

## **Pembina Institute and Toxics Watch Society of Alberta Comments on Industrial Sector Cross-Cutting Issues of the Federal Government's *Regulatory Framework for Air Emissions***

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On April 26, 2007, the government of Canada announced its *Regulatory Framework for Air Emissions*,<sup>4</sup> which includes targets for Canada's total greenhouse gas (GHG) emissions and a proposed approach for regulating GHG emissions from large industry. The government subsequently held a multi-stakeholder *Consultation on the Clean Air Regulatory Agenda for Industrial Sector Cross-Cutting Issues* in Montreal on May 31 and June 1, 2007 and in Vancouver on June 4–5, 2007. At these consultation sessions, Environment Canada officials presented an overview of key elements of the Regulatory Framework, gathered stakeholder views on the cross-cutting elements of its design and implementation, and invited participants to submit written comments by the "end of July".<sup>5</sup>

The Pembina Institute and the Toxics Watch Society of Alberta welcome this opportunity to provide comments. The following comments and recommendations build on the Pembina Institute's *Analysis of the Government of Canada's April 2007 Greenhouse Gas Policy Announcement*,<sup>6</sup> which identified multiple loopholes and gaps that could undermine the government's ability to secure the emission reductions that it has claimed its Regulatory Framework will achieve.<sup>7</sup> We recommend that in addition to the comments below, the federal government also takes into consideration the Pembina Institute's analysis when further refining the Regulatory Framework.

Our comments focus on specific elements that were discussed at the Montreal and Vancouver consultations, notably the federal government's proposed emissions trading system, the design of the Offsets System, Credits for Early Action and the Technology Fund. These comments build on those that environmental NGO (ENGO) participants made orally at the consultations.

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<sup>4</sup> Environment Canada. 2007. *Regulatory Framework for Air Emissions*;  
[http://www.ec.gc.ca/doc/media/m\\_124/toc\\_eng.htm](http://www.ec.gc.ca/doc/media/m_124/toc_eng.htm).

<sup>5</sup> Environment Canada. 2007. *Industrial Regulatory Framework: Cross-cutting Consultation – Introduction*, p.4. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31.

<sup>6</sup> Available at <http://climate.pembina.org/pub/1464>.

<sup>7</sup> Bramley, M. 2007. *Analysis of the Government of Canada's April 2007 Greenhouse Gas Policy Announcement*. The Pembina Institute; <http://climate.pembina.org/pub/1464>.

## GENERAL COMMENTS

**1. Consultation process:** The Regulatory Framework states that the federal government will “undertake a series of consultations over the coming months ... with provinces and territories, each industry sector, labour, and environmental and health groups to discuss the implementation of the target structure for greenhouse gases and to validate the proposed air pollutant targets that have been determined through the benchmarking analysis, including the timeframe for their entry into force. In addition, the discussions will address the scope of the offset system, the administration of the technology fund, and the criteria for the credit for early action.”<sup>8</sup>

ENGOs have been pleased to have participated in the two initial consultations with Environment Canada officials that initiated discussions on the details of the Regulatory Framework. However, we are concerned that ENGOs have not been invited to consultations specific to individual industry sectors. Instead consultations are being held with each sector, excluding not only ENGOs but also representatives of other sectors.

The Regulatory Framework’s ability to achieve the amount of real emission reductions that the government has claimed, the inter-sectoral fairness of the framework and its chance of commanding any degree of public confidence depend critically on a series of decisions that will be taken at the sectoral level, notably the validation of sectoral air pollution targets, the definition of targets for new facilities, the definition of fixed process emissions to be exempted from emission reductions, size thresholds for exclusion of small facilities, quantification protocols, and the disaggregation of sector targets to facility and company levels. In all these cases, the decisions made will have a considerable bearing on the amount of emission reductions that each sector will be required to deliver under the future regulations.

Given the fast pace at which consultations are taking place and the federal government’s commitment to accountability and transparency, we urge the federal government to include ENGOs and representatives of other sectors as participants in the sector-specific consultations. This will help maximize environmental benefits and demonstrate that all sectors are being treated fairly.

**2. Complexity of the design of the Regulatory Framework:** The Regulatory Framework has an extremely complicated design, with multiple compliance options and special exemptions. The extensive loopholes and vaguenesses of the framework make it difficult to assess its effect on emissions with any certainty, and its complexity substantially increases the risks of delay in launching the emission trading system and poor transparency and inefficiency once it is in force. In comparison, the European Union’s (EU) Emissions Trading Scheme (ETS), currently the world’s most extensive regulatory system for industrial GHG emissions, is much simpler, with targets in terms of absolute emissions, not emissions intensity; allocation of facility-level targets devolved to member states; no technology fund; and a reliance on existing flexibility mechanisms under the Kyoto Protocol. For improved efficiency and effectiveness, the federal government should consider adopting a Regulatory Framework more in line with current international GHG emissions trading systems, particularly the EU ETS.

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<sup>8</sup> Environment Canada. 2007. *Regulatory Framework for Air Emissions*, p.33; [http://www.ec.gc.ca/doc/media/m\\_124/toc\\_eng.htm](http://www.ec.gc.ca/doc/media/m_124/toc_eng.htm).

## EMISSIONS TRADING

**3. GHG trading – priority for linking:** The Regulatory Framework states that the federal government will “explore opportunities” to link the Regulatory Framework to regional, state-level and federal-level GHG emissions trading systems in the US, and will “actively explore cooperation on emissions trading with Mexico”.<sup>9</sup> Where future linkages are explored the government must ensure that they do not compromise the environmental integrity and domestic objectives of the Canadian system. Specifically, future linkages between Canadian and foreign GHG emissions trading systems must be conditional on:

- (i) linked foreign systems being at least as stringent in all respects as the Canadian system, so that the environmental value of the latter does not suffer;
- (ii) constraints being placed on linkages to ensure that the Canadian price of emissions remains high enough to drive desirable domestic investments in low-GHG emitting technology and infrastructure; and
- (iii) linked countries being parties to the Kyoto Protocol or, after 2012, the global agreement that will extend or replace the Kyoto Protocol, so as not to diminish the contribution of the Regulatory Framework towards meeting Canada’s international obligations.

We therefore recommend that as a priority, the federal government pursue linkages with systems that already meet these criteria, notably the EU ETS and the Kyoto Protocol’s Clean Development Mechanism (CDM).

Canada should also seek to improve its own emissions trading system in order to ensure it has the ability to link with the most effective global emissions trading systems. Unfortunately, the Regulatory Framework establishes GHG intensity targets for large emitters and a baseline-and-credit system, rather than a cap-and-trade system. This approach makes it impossible to link Canada’s emissions trading system with the EU ETS given that the latter is a cap-and-trade system. To ensure that regulated industries can benefit from these international trading regimes, the federal government should shift its Regulatory Framework to a cap-and-trade system.

Canada should therefore make the following improvements to its emissions trading system to ensure that it is cost-effective and compatible with current international GHG emission trading systems:

- use a cap-and-trade architecture with absolute targets (as opposed to an intensity-based baseline-and-credit architecture) where the number of emission permits issued each year is less than the demand;
- implement the system in the context of clear, regulated short- and medium-term emission caps that are consistent with a long-term target based on the science of climate change;
- minimize market distortions (e.g., by ensuring that any price cap applies exceptionally, not routinely) and avoid loopholes (e.g., technology fund) that allow emitters to comply “on paper” without having to secure near-term emission reductions.

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<sup>9</sup> Environment Canada. 2007. *Regulatory Framework for Air Emissions*, p.15; [http://www.ec.gc.ca/doc/media/m\\_124/toc\\_eng.htm](http://www.ec.gc.ca/doc/media/m_124/toc_eng.htm).

**4. Public access to information:** Emissions trading is a new concept for most Canadians and requires a high level of transparency to allay public suspicion of emissions trading and doubts about the environmental legitimacy of offset credits. For this reason companies must be required to disclose publicly sufficient information to maintain public confidence in the emissions trading system. Resistance to such transparency will only further heighten public suspicions that the use of emissions trading is fraudulent and does not lead to real environmental improvements.

There is a compelling public interest in the public disclosure of company-specific GHG emissions and related compliance information. This interest is not dissimilar to the public interest in financial information on publicly-traded companies, and goes beyond the public interest in general information held by government. The Access to Information Act is therefore not a sufficient basis for publication of company-specific GHG emissions and related compliance information. Instead, the federal government should require all such information to be made public except where there is a compelling case that it should not be.

In the several jurisdictions that have already put in place emissions trading systems, public accountability is a key factor in ensuring that these systems achieve their intended environmental outcome. The proposed regulations for an emissions trading system for NO<sub>x</sub> and SO<sub>2</sub> in Alberta provide a clear example of the degree of public transparency necessary in an intensity-based emissions trading system. The proposed NO<sub>x</sub>/SO<sub>2</sub> emissions trading regulation states that the underlying data used in determining the baseline information of a unit (facility) and the detailed generation and emissions data with respect to a unit are public information and must be disclosed by the registry operator.<sup>10</sup>

The federal government should take all efforts to make publicly available data that will allow for a highly transparent and credible emissions trading system. For each facility, this would include:

- emission intensity targets;
- verified baselines;
- annual emissions disaggregated by gas and by activity;
- production information for each activity;
- methodologies used to calculate emissions and production information;
- uncertainties associated with the reported values.

This information should be made public through a registry system. Public registries are used in most emissions trading systems in the world. The lack of a public registry that includes all of the above information would undermine the emission trading system's transparency and severely limit public confidence. In addition, Canada should only have one registry, rather than multiple provincial registries, to ensure efficiency and transparency.

**5. Confidentiality:** The burden of proof that certain information should be kept confidential should be placed on those who wish it to be so. Blanket assertions, without convincing justifications, that certain categories of information should be kept confidential are not credible

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<sup>10</sup> See <http://www3.gov.ab.ca/env/air/OGS/managingemissions.html>.

and not acceptable.<sup>11</sup> The norm of the system should be to make all relevant information available to the public, and if there are exceptions, compelling justification must be provided, demonstrating that the public interest does not outweigh in importance the needs of the entity requesting confidentiality. This concept is for the most part included in the existing provisions of the *Canadian Environmental Protection Act* (CEPA).

However, in addition to the confidentiality provisions already included in CEPA, the government should examine whether a certain type of information is currently, or was previously made public, before granting confidentiality. If a certain type of information is currently, or was previously made public in some other forum, there is no justification for keeping it confidential.<sup>12</sup>

It is also essential to examine the age of certain information before granting confidentiality. Information that, for example, has a significant impact on a company's competitiveness when it is current or recent will no longer have any significant impact on competitiveness after a certain period of time.<sup>13</sup> Alberta's GHG reporting system recognizes this by limiting the period of time emitters can request confidentiality to five years.<sup>14</sup>

Therefore, regulations should specify that

- before granting confidentiality the Minister should consider whether the type of information being granted the exemption would ordinarily be considered confidential material, and
- where confidentiality is granted, it should be for a definite period that does not exceed two years.

**6. Tradability of technology fund credits and credits for early action** (see also discussions in Sections 26–36 below): Neither technology fund credits (granted in exchange for payments into a fund or for “pre-certified investments in specific projects” – see Section 36 below) nor credits for early action must be allowed to be traded under Canada's emission trading system, as these compliance options will allow industry to achieve “paper reductions” that do not correspond to reductions in actual emissions on a go-forward, near-term basis.<sup>15</sup>

The government should instead consider requiring that industrial emitters demonstrate that they have explored all other options to meet their obligations before having access to technology fund credits. In this way the system will maximize the volume of near-term reductions achieved.

**7. Limited access to Clean Development Mechanism (CDM):** The Regulatory Framework limits access to CDM credits for compliance purposes to 10% of each firm's target. However, this limit does not recognize that GHG emissions impact the environment in the same

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<sup>11</sup> Bramley, B. and N. Shariff. 2005. *ENGO Principles and Questions Regarding Public Access to Information Reported under the National Reporting System for Emissions of Greenhouse Gases (GHGs) and Related Information*. Submission to the National Steering Committee on Reporting; <http://climate.pembina.org/pub/591>.

<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> Alberta Regulation 251/2004, *Climate Change and Emissions Management Act*, Specified Gas Reporting Regulation, Section 5(1); [http://www.qp.gov.ab.ca/documents/Regs/2004\\_251.cfm?frm\\_isbn=0779733134](http://www.qp.gov.ab.ca/documents/Regs/2004_251.cfm?frm_isbn=0779733134).

<sup>15</sup> See Bramley, M. 2007. *Analysis of the Government of Canada's April 2007 Greenhouse Gas Policy Announcement*, Table 3, p.7. The Pembina Institute; <http://www.pembina.org/pub/1464>.

manner regardless of where in the world they are emitted. For this reason, international emission trading, if it is subject to strict rules respecting environmental integrity, is an effective method of combating climate change. The CDM also has the advantage of being the world's primary mechanism for helping developing nations to industrialize in a less GHG-intensive manner.

We recommends that the Regulatory Framework's limit on use of CDM credits be removed as the CDM is a legitimate, transparent compliance mechanism that is internationally recognized under the Kyoto Protocol.

**8. Auctioning:** Under the Regulatory Framework, regulated industries will receive free emission allocations because their GHG targets have been set equal to their baseline emissions. The government will effectively be giving industry a free license to pollute, equivalent to gratis issuance of emission permits in a cap-and-trade architecture. Auctioning permits instead of issuing them gratis would make industry financially responsible for all of its emissions. Given the experience of the EU ETS (where gratis allocation has resulted in windfall profits for some emitters), the support for auctioning permits in the US through the RGGI, and the desire by many regulated industries to have Canada's emission trading system link with other trading systems, the federal government should adopt a cap-and-trade architecture and the objective of auctioning a rapidly increasing proportion of the permits to regulated industry. The transition to auctioning will also allow eventual full implementation of the polluter pays principle.

## OFFSET SYSTEM

While the concept of a domestic offset system is straightforward, its detailed design is critical to ensuring that it has a high level of environmental integrity. An offset system will only deliver real emission reductions if it is based on rigorous emission accounting, so like any financial accounting system it must have strict rules that govern its operation. Unfortunately, some of the rules for offset projects being considered by the federal government introduce emissions accounting that could compromise the integrity and credibility of Canada's offset system. This will result in the Regulatory Framework delivering significantly fewer real emission reductions than claimed. Every tonne of reductions that industrial emitters fail to deliver through the offset system is an extra burden on the climate and an extra tonne that the federal government – and taxpayers – will have to find and pay for, from somewhere else.

**9. Eligibility criteria:** We strongly recommend that the eligibility criteria currently under consideration by the federal government be revised to address the following concerns:

**a) *Criteria to define incrementality***<sup>16</sup>: To ensure that an offset system does not diminish the environmental outcome of regulations, offset credits must be equivalent to the emission reductions foregone by the regulated industry that purchases the offset. In other words, the fundamental condition for incrementality must be that the investment in a project results in emission reductions *that would not have occurred if offset credits were not available*. If this essential condition is not included in the definition of “incremental”, then companies' compliance with regulated targets will be in part either fraudulent, subsidized by taxpayer-funded incentives, or both. This is clearly unacceptable. Issuing credits that do not meet the fundamental condition for incrementality will cause an increase in net global emissions because

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<sup>16</sup> Incrementality is also frequently referred to as “additionality”.

credits will be used by regulated industry to emit more than otherwise, without a compensating amount of incremental reductions in emissions not covered by the federal government's GHG regulations. This amounts to "emissions fraud".

We welcome the federal government initial attempt to define "incremental", according to which a project must, to be incremental:<sup>17</sup>

- (i) meet the "cut-off date for project eligibility",
- (ii) go "beyond business as usual" (BAU) and,
- (iii) be "surplus to legal requirement and government incentives."

However, this proposed language does not clearly rule out the possibility of offset credits being issued in respect of emission reductions that are already required by provincial regulations or covered by provincial incentives. This would both violate the fundamental condition for incrementality outline above, diminishing the emissions reductions achieved by the Regulatory Framework, and create a lack of clarity as to who owns the reductions. Where credits were granted for emission reductions covered by provincial incentives, provincial taxpayers would, in effect, be paying for industry's costs to meet federally regulated targets. This is not acceptable.

The start date of eligible projects also needs to be fixed so as to ensure that projects are incremental, i.e., the start date should be set at a point that excludes projects that could not reasonably have expected to receive offset credits at the time the decision was taken to invest in the project. Also, it is necessary to deem an appropriate moment in project development to be the start date. This should be the best available proxy for the moment at which the investment decision was taken (the moment at which an environmental approval application was submitted may be an appropriate proxy).

Applying a robust incrementality requirement need not be onerous. Practical rules can be adopted to ensure BAU projects cannot receive credits, as demonstrated by the CDM, which uses a "tool for the demonstration and assessment of additionality" that provides a reasonably rigorous and clear way to do this. The CDM additionality tool provides a project developer with two alternative paths to prove incrementality, by showing that without credits, the project is either (i) not financially attractive or (ii) prevented by barriers that do not apply to alternative activities. The CDM additionality tool has been effectively used by project developers and investors for three years in what is by far the world's largest offset system.

It is true that the CDM has suffered from administrative bottlenecks in the past, but this was principally a result of under-resourcing of the CDM Executive Board, and because there were initially few experienced sellers, not because of incrementality rules. Robust incrementality rules help to reduce uncertainty because they make it very clear to project proponents whether their projects are likely to qualify or not. In 2006, nearly US\$5 billion was invested in CDM projects,<sup>18</sup> and 742 CDM projects have been registered to date.

**b) Other environmental impacts:** Projects that reduce GHG emissions could have detrimental environmental impacts in other areas. In order to ensure that projects that receive offset credits

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<sup>17</sup> Environment Canada. 2007. *Offset System*, p.6. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31.

<sup>18</sup> Capoor, K. and P. Ambrosi. 2007. *State and Trends of the Carbon Market 2007*, p.20. World Bank.

are environmentally beneficial, not just from a GHG perspective, but from a broader environmental perspective as well, all projects must be assessed for all environmental impacts. Only those projects that can demonstrate acceptable mitigation of all other environmental impacts should be allocated offset credits.

To address concerns around incrementality and other environmental impacts, we recommend that the federal government replaces its current definition of “incremental”<sup>19</sup> with the following:

***Incremental environmental benefits:** to be eligible to receive offset credits, a project must result with high confidence in lower greenhouse gas emissions or higher greenhouse gas removals than would be the case if offset credits were not available. Other environmental benefits and impacts must also be addressed when considering project eligibility.*

**10. Scope of the Offset System:** We are cautiously in favour of a broad offset system, as it can now be used to leverage the large untapped energy efficiency potential that remains underused due to market barriers. However, the scope of the Offset System must be defined by criteria that will ensure the environmental integrity of the system and its compliance with national and international legal climate change obligations.

- ***Offset projects outside Canada’s Kyoto inventory:*** Some types of emission reductions/removals that cannot be counted towards Canada’s compliance with the Kyoto Protocol have been proposed to be eligible for offsets credits. This is the case, for example, for (i) reductions occurring in countries that are not parties to the Kyoto Protocol (e.g., geological sequestration of US CO<sub>2</sub> in Canada and the US portion of cross-border trucking projects), (ii) reductions in years prior to 2008 (which cannot be counted because the Kyoto Protocol’s first commitment period begins in that year), and (iii) forest management sinks before 2013 (which cannot be counted because Canada’s Initial Report under the Kyoto Protocol did not elect to count them).

Since the federal government would move even further from meeting its legal obligation under the Kyoto Protocol by granting offset credits in respect of reductions/removals such as these, we recommend that they be eligible only if the government creates demand for such credits over and above the existing demand (e.g., by strengthening existing GHG industrial targets or creating a special fund to purchase these offsets).

We recognize that better management of Canada’s forests (see also Section 21 below) has a very large potential for GHG emission reductions/removals and that there is therefore a clear and pressing need to attach a financial value to the carbon stored in forests. As article 3.4 of the Kyoto Protocol provides credit for forest management post-2012 (in the second and subsequent commitment periods), we support the inclusion of forest management in the Offset System in respect of reductions/removals in years 2013 and later. We also encourage the government to

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<sup>19</sup> Environment Canada. 2007. *Offset System*, p.6. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31.



create sufficient extra demand for offset credits to allow the inclusion of forest management in the Offset System in respect of reductions/removals in 2008–12.

- ***Nuclear energy and large hydroelectricity projects:*** Nuclear energy and large hydroelectricity projects must not be eligible to generate credits in the Offset System.

While nuclear electricity generation stations are not direct sources of GHG emissions, large amounts of radioactive and hazardous wastes are generated at each stage of the nuclear energy production process – wastes that will require care over thousands of years for safety, health, environmental and security reasons. These challenges, along with security, accident and weapons proliferation risks that are not shared by any other energy source, place nuclear energy in a unique category relative to all other energy supply options.<sup>20</sup> In addition, nuclear electricity generation would face serious difficulty qualifying under a robust incrementality criterion (see Section 9 above), especially given that it receives large subsidies from the federal government through Atomic Energy of Canada Limited (AECL).

Large hydroelectric projects should also not qualify for offset credits. These projects can release substantial methane emissions, caused by decomposing organic materials. Methane has a 100-year global warming potential 25 times greater than CO<sub>2</sub>.<sup>21</sup> Furthermore, large hydroelectric projects destroy ecological habitats and systems, have significant social impacts on communities which must be relocated, and would face serious difficulty qualifying under a robust incrementality criterion.

We recommend that only electricity generation projects that meet the federal government's Eco-logo certification be eligible for offset credits.

- ***Fixed process emissions:*** The Regulatory Framework is silent on whether reductions in fixed process emissions will be credited under the Offset System. Representatives of regulated industry sectors argued that these emissions were impossible to reduce and that for this reason they could not be covered by the emissions reduction targets. If regulated industrial emitters are now claiming that they can reduce these emissions in order to receive offset credits, then they should be covered instead by the regulated emissions targets. Under no circumstances should reductions in emissions deemed to be “fixed process emissions” for purposes of regulation be credited in the Offset System.
- ***Small facilities:*** If the government sets size thresholds to exempt small facilities from regulated GHG targets, then the possibility arises of allowing projects undertaken in such facilities to be eligible for offset credits. This appears contradictory, because if facilities are excluded from regulation on grounds of administrative burden, then

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<sup>20</sup> Winfield, M., et al. 2006. *Nuclear Power in Canada: An Examination of Risks, Impacts and Sustainability*. Pembina Institute; <http://www.pembina.org/pub/1346>.

<sup>21</sup> Forster, P. and V. Ramaswamy (coordinating lead authors). 2007. “Changes in Atmospheric Constituents and in Radiative Forcing” (Chapter 2) in *Climate Change 2007 – The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the IPCC*. Intergovernmental Panel on Climate Change; <http://ipcc-wg1.ucar.edu/wg1/wg1-report.html>.

administrative burden would presumably also make them unappealing for offset projects. Therefore, before considering the eligibility of small facilities for offset credits, the government must examine first whether instead size thresholds can be set at a lower level or removed altogether.

- **Co-generation:** For the sake of consistency and fairness, the federal government should not allow industrial co-generation to be included in the Offset System. Instead, all industrial-scale fossil fuel-fired electricity generation facilities should be assigned regulated GHG targets in a consistent manner. (In addition, the government should assign targets in a manner that prevents windfall emissions credits accruing to relatively low-emitting fossil fuel fired generation.) If there is a demonstrable need to provide a financial incentive (beyond the relative incentive inherent in the regulated GHG targets) to capture untapped potential for co-generation to displace more GHG-intensive electricity generation in certain provinces, then it would be more appropriate to provide that through a specific federal or provincial government program. There is a strong case for implementing such programs for small cogeneration plants in light manufacturing and commercial and institutional buildings.

**11. Public disclosure of information** (see also Section 4 above): Environment Canada’s May 31, 2007, presentation on the Offset System states that the “Offset System will have sufficient transparency to help entitlement and environment integrity” and further asks “what information should the Offset System make publicly available?”<sup>22</sup> We urge that detailed information about all offset projects be made publicly available. This information should include:

- detailed project descriptions including information on the calculation of emissions,
- all information in the *Reduction/Removal Report* (as described in Section 14 below), and
- unique serial numbers that allow the public to track the creation of all offsets and the identity of the facility that retired each credit.

This information should be made public through a public registry system. Public registries are used in most emissions trading systems in the world. The lack of a public registry for Canada’s offset system would undermine the system’s transparency and severely limit public confidence. In addition, there should only be one registry, rather than multiple registries, to ensure efficiency and transparency.

Ontario’s emissions trading system for NO<sub>x</sub> and SO<sub>2</sub> is an example of a system that meets these requirements.<sup>23</sup> The federal government will need to carefully justify any departure from the precedent set by Ontario regarding transparency.

**12. Confidentiality** (see also Section 5 above): Our position is that information can only legitimately be held confidential where there is compelling justification and a clear case that the public interest is outweighed by commercial concerns. This approach would be in line with

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<sup>22</sup> Environment Canada. 2007. *Offset System*, p.3,9. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31.

<sup>23</sup> See <http://www.oetr.on.ca/oetr/index.jsp>.

Section 53 of CEPA, according to which the Minister of the Environment may reject a request for confidentiality if the disclosure is in the interest of the protection of the environment, public health or public safety; and the public interest in the disclosure outweighs any financial or competitiveness loss that may be incurred as a result of its release.

As recommended in Section 5 above, in addition to the existing provisions under CEPA, regulations should specify that

- before granting confidentiality the Minister should also consider whether the type of information being granted the exemption would ordinarily be considered confidential material, and
- where confidentiality is granted, it should be for a definite period that does not exceed two years.

**13. Public comments:** The “Credit creation process” outlined in Environment Canada’s May 31, 2007 presentation on the Offset System<sup>24</sup> provides no explicit step for public review of offset projects. The lack of a public review risks seriously diminishing public confidence in and acceptance of offsets. This review step would provide the public with an essential opportunity to provide views on a project and its acceptability for receiving offset credits before it is registered. The registering body should then take these views into account when deciding whether to approve a project. The public should be given the opportunity to provide input on:

- The environmental integrity of the project – including any concerns around incrementality;
- Any non-GHG environmental impacts and related concerns about the project;
- Any socio-economic impacts and local concerns about the project.

We cannot support the Offset System if the following explicit step is not included in the “Credit creation process”:

***Public comment period:** Once a project is validated, the project document, the protocol used and validation report will be posted on the internet and made available for public and stakeholder comments for 30 days. This will allow stakeholders and the public to evaluate issues such as socio-economic and non-GHG environmental impacts (beyond those covered by any EIA requirements), local concerns, conformance with offset eligibility criteria, and confidence that the project will produce incremental GHG reductions. The comments and any recommendations from the public comment period will be taken into account during the project approval process.*

**14. Project proponent’s Reduction/Removal Report:** In order to evaluate environmental integrity and incrementality as well as to assist in determining and clarifying public versus private ownership of emission reductions, the following requirements should be included in the project proponent’s *Reduction/Removal Report*<sup>25</sup>:

- list of all investors in the project (e.g., federal and provincial governments and private entities);
- breakdown of investments by investor and the proportion of emission reductions claimed by each investor;

<sup>24</sup> Environment Canada. 2007. *Offset System*, p.7. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31.

<sup>25</sup> *Ibid.*

- quantification of all federal, provincial and municipal government incentives (e.g., Technology Fund, WPPI, ecoENERGY, Alberta's *Emissions and Climate Change Fund*, EcoTrust funding) that the project has received;
- demonstration of incrementality (see last two paragraphs in Section 9 a) above); and
- a report on the verification steps undertaken by the project proponent.

**15. Validation:** The government is considering allowing third party validators in the Offset System. While this may eventually be appropriate, the government should take on this role initially in order to ensure that only offset projects of a high quality are validated. If validation is later opened to third parties this should only be done once:

- clear criteria for validating projects have been set; and
- validators are certified by the government.

**16. Verification:** Environment Canada officials stated at the Cross-Cutting Issues consultation in Montreal that the government would require mandatory third party verification of offset projects. This is a commendable requirement that we support. However, the government must also ensure that verifiers are required to follow clear and robust guidelines when undertaking verification audits. Verifiers should also be certified by the government.

**17. Accuracy level of data:** To ensure that a high level of accuracy is achieved in the quantification of emission reductions/removals, the uncertainty of GHG emissions estimates must be reported and made publicly available. As most existing quantification protocols provide sufficient information to quantify uncertainties, this requirement should not be considered overly onerous.

The federal government should also require that all project proponents use the best information (i.e., tier) available to them to estimate their emissions and reductions. This will maximize the accuracy of the data is used for quantifying offsets.

**18. Quantification Protocols:** The Offset System should not allow project proponents to choose the quantification protocol they would like to use as identical projects could end up with different emissions profiles despite having identical physical processes. Instead we recommend that proponents be required to use protocols that are certified by the federal government. If a proponent would like to develop a project for which no protocol is available, then the proponent should be allowed to propose a new protocol, provided that it is consistent with the IPCC's Good Practice Guidance to help ensure that emission reduction estimates are of a high accuracy, precision and quality.

Projects should also be required to use the same quantification protocols, and tiers used in those protocols, for estimating emissions from year to year and for their baseline period. This will ensure that spurious reductions/removals are not calculated simply as a result of changes in methodologies over time.

**19. Responsibility for transaction costs:** As a general principle, transaction costs associated with the creation and trading of offset credits should be borne by the buyers and sellers. It is appropriate for normal costs of administering regulations to be borne by the government, but costs related to quantification, verification and trading of emission reductions from specific

projects should be borne by the buyers and sellers of those reductions. If an excessive proportion of the price of reductions is being absorbed by transaction costs, the appropriate solution is to take steps to increase the market price (notably, by increasing the rate for contributions into the Technology Fund), not to subsidize transaction costs.

**20. Crediting period:** We would support allowing offset credits to be earned for a maximum of up to 8 years, after which the BAU baseline of a project should be re-evaluated to check whether the project activity has now become BAU, in which case, respecting the need for incrementality, it should no longer earn credits. This period of time should be adequate to encourage investment in projects with a longer time frame, while protecting environmental integrity. We also support the use of credits generated in the 2008–2012 period after 2012, consistent with banking provisions of the Kyoto Protocol.

**21. Forest management projects** (see also Section 10 above): We recognize that better management of Canada’s forests has a very large potential for GHG emission reductions/removals and that there is therefore a clear and pressing need to attach a financial value to the carbon stored in forests. We would prefer to see carbon prices set through “forest-based” mechanisms (i.e., using an estimate of the carbon stored in forested land as a whole) rather than through project-based offset credits for specific management projects within a forest. The “forest-based” approach is preferable because it ensures credit for carbon gain is balanced by debit for carbon loss. By focusing on total net emissions, it also lessens the need to assess incrementality and reduces the risk of leakage.

In the context of the Offset System, we support the inclusion of forest management in respect of reductions/removals in years 2013 and later, as article 3.4 of the Kyoto Protocol provides credit for forest management in the second and subsequent commitment periods. But because Canada’s Initial Report under the Kyoto Protocol did not elect to count forest management in the first commitment period, granting offset credits for reductions/removals occurring prior to 2013 would move Canada even further from meeting its legal obligation under the Kyoto Protocol. We are therefore opposed to the inclusion of forest management in respect of reductions/removals occurring before 2013 unless the government creates sufficient additional demand for forest management credits (e.g., by strengthening existing GHG industrial targets or creating a special fund to purchase these offsets). We encourage the government to create sufficient extra demand for offset credits to allow the inclusion of forest management in the Offset System in respect of reductions/removals in 2008–12.

**22. Temporary credits** (see also discussion in Section 21 above): In light of the high risk of impermanence of biological carbon storage, we recommend that any biological sink enhancement projects use the temporary credit approach, where credits would have to be renewed periodically, as required under the CDM. These projects are highly susceptible to external factors (e.g., forests are susceptible to forest fires, beetle infestation, etc.) which can cause accumulated carbon stored to be released to the atmosphere in a very short period of time. To protect environmental integrity, therefore, the credit duration period for such projects should be set at one year. Temporary credits would deal with the long-term liability issues associated with these types of projects and would also prevent regulated industry from “borrowing” emission reductions from the future, as would occur if instant credit were granted for carbon sequestration that would not occur until decades into the future. Such borrowing would be incompatible with environmental integrity.

If Canada elects to include forest management practices in its National Inventory Reporting under the Kyoto Protocol, then it must place limitations on the use of these credits that are in line with Decision 7/CP.7, article 7b of the Marrakech Accords, which states that “*for the first commitment period, the total of additions to a Party’s assigned amount resulting from eligible land use, land-use change and forestry [LULUCF] project activities under the clean development mechanism shall not exceed one per cent of base year emissions of that Party, times five.*”<sup>26</sup>

**23. Small offset projects:** The Offset System should allow the aggregation of small projects into large enough “bundles” to register under the system. For example, municipalities or utilities should be given the opportunity to aggregate reductions from energy efficiency and small scale renewable energy initiatives, and to register these aggregated reductions as regular offsets. Examples include municipal Local Improvement Charge programs used to finance energy efficiency in buildings, and utility Demand Side Management programs that induce electricity savings. The municipalities and utilities would pass on the benefit of offset sales to the program participants. The advantage of such a system would be that individual program participants would benefit from the offsets process without the administrative burden while municipalities and utilities would benefit from additional financing and increased participation. We recommend that offset rules be developed to allow the registration and emission reduction verification of such programs. We would welcome an opportunity to prepare a submission on this issue.

In the case of other individual small projects that cannot be aggregated, government programs should be used to finance them directly.

**24. Electricity grid emission intensity factor:** The fundamental objective of the Offset System must be to secure real reductions in Canada’s GHG emissions. For this reason the offset system must assign intensity factors that reflect, as much as is practical, real reductions in GHG emissions. For example, displacing a kilowatt-hour of coal-fired electricity with wind power has greater environmental value than displacing a kilowatt-hour of hydroelectric power. Offset credits granted for electricity generation must reflect these conditions. A system that allows renewables to receive credits at a rate that is higher than the emissions that are being displaced will cause an increase in net global emissions, as it will not compensate for the reductions foregone by large emitters.

We therefore propose that for all electricity generation projects, credits be based on intensity factors that are province specific and on an assessment of the real reductions achieved by the projects.

We strongly support financial incentives for development of wind power (and other low-impact renewable energy sources) across Canada, but we believe that doing this through the Offset System should not be the primary way to encourage renewable energy development. The system is primarily a means of helping large emitters to reduce their emissions and must be treated as such.

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<sup>26</sup> Marrakech Accords (FCCC/CP/2001/13/add.2), p.22;  
[http://cdm.unfccc.int/Reference/COPMOP/decisions\\_17\\_CP.7.pdf](http://cdm.unfccc.int/Reference/COPMOP/decisions_17_CP.7.pdf).

**25. Expert advisory committee:** To guide the ongoing development of the Offset System in a transparent way, and to help maximize public confidence, we recommend that Environment Canada create an official technical advisory committee comprising representatives of ENGOs, industry, municipal and provincial governments and other experts. The advisory committee should attempt to achieve a fair balance between public and private interests and should have co-chairs from government, industry and ENGOs. The government should work with the Canadian Environmental Network and the Climate Action Network Canada to ensure appropriate ENGO representation on the advisory committee.

## **CREDITS FOR EARLY ACTION**

**26. Allocation of credits for early action:** The Regulatory Framework provides for a one-time 15 Mt credit for emission reductions that occurred between 1992 and 2006. Between 1990 and 2004, it is estimated that the energy-producing sectors (upstream oil and gas and electricity generation) increased their annual GHG emissions by 82 Mt, while the energy-consuming heavy industry sectors reduced their emissions by 6 Mt.<sup>27</sup> The one-time 15 Mt credit for early action clearly does not address this large discrepancy between sectors.

We believe that the principle of credit for early action should be implemented not by increasing the 15 Mt (see Section 27 below) but by using a 1990 base year for target-setting. This will ensure that sectors that achieved the largest reductions post-1990 automatically receive credit for their action. It is important to note that 1990 is the internationally accepted base year for emission reduction commitments because of its proximity to 1992, the year when the international community agreed, by adopting the United Nations Framework Convention on Climate Change (UNFCCC), the objective of putting an end to the accumulation of GHGs in the atmosphere.

If the federal government elects to continue with its current approach, it will need to develop “eligibility criteria” to determine how to best allocate the one-time 15 Mt credit for early action. We recommend that the allocation of the 15 Mt credit be based on actual emission reductions achieved post-1990. Requiring industry to submit reports seeking to demonstrate that past GHG reductions were beyond BAU would likely be difficult to adjudicate fairly and administratively burdensome. We suggest the much simpler approach of dividing the 15 Mt equally (e.g., in proportion to corporate emissions) within the only broad sector that achieved absolute reductions in emissions between 1992 and 2006, namely the energy-consuming industries. Alternatively, the 15 Mt could be divided up between sub-sectors of the energy-consuming industries based on the actual emissions performance of those sub-sectors post-1990.

Given the very large emission increases since 1990 in the upstream oil and gas and electricity generation sectors, we do not see a case for allocating any credits for early action to these sectors.

**27. Size of credit for early action:** We are strongly opposed to increasing the 15 Mt credit in the absence of an equivalent tightening of regulated GHG targets. If the 15 Mt credit for early

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<sup>27</sup> Bramley, M. 2007. *Fair Share, Green Share: A Proposal for Regulating Greenhouse Gases from Canadian Industry*, p.2. Submission to the House of Commons Legislative Committee on Bill C-30, February 20, 2007; <http://www.pembina.org/pub/1372>.

action were increased without an equivalent tightening of targets, the net result would be to further diminish the environmental benefit of the Regulatory Framework, which would be unacceptable. As the 15 Mt credit for early action will certainly be over-subscribed, the government will need to be firm in refusing any increase in its size unless it is willing to adjust regulated targets commensurately.

**28. Tradability of credits for early action:** Credits for early action must not be allowed to be traded or banked under Canada's emission trading system, as this compliance option will allow industry to achieve "paper reductions" that do not correspond to reductions in actual emissions on a go-forward basis.

## TECHNOLOGY FUND

We do not support the use of investment into a Technology Fund or other technology investment vehicle as a means of achieving compliance with regulated targets because there are no grounds for confidence that investments will produce near term reductions. Counting technology investments for compliance purposes allows industry to borrow emission reductions from the future with no assurance as to the volume of those reductions or that they will actually be achieved at all. To encourage technology development the federal government should instead establish appropriate long-term expectations for emission targets and prices as well as complementary measures as needed to address market failures.

If payments into the Technology Fund are retained as a compliance option, then the following concerns should be addressed:

**29. Criteria for disbursement:** Payments into the Technology Fund, in the early years of the Regulatory Framework, are likely to be the largest source of "paper reductions" that are not expected to yield immediate reductions in actual emissions.<sup>28</sup> Preventing the further weakening of the framework therefore depends critically on the rigorous implementation of the Technology Fund. Maximizing the emission reductions resulting from investments by the fund will require that regulations provide sufficient clarity on the following points:

- upholding the government's commitment to use the fund "principally to fund investments that have a high likelihood of yielding greenhouse gas emission reductions in the near term"<sup>29</sup> – and on interpreting "near term" as, in the range of one–five years as opposed to 10–15 years;
- transparently applying cost-effectiveness and other clear criteria to ensure that investments are made on merit, not for political reasons; and
- ensuring that investments made by the fund add to, rather than simply displace, existing funding commitments (i.e., rules must be included in the final regulations that ensure that payments into a fund are additional to BAU technology investments by regulated emitters).

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<sup>28</sup> Bramley, M. 2007. *Analysis of the Government of Canada's April 2007 Greenhouse Gas Policy Announcement*, Table 3, p.7. The Pembina Institute; <http://climate.pembina.org/pub/1464>.

<sup>29</sup> Environment Canada. 2007. *Regulatory Framework for Air Emissions*, p.12; [http://www.ec.gc.ca/doc/media/m\\_124/toc\\_eng.htm](http://www.ec.gc.ca/doc/media/m_124/toc_eng.htm).



**30. Emissions accounting:** Environment Canada’s presentation on the Technology Fund in Montreal on May 31, 2007 stated that “every unit for contributions to the fund must be matched by a one tonne emission reduction, on a 1 to 1 basis, within a reasonable timeframe.”<sup>30</sup> This is an important principle that could help to significantly strengthen the Regulatory Framework. To make this principle meaningful, regulations will need (i) to specify that future reductions resulting from investments by the fund will be measured relative to a credible (not an inflated) baseline and (ii) to define “reasonable timeframe” in line with our suggestion in Section 29 above.

Another key accounting issue related to the Technology Fund is the need to prevent any double counting. Double counting will arise if industry can count for compliance purposes reductions resulting from money that had been paid into the Technology Fund for compliance in an earlier year. For example, assuming that, by 2020, investments by the Technology Fund had resulted in significant reductions in the emissions intensity of processes used in some large industry, double counting would occur if companies were not prevented from counting such reductions for the purposes of compliance with their regulated intensity targets. Double counting will also occur if offset credits (see also Section 9 above) are issued for emission reductions from projects that were funded by the technology fund investments.<sup>31</sup>

**31. Interpretation of percentage limits:** Environment Canada officials have stated that the limits on use of the Technology Fund will be applied to the gap between the projected industrial emissions (without regulations) and the target emissions (i.e., intensity targets multiplied by projected production levels). This approach has the disadvantage of being tied to a particular BAU projection, which will be subject to uncertainty and dispute. It would be much more straightforward – and more in keeping with the language in the Regulatory Framework<sup>32</sup> – to apply the percentage limits to the gap between actual emissions in the year in question and the target emissions.

**32. “Equivalent” funds:** According to the Regulatory Framework, payments into other funds “that meet all necessary requirements... [i]n particular, provincial funds” could be accepted for compliance with targets as an alternative to payments into the main federal technology fund.<sup>33</sup> The acceptance of multiple funds is a source of concern given that prevention of further weakening of the Regulatory Framework depends critically on the rigorous implementation of this compliance option, and that there are multiple unresolved implementation issues. The existence of multiple funds would make adequate public monitoring of the fund more difficult, which would have negative consequences for accountability and transparency.

**33. Liability:** Technology fund investments have a high risk of not achieving the expected emissions reductions, and it is industry that should bear this risk. That is, a company should be liable if its investment does not yield a “1 to 1” future emission reduction (see Section 30 above).

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<sup>30</sup> Environment Canada. 2007. *Technology Fund*, p.13. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31.

<sup>31</sup> For further discussion of this issue, see Bramley, M. 2007. *Analysis of the Government of Canada’s April 2007 Greenhouse Gas Policy Announcement*, Section 5. The Pembina Institute; <http://climate.pembina.org/pub/1464>.

<sup>32</sup> Environment Canada. 2007. *Regulatory Framework for Air Emissions*, p.13; [http://www.ec.gc.ca/doc/media/m\\_124/toc\\_eng.htm](http://www.ec.gc.ca/doc/media/m_124/toc_eng.htm).

<sup>33</sup> *Ibid.*, p.12.

Thus if future emission reductions are less than expected, emitters – not governments and taxpayers – will have to pay to compensate for those unachieved reductions.

**34. Interest:** To the extent that technology investments used for compliance purposes result in delayed emissions reductions, regulated industry should be required to pay the same penalty that Canada is required to pay under international agreements. For example, if a reduction paid for in 2010 is not actually achieved until 2013, then the regulated emitter should have to pay for 1.3 tonnes of reductions for every tonne originally invested in, in accordance with the compliance provisions of the Kyoto Protocol.

**35. Credits for pre-certified project investments:** According to the Regulatory Framework “The government will also explore the option of providing credits to individual companies for government pre-certified investments in specific projects.”<sup>34</sup> This would be a compliance option equivalent to payments into the Technology Fund, except that a company would bypass the fund by making the payments directly into its own projects. We urge the government to reject this option because it further exacerbates the accountability concerns raised for multiple technology funds, and would be especially vulnerable to the risk that payments would simply be a re-labelling of technology spending that a company had already planned to make in the absence of the regulatory framework. Officials have stated that this option would be covered under the percentage limits on use of the technology fund, despite the silence of the Regulatory Framework document on this point. We look forward to the government confirming this formally and publicly.

**36. Tradability of technology fund units:** Technology fund credits (granted in exchange for payments into a fund or for “pre-certified investments in specific projects” – see Section 36 below) must not be allowed to be traded or banked under Canada’s emission trading system, as this compliance option will allow industry to achieve “paper reductions” that do not correspond to near-term reductions in actual emissions.<sup>35</sup>

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<sup>34</sup> Environment Canada. 2007. *Regulatory Framework for Air Emissions*, p.13; [http://www.ec.gc.ca/doc/media/m\\_124/toc\\_eng.htm](http://www.ec.gc.ca/doc/media/m_124/toc_eng.htm).

<sup>35</sup> See Bramley, M. 2007. *Analysis of the Government of Canada’s April 2007 Greenhouse Gas Policy Announcement*, Table 3, p.7. The Pembina Institute; <http://www.pembina.org/pub/1464>.