

Exploring Ideas for a North American Pollution Prevention Challenge

PANEL DISCUSSION

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Sustainability Efforts Reflected in PRTR

US

- On-site and off-site other waste management efforts (recycling, energy recovery, treatment)
- Source reduction activities (8 categories), optional text narratives to provide details, methods used to identify source reduction activities, barriers to source reduction, estimated expected reduction

Canada

- Off-site other waste management efforts
- Pollution prevention plans, 7 common P2 techniques including on-site reuse, recycling or recovery

Mexico



Barriers to Implementing Pollution Prevention

Analysis of reported barrier information can help:

- identify research needed to address technological challenges or promote development of viable alternatives.
- allow for better communication and knowledge exchange on effective source reduction practices

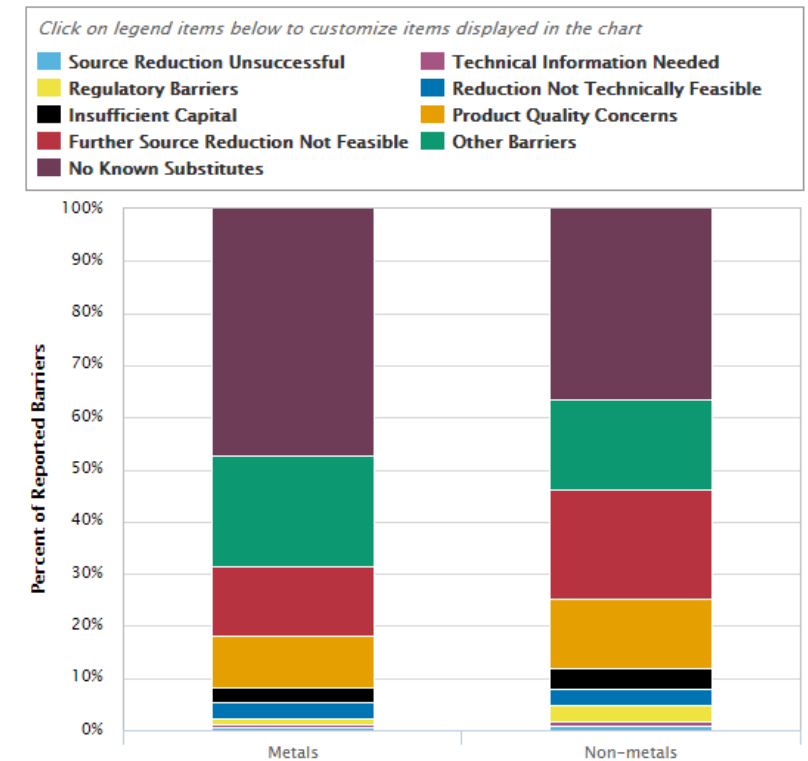
Most frequently reported barriers:

- *no known substitutes or alternative technologies*
- *further source reduction not feasible*

Top three industries reporting barriers:

- chemical manufacturing, nonmetallic mineral products, and fabricated metals

Barriers to Source Reduction Reported for Metals and All Other Chemicals, 2014–2018



The 33/50 Program

Primary goal:

- Obtain major national reductions in quantities released onsite and transferred offsite of 17 targeted TRI chemicals
 - Chemicals selected based on toxicity, production volumes, and potential for successful pollution prevention
 - 33% reductions by 1992
 - 50% reductions by 1995
 - 1988 baseline

Timeframe: 1991-1995

Participation:

- Commitment made at the company level but participation was not required for each facility within a company

RCRA National Waste Minimization Program

Primary goal:

- Reduce waste generated of 31 priority chemicals (PCs) and lower the toxicity and persistence of wastes generated
 - consist of organic PBT chemicals along with three groups of metals and their compounds
 - 10% reduction by 2008
 - 2001 baseline

Timeframe: 2004 - 2008

Collaboration: Partnerships with NGOs to facilitate technical assistance for firms, including activities such as implementing chemical management systems.

- Explore options for eliminating or reducing their use in production or for increasing their recovery or recycling.

The Climate Wise Program

Primary goal:

- Encourage the non-utility industrial sector to reduce carbon dioxide (CO₂) and other greenhouse gases (GHGs) via adoption of energy efficiency, renewable energy and pollution prevention technologies.
 - Support commitment to reduce GHG emissions to 1990 levels by 2000.

Timeframe: 1993 to 2000

Sponsorship: Jointly by Dept. of Energy and EPA

Collaboration:

- Partnership between government and industry. Companies that became Climate Wise partners received technical assistance and financing information to help them develop and implement cost-effective strategies
 - Easy and productive three-step process

National Environmental Performance Track

Primary goal:

- Encouraged continuous environmental improvement through environmental management systems, community outreach, and measurable results
 - National and regional challenge goals to focus members on certain priorities (e.g., protecting impaired waters from further degradation, minimizing use of priority chemicals, and reducing GHG emissions)
 - Challenge goals relating to habitat protection and restoration.
 - Performance metrics related to upstream procurement and inputs.

Timeframe: 2000-2009

Participation: Corporations, small businesses, and public entities were invited to participate based on already strong environmental performance and encouraged to further improve their performance.

Ongoing voluntary partnerships and programs

- ❖ **GreenChill Partnership** – EPA Partnership with food retailers to reduce refrigerant emissions and decrease their impact on the ozone layer and climate change.
- ❖ **Waste Wise** – EPA Program that encourages organizations and businesses to achieve sustainability in their practices and reduce waste. Comprehensive approach with varying levels of participation, and annual goal setting.
- ❖ **Safer Choice** – EPA program to promote the incorporation of safer chemical alternatives into industry practices and consumer products. Resources from Safer Choice may cater to consumers or industry.
 - Safer Choice Ingredient List (SCIL), Safer Choice Label, DfE Alternative Assessments, Life Cycle Analysis, and Safer Detergent Stewardship Initiative
- ❖ **Energy Star** – EPA Program that helps businesses and individuals save money and protect climate through superior energy efficiency. Labeling program to identify and promote energy efficient products. Resources for buildings and plants

Key Concepts for a New Pollution Prevention Initiative

- Supplement enforcement regulations and market-based approaches
- Select a specific focus (limited sectors/chemicals)
- Design clear and reasonable targets along timeframe
- Develop strong collaborative relationships
- Establish adequate monitoring and reporting platform
- Consider funding and resources

Outline of Design Parameters

- Scope – Chemicals / Industry Sectors
- Timeframe
- Metrics
- Participants
- Incentives/Recognition
- Goals/Milestones
- Outreach campaign
- Reporting platform
- Evaluation/Monitoring
- Budget/Resources

Approaches for a North American Initiative?

- ❑ Beyond PRTR? Include SMEs? Data outside of PRTR?
- ❑ Incorporate other data elements? -- water and energy consumption, product stewardship, other
- ❑ Tiered metrics and levels of commitment?
 - Releases, offsite transfers
 - Recovery/Recycling details or other waste management
 - Source reduction activities, water/energy savings, etc.
- ❑ Common priorities?
 - Set of chemicals or chemical class (e.g. solvents)?
 - Specific sector(s) - Food, auto, plastics, paints and coatings?

Benefits of Pollution Prevention Initiatives

Industry benefits

- No regulatory burden
- Encourage consideration and application of green approaches to reduce environmental releases
- Stimulate technological and chemical advancements
- Opportunity for recognition

Society benefits

- Achieve considerable reductions in chemical quantities released into the environment
 - Increase public awareness of chemical risks
 - Change public understanding of concepts
 - Promote sustainable thinking
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