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March 27, 2007

The Honorable John D. Dingell, Jr.  
Chairman - Committee on Energy and Commerce  
United States House of Representatives  
2125 Rayburn House Office Building  
Washington, D.C. 20515

The Honorable Rick Boucher  
Chairman - Energy and Air Quality Subcommittee  
Committee on Energy and Commerce  
United States House of Representatives  
2125 Rayburn House Office Building  
Washington, D.C. 20515

Gentlemen:

On behalf of the members of the American Iron and Steel Institute, it is our great pleasure to transmit to you our response to your questionnaire regarding global climate change policy.

We want to especially thank you for the opportunity to present our views to the Committee in such a timely manner. Your thoughtfulness in soliciting our views is deeply appreciated by all our members, and we can tell you that the questions posed by the Committee received extraordinary attention by our CEOs and other leaders, as well as the AISI staff. We also want to thank you for making your staffs so available to our industry, and we see this questionnaire as part of the continuing dialogue between the Committee and the steel industry on the climate issue.

Our response reflects three basic principles that are held unanimously by our membership.

First, we strongly oppose a cap and trade system, and believe that there are far better ways of dealing with the challenges raised by climate change. Our position is based not on some vague, theoretical notion, but on our real life experiences with the cap and trade system in Europe. It has proven to be inherently unfair, has created strong disincentives to technological innovation, and encouraged relocation of affected industries away from the regulated areas. We believe other options, such as a sectoral approach, offer a far better alternative than cap and trade in actually reducing global emissions in a way that will mitigate the massive economic dislocation risked by cap and trade systems. Sector-specific, technology-based approaches have proven highly effective in addressing other environmental challenges. We stand ready to work with the Committee to develop those ideas into workable legislation.

Second, we believe that the global problem of climate change can only be addressed effectively on a global basis. The enactment of any carbon restraint regime in the United States without similar measures being taken by other critical nations such as China on a contemporary time line

will without doubt lead to the perverse outcome of the loss of significant employment in the domestic manufacturing economy and a net increase in total global emissions. We must hold foreign imported goods to comparable standards, or else we will risk our own economic health and national security, while at the same time making our planet's atmosphere worse, not better. We urge the Congress to condition the application of any new regime on the adoption of similar rules by our major trading partners.

Third, and above all, the Committee must understand that there are presently no feasible alternatives to fossil fuels in the making of steel. Carbon is necessary for the chemical conversion of virgin iron ore to iron and eventually steel. It is this chemical transformation that is the foundation for the modern integrated steel industry. Electric furnace steel producers, which derive iron units mainly from scrap recycling, utilize coal-based electricity and natural gas as principal energy sources, but one still ultimately dependent on the injection of ore-based material into the system. Thus, climate policy which affects the costs and availability of coal and natural gas is critical to all steel producers.

We recognize the enormous difficulty that faces the Committee as you seek to develop responsible legislation in the area of climate change. We have sought to address your questions with the importance and thoughtfulness that the issue requires. As the Committee moves forward, please rest assured that you will have the full cooperation of our industry as a technical resource, to be called on at any time.

Thank you again for all the courtesies that you have shown us, and we look forward to working together to help solve this global issue.

Sincerely,



Louis L. Schorsch  
Chairman



Andrew G. Sharkey, III  
President & Chief Executive Officer

Cc:

The Honorable Joe L. Barton  
Ranking Minority Member - Committee on Energy and Commerce  
United States House of Representatives  
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The Honorable Dennis Hastert  
Ranking Minority Member - Energy and Air Quality Subcommittee  
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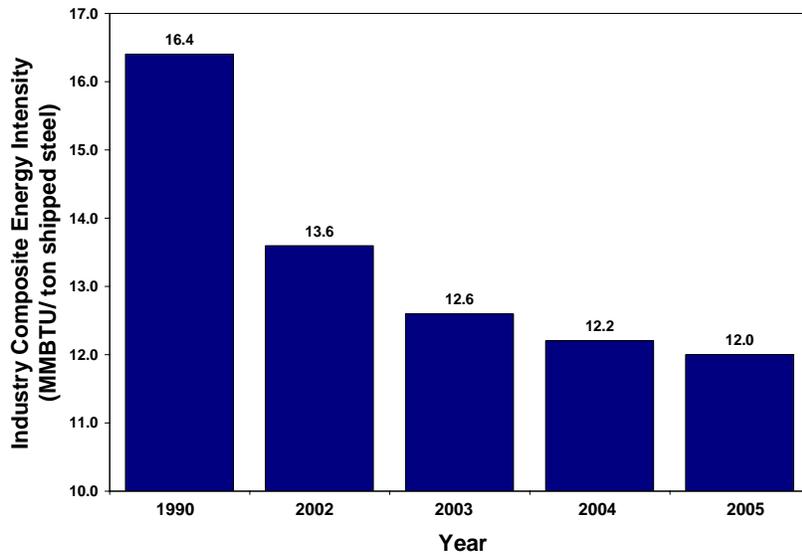
**AISI Response to the Request of  
House Energy and Commerce Committee  
Chairman John Dingell's Request  
for Views on Climate Change Legislation**

- 1. Outline which issues should be addressed in the Committee's legislation, how you think they should be resolved, and your recommended timetable for Congressional consideration and enactment. For any policy recommendations, address the impacts you believe the relevant policy would have on: (a) emissions of greenhouse gases and the rate and consequences of climate change and (b) the effects on the U.S. economy, consumer prices, and jobs.*

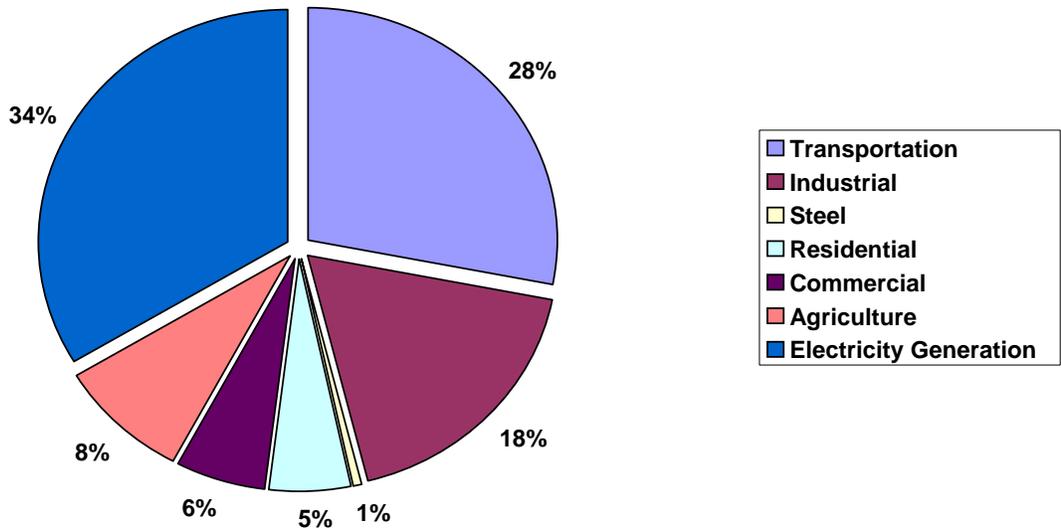
The American steel industry utilizes fossil fuels for a variety of purposes. In addition to their role as an energy source, fossil fuels (in the form of coal or natural gas) also play an essential *chemical* role in the reduction of iron ore to produce iron (and eventually steel). This chemical transformation of virgin iron units is the foundation for the modern steel industry. For integrated steel producers, who rely primarily on the transformation of virgin iron units, two-thirds of the energy required to make steel is derived from coal, and most of that is associated with coke, an essential material that provides the carbon necessary for the chemical conversion of iron ore to iron. In the case of coking coals and other energy sources for the reduction of iron ore, there are presently no feasible alternatives to fossil fuels. Electric furnace steel producers, which derive iron units mainly from scrap recycling, utilize electricity and natural gas as principal energy sources. Much of the electricity is currently from coal-based power generation. For these reasons, climate policies affecting the costs and availability of coal and natural gas are very important to all steel producers.

Because energy costs represent over 20% of the manufacturing cost of steel, efficient energy use has been of paramount importance to the industry, and increasing energy costs place even more importance on conservation and efficiency. The industry, largely through investments in new technology, has reduced energy use per ton of steel shipped by over 40% over the past 25 years and by 27% since the Kyoto baseline year of 1990 (see chart "U.S. Steel Industry Energy Intensity"). Reductions in carbon dioxide (CO<sub>2</sub>) have also occurred. According to the most current EPA data, the iron and steel sector has reduced its CO<sub>2</sub> emissions from its facilities by about 40% between 1990 and 2005. The industry will continue to seek ways to reduce energy-related emissions of CO<sub>2</sub> provided the industry remains economically competitive. However, since the industry has already undertaken the most cost-effective steps to conserve energy, future incremental gains will be harder and more costly to achieve. Moreover, certain steel processes are already operating at the limits of known technological capability.

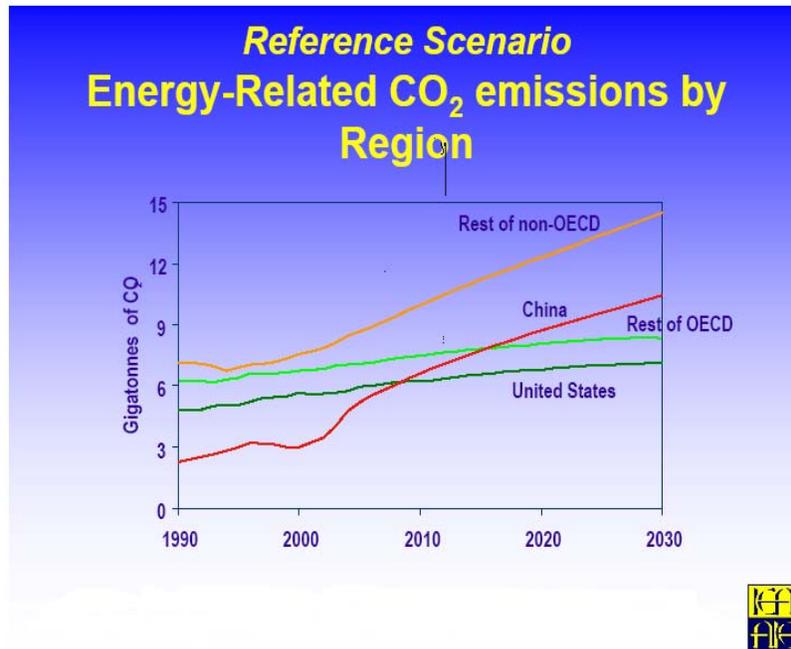
### U.S. Steel Industry Energy Intensity (1990-2005)



### U.S. Greenhouse Gas Emissions by Sector



Data Source: Draft EPA GHG Inventory Executive Summary for the period 1990-2005, found at: <http://epa.gov/climatechange/emissions/downloads07/07ES.pdf>



It is also important to bear in mind two critical aspects of the relationship between the steel industry and greenhouse gases. First, the U. S. steel industry facilities only account for about 1% of U.S.-generated greenhouse gas (GHG) emissions (see chart “U.S. Greenhouse Gas Emissions by Sector”). Second, steel has a critical role to play in addressing the GHG challenge. This is true not only in terms of its status as the most recycled material – by a wide margin – in the global economy, but even more importantly in terms of the role steel can play in supporting reduced emissions in the transportation sector, the largest single source of GHG, after electricity generation. Over the past decade, the global steel industry has been developing advanced high-strength steels (AHSS) to meet the auto industry’s needs for safety, weight reduction, and cost effectiveness. If currently available AHSS were applied throughout the current U.S. automotive fleet, GHG emissions from automobiles would be reduced by approximately 12% - an amount greater than the entire current generation of GHG by the American steel industry.

Steel’s commitment to advanced technologies continues. Notwithstanding progress in cutting energy consumption and limiting emissions to date, the U.S. steel industry, in collaboration with the rest of the global steel industry, has embarked on aggressive (R&D) programs to develop transformational iron and steelmaking and CO<sub>2</sub> sequestration technologies that will drastically reduce or eliminate its CO<sub>2</sub> emissions. AISI is actively involved in the North American aspect of that work.

Just as the steel industry is seeking a global solution to the GHG emissions problem through international technology efforts, our industry believes strongly that any U.S. GHG program must include a strong, meaningful international component. Unless competing steel-producing nations – including those in developing countries such as China, India and Brazil – face comparable requirements, measures taken by the

U.S. will adversely impact the ability of American steelmakers to remain competitive in the international marketplace and adversely impact the rate of CO<sub>2</sub> emitted globally. Programs that lack such an international, trade-related component could provoke a significant shift in manufacturing from North America to offshore operations with less stringent controls and thus threaten tens of thousands of American jobs, not only those of steelworkers but also those in industries that support and rely on the steel industry. Legislation that imposes carbon emission caps on steelmaking in the U.S. without addressing steel imports in all forms will result in displacement of American jobs and production by producers in countries unconstrained by comparable CO<sub>2</sub> restrictions. The result of this “market dynamic” will be depressed economic conditions in domestic steel and related sectors and a global net increase in GHG emissions.

The American steel industry is among the most energy efficient and environmentally conscious in the world. About two-thirds of all American-made steel is produced from recycled steel or iron-bearing materials, which results in far less energy consumption than if all steel were made from virgin iron ore. The industry has also helped to reduce emissions associated with use of steel products and the life cycle of steel. In addition to the tremendous benefits that AHSS is bringing to the automobile industry, steel-related solutions are contributing to more energy-efficient construction, and electrical-grade steels are being developed that allow for more energy efficient electrical equipment such as motors and transformers.

With the above as background, we believe any climate legislation must be based on the following principles:

- Programs with sector-based, energy intensity-based goals are preferred over mandatory GHG emission reductions or cap-and-trade systems.
- A global concern requires a global solution involving developing as well as developed countries. A program that merely shifts manufacturing-related GHG emissions to other parts of the world fails to address the global concern and will almost certainly make it worse.
- Sustainable manufacturing sectors are essential for economic growth of the U.S. and important to national security.
- National policy should be based on sector-specific best practices in order to balance domestic CO<sub>2</sub> reductions with the economy’s need to remain globally competitive.
- Emphasis should be placed on investment in research, development, and deployment of technology and innovation to reduce fossil energy utilization and improve productivity.

- The public and private sectors share responsibility for funding process R&D aimed at GHG mitigation, because the result of such research helps attain both public and private goals.
- Tax incentives and investment inducements are preferred over energy taxes or mandates as the optimum way of encouraging continual improvements in sectoral best practices with respect to equipment and operating procedures.

Given the concern to address the issue globally and the rapid growth of GHG emissions in developing countries, we recognize that many will believe we must legislate very quickly. Legislative deliberation over the Clean Air Act Amendments of 1990 occurred over a ten-year period; time has proven that legislative process and subsequent product to be a workable model. Similarly, it is critical that we respond thoughtfully to the greenhouse gas issue and not rush into a program that is flawed or counterproductive. We recognize that comprehensive legislation may require more time and that it may be prudent to enact pieces of an overall program separately. A phased strategy would also allow for a more measured approach that would provide a slowing of emissions growth and consideration of the consequences as the program unfolds.

**2. *Answer the following questions regarding the potential enactment of a cap-and-trade policy:***

The American steel industry does not support a cap-and-trade policy. As noted above, the industry has already achieved significant progress in reducing energy and GHG emissions. Increasing steel recycling rates are making the industry one of the most sustainable in the world. Effective, pro-growth, technology-driven approaches allow the U.S. to achieve GHG reductions in an economical manner. This is particularly important because of the carbon-based *chemical* manufacturing requirements for iron and steelmaking. A mandatory cap-and-trade system applied simplistically to the steel industry, especially without comparable requirements globally, would have an adverse impact on the U.S. economy and would be detrimental to the competitiveness and viability of the domestic steel industry and related sectors. Moreover, such a regime would have a perversely negative effect on climate change, both because it would shift production to regions with less stringent controls and because it would limit the environmental benefits a healthy steel industry can bring to consuming industries, particularly automotive.

The experience of the European Union in attempting to comply with its Kyoto Protocol obligations has shown that GHG emission cap-and-trade schemes can significantly increase energy costs for many industry sectors, including steel. These added costs are threatening the viability of the affected industries (including steel) relative to their foreign competitors and are encouraging companies to move operations abroad. Such outcomes would also result in the U.S. following the implementation of a similar cap-and-trade program.

Shifting manufacturing operations and emissions to developing countries does nothing to address global concern for climate change and will likely increase global GHG emissions.

Our industry's experience with the European cap-and-trade program highlights how the fundamental problems with a cap-and-trade program can be compounded by poor design and implementation. Under the Kyoto Protocol the EU committed to an overall goal for reducing GHG emissions, allocated specific reductions to EU countries, and established an emission trading system. Each country was then obligated to develop plans for restricting emissions, but only for a limited number of energy-intensive sectors (power, steel, pulp/paper, and mineral (includes cement, lime & glass)). No requirements were established for other manufacturing sectors, including some producing competing materials (e.g., aluminum and plastics), and no obligations were placed on transportation or residential or commercial sources. Incredibly, only 46% of total emissions were covered by the program.

Moreover, the power sector was granted a disproportionate share of allowances, which created an adverse outcome for other affected industry sectors, including steel. Not only did it place added burdens on countries to reduce emissions from the targeted industry sectors, it also allowed power companies to pass through added electricity costs for any carbon credits they had to purchase at market prices created by the demand on those credits to meet the Kyoto goals. This led to increased volatility and dramatic price increases, particularly in Germany and France, where cost increases exceeded 40% over two years. Power companies usually do not compete internationally as do many manufacturers and are therefore able to pass through increased costs where manufacturers cannot. Some countries have brought legal action against the European Union (EU) because of the unfair allocation process.

Below is a summary list of lessons learned and problems created for the European steel industry – and other basic industries – by the EU mandatory cap-and-trade system and corresponding emission trading system. While some of these concerns could possibly be mitigated by a different approach, they highlight fundamental problems with a cap-and-trade system:

- A threefold distortion of competition has been created between: (1) EU steel manufacturers and their competitors outside the EU; (2) steel manufacturers in different EU countries; and (3) steel and competing materials, both within the EU and internationally.
- The emissions allocation process itself is fraught with inequities that derive from the base year chosen and the system used to make allocations; these are compounded by the uncompromising relationship between the local and central authorities and the unique operating circumstances of specific companies (e.g., maintenance outages, cross-border synergies, etc.).

- It is impossible for many industries that face foreign competition to pass these costs along to their customers and may lead to the unintended consequence of shifting production abroad.
- Electricity prices have risen significantly due to the distorted allocations given to power companies.
- There is no incentive or reward for innovation, and new installations are constrained.
- There is no recognition for earlier accomplishments by the steel industry.
- Capping emissions for processes for which there are currently no proven alternative technologies, such as the carbon required for the chemical reduction of iron ore, caps production of steel, which is essential for a growing economy, thereby encouraging job displacement and diminishing the contribution steel can make to helping other sectors reduce their carbon footprint.
- Because CO<sub>2</sub> reductions may only be possible by cutting capacity or closing plants, it is important to allow for transfer of credits across national boundaries.
- Impending new allocations of emissions allowances create tremendous uncertainty and thus limit investment and development.
- Emphasis is placed on optimizing carbon emissions at the facility level rather than globally, thereby sub-optimizing the program as a whole.
- Arbitrary allocations were made for sectors with little recognition of cost-effective abatement opportunities in those sectors and differences in processing methods and product mix within the sectors.
- Strong incentives have been created to relocate operations to non-Kyoto countries or externalize certain activities, such as importing semi-finished products or raw materials with carbon burdens from non-Kyoto countries instead of producing them.
- GHG emissions are shifted to other countries that have no comparable obligations, which results in no net benefit or even a possible increase in global emissions if shifted to countries with lower productivity or energy efficiency.
- Several European steel companies have already begun to expand operations in other countries that do not have obligations under the Kyoto Protocol.

In summary, the steel industry has grave concerns about, and is therefore opposed to a cap-and-trade type approach as the means of controlling greenhouse gas emissions in the United States. Instead, we favor the development of sector-based carbon intensity regulations, applying regulatory processes that have a proven track record of effectiveness, that take into consideration the state of existing technologies by process and product, that reflect global industry best practices, and that address global competition for steel and steel-containing products. With regard to the latter, our objective is not to pursue a least common denominator, but rather to hold foreign imported goods to comparable standards that will enhance the quality of the planet's atmosphere without sacrificing American jobs.

*a. Which sectors should it cover? Should some sectors be phased in over time?*

Based upon our European experiences, the steel industry opposes a cap and trade system, and believes that a sectoral, technology-based approach is clearly superior for reducing GHGs. We also believe that the mode and timing of targets for controlling GHG emissions should reflect the technological alternatives available. Sectors like steel, where carbon plays an irreplaceable role in a chemical process in addition to its caloric contribution, require a distinctive approach, including the timing of specific emission targets.

*b. To what degree should the details be set in statute by Congress or delegated to another entity?*

Our strong preference is for a sector-specific approach – rather than a generic cap-and-trade. We believe that sector specific criteria should be incorporated into the law and we will work with the Committee as we move through the process.

*c. Should the program's requirements be imposed upstream, downstream, or some combination thereof?*

The steel industry believes that the most critical aspects of any effective GHG program are that it be applied internationally, economy-wide, sector-specific, and technology-based. Despite our opposition to cap and trade, if the Congress decides to adopt it, simplicity argues that any regulatory caps would be applied upstream only. It is critical that any requirements be applied internationally in order to avoid loss of jobs and greater global greenhouse gas emissions.

*d. How should allowances be allocated? By whom? What percentage of the allowances, if any, should be auctioned? Should non-emitting sources, such as nuclear plants, be given allowances?*

As we have already argued, we believe an emissions allowance allocation system would not work, as the European experience shows. If allowances are considered, however, they should be allocated taking into account the burdens caused by the emission policy as well as the ability of sources to pass these costs on to their customers.

We also recognize that nuclear power must be part of the long-term solution to the GHG challenge and that utilities considering investment in new nuclear capacity should be incented to do so, but nuclear plants should not be given emissions allowances.

*e. How should the cap be set (e.g., tons of greenhouse gases, CO<sub>2</sub> intensity)?*

The American steel industry strongly believes that intensity metrics are more suitable targets for any GHG policy, not only in this country but particularly in the developing world. By applying these intensity goals to all steel sold in the U.S., we will provide appropriate incentives for all steelmakers, domestic and foreign, to take the steps necessary to mitigate their greenhouse gas emissions.

*f. Where should the cap be set for different years?*

As we have stressed, the American steel industry believes that the most effective GHG program will be sector-specific and technology-based. This implies that targets must be tailored – based on what is feasible and economic – to specific sectors. Target adjustments and schedules should be similarly tailored and should balance environmental objectives with technological constraints and economic impact.

*g. Which greenhouse gases should be covered?*

GHG policy should cover all six of the gases identified in the Kyoto Protocol as contributing to global warming.

*h. Should early reductions be credited? If so, what criteria should be used to determine what is an early reduction?*

A sector specific, intensity based approach would automatically provide recognition for early action and adoption of technologies.

*i. Should the program employ a safety valve? If so, at what level?*

We oppose cap and trade because it is likely to cause significant economic harm to the U.S. without any meaningful reduction in global greenhouse gas emissions. If Congress adopts cap and trade, a safety valve is absolutely essential. The greatest

safety valve, of course, is to condition the implementation of any U.S. legislation upon the adoption of similar requirements by China and other nations.

*j. Should offsets be allowed? If so, what types of offsets? What criteria should govern the types of offsets that would be allowed?*

The logic for offsets is closely related to cap and trade – an approach that the American steel industry finds highly problematic. Consistent with our preference for a sector-specific, technology-based approach, we believe such an approach, if well designed, would not require offsets.

*k. If an auction or a safety valve is used, what should be done with the revenue from those features?*

We oppose auctions because they are a tax and they encourage speculation. Any revenues raised from auctions or safety valves should be used to offset the economic harm created by a carbon-restraint program.

*l. Are there special features that should be added to encourage technological development?*

The American steel industry has demonstrated that voluntary programs which promote and accelerate R&D can be very effective at achieving broad public-policy objectives. For example, the steel industry and the DOE's ITP program began investing in energy-related R&D in 1987, and the industry's substantial energy-efficiency improvements are largely due to that work. This track record argues strongly for continued government-industry co-investment.

Reflecting its strong environmental and recycling record, the international steel industry is undertaking aggressive R&D programs to develop transformational iron and steelmaking technologies that will drastically reduce or eliminate CO<sub>2</sub> emissions. AISI is actively involved in the North American aspect of that work. Four projects are underway – two dealing with novel iron and steelmaking technologies that yield little or no CO<sub>2</sub> and two dealing with sequestration projects to capture and neutralize the carbon associated with steelmaking. Other projects are under consideration. The long-term and speculative nature of such initiatives make them well suited to government support and cooperation. Unfortunately, our country lags on this front; EU governments, for example, invest 20 times more than the U.S. on this type of research.

AISI believes that global GHG emissions must be addressed through increased R&D and deployment of innovative, breakthrough technologies and cooperation on an international level. This can be accomplished through multilateral agreements involving both public and private parties, such as the Asia Pacific Partnership, and

through sector-wide cooperative R&D programs, such as the DOE ITP program, where federal co-investment broadens and accelerates the research and its ultimate deployment in meeting international and national GHG reduction goals. Such sector-based international programs also increase the potential for bringing developing countries to the table and can ameliorate competitive disparities if they lead to best-in-class manufacturing.

Legislation should also include adequate funding to support governmental participation in developing and participating in bilateral and multilateral technology development agreements and to match private-sector funding for fundamental R&D. Tax incentives to encourage more rapid turnover of capital stock or to reward innovative manufacturing measures to reduce emissions or energy use are also recommended.

*m. Are there design features that would encourage high-emitting developing countries to agree to limits on their greenhouse gas emissions?*

Nations that have ratified the Kyoto Protocol represent only 30% of global GHG emissions. Meanwhile, emissions from non-Kyoto developing countries, such as China and India, are increasing at a rapid pace; and these increases will dwarf any reductions that may be achieved through the Kyoto Protocol. Moreover, it is clear that most Kyoto countries will not achieve their targets. Unless the growing emissions from developing countries are addressed, it will not be possible to limit global GHG emissions effectively. (See chart on page 3: “Reference Scenario: Energy-Related CO<sub>2</sub> Emissions By Region”) It is essential to incorporate this objective in our policy response to the challenge of greenhouse gases. It makes no sense to unilaterally restrain the U.S. unless other nations such as China adopt similar regimes.

We must develop GHG policies that proactively preclude the loss of U.S. competitiveness and jobs because our controls are not matched in other countries, particularly in the developing world. Indeed, there is a risk that a poorly designed or implemented domestic program could act as an *incentive* for developing countries to delay their adoption of similar standards. The best mechanism for avoiding such a perverse outcome would be to incorporate a trade-related element into our GHG policy. We are confident that a WTO-compliant mechanism can be developed to apply GHG standards to all products consumed in the United States, whether domestically produced or imported. Such a mechanism would ensure that our GHG program does not have the perverse effect of creating an incentive to move manufacturing operations to regions where controls are less strict. By tying access to the U.S. market to sound environmental policies, such linkage would act as a strong incentive to encourage high-emitting developing countries to agree to limits on their greenhouse gas emissions.

**3. *How well do you believe the existing authorities permitting or compelling voluntary or mandatory actions are functioning? What lessons do you think can be learned from existing voluntary or mandatory programs?***

AISI is actively engaged in the Department of Energy's Climate VISION program, which is a voluntary initiative in which over a dozen business sectors representing a high percentage of the nation's energy consumption have adopted goals. Progress toward reducing energy consumption and GHG emissions through this program has been significant. In the case of the steel industry, which established a goal of reducing energy consumed per ton of shipped by 10% from 2002 to 2012, reductions of approximately 12% have been documented through 2005. Progress is also being made by other participating sectors.

EPA's voluntary Climate Leaders and Energy Star programs have also been very successful at securing company-specific energy or GHG emission reduction goals, and participating companies have been making major progress toward meeting those goals.

In addition, AISI is also participating in the Administration's voluntary Asia Pacific Partnership for Clean Development and Climate. This program includes a steel task force with representatives from the six participating countries, which account for about 60% of global steel production, and is engaged in technology exchange and identification of best practices for the steel industries in those six countries. The program holds promise for significantly stemming increases in GHG emissions in both developed and developing countries, which the mandatory framework of the Kyoto Protocol does not accomplish.

On the other hand, the European Union's mandatory cap-and-trade program designed to meet Kyoto Protocol requirements has been a failure in many respects. The flaws and failings of the EU system are described more fully above in response to Question 2.

**4. *How should potential mandatory domestic requirements be integrated with future obligations the U.S. may assume under the 1992 UN Framework Convention on Climate Change? In particular, how should any U.S. domestic regime be timed relative to any international obligations? Should adoption of mandatory domestic requirements be conditioned upon assumption of specific responsibilities by developing nations?***

The 1992 UN Framework Convention on Climate Change (UNFCCC) was a goal-oriented agreement intended to address global concentrations of GHGs. The pact primarily pledged signatories, including both developed and developing countries, to work cooperatively on the issue, and the only obligations were mainly limited to reporting requirements. However, the subsequently adopted Kyoto Protocol is not

consistent with the intent of the UNFCCC because it places burdens only on a limited number of so-called developed countries while imposing no restrictions on other signatories of the UNFCCC. Because the U.S. has ratified the UNFCCC, it should continue to abide by the terms of that agreement, including any future obligations that apply to all signatories of the UNFCCC, although those future obligations are subject to future deliberations and are not known at this point. While it is important for the U.S. to show leadership on this issue, the schedule and timetable for implementing any U.S. program must be coordinated with and in parallel with programs of all signatories of the UNFCCC. The European experience has shown how proceeding with mandatory programs without commensurate involvement by all trading partners can have adverse effects on economies and international trade.

For these reasons the answer to the question concerning linkage of the U.S. program to responsibilities of developing nations is emphatically "Yes." As noted above, we believe intensity-based, sector-based approaches stand a better chance of acceptance by developing countries and will minimize the potential for competitive distortions if approached on a global basis. Legislation should provide for a timely and periodic review of domestic programs and the corresponding progress and impacts of international programs and the related impacts on the economy and trade in order to make adjustments and revisions to address any adverse consequences.

***5. What, if any, steps have your organization's members taken to reduce their greenhouse gas emissions? Which of these have been voluntary in nature? If any actions have been taken in response to mandatory requirements, please explain which authority (State, Federal, or international) compelled them?***

See the discussion under Question 1 concerning the accomplishments of American steel producers in reducing energy consumption and corresponding GHG emissions. As noted, these reductions were accomplished without mandates or taxes but rather through technological advances and capital stock turnover. Also see the discussion of the mandatory EU system under Question 2.