Comments by
The Pew Center on Global Climate Change
regarding
Voluntary Reporting of Greenhouse Gas Emissions, Reductions, and Carbon Sequestration

These comments by the Pew Center on Global Climate Change are written in response to the notice of inquiry by the U.S. Department of Energy (DOE) regarding “Voluntary Reporting of Greenhouse Gas Emissions, Reductions, and Carbon Sequestration” (Federal Register: May 6, 2002, Volume 67, Number 87, Pages 30370-30373). The Pew Center appreciates the opportunity to comment on this important issue.

On February 14, 2002, President Bush directed the DOE to recommend improvements to the Voluntary Reporting of Greenhouse Gases Program established under section 1605(b) of the Energy Policy Act of 1992 (“1605(b) program”). In particular, the President directed the Secretary of Energy to recommend reforms to ensure that businesses and individuals that register greenhouse gas (GHG) reductions are not penalized under a future climate policy – an assurance known as “baseline protection” – and to provide transferable credits to companies that achieve real GHG emissions reductions.

The Pew Center applauds these efforts to improve the quality of voluntary GHG reporting and to recognize the importance of baseline protection and transferable GHG emissions reduction credits. The comments below are offered in the spirit of advancing these objectives.

Recommended: A Mandatory Program

The Pew Center believes a mandatory GHG reporting and disclosure program is an essential first step in any effort to reduce U.S. GHG emissions, as discussed in an attached policy brief published by the Pew Center, “Greenhouse Gas Reporting and Disclosure: Key Elements of a Prospective U.S. Program.” The program should be comprehensive, but should be implemented in phases to allow for the development of widely accepted and sound reporting protocols. Ultimately, the program should:

- Cover at least 75 percent of the human-induced U.S. GHG emissions;
- Accurately track at least six greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and others as appropriate;
- Require reporting by the largest GHG emitters of emissions under their control, including direct emissions from their facilities and vehicle fleets, and indirect emissions generated elsewhere in association with their purchase of electricity, heat, and steam;
• Require reporting of emissions associated with use of certain GHG-intensive consumer products, i.e., vehicles and major appliances, by their manufacturers, and encourage reporting of other product use emissions as protocols are developed;
• Allow and encourage voluntary reporting by smaller GHG emitters and of projects to curb or sequester emissions, both in the United States and abroad;
• Ensure that voluntary GHG reductions that are tracked in accordance with the reporting program (including verifiable previous reductions) are recognized under any future U.S. domestic program to limit GHG emissions;
• Disclose the collected information to the public via the Internet in a timely fashion; and
• Minimize the cost and general burden associated with reporting and maximize transparency and accuracy through several measures, including the establishment of reporting protocols, emissions factors, and electronic reporting, and integration with other GHG and environmental reporting programs.

While GHG reporting could be either voluntary or mandatory, experience suggests that mandatory reporting will stimulate voluntary reductions across the economy—not just among the small group of corporate leaders who typically participate in voluntary programs. During 2000, for example, 222 U.S. companies and other organizations reported to the 1605(b) program that they had undertaken 1,882 projects to reduce or sequester GHGs. Of these, only 100 reported entity-wide emissions, as opposed to projects.3 These companies are a small group compared to, for example, the roughly 10,000 establishments nationwide that together generate about 80 percent of the CO2 emissions from the manufacturing sector.

In addition to its low rate of participation, the 1605(b) program has been criticized for lacking rigorous reporting standards and verification requirements, allowing the double-counting of reductions, and failing to account for overall GHG emissions increases by entities registering reductions at the project level.4 The present effort to improve the 1605(b) program is commendable and may remedy some of these weaknesses. However, even were such flaws remedied and baseline protection and other incentives provided, significant GHG reductions would not be assured because most emitters would still not participate. Experience suggests that only mandatory reporting can achieve the broad participation needed to stimulate voluntary reductions across the economy.

A case in point is the Toxics Release Inventory (TRI) program, a mandatory reporting and disclosure program long considered effective in stimulating voluntary reductions of chemical releases across a large segment of industry. Under the TRI, mandatory disclosure has prompted voluntary action by firms not typically predisposed to voluntary action. The top managers and non-environmental staff of large firms have often first learned of their releases through TRI disclosure—leading them to reduce the economic waste represented by the chemical releases. Vendors of pollution prevention technologies have used the TRI to find customers. State and local agencies have used the TRI to identify firms in need of technical assistance. And, finally, entities not otherwise
moved have been motivated to reduce emissions by the publicity associated with disclosure. All these mechanisms would likely operate under a mandatory GHG reporting program as well. In other words, mandatory reporting and disclosure is key to stimulating voluntary GHG emission reductions.

In addition, the information yielded by a mandatory reporting program – broader and more detailed than what is available now — would provide policy-makers a stronger foundation on which to develop a comprehensive climate change strategy.

**Baseline Protection**

It is not known when a mandatory program to limit emissions of GHGs will be established in the United States or what the design of such a program will ultimately be. Despite these uncertainties, it is important to move forward with GHG reductions, given the long atmospheric lifetimes of greenhouse gases. To stimulate voluntary reductions of GHG emissions today, a GHG reporting program should provide “baseline protection” for companies that have already taken action or are planning to take action to reduce their emissions. These entities should be assured that — in the event of future controls on GHG emissions — they would receive credit for reductions achieved voluntarily. The extent and form of such credit would depend on the design of the ultimate GHG control program. All this is implicit in the President’s February 14, 2002 directive to the Secretary of Energy.

Baseline protection from the first year of reporting and onward should apply to all participating entities that are in compliance with program requirements, and that report emissions for the entire entity – not just for projects or individual facilities – with adjustments made to account for acquisitions, mergers, and other changes in the entity’s operation. An entity’s “baseline” would be emissions reported during its first year of reporting under this program, unless it chooses to select an earlier base year for which there is credible and verifiable information on GHG emissions. Those selecting an earlier base year and attempting to qualify for baseline protection or crediting would follow the procedures discussed below.

The Pew Center’s review of existing statutory authorities indicates that the Executive Branch currently lacks authority to assure that current efforts to reduce GHG emissions will receive credit under a future law. If a baseline protection program is to have binding effect, it must be authorized by law to provide greater assurances to companies that the baseline protection would extend beyond the current Administration. Language in the version of the Energy Policy Act of 2002 (H.R. 4) passed by the Senate attempts to provide this assurance.

**Information Required on Entity Emissions**

Measurement and reporting of GHG emissions – particularly that done by entities seeking baseline protection and the right to trade GHG emissions credits – should be done according to generally accepted reporting standards and established by rule. One
existing tool that could serve as the basis for reporting emissions from a particular entity is the Greenhouse Gas Protocol Initiative Corporate Accounting and Reporting Standard, which was developed through an international multi-stakeholder process. Finally, a balance must be struck between developing reasonably complete information and minimizing the burden on the reporting entities. One way to strike this balance would be to require entities seeking baseline protection to report the GHG emissions released: (1) directly from all but their smallest U.S. facilities, (2) from their vehicle fleets, and (3) as indirect emissions estimated to be associated with imported electricity, heat, or steam (e.g., by using standard factors under the reporting protocol). Each of these three would be reported as a separate item of information to prevent double counting when the data are aggregated — for example, of the indirect emissions from electricity use by a manufacturer and the direct emissions of its power company. These factors represent the main emissions sources under the control of most reporting entities. This system could allow for — but not require — separate reporting of individual projects within a facility.

**Reporting of Product Use Emissions**

The use of certain GHG-intensive consumer products, such as vehicles and major appliances, generates a large portion of U.S. GHG emissions. Furthermore, many companies are developing technologies or products — including cars, appliances, and computers — that through increased energy efficiency or other means could substantially reduce GHG emissions. Their success in doing so is vital for any domestic or global effort to reduce GHG emissions.

In addition, manufacturers of these or other GHG-intensive products should be allowed to report voluntarily on product emissions and emissions reductions achieved through changes in product design. Further development of calculation tools for these and other “life-cycle” emissions could provide a basis in the future for more widespread reporting of these emissions.

**Verification and Enforcement**

A GHG reporting program – particularly one intended to provide baseline protection and foster trading of GHG emissions credits – can only be as effective as the verification of the reported information. Toward this end, GHG emissions reports should be submitted annually on DOE-designated reporting forms by the reporting entities. The forms should be self-reported and signed by an authorized officer of the reporting entity to certify that emissions reported are accurate and complete. Entities should face civil penalties if they intentionally misrepresent their emissions.

The DOE could develop additional verification requirements — including requiring other data to supplement or corroborate the initial filing, and allowing for site inspections. Companies could choose to engage third-party verifiers to review their data, but verification by such entities should not be required for reporting their direct and indirect emissions. Third-party verifiers should receive government certification to ensure
the integrity of their results. The DOE should establish minimum criteria to ensure that the certifications are of the highest possible quality and the methodologies are consistent.

Public Disclosure

A key objective of a GHG reporting program would be to give the public direct access to information on GHG releases in a timely fashion. To meet this objective, data on individual facilities and companies should be made available to the public over the Internet — except for information determined to be a trade secret or information vital to national security. Companies should also be allowed to provide production-based emissions information on a voluntary basis, for example, to show relative emissions reductions even as production increases.

Off-site Projects and Offsets

Because GHG emissions have the same warming effect regardless of where on the globe they are emitted, it is useful to encourage the most cost-effective GHG mitigation opportunities even if they are not in the United States or at a facility owned by a reporting entity. Many companies have already invested in off-site projects to reduce GHG emissions, for example, by investing in renewable energy projects. Others are investing in projects to remove and store, or “sequester,” carbon through, for example, reforestation and conservation. This work has been done by U.S. firms both domestically and abroad and provides an important means of keeping GHGs out of the atmosphere.

Allowing companies to register the progress of these programs would likely stimulate investments in more such projects. To this end, entities participating in a GHG reporting program should have the option of reporting reductions and offsets achieved through projects both inside and outside the United States, for example, through carbon sequestration and increased energy efficiency. Such offsets should: (1) be certified as real, quantifiable, and not resulting in increased emissions elsewhere; (2) be verified by a third party qualified to provide such certification; and (3) pertain only to projects not reported elsewhere in the register.

Entities should also be able to report voluntarily transfers of ownership of a given GHG reduction or offset.

Reporting of Activity Prior to Enactment of this Reporting Program

Many companies have taken responsible actions to curb their GHG emissions and undertake GHG reduction projects over the last decade, due to concern about climate change impacts and in response to the United Nations Framework Convention on Climate Change and various U.S. voluntary programs. These companies should receive credit for their early action – even when their actions were not previously reported to the 1605(b) program or any other federal or state program. A GHG reporting program should make it possible for such entities to report (and receive baseline protection for) emission reductions and offsets implemented after 1990 and before enactment of the program, so
long as the information is certified by the reporting entity and is reported under the established reporting standards as explained above, or the entity can provide substantially the same information. Companies should select a base year for which their emissions are well documented and verifiable.

Procedures should also be developed by the DOE for considering petitions from companies that can show that, even though they cannot meet the exact requirements of the newly developed protocol, they can provide substantially the same information in order to support use of an earlier base year for entity-wide reporting. In addition, entities that have reduced emissions through either on or off-site projects that can rigorously document and certify reductions are real, quantifiable and verifiable and that such reductions have not resulted in increased emissions elsewhere should be able to receive baseline protection/credit for these measures.

Minimized Reporting Burden

A GHG reporting program should be designed to minimize the cost, inconvenience, and general burden associated with reporting. The DOE should work with stakeholders to establish protocols and emission factors, and the program should be integrated with GHG reporting requirements at other levels of government (both domestic and international), as well as with other existing environmental reporting requirements. Electronic reporting should be allowed and encouraged, in a format that allows entities to report directly from their internal electronic databases to the reporting system. The DOE should specify emissions factors for utilities and manufacturers and common unit-process technologies that could be used by reporting entities. Technical assistance in reporting should be available to any reporting entity.

Conclusion

While a mandatory greenhouse gas reporting and disclosure program is an important step in any effort to address climate change, an improved 1605(b) program – particularly if coupled with real baseline protection – would be beneficial.

Endnotes


2 These indirect emissions can be estimated by using emission factors and protocols developed by the implementing agency.


5 WBCSD/WRI, The Greenhouse Gas Protocol Initiative. The first “module” under this protocol consists of standards, guidelines, and calculation tools for companies and other organizations wanting to account and report their direct and indirect emissions of the six GHGs covered by the Kyoto Protocol. A future module under development will provide accounting and reporting standards for project-based GHG reduction activities.

6 Direct emissions are emissions from sources that are owned or controlled by the reporting entity, e.g., emissions from factory stacks, manufacturing processes and vents, and from company-owned/controlled vehicles. Indirect emissions are emissions that are a consequence of the reporting entity’s activities, but occur from sources owned or controlled by another entity, e.g., emissions from the production of purchased electricity, contract manufacturing, employee travel on scheduled flights, and emissions occurring during the product use phase. World Business Council for Sustainable Development — World Resources Institute (WBCSD/WRI), The Greenhouse Gas Protocol Initiative: Corporate Accounting and Reporting Standard, October 2001.

7 Trade secrets are treated differently by different federal statutes. Under the Clean Air Act, for example, emissions information cannot be withheld on the basis of trade secrecy. Under the Superfund Amendments and Reauthorization Act of 1986 (SARA), which created the Toxics Release Inventory (TRI), however, a reporting entity may seek trade secret protection of information which: (1) has not been disclosed by the entity to any other person, unless under a confidentiality arrangement; (2) has not been disclosed under another law; (3) if disclosed, would cause substantial harm to the competitive position of the reporting entity; and (4) is not readily discoverable through reverse engineering. Upon showing that all four of these tests can be met, the specific chemical identity can be withheld from disclosure, and replaced by the generic class or category of the reported chemical. The rest of the reported information must be disclosed. (See SARA Section 322.) A similar approach under a GHG reporting program (once the trade secret determination had been made) would provide for disclosure of all the information except the identity of the specific greenhouse gas, which could be represented instead by its carbon dioxide equivalence.

8 A production-based emissions report, for example, could state the amount of GHGs emitted per unit of product manufactured (for reporting entities that are manufacturers) or per unit of electricity generated (for reporting entities that sell electricity). Such a rate-based approach could provide important information on efficiency improvements that are not transparent from reporting absolute measures (e.g., metric tons).