operation in 2005. See Climate Action Network Canada, *op. cit.*, p. 29.