

Comments on Alberta's *Offset System Project Guidance Document* (draft), dated June 20, 2007

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The Pembina Institute and the Toxics Watch Society of Alberta welcome this opportunity to provide comments on the *Alberta Offset System Project Guidance Document* (hereafter referred to as the Guidance Document). We hope the following comments and key recommendations will be considered by Alberta Environment when finalizing the document.

General comments

While the concept of a domestic offset system is straightforward, its detailed design is critical. Like any financial system it must have stringent rules that govern its operation. An offset system will only deliver real emission reductions if based on rigorous emission accounting. Unfortunately, the guidelines and rules for offset projects defined in the draft Guidance Document introduce emissions accounting that will likely compromise the integrity and credibility of Alberta's offset system. This will result in regulated industrial emitters delivering significantly fewer emission reductions. Every tonne of reductions that these industrial emitters fail to deliver through the offset system is an extra burden on the climate and an extra tonne that the Alberta government – and taxpayers – will have to find and pay for somewhere else.

1. Introduction [p.1]: The introduction chapter of the draft Guidance Document requires substantial revision, notably to ensure it reflects what Alberta Environment (AENV) officials have clearly stated during stakeholder meetings regarding the province's offset system:

- *Climate Science* [§1]: The opening paragraph states that “The Alberta Government recognizes that global climate change is real, and is committed to taking effective action on climate change.” Although this is an important premise to acknowledge, it is also important for the government to acknowledge, by referencing in a footnote, the currently accepted science of climate change represented by the IPCC's Fourth Assessment Report (2007).
- *Emission trading system vs. carbon compliance system* [§1]: AENV officials clearly stated at the AENV Offset Protocol Validation Workshop (May 17) and at the Offset System Design Consultation (June 26) that Alberta was introducing a “*carbon compliance system*”, not an “*emission trading system*.”³ The final Guidance Document must be upfront about this by clearly explaining the distinction between these two systems in its Introduction and by replacing all references in the Guidance Document to an “emission trading system”, with “carbon compliance system.”

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³ Environment Canada officials also recognized that the Alberta system was a “carbon compliance system”, not an “emission trading system” at a Cross-Cutting Issues Stakeholder Consultation in Montreal, on May 31.

- *Criteria for an effective emission trading system* [§1]: AENV’s proposed definition of an “effective” emission trading system is wholly inadequate. It is widely recognized that to be cost-effective, a greenhouse gas (GHG) emission trading system must:
 - 1) Be based on a cap-and-trade system (i.e., with absolute targets, and not an intensity based baseline-and-credit system) where the number of emission permits issued each year is less than the demand;
 - 2) Be introduced in the context of clear and legislated short- and medium-term emission caps that are consistent with a long-term planning target based on the science of climate change;
 - 3) 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;
 - 4) Be compatible with the world’s major carbon trading systems, which are currently the European Union’s Emissions Trading Scheme and the Kyoto Protocol’s Clean Development Mechanism.

Furthermore, although it is true that to be effective, an emission trading system must “demonstrate consistency with international efforts to reduce climate change” [last sentence of §1], it is very misleading to make such a claim in the Guidance Document when (i) Alberta’s trading system under the *Specified Gas Emitters Regulation* is limited to the province, and (ii) Alberta’s industrial emission reduction targets are not consistent with international efforts under the Kyoto Protocol to reduce absolute emissions from industrialized countries below 1990 levels. Alberta’s regulation is consistent with Alberta’s proposed long-term objective of a 50% reduction in GHG emissions per unit of GDP below the 1990 level by 2020 (in Section 3 of Alberta’s *Climate Change Emission Management Act*). If Alberta’s GDP continues to grow between 2005–2020 at the same rate that it did between 1990 and 2005, the 50% intensity target will be met even while the province’s emissions rise to 72% above the 1990 level.⁴

Given that Alberta’s carbon compliance system does not meet the above criteria for an effective emission trading system, it would be more accurate to replace the last sentence in §1 with the following:

“An emission trading system is a market-based approach for limiting industrial emissions. To be effective, an emissions trading system must fix the quantity of emissions permitted, and then let the market arrive at the price emitters are willing to pay for permits. However, the Government of Alberta has chosen to adopt a “carbon compliance system” that it views as reflecting both Alberta’s environmental and economic circumstances.”

- *Eligible offset projects* [§3]: The draft Guidance Document states that regulated firms can buy verified emission reductions and/or removals of GHGs (i.e., offsets) from voluntary actions undertaken by unregulated companies/facilities (i.e., offset projects) in Alberta. To be consistent with the Offset System approach being proposed by the federal government⁵ and to ensure the environmental integrity of the Alberta system, the final Guidance Document needs to further clarify this sentence by stating that:

⁴.According to Statistics Canada (CANSIM Table 384-0002) Alberta’s real GDP increased by a factor of 1.855 between 1990 and 2005. If this rate continues between 2005–2020, but emissions intensity falls by half, emissions in 2020 will be $(1.855)^2/2=1.72$ times their level in 1990.

⁵ Environment Canada. 2007. *Offset System*. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31, p.6.

“Regulated firms can buy verified emission reductions and/or removals of greenhouse gases from voluntary actions undertaken by unregulated companies/facilities in Alberta and which are surplus to incentives provided by provincial or federal governments (i.e. offset projects).”

If the underlined words are not added, companies’ compliance with regulated targets will be subsidized by taxpayer-funded incentives. This is unacceptable.

- *Unfettered price signal* [§4]: The Guidance Document specifies that an offset system “offers flexibility for emitters, since markets typically determine the most cost-effective emission reduction opportunities, particularly when an unfettered price signal can ensure that enough reductions are created to meet the demand.” This is correct. However, the Guidance Document must acknowledge that Alberta’s trading system will not benefit from an “unfettered price signal” given that Alberta’s offset market is inherently stifled by the existence of the *Climate Change and Emissions Management Fund*, which will cap the price of offsets at \$15/tonne CO₂ (less, taking into account transaction costs). To create an effective emissions trading system with an “unfettered price signal”, the Alberta government should remove the compliance option that allows regulated emitters to meet their target “on paper” (not in reality) by making payments into the *Climate Change and Emissions Management Fund*.

2. Key principles [p.5–6]: Without proper design and rules, an offset system will seek out the cheapest emission reduction credits but not the best environmental outcome. If Alberta wants an offset system that promotes transformational changes towards a sustainable low-carbon economy, its point of departure must therefore be the promotion of incremental projects that contribute to sustainable development, with rules and modalities designed to deliver this outcome. Although some of the key principles in the draft Guidance Document have value, the environmental credibility of Alberta’s domestic offset system depends critically on amending two principles as follows:

- “Environmental benefit: the design must ensure project-based emission offsets result in (with high confidence) 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.”
- “Transparency and Accountability: to earn public confidence and mitigate conflicts of interest, the offset system must maximize opportunities for public scrutiny and input at the level of individual projects; and ensure robust, independent verification of emission reductions and/or removal enhancements. Restrictions on public disclosure are acceptable only where compelling reasons to protect confidential business information are provided and where these reasons clearly outweigh the public interest”

3. Successful market-based approaches [p.2 §1]: The Guidance Document states that emissions trading “has been used successfully in other environmental areas, such as sulphur dioxide, fisheries, mercury, renewable energy and lead in gasoline.” It is inappropriate to list mercury as an example of effective emissions trading. There are few functioning mercury trading systems in the world due to a growing acceptance that trading of rights to emit dangerous toxic, bioaccumulative substances like mercury is inappropriate. Unlike with GHGs, there is widespread opposition to trading of mercury; it should therefore not be listed in the Guidance Document as a good example of emissions trading. .

4. Incrementality⁶ [p.2 §3–4, p.4 §2, p.6 third bullet, p.12 §5]: To ensure that an offset system does not diminish the environmental outcome of the regulatory system, an offset must be equivalent to the emission reductions foregone by the regulated industry that purchases the offset. In other words, the

⁶ Incrementality is also frequently referred to as “additionality”.

investment in the offset must result in incremental emission reductions that would *not have occurred if offset credits were not available*. Issuing non-incremental credits will cause an increase in net global emissions because credits will be used by regulated industry to emit more than otherwise, without compensating by creating incremental reductions in emissions not covered by Alberta's GHG regulation. This amounts to "emissions fraud". In other words, if an offset project would have gone ahead even if it had not received credits, then no real "offset" is occurring: instead, the creation and sale of credits from that project will actually result in an increase in global emissions.

Unfortunately the language used to describe incrementality in the draft Guidance Document violates the incrementality criterion by implying that offset credits could be issued to emission reductions that are already required by federal regulations or made possible by provincial or federal government programs (e.g., *Climate Change Management Fund*, WPPI/RPPI, EcoTrust). This creates both a fraudulent loophole that will diminish the environmental outcome of the regulatory system and a lack of clarity as to who owns the emission reductions. The draft Guidance Document's criterion for incrementality is also inconsistent with the criterion that is currently being considered by the federal government in its Offset System. Under the proposed federal system, to be incremental, a project must:

- (i) meet the "cut-off date for project eligibility",
- (ii) go "beyond business as usual" and
- (iii) be "surplus to legal requirement and government incentives."⁷

The start date of projects proposed in the draft Guidance Document also needs to be adjusted to ensure that projects are incremental. The draft Guidance Document states that "projects generating emission reductions [that] are additional to what otherwise would have occurred in Alberta, prior to the January 2002 release [of] Alberta's first climate change plan – *Taking Action*" can qualify as offset projects. First, that plan was actually released in October 2002. More importantly, projects that became commercially operational in 2002 and 2003 were very likely in the planning and construction stages before Alberta's 2002 Climate Change plan was released, and are therefore, very likely to be business-as-usual (BAU) projects. These projects cannot be considered incremental. Instead, to ensure incrementality, AENV should set the start date to a point that excludes projects that could not reasonably have expected to receive offset credits at the time the investment decision was taken, and also define a more appropriate moment in project development for a start date (e.g., the moment at which an environmental approval application was submitted).

Applying a robust incrementality requirement is not difficult or onerous. Practical rules can be adopted to ensure BAU projects cannot receive credits, as demonstrated by the Kyoto Protocol's Clean Development Mechanism (CDM), which uses an "Additionality Tool" 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 tool has been effectively used by project developers and investors for three years in what is by far the world's largest offset system, the CDM.

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. Incrementality rules actually help to reduce uncertainty because they make it very clear to project proponents whether their projects will qualify or not. In 2006, nearly US\$5 billion was invested in CDM projects,⁸ and 729 CDM projects have been registered to date.⁹

⁷ Environment Canada. 2007. *Offset System*. Presentation at the Industrial Regulatory Framework: Cross-Cutting Consultations, Montreal, May 31, p.6.

⁸ Capoor, K. and P. Ambrosi. *State and Trends of the Carbon Market 2007*. World Bank., p.20.

We recommend that AENV adjust its definition of incrementality so that it is consistent with the CDM (as well as the one currently being considered by the federal government) and that AENV incorporate the following changes to passages in the Guidance Document which make reference to incrementality:

- [p.1] “Regulated firms can buy verified emission reductions and/or removals of greenhouse gases (i.e. offsets) from voluntary actions undertaken by unregulated companies/facilities in Alberta and which are surplus to incentives provided by provincial or federal governments (i.e. offset projects).”
- [p.2] “In general, an emission offset is generated when a project results in lower GHG emissions or higher GHG removals than would be the case if offset credits were not available.”
- [p. 3] “...the intent of the regulation was to ensure that the projects generating emission reductions are additional to what otherwise would have occurred in Alberta, prior to there being a clear expectation that offset credits would be available Based on this intent, it is suggested that project developers consider their Project Start Date to be the date of submission of an application for environmental approval application or other equivalent application.”
- [p.6] “Environmental benefit: the design must ensure project-based emission offsets result in (with high confidence) 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.
- [p.9] It should also be required that project reports include “demonstration of incrementality” (using the same decision tree as required under the CDM).

5. Accountability [p.6, Figure 2; p.10, Figure 2; p.11, Table 1]: As it currently stands, the Guidance Document provides no opportunities for public review of offset projects, thereby seriously diminishing the likelihood of public confidence in and acceptance of Alberta’s proposed system. Unlike the CDM or the offset system being proposed by the federal government, the project cycle included in the Guidance Document does not include an explicit public review step. This is also a clear violation of the Transparency and Accountability principle [p.6] in the guidance Document which states: “to earn public confidence and mitigate conflicts of interest, the offset system must maximize opportunities for public scrutiny and input at the level of individual projects; and ensure robust, independent verification of emission reductions and/or removal enhancements while respecting confidential business information.” This step provides the public with an essential opportunity to provide views on a project before it is registered. The registering body must take these views into account when approving or disallowing a project. Section 2.3 [p.10-11] and Figure 2 [p.6], Figure 3 [p.10] and Table 1 [p.11] of the Guidance Document need to be reviewed to include public accountability. Specifically, in Table 1 [p.11], a row entitled “public stakeholders (accountability)” should be added, with the responsibility to provide input on:

- Environmental integrity – including incrementality;
- Any non-GHG environmental impacts or concerns about the project;
- Any socio-economic impacts of the project.

ENGOs would not support the offset system unless the following explicit step is included in the project cycle (see also Section 10 on Verification below):

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 issues such as socio-economic and non-GHG environmental impacts (beyond those covered by any EIA requirements), local concerns,*

⁹ See <http://cdm.unfccc.int/index.html>.

conformance with offset eligibility criteria, and confidence that the project will produce incremental GHG reductions to be evaluated by the public or other stakeholders. The comments and any recommendations from the public comment period will be taken into account during decisions on project registration.

6. Transparency: Detailed project information for projects qualifying for offset credits, including the quantity of credits granted and information on the verification of these credits must be made accessible to the public. Otherwise, the credibility of the offset system will be limited and accountability will be hampered. Data relevant to offsets projects and credits should not be kept confidential in the absence of compelling reasons why its publication would be significantly harmful and a demonstration that those reasons clearly outweigh the public interest.

Offset 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 for Alberta's offset system would undermine the system's transparency and severely limit public confidence. Given the existence of doubts about the environmental legitimacy of offset credits and widespread public suspicion of emissions trading, companies using credits to meet their regulatory requirements must be publicly accountable for their choice of credits. Resistance to such transparency will only further heighten public suspicions that use of offsets is fraudulent.

Information on offsets to be made available on a public registry must therefore include:

- detailed information on offsets created including all information in the Project Report (as described in Section 7 below);
- Unique serial numbers that allow the public to track the creation of all offsets and the identity of the facility that retired each credit.

Ontario's emissions trading system for NO_x and SO₂ is an example of a system that meets these requirements.¹⁰ AENV will need to carefully justify any departure from the precedent set by Ontario regarding transparency.

Alberta's *Emissions Trading Regulation* includes provisions for public information disclosure in relation to its registry. In addition to the detailed offset Project Report, AENV should include similar registry provisions to those included in Alberta's *Emissions Trading Regulation* in its GHG offset system. Specifically, the *Emissions Trading Regulation* states that:

"[t]he following information in the registry is public information and must be provided by the registry operator through the registry website:

- (a) the identity of account holders;
[...]
- (f) the number of emission credits issued in respect of each generating unit, if applicable;
- (g) the number of emission credits that have been used for compliance purposes for each generating unit and their serial number, if applicable;
[...]."¹¹

7. Project reporting requirements [p.9]: In order to evaluate environmental integrity and to assist in determining and clarifying public versus private ownership of emission reductions, the following requirements should be added to what must be included in Project Reports:

¹⁰ See <http://www.oetr.on.ca/oetr/index.jsp>.

¹¹ Section 14.1, *Emissions Trading Regulation* under the Alberta Environmental Protection and Enhancement Act.

- 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;
- List all federal, provincial and municipal government incentives that the project has received;
- Demonstration of incrementality (see last two paragraphs in Section 3 above);
- A report on the verification steps undertaken by the project proponent.

8. Confidentiality [p.6]: The Guidance Document outlines the transparency and accountability principle as:

“Transparency and Accountability: to earn public confidence and mitigate conflicts of interest, the offset system must maximize opportunities for public scrutiny and input at the level of individual projects; and ensure robust, independent verification of emission reductions and/or removal enhancements **while respecting confidential business information.**” (our emphasis added)

However, information should only be held confidential where there is compelling justification and a clear indication that the public interest is outweighed by commercial concerns. The current *Specified Gas Emitters Regulation* is inconsistent with the Canadian Environmental Protection Act (CEPA) on this point and should be amended so that the same criteria that will be applied nationally are also applied to regulated industrial emitters in Alberta. According to section 53 of CEPA, the Minister of the Environment may reject the request 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. CEPA 1999 also clearly requires the Minister to weight the public interest against competitiveness concerns, whereas Alberta’s proposed *Specified Gas Emitters Regulation* does not make any reference to the public interest and only requires that concerns be substantiated. Alberta’s proposed *Regulation* must therefore be amended to include, at a minimum, a provision on disclosure in the public interest equivalent to that contained in CEPA.¹²

9. Verification: The government of Alberta is issuing guidance rather than requirements for verification which leads the determination of whether an offset is real and incremental to too great a degree of subjective judgement. The Alberta government should lay out strict criteria that verifiers must apply when verifying an offset project. This will ensure that verification is always of the same quality.

The government of Alberta should certify a certain number of verifiers in order to ensure that verification of facilities is of a high quality and adheres to clear professional standards.

10. Certification [p.8]: The Guidance Document states that “under the Alberta system, validation and registration are optional.” This approach is in contrast to most other emissions trading systems in the world including the CDM and the offset system proposed by the federal government.

The government of Alberta is going to accept emissions reduction offsets in lieu of actual emissions reductions from large industry for compliance with regulated targets. The government therefore has a critical responsibility to ensure that the offsets that it is accepting represent real reductions in emissions. It is therefore essential that the government validate and register all offset projects, and certify all credits. Without validation or registration stages or certification of credits there will be no assurance that offsets

¹² We do however recognize that Alberta’s GHG reporting system (Specified Gas Reporting Regulation, Section 5(1)) does limit the period of time for which emitters can request confidentiality to five years. We believe that this element of the current confidentiality provisions is important as it recognizes that information that may be justifiably kept confidential at one point in time will not require the same protection a few years later. While recommending that Alberta include a provision on disclosure in the public interest to that contained in CEPA, we also recommend that Alberta retain the five-year time limit on confidentiality.

represent real emissions reductions and thus no reason for the public to believe in the achievement of emissions reduction commitments.

11. Accuracy level of data [p.15-16, 21]: The Guidance Document states that quantifying uncertainty is challenging and may be beyond the resources of the project developer [p.21]. However, most existing quantification protocols provide sufficient information to quantify uncertainties. AENV should require that all offset developers submit uncertainty information with their emissions reports.

Furthermore, the proposed tiered approach in the Guidance Document [p.16] is not equitable as it leads to different quality levels in offsets for the same emissions reductions. The government of Alberta should instead require, at a minimum, all project proponents to use the best information (i.e., tier) available to them to estimate their emissions and reductions. This would help ensure that the most accurate data is used for estimating offset values.

12. Quantification Protocols [p. 15]: According to the Guidance Document, the Alberta offset system will allow project proponents to choose the type of quantification protocol they would like to use. Under this proposed system identical projects could end up with different emissions profiles as a result of using different quantification methods despite having identical physical processes. For this reason this degree of flexibility with respect to quantification protocols should not be allowed.

Instead the government should require projects to use the protocols that are certified by the government of Alberta. If a proponent would like to develop a project for which no protocol is available, then the proponent should be allowed to propose a protocol of its own, provided the protocol is consistent with IPCC good practice guidance.

The Guidance Document defines “Good practice guidance” as “available information on the accurate quantification of GHG emissions and the reductions associated with Project based Offsets” [p.18]. The Guidance Document also provides a list of references to “good practice” documents. Rather than simply recommend guidance, the final Guidance Document should require, at a minimum that all calculations be consistent with the IPCC’s Good Practice Guidance to help ensure that emission reduction estimates are of a high accuracy, precision and quality.

The 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 are not calculated as simply a result of changes in methodologies over time.

13. Credit duration period [p.3, 20]: According to the Guidance Document, “Projects under the Alberta Offset System will have a credit duration period of 8 years, plus an additional possible 5 years.” We support the proposal to allow offset credits to be earned for up to 8 years after which time the BAU baseline of a project should be re-evaluated, but we strongly oppose the extension of this period to an additional 5 years. The credit duration period of 8 years is appropriate and sufficient to encourage investment in projects with a longer time frame and is in line with what is currently being considered by the federal government in its offset system. To extend this to an additional 5 years will only further undermine the environmental integrity of the Alberta Offset System by allowing projects that may have become BAU to be granted extra offset credits.

- *Forestry and Tillage management projects* [p.21]: It is unacceptable that the credit duration period for forestry and tillage projects be set at 60 years and 20 years, respectively, given the high risk of impermanence associated with these projects, not to mention the problem of incrementality. These projects are highly susceptible to external factors (e.g., forests are susceptible to forest fires, beetle infestation, etc.) which can transform them into emission sources rather than emission sinks in a very short period of time. To fully take into account these

permanence issues, Alberta should adopt a similar approach to that being considered by the federal government in its offset system, which is to create “temporary credits” that would have to be renewed on an annual basis. Temporary credits would also prevent regulated industry from “borrowing” emission reductions from the future, whereby someone could plant trees today and claim instant credit for carbon sequestration that would not occur until years into the future. Such borrowing would be incompatible with environmental integrity.

14. Fixed process emissions: The Guidance Document is silent on whether reductions in fixed process emissions will be credited under Alberta’s Offset System. Regulated industry 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 offsets, then they should be covered 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 Alberta’s Offset System.

15. Facilities emitting less than 100 kilotonne CO₂e/year: The Guidance Document is silent on whether facilities emitting less than 100 kilotonne CO₂e a year operated by companies with larger facilities that are covered by Alberta’s *Specified Gas Emitters Regulation* can claim offset credits for reductions that occur within their small facilities. This issue is especially important in the oil and gas sector, where a significant proportion of emissions come from small facilities. AENV has estimated that the 100 kilotonne CO₂e threshold currently used by the government of Alberta exempts 23% of CO₂e emissions from gas plants and heavy oil plants in the province.¹³

The government of Alberta must amend the Specified Gas Emitters Regulation to allow it to cover the majority of facilities in large industrial sectors. Specifically in the oil and gas sector, all facilities should be covered by emissions reduction targets and companies should be allowed to aggregate smaller facilities for reporting and compliance purposes in order to ease the burden of the regulation.

16. Baselines for Electricity: [p.22]: The offset guidance document states that “The emission reductions for renewable energy projects in Alberta are quantified using emission factors based on average grid intensity.” This is a wholly inappropriate way to calculate the GHG reduction that arises from renewable energy being constructed in Alberta. In Alberta new generation is primarily expected to be gas-fired in the province. Given that gas fired power is generally what units are displacing offset credit levels must be set at or below this level in order for the credits to represent a real reduction from the units.

Setting emission factors for crediting renewable energy at the average intensity of the sector provides a good example of how a poorly designed offset system can result in an **increase** in total emissions. Under the proposed offset system, a new wind generator would receive 0.776 tonnes of credits for every megawatt-hour produced, and these credits would be sold to allow a large emitter to emit this same amount above and beyond its target level. If instead a gas-fired generator were constructed, it would emit as little as 0.37 tonnes per megawatt-hour, and no offset credit would be granted to allow a large emitter to emit above its target level. Thus, total emissions from the system, and consequently, emissions released to the environment, would be less if the gas-fired generator were built than if the wind farm were built. In other words, the offset system would be encouraging an increase in emissions. To prevent this perverse situation, emission factors for crediting renewable energy should be set at the regulated GHG target level of the facilities that it is actually displacing.

17. Forestry and tillage management projects [p.21]: Although we are in favour of pricing forest carbon, we would prefer to see carbon prices set in forests through “forest-based” mechanisms (i.e., using

¹³ Alberta Environment. 2002. *Framework Proposal For an Alberta Greenhouse Gas Reporting Program* (Draft for Discussion), p.27.

an estimate of the carbon stored in forested land as a whole) rather than through “project-based” 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; avoids, like cap-and-trade systems, the need to assess incrementality by focusing on total net emissions; and reduces the risk of leakage.

Furthermore, it is not clear if or how forest emissions/sinks will be counted in regards to Canada’s GHG targets as stated in the federal Regulatory Framework on Air Emissions or in regards to Canadian GHG targets under future international agreements. Crediting forest management projects under Alberta’s offset system could therefore pose a significant liability to regulated industries and the government of Alberta once federal industrial regulations come into effect in 2010–11, because Alberta forestry offset credits may not be in compliance with the federal offset system and Canada’s international obligations. In that case such credits will need to be replaced, creating financial liability conflicts between project proponents, regulated industries and the provincial government.

In order to reduce this liability, if the government of Alberta elects to grant offset credits to forestry management projects, it would be preferable that it create demand for them over and above the existing demand (e.g., by strengthening existing GHG industrial targets or creating a special fund to purchase these offsets).

18. IPOG protocol adaptation guidelines [p.15]: The Guidance Documents states that “the Project Developer may choose to adapt a protocol approved in another jurisdiction using the adaptation guidelines in the *Industry-Provincial Offset Working Group (IPOG; www.offsetsgroup.ca)*.” The merit of this proposal requires further analysis, but it is of concern given that the IPOG Final Report of February 2007 has not been subject to any public consultation and makes several recommendations that appear to place private sector needs above the environmental and public interest. Indeed, the Introduction (p.7) describes the objective of the group as meeting only “the needs of those who will be engaged in reducing” GHGs, and there are several other serious concerns with the validity of the IPOG process.¹⁴ It is therefore not acceptable simply to transcribe IPOG recommendations into the Alberta offset system in the absence of full public consultation on such recommendations.

¹⁴ See <http://www.pembina.org/pub/1456>.