

Council of Industrial Boiler Owners (CIBO)
Global Climate Change
November 5, 2007

Policy Statement

The Council of Industrial Boiler Owners (CIBO) recognizes that climate changes occur due to natural variability and direct and indirect impacts of human activity that alter land use and the composition of the atmosphere. Carbon dioxide is recognized as the most important anthropogenic greenhouse gas (GHG), and those emissions are primarily dependent on human utilization of fossil fuels. Since the use of fossil fuels is currently essential to human health, well-being, and standard of living, approaches to address human-induced climate change must balance energy use and economic development. Altering the trajectory of GHG concentrations in the atmosphere is an inherently long term process not only due to the lifetime of greenhouse gases in the atmosphere, but also due to the time needed to develop required advanced technologies and major capital investments that will be required to increase energy efficiency and reduce GHG emissions while providing essential products and services. Changes in end use consumption patterns and overall mitigation policies must rely on education and free market principles in order to minimize economic dislocation, and must be applied globally, not just in developed countries like the U.S. While mitigation of GHG emissions is an essential part of a policy addressing climate change, and since there will continue to be climate changes in the future regardless of actual emissions reduction levels and timing, balanced attention must also be given to adaptation to changing climate conditions on a global and regional basis.

Understanding this framework, CIBO supports reasonable efforts to reduce GHG emissions. CIBO believes that such efforts must be consistent with promoting a strong U.S. economy, maintaining broadly diversified energy supplies (including conventional energy resources and renewables) and national security, and ensuring the competitiveness of the U.S. industrial base in the global marketplace. CIBO favors GHG reduction approaches that foster reinvestment in our industrial infrastructure and promote energy conservation and efficiency gains. CIBO suggests that the following factors be carefully considered as plans and policies to reduce GHG emissions are developed:

- All major sectors of the economy (electric utilities, industry, transportation, and residential/commercial/ institutional) must be addressed as part of a comprehensive program to address climate change. A menu of various approaches could be considered and selected/tailored for each sector, such as market based incentives, performance standards, cap and trade programs, tax reform, incentives for technology research, development, and deployment, or other appropriate tools. There is no single approach that is appropriate for all sectors of the economy.
- Industrial production and associated energy use play a crucial role in the U.S. economy, directly supporting and making possible the products and services that define the American standard of living. Policies that ensure fuel and energy flexibility are key to the future success of the U.S. manufacturing base. Therefore, any GHG reduction policy must consider the direct and indirect impacts on the industrial sector, must consider global market forces, and must not place a disproportionate GHG reduction or cost burden on the industrial sector or the United States. Energy using facilities including industrial, commercial, and institutional entities will in effect see multiple levels of impacts due to climate change policies, e.g., cost increase of their lower carbon fuel supplies (natural gas and oil), increases in purchased electricity costs, direct compliance costs. Assistance through tax reform or other methods needs to be provided to address compounding impacts and enable continued

operation. In addition, many industrial products are used in other sectors of the economy to improve their energy efficiency and reduce and/or sequester greenhouse gas emissions; therefore, the ability to competitively manufacture these products in the U.S. needs to be preserved and enhanced.

- Industrial boilers provide over 90% of the nation's industrial process steam. The industrial energy infrastructure requires constant renewal and reinvestment. Although new technologies offer efficiency gains and lower emissions, regulatory uncertainty stifles efforts to upgrade or replace older energy facilities. CIBO cautions against a U.S. climate change program which places U.S. industries at greater disadvantage to international competition. Reductions in GHG emissions should be achieved through advances in technology rather than through a decline in domestic productivity and harm to the economy.
- Programs to reduce U.S. emissions should be based on sound science and be flexible, including market-based options where possible. Emission reduction strategies should not be limited to on-site sources; equal recognition should be given to programs that enhance emission sinks such as sustainable forest management practices, and programs that promote renewable fuels and the renewable energy sources from which they are derived.
- The global nature of climate change requires that solutions be global and that emissions are not merely transferred from the U.S. to other global locations. An equitable and effective international policy framework is needed, including the major developing nations. Broadly available emissions trading programs and technology transfer could enhance the ability of U.S. manufacturing to compete globally. This could help prevent industrial migration from the U.S. and maintain the positive effect of the U.S. on the world economy.
- Energy diversity and energy security are and will remain major concerns for the nation. A large diverse suite of affordable energy sources (e.g., carbon-based fuels, nuclear, hydropower, renewables) will continue to be vital to ensure an adequate energy supply. Increased use of economically competitive renewable energy and other non-GHG emitting energy sources must occur. Increased use of CHP (Combined Heat and Power) should be a priority due to its ability to provide high efficiency energy conversion, increase electricity grid reliability through distributed generation, and allow increased use of bio-based fuels. The very real efficiency improvements and GHG emission reduction potential of CHP should be advanced by implementing incentives for its further development; this should also include means to advance integration of distributed electric utility power generation with industrial/institutional electrical and thermal energy supply as a means to raise overall power generation sector efficiency. Continued reliance on coal will be required, but with trends toward higher efficiency, cleaner technologies, and long term CO₂ sequestration. It is recommended that several, large size CO₂ sequestration projects be pursued before any major CO₂ capture regulations are put into effect. Consideration needs to be given to the technical, legal, regulatory, and liability issues associated with this promising approach.
- Reliance on low emitting carbon based fuels such as natural gas, biomass, and biofuels must be supported by concurrent increases in domestic supply. A fundamental imbalance between natural gas supply and demand has already had a major impact on all sectors, contributing to American manufacturers closing their U.S. operations. The same result is beginning to occur with biomass. Wood fiber prices are increasing domestically due to renewable energy policies. The natural gas imbalance has resulted in the loss of many high paying jobs and a collateral magnified impact on

surrounding communities, as well as loss of local and federal tax revenues. Government policy must consider all of these impacts when implementing policies that have the potential to further increase the demand for natural gas or other low-GHG emitting energy sources.

- Appropriate treatment of feedstocks in national climate legislation is critical to the chemical and wood products industries. Feedstock uses of fossil fuels in the production of other chemicals or products that do not result in GHG emissions should be exempt from mandatory controls. A fossil energy feedstock exemption is crucial to maintain global competitiveness of chemical manufacturing products. Similarly, the value of wood fiber as a feedstock for products with low carbon footprints and carbon storage potential needs to be protected from unintended consequences of advancing renewable energy requirements.
- Free market principles should be maintained. Subsidies should be judiciously applied only with a clear understanding of potential impacts and minimization of the associated economic displacement. A clear emphasis should be on energy efficiency and minimization of energy use throughout the economy, development of renewable energy resources, and development and deployment of low GHG energy technologies, with a focus on removing barriers to new market entries.
- CIBO supports continued short and long term research to develop new technologies and to refine our scientific understanding of global climate change. A broad range of technologies should be pursued. No single technology is capable of "solving" the climate change problem. No single technology is applicable to all of the diverse applications and fuels, even within a single industry. Options are needed; technology developments can provide these options. Improved efficiency in both the conversion and end use of energy provides the least cost approach to reducing GHG emissions. Carefully tailored industrial technology R&D programs should be funded to allow faster development of technologies applicable to a broad spectrum of American industry. Demonstration projects applicable to a narrow spectrum of units should be avoided. In addition, significant Federal government support is required for basic research to discover new low and non-GHG emitting energy supply technologies.
- GHG emission reductions should be achieved on a practical schedule so that major disruptions to economies and standards of living are avoided. Schedules must be consistent with business and capital reinvestment cycles, recognizing the need to remain internationally competitive.

At this point in the national climate policy discussion, use of a cap and trade approach is garnering much attention. From an industrial boiler operator and energy user perspective, there are potential applicability and implementation concepts that could have significant impact, depending on how they are implemented and crafted. The following discussion points provide CIBO's views on major issues relative to a cap and trade system:

- Allowance Allocation Method- The method of allowance allocation has the potential to seriously disadvantage industrial facilities if the system is set up to require competition with electric utilities for allowances through a common auction. While some portion of allowances for electric utilities can be justified through an auction, methodologies for that sector should be implemented separately from the industrial sector. To the extent allowances are required of industrial entities, they should be fully allocated to industrial sources referenced to baseline emissions without relying on an auction so that

there is minimal impact on those sources with an inability to pass allowance costs through to customers.

- Point of Regulation- Upstream, downstream, or hybrid approaches have been discussed. It is quite likely that a hybrid approach would provide needed flexibility to craft a program to minimize economic dislocations while achieving the desired economically and environmentally efficient results.
- Safety Valve and Periodic Reviews- In the case of a major program with very long term requirements and goals, and with major potential economic and structural impacts, it is critical for the program to include periodic reviews with the ability to modify the program as needed to address changing knowledge and conditions. These reviews should incorporate both look-backs to evaluate what has occurred and projections looking forward in order to try to avoid major dislocations or economic impacts. Use of a “safety valve” is one method that could be used to mitigate overall economic impacts and dislocations that may be due to unforeseen outside influences while still supporting the market system’s allowance price signals.
- Offsets- Offsets should be allowed with no limitations so that a broad base of actions can be taken across many global regions. The ultimate goals are reducing emissions and stabilizing atmospheric GHG concentrations, so certifiable reductions anywhere globally have equal impact. Systems should be set up to optimize actions and utilize programs such as joint implementation (JI) and clean development mechanisms (CDM) or other future even more useful programs.
- Reporting and Registration Programs- A U.S. nationwide GHG emissions and intensity registry/reporting system should be established. The accuracy and level of verification need to be balanced against cost, feasibility, and intended use of the system, so that efforts are focused on actual reductions rather than recordkeeping and monitoring. Reporting should be no more frequent than an annual basis. Continuous emissions monitoring systems (CEMS) should not be required for tracking GHG emissions for other than large electric utility sources which already use them; rather, fuel use should be utilized for determining CO2 emissions as much as possible.
- Emissions Baselines- An economy-wide climate policy will likely include an emissions baseline for determining GHG emissions reductions targets. Different baselines may be appropriate for different sectors of the economy (e.g., industry vs electric utilities). U.S. industry has achieved significant energy efficiency improvements and GHG emissions reductions and the choice of baseline should allow credit for those actions. The emissions baseline should allow industry to receive credit for reasonably recent actions to reduce GHG emissions; establish a base year as early as possible consistent with the scope and requirements of the program; and include the ability to use a multiple year baseline to address atypical situations, such as 3 to 5 years. Many industrial products experience fairly long economic cycles as well as overlying weather impacts.
- Credit for Early Action- Credit for early action should be available as far back in time as accurate, verifiable GHG emissions data is available for a source. Activity eligible for credit should include utilization of more efficient technologies and direct emissions reductions, as well as capacity rationalization and consolidation of production in lower cost, higher efficiency production facilities within a company.

- Emissions Reduction Rate for Industry- The required emissions reduction rate for industry over time should be based on realistic capital turnover cycles and the ability to implement efficiency improvements without resulting in significant loss of global competitiveness. Diversity of available energy supplies must be maintained so that energy security and production security for critical products can be provided. Time must be allowed for technology development and implementation. Regulatory programs should be enhanced and modified to ensure the ability and incentivize industry to install new higher efficiency equipment.
- Federal Pre-Emption- National climate legislation should provide a uniform national program, rather than state by state regulation, and should fully credit regulated actions entities have taken under state programs.

The Council of Industrial Boiler Owners (CIBO) is a broad-based association of industrial boiler owners, architect-engineers, related equipment manufacturers, and University affiliates consisting of over 100 members representing 20 major industrial sectors. CIBO members have facilities located in every region of the country; and have a representative distribution of almost every type boiler and fuel combination currently in operation. CIBO was formed in 1978 to promote the exchange of information within the industry and between industry and government relating to energy and environmental equipment, technology, operations, policies, law and regulations affecting industrial boilers. Since its formation, CIBO has been active in the development of technically sound, reasonable, cost-effective energy and environmental regulations for industrial boilers.