

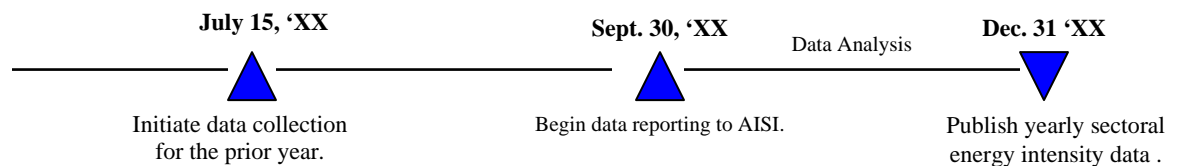
Work Plan for Climate VISION Implementation with DOE

Work Plan for implementation of Climate VISION activities to reduce steel industry energy intensity by 10% by the year 2012 as outlined in AISI's letter to the Secretary of Energy, Feb 13, 2003 (see Appendix A). DOE is cooperating with AISI, SMA and SSINA to implement the activities below designed to accomplish those goals.

➤ **Element 1: Energy Measurement and Reporting Protocols**

In steel manufacturing energy usage is directly related to GHG emissions. Therefore the steel industry established a sector-wide energy reporting protocol. Energy use (and hence greenhouse gas emissions) will be tracked and reported on a sector-wide basis. Reporting began and was completed in 2003 (for calendar year 2002) according to the following timeline and objectives. These will remain the major milestones and delivery dates for reporting in subsequent years. Data gathering has begun for 2003.

Timeline:



➤ **Element 2: Identify and implement near-term *cost-effective CO₂ reduction opportunities.***

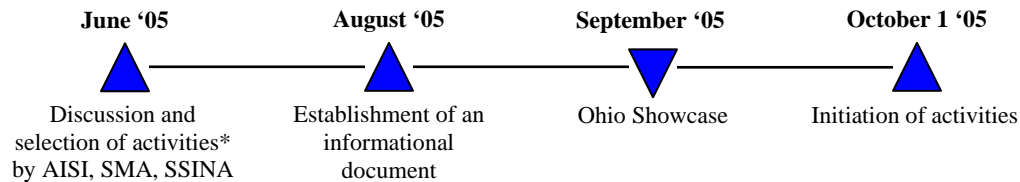
Climate VISION encourages industry groups / sectors to identify and implement near-term cost-effective energy saving opportunities that reduce greenhouse gas emissions. The steel industry, through various means including association meetings, strives to increase the efficiency of their member companies and will identify and implement near-term energy saving opportunities to reduce greenhouse gas emission intensity with the assistance, as appropriate, of the Department of Energy (DOE).

Therefore, AISI, SMA, and SSINA, will identify specific topics for inclusion under Element 2 including training, workshops, information dissemination, case studies, and other activities that would help facilitate communication of steel-related best practices and technologies which could impact energy utilization and/or CO₂ generation among steel-related trade associations, suppliers, customers, and other interested stakeholder groups. These topics will also be discussed with the DOE Office of Energy Efficiency and Renewable Energy (EERE) to identify assistance, as appropriate of the DOE.

AISI, SMA, and SSINA will facilitate activities so their member companies will encourage their employees to practice energy conservation by stepping up education efforts concerning energy savings at work and at home. Working in coordination with DOE they will develop and circulate an informational document which will include key energy efficiency resources and website links, such as www.energysavers.gov (for home owners) and www.energysavers.gov/industry (for steel plants.)

Other specific activities could include: (1) participation in DOE's Ohio Showcase, September of 2005; (2) share methodologies and best practices to achieve greenhouse gas intensity reductions; and (3) facilitating a sector wide event for technology transfer of DOE's "Best Practices" regarding steam and process heating to the steel industry.

Timeline:



* These activities could include:

- Co-sponsored energy efficiency training events on various energy applications (pumping, steam, process heating, etc.)
- Development and dissemination of information, tools & resources
- Promotion of DOE solicitations
- Commercialization of emerging technologies
- Trade journal articles
- Future publications, communications and outreach
- Participation in public events
- Case study referrals
- Web site coordination and development

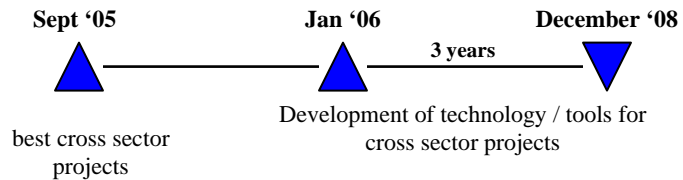
➤ **Element 3: Develop *cross-sector projects* for reducing greenhouse gas emissions**

Climate VISION aims to encourage cross-sector projects that reduce greenhouse gas emissions. DOE, AISI, SMA, and SSINA will explore innovative projects among the Steel industry and other industrial sectors that would provide improvements to energy efficiency and greenhouse gas emissions.

If a cross-sector meeting can be established, AISI, SMA, and SSINA will, in preparation, survey their members to discover techniques that can be used to enhance other industrial sector processes.

Additionally, a coordination meeting could be convened by the Alliance for Materials; Manufacturing Excellence to identify current projects and activities with cross-sector potential.

Timeline:

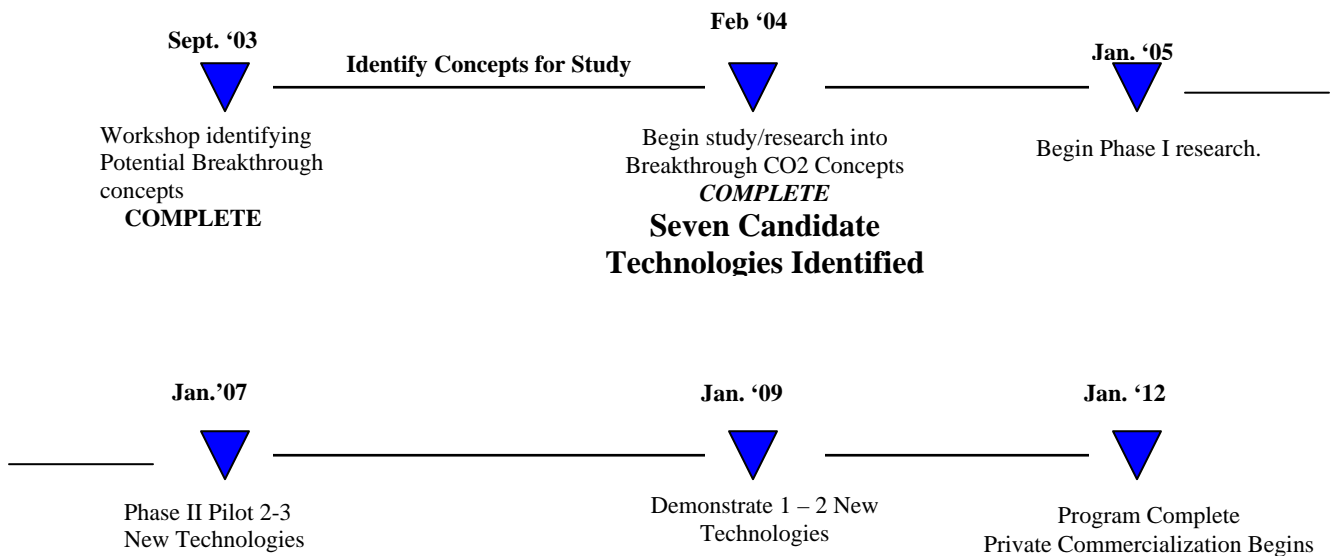


➤ **Element 4: *Research, Development, and Demonstration of CO₂ Breakthrough Technologies with Significant Greenhouse Gas Abatement Potential***

This element relates to the establishment of a new AISI/DOE collaborative program to discover and demonstrate “Breakthrough Technology” that will result in greatly reduced GHG emissions.

The first step in implementing this program was the Planning Workshop. The Workshop brought together leading authorities from many industrial sectors, academia, and government who identified radical new approaches to steelmaking with significant CO₂ reduction potential. The new, three-phase AISI/DOE program is designed to research, develop, and demonstrate one or more of these approaches. Phase I will investigate the feasibility of the proposed CO₂ abatement technologies; seven technologies have been selected for study. The investigations will take place at research centers and universities around North America beginning January 1, 2005. Phases II and III will pilot and demonstrate successful technologies.

Timeline:



AISI is also cooperating in other, international CO₂ Breakthrough programs. In so doing it will avoid duplication of efforts and share in new developments discovered elsewhere.