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**Final Report:
ARET Voluntary Codes Project**

prepared for:

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June 15, 1997

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EXECUTIVE SUMMARY

This report encapsulates four studies aimed at contributing to the analytical context of the Accelerate Elimination/Reduction of Toxics program (ARET). In addition, the findings of these studies are intended to contribute to the ongoing improvement of the process and structure of this voluntary initiative.

First, a historical overview is provided in order to present the birth, growth and maturity stages of this seven year old initiative. The actual toxic emissions reductions achieved under ARET are then analyzed in the context of sustainable development (SD). Decreases in emissions are viewed in relation to the industrial production levels of participants. From this, achievements to date can be seen as progress towards enhanced environmental protection and economic growth. This study concludes that all eight industrial sectors have, overall, increased production during the period of time that their reduction of ARET emissions were achieved. Moreover, it is anticipated that these increases will continue along with the participants' projected reductions to the year 2000.

The next two sections of this report then investigate the role of community involvement in the ARET process, and assess the need for a technical assistance component to the toxics reduction program. Primary research reveals that Community Advisory Panels (CAPs) and consultations with municipal governments have provided a means to broaden public involvement with industry in the management of environmental issues. However, there are specific barriers (e.g. community apathy, absence of technical knowledge, lack of commitment and continuity of community groups) to injecting community participation into the formulation of ARET action plans. In light of some of these barriers, some study respondents felt that while there is room for improved public participation in the ARET program, the format, procedure and degree of involvement will

vary in terms of effectiveness amongst the various industrial sectors and, moreover, with each individual company facility.

Although study respondents generally did not see a need for a new technical assistance entity to be created for ARET, some participants saw the feasibility of technical information assistance in the communication of scientific and risk information to other stakeholders (primarily communities). Otherwise, existing technical institutions both within industry (e.g. industry associations and sectoral research institutes such as PAPRICAN), and within the international scientific arena, seemed to offer most participants sufficient technical assistance in meeting their ARET objectives.

Issues of corporate accountability, credibility and efficiency are also briefly addressed within this report in terms of how ARET fits in with the policy mix of environmental protection mechanisms (i.e. regulations, voluntary initiatives, MOUs). Analysis and conclusions offer insight into what has been achieved to date under ARET both quantitatively and qualitatively in light of the four components of the report. Also, recommendations on improving community involvement and dealing with the technical aspects of ARET action plans and information management set the stage for the next step of ARET.

INTRODUCTION

The ARET program is maturing in the sense that the process and structure have become quite well established, results have been tallied, and exposure and recognition of the program and its participants is growing. Thus an analysis of what has been achieved so far, as well as how ARET can be improved, is pertinent to ARET's ongoing development.

Therefore, this report focuses on three main areas which reflect the evolving dimensions of ARET. First, the toxic reductions achieved to date by industry participants are put in a socio-economic context with respect to sustainable development. Based on the most recently reported data, SD indicators are developed and intended to illustrate the reduced releases of pollutants in light of production levels of the participating members of industry sectors.

Secondly, in the interest of broadening public participation in environmental decision-making, the role of community involvement in the ARET process is analyzed. The third aspect of this report scopes out the feasibility of a technical assistance component of the ARET program. Primary research was conducted with ARET stakeholders in order to unearth some answers to these queries. The above three sections are preceded with a detailed history and synopsis of ARET from inception to the most recent release of its second annual report. In addition, a bibliography is provided on published material pertaining to the ARET program.

The charts, recommendations and conclusions within this report have been developed in the interest of contributing to an improved ARET program. Ultimately this would include an enhanced multi-stakeholder process to achieve continuous environmental improvement and industrial sustainability.

Overview and Synthesis Statement
for the
Final Report: ARET Voluntary Codes Project

by
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This preliminary study on the future of ARET-type processes was designed as a composite of three sub-projects:

- (a) a set of overview charts comparing production projections (to 2000) for industrial sectors to expected total emissions reductions for ARET substances;
- (b) interviews with selected ARET participants on the potential for community-level involvement in ARET-type processes;
- (c) recasting of the Queen's University - Environmental Policy Unit's study [hereafter EPU study] of stakeholder perceptions on ARET into a preferred format.

This Overview takes up a number of important issues for the future of ARET-type processes that emerge out of those projects. It is organized as follows:

1. Stakeholder involvement:
 - Environmental Stakeholders.
 - New sets of stakeholders (community, municipal).
2. Knowledge requirements:
 - Stakeholder capabilities.
 - Third-party expertise.
3. Recognition:
 - Credibility.
 - Verification.
4. The path forward for ARET-type processes.

1.1 Stakeholder involvement: ENGOS.

There is obvious disappointment, among many of those involved in the original ARET process, about the withdrawal of ENGO stakeholders and their apparent reluctance to re-engage with this or similar processes. The EPU study found a deep sense of suspicion and even antagonism towards ARET among the ENGO spokespersons interviewed. Because of the nature of that study, which was predicated on the attempt to find and emphasize elements of commonality and agreement among the interviewees, evaluative comments by the study

team would have been inappropriate. Here I would like to offer my own evaluation and comment.

The disappointment referred to above probably is unwarranted, for what is really noteworthy about ARET is that these stakeholders were there at all and that they stayed on as long as they did. For many ENGOs toxic substances management [TSM] is the cornerstone environmental issue and therefore they expect governments to have the deciding voice in how it is addressed. I believe that ARET-type processes can be interpreted as putting TSM "back" in the hands of industry, where it was before governments wrested it away. Second, in TSM matters industry is perceived as being inherently untrustworthy, so that - in conceding the lead role to industry - Canadian governments are simply guaranteeing that they will achieve sub-optimal levels of environmental protection. Finally, there is an inherent structure of inequality in stakeholder capabilities: In extended multi-stakeholder processes industry has the financial means, technical expertise and experience, continuity of personnel, and other advantages that simply overawe the resources of all NGO participants.

As things stand presently, it is not in the interest of at least many important ENGOs to commit themselves to participation in ARET-style processes. I do not expect that they will be inclined to do so. Therefore other models for seeking an adequate range of group participation in such processes will have to be explored.

1.2 Stakeholder involvement: Community - municipal organizations.

The reasons why community-level organizations are unlikely to become initiating and sustaining stakeholders - that is, decision-making participants -- in ARET-style processes are adequately indicated and supported in the report on Sub-project B. This includes what are known as CAPs [Community Advisory Panels]. The reasons are summarized here. (Note that I am assuming that ARET-style processes necessarily are concerned with environmental issues that are within the constitutional mandate of the federal government.)

- (i) community-level groups are inherently oriented around local or regional issues;

- (ii) such groups lack the technical expertise necessary to tackle ARET-type challenges;
- (iii) CAPs are inherently oriented to matters involving specific plants or local industrial complexes.

By using the qualifying phrase "initiating and sustaining" stakeholders above, I wish to indicate that there is certainly another key role for community-level organizations, CAPs or any other, in the implementation phases of ARET-style processes. In fact, for present and future ARET-style processes there are *very important* advantages to industry in establishing ongoing relations at this level (a) for regular communications about what is happening and why, and (b) for reporting, verification, and monitoring activities. This is undoubtedly well known already to those firms which have well-functioning CAPs.

There is an old truth that we must learn to walk before we can run. This applies to the involvement of community-level organizations in the activities of industry. In Canada to date there are not nearly as many well-functioning CAPs (at the level of plants or regional industrial complexes) as there ought to be. CAPs certainly must learn the ropes first through involvement in local and regional issues. Later they can participate with skill and experience in the implementation phases of ARET-style processes – but I doubt very much that any can do so if they were to be convened initially for such purposes.

2. Knowledge requirements.

The results of Sub-Project B are definitive on this point as well, so far as community involvement is concerned. (Those results also correctly indicate, in my view, that the matter of municipal government involvement is an entirely separate issue. Industry interviewees point out that they have a host of formal and informal relations of an ongoing nature with municipal agencies. Some of those agency personnel, of course, have technical training appropriate to TSM issues, but I doubt if such expertise extends very far in any municipality, apart from the largest ones. By and large they are preoccupied with local issues; the safest

assumption to make is that there would be little interest or ability at this level, in most cases, to participate in ARET-style processes as defined above.)

Industry interviewees clearly are convinced that the demands for technical expertise implicit in ARET-style processes are inappropriate, in general, for community-level organizations. But neither can very many Canadian ENGOs muster the requisite level of staff expertise or resources. Nor should they seek to do so, in my opinion, because this is inherently a fundamentally unequal contest, and those designing ARET-style processes in the future must find a different way, other than seeking multi-stakeholder consensus at the initiating stage, to build in future ENGO involvement.

The greatly unequal scientific and technical resources among Canadian stakeholders for TSM issues, which inevitably skews this aspect of the processes in favour of industry, is unacceptable as a matter of principle. The solution is to remove the priority-setting exercises based on comparative risk assessment from the multi-stakeholder process and lodge it instead in a process of independent judgement exercised by credible expert panels.

The appropriate place for intensive ENGO involvement in Canadian ARET-style processes, in my opinion, is in the verification and reporting phases. In order to attract their participation, these phases must be redesigned and significantly upgraded, so that they are "high-profile" and rigorous. It follows that those phases must be assigned resources commensurate with their profile and importance in the process (see below for further comment).

3. Recognition: The Problem of Credibility and Verification.

ARET-style processes are insufficiently well-known to the Canadian public, outside of a very small circle of involved parties, even to have a general credibility problem. This should occasion little surprise, since it took something like eighteen months of determined effort even to get the Minister of the Environment to (very quietly) put a small mark of official

approval on the original ARET. So there is a long way to go down the road of achieving, first, public awareness and second, general public credibility – although the trip certainly must be made, and the sooner, the better.

The fact that some ENGOs affirm that ARET “lacks credibility” can be just put to one side for the time being. Nothing can be done to change this in the short run. Some of the reasons for this have been given earlier. In general the problem is this: There is very little profit for ENGOs in being a relatively small player in a game in which (if it succeeds) industry will demonstrate both its willingness and its ability to assume responsibility for achieving dramatic gains in environmental protection. If the keen participation of key ENGOs is desired in future ARET-style processes (as it should be), then the game must be redesigned so as to give them leading roles in at least one important, semi-independent part of the process. I have suggested above that the best candidate is a significantly enhanced verification and reporting phase of the overall process.

In general industry spokespersons tend to regard verification as a relatively unimportant aspect of the whole process, because they think (correctly) that, once commitments are made, the modern corporate culture will ensure that they are honoured. However, the problem is that they are seeing the situation from the “inside.” In the public mind generally there is great distrust of corporate actors so far as environmental protection is concerned. Verification is a matter of perception; and perception is reality. Before any campaign is undertaken to widen the purview of ARET-style processes among Canadian industry, or to widen general public awareness of this approach, the matter of credible verification must be tackled head-on.

The most promising approach to re-enlisting the participation of ENGO representatives in ARET-style processes is to offer them the position of lead stakeholders in the verification and reporting phases.

4. Conclusion: The path forward.

The original ARET will be recognized very broadly in the future as a dramatic innovation in environmental protection practice. If it can be extended and enhanced, it will form the cornerstone of a fundamentally new approach in Canadian society to environmental protection policy.

To release its potentialities we must break the original mould: We should not seek to duplicate the original ARET, but to draw inspiration from it and explore different paths towards the same goal. In this preliminary examination I have identified two key requirements for re-thinking: First, using independent expert panels for the risk-based priority-setting tasks; and second, finding a very different role for ENGO participation. There are undoubtedly others.

The ARET Toxics Reduction Program

by
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Background and Preconditions

The term "ARET" refers to the "Accelerated Reduction/Elimination of Toxics".¹ ARET initially took the form of a multistakeholder consultation process tasked with discovering methods for achieving the reduction and/or elimination of toxic substance emissions. It then took the form of a "challenge" to Canadian industry to voluntarily take action in this area. The ARET Challenge is based on the premise that voluntary action on the part of users and emitters of toxic substances may work more quickly than the traditional, regulatory approach alone.

ARET grew out of the work of the "New Directions Group" (NDG), an independent, voluntary network of concerned Canadians from the senior levels of industry, the environmental movement and other non-governmental organizations. The Group's formation in November 1990 was spurred by the desire to establish a forum that used cooperative, non-adversarial methods of identifying and providing leadership in addressing significant environment-economy issues. NDG activities were guided by four principles: the goal of sustainable development; a commitment to pollution prevention; a crossmedia approach (air, water, land and biota) to reduction; and a commitment to public participation in decision-making.

¹ This case study is largely based on a study undertaken on behalf of Environment Canada/ARET Secretariat by the Environmental Policy Unit of the School of Policy Studies at Queen's University. The study, "Lessons Learned from ARET: A Qualitative Survey of Perceptions of Stakeholders, sought to identify what could be learned from the ARET experience to render future initiatives more effective. The objectives of the survey were to identify ways in which stakeholders in the ARET process to date, and other stakeholders familiar with that process (but not direct participants) perceive: (1) the nature of the consultative process (as well as any changes the respondents would recommend); (2) the costs associated with the process; and (3) the results of that process (in relation to the ARET Challenge). The method of the survey was qualitative in scope, based on individual in-person and telephone interviews. The study was released in June 1996 and can be obtained from the Environmental Policy Unit.

The first problem that the NDG chose to address was toxic substance emissions. During the 1980s, discussion had turned to the possible "sun-setting" or elimination of chemicals considered toxic through phase-outs and bans. Little progress on this issue was being made on the regulatory front so the NDG set about discovering alternative methods to reduce and eliminate emissions of toxic substances. The objective of the Group was not to substitute these alternative methods for environmental regulation. Rather, the initiative was to complement government initiatives. In September of 1991, the Group called for federal action on two fronts: (1) to proceed immediately in establishing toxic substance emissions inventories as committed to in the federal Green Plan (another federally initiated multistakeholder process later resulted in the National Pollutant Release Inventory, NPRI) and (2) to initiate a process for targeted reductions including the phasing-out of some toxic substances. The federal Minister of the Environment responded to the second option by launching a group that became known as "the ARET Committee".

The ARET Committee had three main objectives: (a) to establish criteria for defining toxicity, (b) to compile a list of target substances based on these criteria, and (c) to devise a means by which industry could address its toxic emissions. The first two objectives met with multistakeholder agreement. First, there was consensus on the criteria chosen: toxicity, persistence and bioaccumulation. Second, the three-criteria approach resulted in consensus regarding the categorization of priority substances into five lists:

- List A-1 for 30 substances which met the persistence, bioaccumulation and toxicity criteria;
- List B-1 for 8 substances which met the toxicity and bioaccumulation criteria;
- List B-2 for 33 substances which met persistence and toxicity criteria; and,
- List B-3 for 44 substances which met only the toxicity criterion.
- List A-2 contains 2 substances which met the three criteria but failed to gain consensus on reduction targets. (Total substances listed = 117)²

² ARET Secretariat. "Environmental Leaders 1: Voluntary Commitments to Action on Toxics through ARET," March 1995, p.7.

Progress in implementing the third ARET objective is currently being made through a voluntary pollution prevention initiative called the "ARET Challenge". The ARET Challenge seeks, by means of industry voluntary action, the virtual elimination of substances in List A-1 (90% reduction by the year 2000) and a 50% reduction in the same period for substances on the other Lists. The Challenge is not backed up by statute; it relies on the persuasiveness of industry associations in recruiting individual member companies to ARET and encouraging compliance. The associations themselves vary in the degree to which they promote compliance and sanction non-compliance, i.e., the Canadian Chemical Producers' Association requires that its members fulfill the terms of participation in ARET as a condition of association membership whereas ARET participation is optional for members of other associations.

However, the voluntary ARET Challenge was issued after the withdrawal of environmental non-governmental organizations (ENGO) and labour representatives from the ARET Committee in September of 1993 and is not supported by these sectors. The Committee was unable to resolve differences among the stakeholders regarding the priority to be placed on the *reduction* vs the *elimination* of targeted substances, and on *regulatory* vs *voluntary* means of achieving this.

Process

The ARET "process" can be distinguished from the ARET "Challenge". While the former refers to the multistakeholder process associated with the ARET Committee prior to the September 1993 withdrawal of the ENGO and labour representatives, the latter refers to the voluntary pollution prevention initiative subsequently pursued by industry and government representatives in 1994.

The ARET Committee, though brought to life by the NDG initiative, was quite a different entity. Whereas the NDG had consisted of industry CEOs and Executive Directors of non-governmental organizations, the ARET Committee was composed of industry association representatives, representatives from the national environmental movement, representatives of labour and aboriginal

peoples, federal and provincial government officials and representatives from health and professional groups. The representation of environmental interests in ARET was coordinated by the Canadian Environmental Network (CEN). The CEN does not take positions on behalf of their members although issue-based working groups or 'caucuses' of the CEN may do so. In the main, CEN representatives act as "facilitators for the environmental perspective" rather than "deal-makers". The 'Toxics Caucus' of the CEN nominated four members to ARET (from Pollution Probe, Great Lakes United, the Toxics Watch Society of Alberta, and the West Coast Environmental Law Association) who ensured that fellow caucus members were kept up-to-date on developments in the ARET decision-making process. On the industry side, representatives from nine broad-based industry associations (the Canadian Chemical Producers' Association, the Canadian Manufacturing Association, the Canadian Electrical Association, the Aluminum Industry Association, the Canadian Manufacturers of Chemical Specialties, the Mining Association of Canada, the Canadian Petroleum Products Institute, the Canadian Pulp and Paper Association, and the Canadian Steel Environmental Association) took part in ARET Committee deliberations. The mandate of industry association representatives allowed them to act as negotiators for their interest although what representatives could agree to on behalf of their memberships was apparently restricted.

The ARET Committee and the subcommittees it formed met frequently throughout 1992. By late 1992, multistakeholder agreement was achieved on the criteria to select candidate toxic substances for action and on a categorized list of substances to be targeted (after the screening of some 2,000 substances). In September 1993, however, during deliberations concerning how industry should actually implement toxic emission reductions/eliminations, the environmental and labour representatives withdrew from the ARET Committee. From the beginning, the process lacked a clear terms of reference and there existed considerable disagreement concerning whether ARET should be regulatory or voluntary and whether it should emphasize reduction or elimination. Although the process was sponsored by Environment Canada, the agency's role was somewhat ambiguous. These disputes, combined with some confusion regarding the decision rules (i.e., what consensus really meant), led to a breakdown of the multistakeholder process. The non-governmental organizations (NGOs) cited three main reasons for withdrawing from the ARET process: (1) the elimination vs reduction issue, (2) the

lack of leadership shown by Environment Canada, and (3) the absence of workplace concerns.³ The remaining industry and government participants decided that ARET should continue and they chose to issue the ARET "Challenge" to industry to voluntarily reduce or eliminate toxic emissions in March 1994.

For ARET Committee members past and present, the multistakeholder process appears to have been more organizationally than monetarily expensive for participants. The most critical factor for all representatives was the time spent on the process: preparing for meetings (especially subcommittee meetings), travelling, actual meeting time and in-between communications. Indeed, the time spent on the process had a significant effect on the strategic priorities within stakeholders' organizations. Direct monetary costs did not seem to be as much of an issue for industry and government who assumed the costs of participating in the process within their normal operations. Moreover, when additional technical resources were required, the industry sector brought these resources with them to the table, lending personnel and, in a few cases, hiring an additional person to lend research assistance. For ENGO stakeholders, however, direct cost was more important. While representatives of industry and government agencies were salaried, non-profit organizations often relied on unpaid and voluntary representation. Travel expenses were covered by Environment Canada for representatives of nonprofit organizations and some funding was provided by means of research contracts. However, as was consistent with current government policy, there was no *per diem* provided for volunteers. Thus, there were some imbalances due to the superior technical support available to industry and governmental stakeholders as compared with the non-profit sector.

In general, the ARET process was cost effective in the context of realizing the first two objectives of ARET which were to identify and classify toxic substances. Participants freely gave of their time to complete tasks, resources were brought to the table by participants, as noted above, and the quality of

³ "Position of Non-Governmental Organizations in the Accelerated Reduction/Elimination of Toxics (ARET) Consultation". Letter to Assistant Deputy Minister Clarke, Environment Canada, signed by representatives of the Canadian Labour Congress, Great Lakes United, Pollution Probe, Toxics Watch Society of Alberta and the West Coast Environmental Law Association, September 17, 1993.

personnel was high. The total cost of functions associated with the ARET Secretariat, the body set up to provide support for the ARET Committee and to monitor industry participation in the Challenge, was about \$1,040,000 from September 1991 to the issuance of the Challenge in March 1994. Environment Canada's support can be estimated at approximately \$940,000. In addition, Industry Canada contributed \$100,000 to the ARET project prior to the Challenge. The post-Challenge/implementation/reporting activities have cost approximately \$460,000 up to March 1996. The total to date of some \$1.5 million calculates to \$72/tonne of reduction commitments.⁴

Code Components

In the spring of 1994, remaining industry and government members on the ARET Committee sent out the ARET challenge to a list of Canadian companies provided by industry associations as well as to federal and provincial government departments. Both private sector companies and governments were asked to take action to reduce or eliminate emissions of ARET-identified substances. For persistent and bioaccumulative substances on List A-1, ARET seeks the virtual elimination of emissions with a short-term target of 90 percent reduction by the year 2000. For other ARET substances, the challenge is a 50 percent reduction in emissions by the year 2000. Facilities committed to this voluntary action have been encouraged to aim for their best efforts on ARET substance emissions and commitments to the year 2000.⁵

The Action Plan Guide provided by the ARET Secretariat to aid participants asks that they identify the List A substances which they use, generate or emit, as well as the List B substances which they emit. Participants are asked to identify a base year (they may choose any year after 1987), to quantify emissions for that year, and to propose action for the year 2000. Participants are also encouraged to include additional information in these Action Plans such as recent and proposed actions,

⁴ This information was obtained from the ARET Secretariat.

⁵ ARET Secretariat. "Environmental Leaders 1", p.7.

environmental priorities, constraints and opportunities, and how performance goals will be achieved.⁶ Thus, the Action Plans are documents containing detailed information on what will be investigated, adjusted, replaced and/or implemented in order to reduce ARET substances and they may vary greatly in approach and content.

Although most companies participating in ARET have been able to provide estimates of total mass of emissions for the chosen baseline year, for 1993 and projections for the year 2000 in their ARET reporting, some have not traditionally collected data in this form or have been unable to convert their data to total mass. In fact, in all but a few industry sectors, techniques for estimating the emission of ARET substances are still being developed and refined.⁷ The emission reports provided by participating companies are compiled and analyzed according to facility/organization, substance, and industry sector by the ARET Secretariat and the results are publicized in a "Environmental Leaders" report series. Reductions and eliminations to the end of 1993, and commitments for further reductions or eliminations from 1993 to the year 2000, are summarized in the March 1995 "Environmental Leaders" report. A second summary report "Environmental Leaders 2" was published in January 1997. An "ARET Update" provided a brief summary of new and revised Action Plans received at the mid-point between the two summary reports.

It should be noted that the ARET challenge includes no third party verification of industry reported data, although ARET participants are asked to track and publicly report on their progress in achieving their Action Plan goals. The ARET Committee recommends that participants utilize existing mechanisms to report on their ARET activities, such as the federal government's National Pollutant Release Inventory, the National Emissions Reduction Masterplan of the Canadian Chemical Producers' Association, annual reports to shareholders, and environmental reports or newsletters.

Implementation

⁶ *ibid.*

⁷ *ibid.*, p.8.

Since the ARET Challenge was launched in March 1994, 278 facilities have agreed to participate.⁸ Collectively, these 278 facilities have reduced toxic substance emissions to the environment by almost 17,500 tonnes--a decrease of 49 per cent from base year levels to December 1995. Participants also commit to further reduce their emissions by another 8,000 tonnes from 1996 to 2000. The following list, showing the participation rate of industry association members in the ARET initiative as of December 1995, has been reproduced from the Industry Canada study "Voluntary Environmental Action: A Participant's View of ARET"⁹ by David Roewade:

<u>Sector</u>	<u>Industry Association</u>	<u>Participation Rate</u>
Aluminum	Aluminum Industry Association	80%
Chemical Manufacturing	Canadian Chemical Producers' Assoc.	97%
Chemical Specialities	Cdn Manufacturers of Chemical Specialities	62%
Electrical Utilities	Cdn. Electrical Association	50%
Manufacturing: Other	Cdn. Manufacturing Association	N/A
Mining and Smelting	Mining Association of Canada	63%
Oil, Gas and Petroleum	Cdn. Petroleum Products Institute	46%
Pulp and Paper	Cdn. Pulp and Paper Association	64%
Steel Production	Cdn. Steel Environmental Association	73%

This study notes that, in terms of production, most industry associations have almost all of their members committed to ARET. For example, both the Mining and Electrical Associations' non-participants are those members with only nominal emissions making up a very small proportion of total

⁸ ARET Secretariat, "Environmental Leaders 2: Voluntary Action on Toxic Substances," January 1997, p.5.

⁹ David Roewade, "Voluntary Environmental Action: A Participant's View of ARET" Prepared for Environmental Affairs Branch. Industry Canada, June 1996, p.6. Note that these participation rates have been updated in 'Environmental Leaders 2'. These updated rates reflect the proportionate amount of production for each sector.

production for their respective sectors.¹⁰ Overall, voluntary participation in ARET is relatively high when compared with compulsory reporting under the National Pollutant Release Inventory (NPRI). According to the ARET Secretariat, after making adjustments for differences in definition of the form of some substances, the amount reported to ARET was 83% of the amount reported to NPRI as of December 1995.¹¹

Industry organizations perceive the voluntary ARET Challenge as having been cost effective when compared with the potential costs of regulatory compliance. The Challenge permitted flexibility in implementation as it allowed industry to work within existing administrative and decision structures rather than constructing new ones. In fact, it would appear that accepting the ARET Challenge has resulted in little change to industry association administrative and management structures. Coordinating the association response to the ARET Challenge and selling it to members have been accomplished mainly through existing management structures and communication channels within industry sectors. Quite often, representatives of various industry associations reported to and received direction from the equivalent of an "Environment Committee" within their association (even if it was not so named). The Canadian Chemical Producers' Association piggy-backed the ARET project onto management structures put in place for the Responsible Care Program--namely regional "leadership groups" of CEOs. In addition, the Canadian Manufacturing Association had previously compiled a data base of 800 environmental 'coordinators' within member companies to whom information on ARET could be passed on and from whom feedback could be received. The "Voluntary Environmental Action" report notes that two thirds of survey respondents already had adequate mechanisms to report their ARET progress.¹² In many cases, corporate environmental performance reports were a preferred venue for ARET reporting.

¹⁰ *ibid.*

¹¹ ARET Secretariat, "ARET Update - Addendum to Environmental Leaders 1", p.8.

¹² David Roewade, "Voluntary Environmental Action", p.25.

There have been some changes at the operations level due to ARET implementation. In one example, it was decided that implementation of ARET would not be controlled at the corporate level, but would be managed through individual business units. A contact person, who would be accountable for ARET implementation, was designated for each unit. Unit site visits occur twice yearly to check on implementation. In addition, ARET-identified substances were flagged in the purchasing system so that employees wishing to purchase such a substance would have to choose a substitute or else justify continued use of the old substance.

The Challenge seeks to harness both market forces and peer pressure within the industrial sector to obtain and maintain the compliance of all members. As evidenced by the figures cited above, this has functioned better within some associations than in others. Nevertheless, it has been suggested that, even if the ARET Challenge functions mainly as a "reporting forum" for industry, it has become a catalyst for change in corporate behaviour. David Roewade points out in his "Voluntary Environmental Action" study that,

Overall, eight out of the ten case studies [of ARET participating companies] provided detailed evidence that ARET is significantly affecting corporate behaviour. Some qualitative results achieved under ARET so far include: increased communications with suppliers, shareholders, customers and the general public with respect to reduction strategies; improved methods of data collection, monitoring and reporting; the creation of internal task forces involving all levels of corporate employees; and enhanced decision making influencing industrial processes, products and practices.¹³

Also, the ARET Challenge may have been useful in demonstrating to more sceptical members of the industrial community what might be achieved through voluntary initiatives. One ARET participant interviewed for the "Lessons Learned from ARET" study claimed that "ARET increased our commitment to voluntary initiatives." This is important in light of initial opposition to the program

¹³ David Roewade. "Voluntary Environmental Action", p.2.

expressed within certain industry sectors. It was also noted in the study that voluntary initiatives are more effective in garnering the support of company CEOs--a challenge issued to an industry to achieve a 50% reduction in emissions garners much more enthusiasm than a restrictive regulation. The Challenge may also have served to reinforce the notion that government and industry can work together.

Finally, it is important to note that the work of the ARET Committee has also had an impact on the development of the federal Toxic Substances Management Policy and was a catalyst for other initiatives such as the Pollution Prevention Legislative Task Force. Discussions in the ARET Committee addressed many pressing issues in this area of environmental protection and may have clarified the various policy options available to government as well as the positions of various stakeholders on these questions.

Interpretive Analysis

The ARET project was useful in a general sense in that it encouraged a consideration of toxics within the broader framework of life-cycle analysis instead of merely end-of-pipe solutions. More specifically, one of the significant results of ARET was the drafting of a list of toxic substances to be reduced/eliminated. Considering the relative time as well as resource constraints, the identification and classification of over 100 toxic substances was remarkable. With respect to the ARET Challenge itself, participation in the program to reduce emissions has been considerable, as noted above. Certainly, enormous results are promised by industry participants in the Challenge and the reported figures in toxics reduction are significant. However, the actual impact of ARET-related activities on the environment is impossible to fully appreciate at this time as it is early in the implementation stage.

Environmental stakeholders are doubtful about the principles underlying the ARET Challenge and about the Challenge's contribution to environmental protection. It has been pointed out that not everyone signed on to the Challenge and that it suffers from the classic "free rider" problem. As noted above, associations consented to participate but not all of their individual members actually complied.

Indeed, the different ability of industry associations to bring their member companies on line suggests that association activism is not sufficient for ensuring or maintaining compliance. ENGO stakeholders are concerned that this will lead to a balkanization of environmental policy in this area with some companies doing less than others. In this sense, regulations can serve as a useful backdrop as they help to ensure a level playing field for industry environmental activities. It is here that government has a very important role to play in setting out a framework within which industry voluntary actions can occur.

The "Achilles heel" of the ARET Challenge is the absence of a credible verification mechanism. This has implications for the success of voluntary pollution prevention initiatives more generally. Some industry participants assert that internal environmental verification of voluntary action is transparent enough, especially if environmental index procedures are standardized as in the case of ISO 14000 and the EMS (Environmental Management System). Industry also worries that outside verification will result in higher costs. The current reporting procedures under ARET do have a certain validity in that, under ARET, it is a CEO who signs the report instead of an employee charged with reporting to environmental regulators. Thus, the CEO states something in a public document which is backed by a personal commitment. However, a credible verification mechanism needs to be in place to gain the confidence of environmental regulatory agencies, politicians, shareholders, consumers and the public more generally. Without it, industry will not get public recognition for genuine efforts to improve environmental protection, especially in light of the fact that clear public support for voluntarism has not been demonstrated. Furthermore, a credible and impartial verification mechanism has to be in place before politicians can be expected to fully endorse a voluntary approach. As a practical solution, a system of "external auditors" who verify the environmental reporting of companies participating in voluntary initiatives has been suggested by some commentators on voluntary pollution prevention programs as a way of correcting this problem. This verification could be done at random and affect only a certain percentage of companies. In the end, the success or failure of ARET rests on the effective and verifiable implementation of its toxic substance pollution prevention program.

The "voluntarism" vs "regulation" debate suffers from a lack of knowledge regarding which approach results in better environmental protection. It is up to the proponents of voluntarism to show that their approach can achieve as much or more than regulatory action.

ARET Bibliography

ARET Secretariat, "Environmental Leaders 1: Voluntary Commitments to Action on Toxics Through ARET" Environment Canada, Ottawa March 1995.

ARET Secretariat, "Addendum to Environmental Leaders 1" Environment Canada, Ottawa December 1995.

ARET Secretariat, "Environmental Leaders 2" Environment Canada, Ottawa December 1996.

BY & Associates, "Co-operative Agreements, Negotiated Agreements & Eco-Covenants: Agreeing to Improve the Environment" National Round Table on the Environment and the Economy, pgs. 7 & 8, Ottawa July 1996.

Environment Canada, "Comparison of 1993 ARET & NPRI Data" (draft), Ottawa September 1995.

Guthrie, Brian, "Voluntary Environmental Initiatives in Canada: A 1996 Status Report" Conference Board of Canada, Ottawa 1996.

Leiss, William, "ARET and Beyond: A new Managerial Ethic for Environment Protection" Presentation at the Ottawa Congress Centre, September 12-13, 1996, Voluntary Codes Symposium, Office of Consumer Affairs - Industry Canada, Regulatory Affairs - Treasury Board Secretariat.

Mining Association of Canada (MAC), "Voluntary Emissions Reduction: The Mining Industry and the ARET Program" Ottawa 1995.

MAC, "Voluntary Emission Reductions [2]" Ottawa 1996.

Roewade, David, "Voluntary Environmental Action: A Participant's View of ARET" Industry
Canada, Ottawa June 1996.

Van Nijnatten, D., and E. Darier, "Lessons Learned from ARET: A Qualitative Survey of
Perceptions of Stakeholders" Final Report, Ed. William Leiss, Environmental Policy Unit, School
of Policy Studies, Queens University, Kingston June 1996.

ARET Sustainable Development Indicators

by
David R. Roewade
William Leiss & Associates

INTRODUCTION

The Accelerated Reduction/Elimination of Toxics (ARET) program has been at work for approximately five years. In the recently released *Environmental Leaders 2* report, industry's emissions reductions to date under this initiative are presented. In a larger economic context, it is important to analyze these achievements in light of industrial productivity. In order to work towards sustainable development, Canada must strike a balance between environmental protection and economic growth. Therefore, this study has plotted ARET participants toxic emission reductions against sectoral productivity in order to observe the progress that is being made through this voluntary program. Obviously the correlation between these two variables is not definitive, however, the trends over time observed in this study could indicate progress towards sustainable development. The following text and charts elaborate on this hypothesis.

METHODOLOGY

- 1) Contacted 8 industry associations to solicit cooperation in the study (excludes the government and electrical utilities sectors due to nominal reported emissions).
- 2) Compiled output data of participating industry sectors via primary and secondary research. Consultations with industry reps and government publications (Statistics Canada and NRCAN) were conducted. This involved determining a representative unit and quantity of measurement for production with respect to those firms with participating industrial facilities under the ARET initiative.
- 3) Prepared graphs that compare ARET emission reductions of participants, by sector, to the sector's corresponding production levels over the same time period of analysis.
- 4) Sent drafts of charts to Stakeholder representatives for review and requested clarification of trend lines for each sector.

5) Prepared analysis of correlation between variables and strengths of trends.

ANALYSIS

The 7 charts illustrate that during the periods of recorded ARET emissions reductions, each sector has experienced and projected an overall increase in production. It should be noted that in specific cases some individual participating companies have experienced and projected a decline in production during the period 1988-1995. However, conglomerated figures show that participating industry sectors seem to have manoeuvred their operations towards becoming cleaner and more efficient.

In 6 of the charts, production data was not necessarily illustrative of the specific industrial processes that caused emissions of ARET substances. However, from a macro perspective, the output figures represented a general comparison to the total ARET emissions for corporate operations covered under their ARET action plans and reporting schemes. Ongoing improvements in these data sets should be attempted in terms of accuracy and representation.

Reasons for the positive correlation of reduced emissions and increased productivity include: improved process efficiencies, substitution of chemicals, plant closures, modernization of equipment, investment in abatement technologies, and expansion into international markets. This list is obviously not exhaustive since each participating company has varying strategies within their ARET action plans as well as different economic and industrial related constraints.

It is recognized that anticipated sectoral production and emission reduction targets may not be achieved or on the other hand may be surpassed. However, it is important to recognize these objectives of industry and acknowledge the specific actions that are being implemented to achieve these goals. This part of the study should be viewed as a step towards developing ARET-based

indicators that show a relationship between sectoral output and emissions reduction data. These indicators may aid in the evaluation of effectiveness of initiatives such as ARET when considering strategies, policies and regulations aimed at achieving sustainable development

CONCLUSION

The accompanying charts illustrate ARET's apparent compatibility with the sustainable development objectives of economic growth and reduced environmental impact. The flexibility inherent in the voluntary nature of the ARET initiative has allowed industry to seek out the most cost-effective ways to reduce their toxic emissions. While it is recognized that the accuracy of data collection and reporting is an ongoing effort, there is a definite indication of a positive direction of trend lines for both reduced ARET emissions and increased industrial productivity of sectoral participants. Over the long-term, the challenge for both industry and the government will be to sustain the direction and strength of this correlation beyond the year 2000. ARET has contributed to this objective of continuous environmental improvement within an economic context and business framework.

NOTES TO CHARTS

General:

- the ARET emissions base year is assumed as 1988 unless otherwise noted; it should also be noted that some firms chose other years (between 1988-1993) to start reporting their emissions
- production figures in some cases may represent output of non-participating firms and or facilities not covered under ARET
- production figures will not always represent the specific industrial processes or technologies that are the source of ARET emissions (with the exception of the Aluminium sector)
- all projection figures should be interpreted as reasonable estimates and should take into consideration the time frame of the study with respect to different variations in each sectors and organizations business cycle
- it should be noted that a tonne of emissions of one substance is not necessarily equivalent in significance to a tonne of any other

Aluminium:

- this sector is represented by one company - Alcan
- the chart represents the per unit of production emission figure of PAHs which is Alcan's only reported ARET emission; this figure is specific to the HSS smelting process that emits PAHs
- "HSS" stands for Horizontal Stud Soderberg which is a potroom used in the

aluminium smelting process

- Alcan's expectations for reduced PAH emissions in the future is based on their phase out of HSS smelters with prebake technology. This phase out, in progress, will continue to be implemented throughout all their smelting facilities and is scheduled for completion by the year 2015.

CCPA:

- ARET emission figures were used as reported under the NERM initiative since Chemical Manufacturing and Chemical Specialities Manufacturing sectors, as categorized by the ARET Secretariat, do not have representative industry associations or statistically reported production figures

- year 2000 production figure was formulated by calculating the average growth in output from 1988-1997 & assuming the same increase per year for the period 1997-2000

Manufacturing:

- Due to the diverse nature of the companies in this ARET sectoral category, efforts were made to contact each company and compile their production figure as an index ratio in order to formulate an aggregate sectoral figure. However, the data was not completely collected in time for this project and, therefore, Stats. Can. production figures were used which represent a broader "Other Manufacturing" sector constituency than ARET's category.

- year 2000 production figure is based on a continuation of an average annual growth rate of 3.73% achieved during the period of 1988-1995

Mining:

- year 2000 production figure is subject to volume and price variations over time
- this projected figure considers the mining industry's plans to open 20 mines per year in between 1998 and the year 2000 as well as the controversies surrounding the Voisey's bay project and BHP mines and the decreasing productivity of some ageing mines in Canada

Oil/Gas:

- year 2000 production figure uses NRCAN's estimation of an annual growth rate of 0.7% per annum for the period 1996-2000

Pulp & Paper:

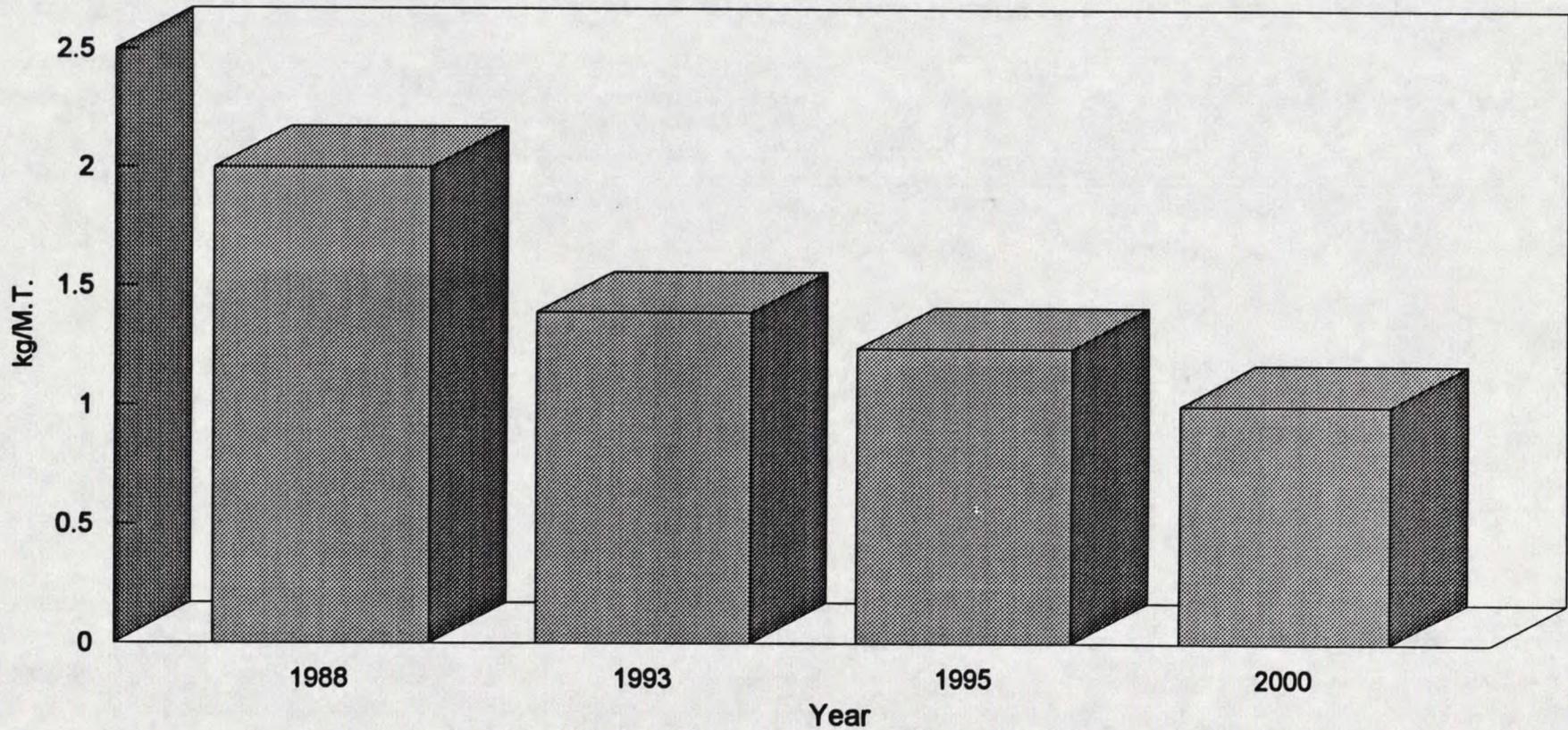
- the projected increase in production for the year 2000 is based on an increasing demand for pulp, paper and paperboard in the sector's exporting markets

Steel:

- year 2000 production figure considers expected short-term increase in capacity

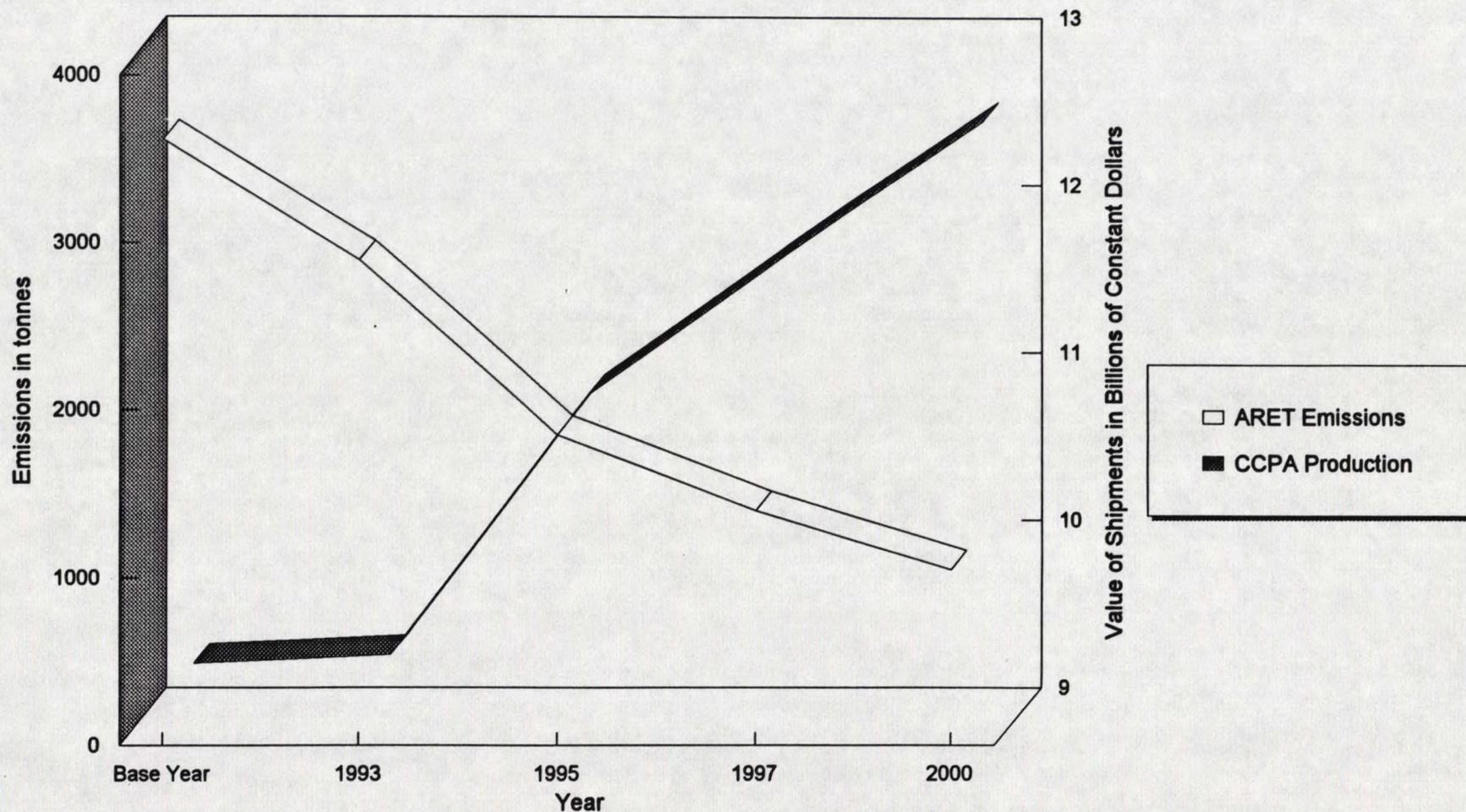
ARET Emissions vs. Aluminum Sector Production

Air Emissions Per Unit of HSS Smelting Production



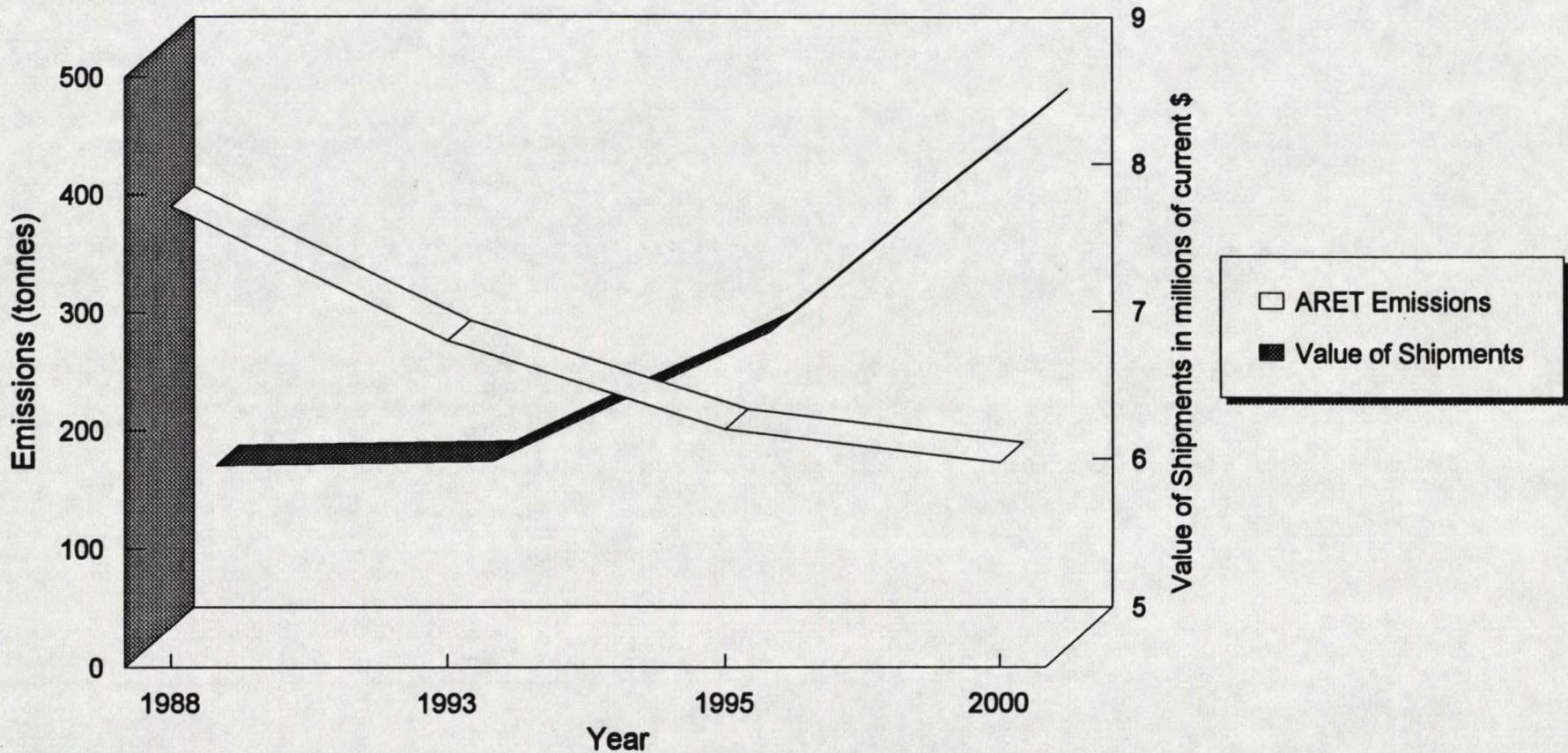
This sector is represented by one participant which reports emissions of one ARET substance - PAH's

ARET Emissions vs. Production Data of Participating CCPA members

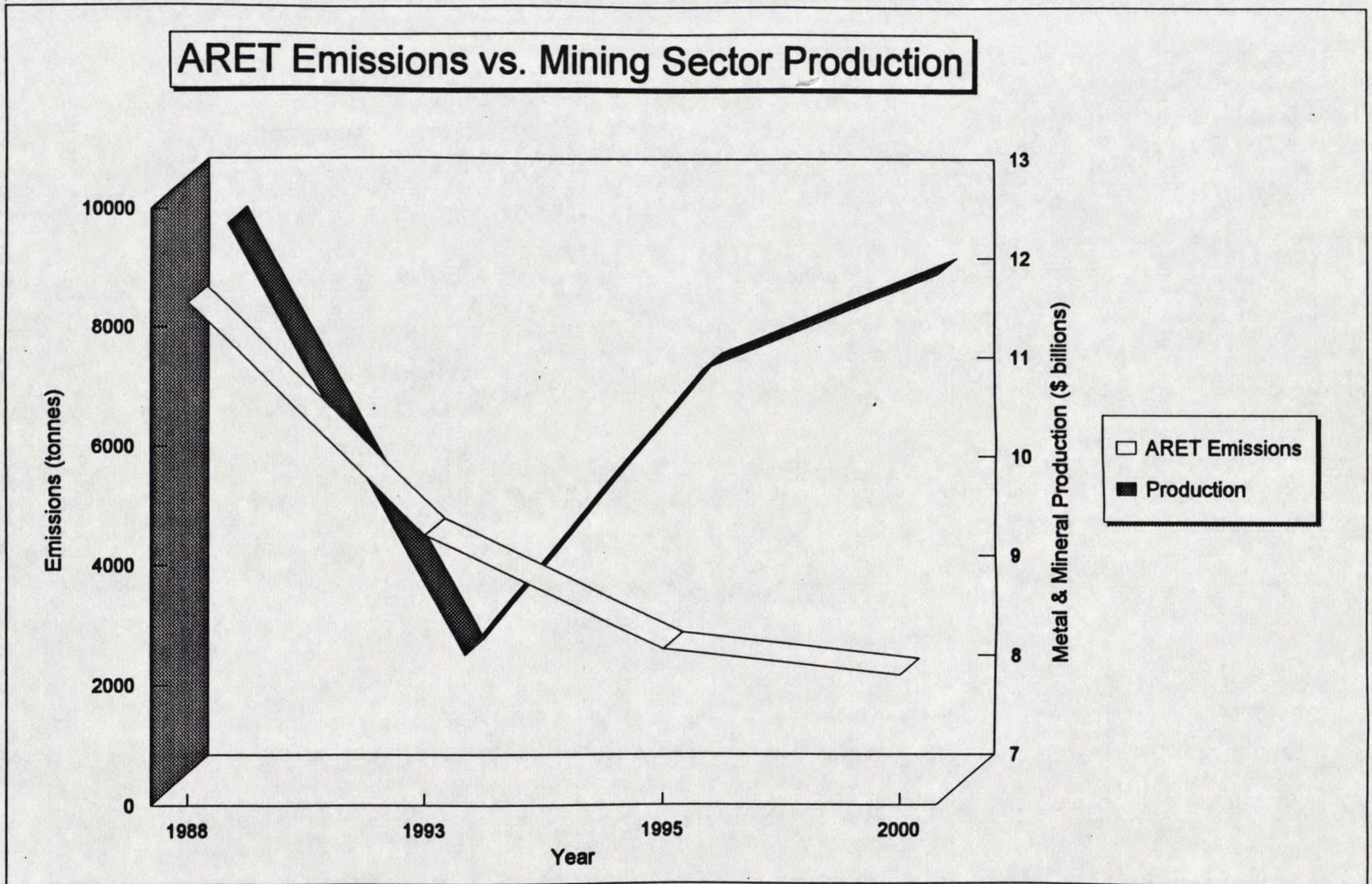


Note: CCPA production data includes companies outside of the "Chemical Manufacturing" sector

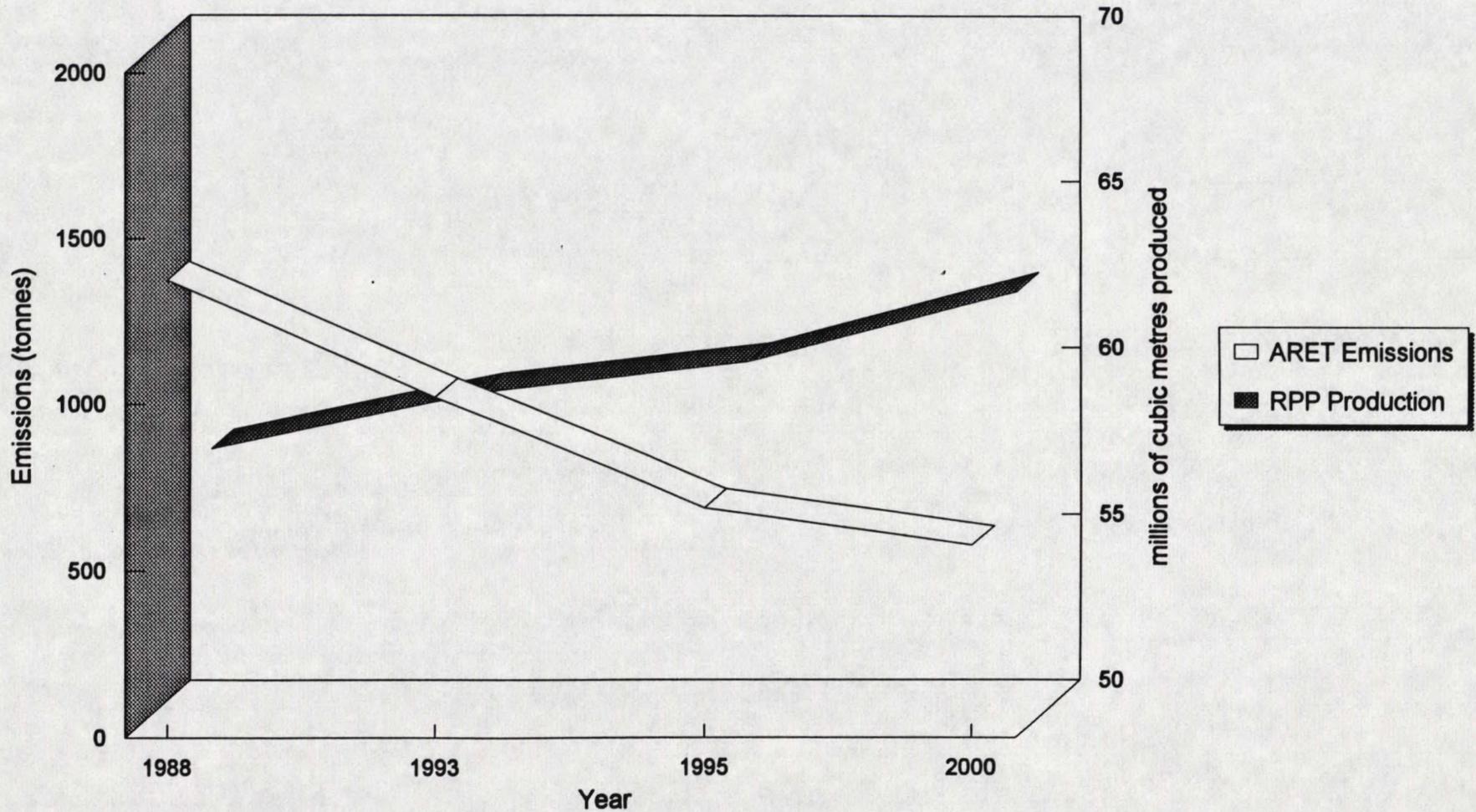
ARET Emissions vs. "Manufacturing: Other" Sector Production

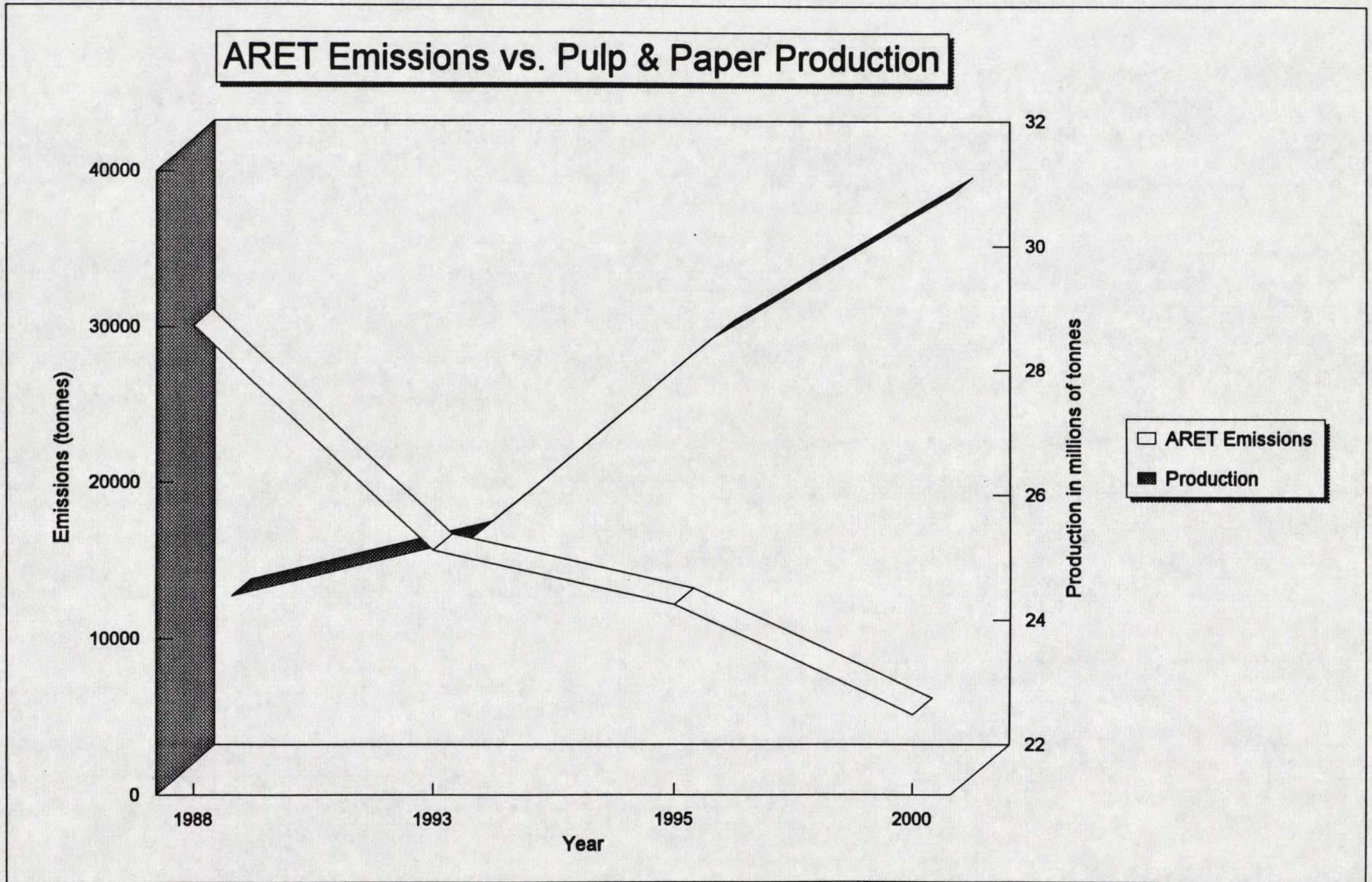


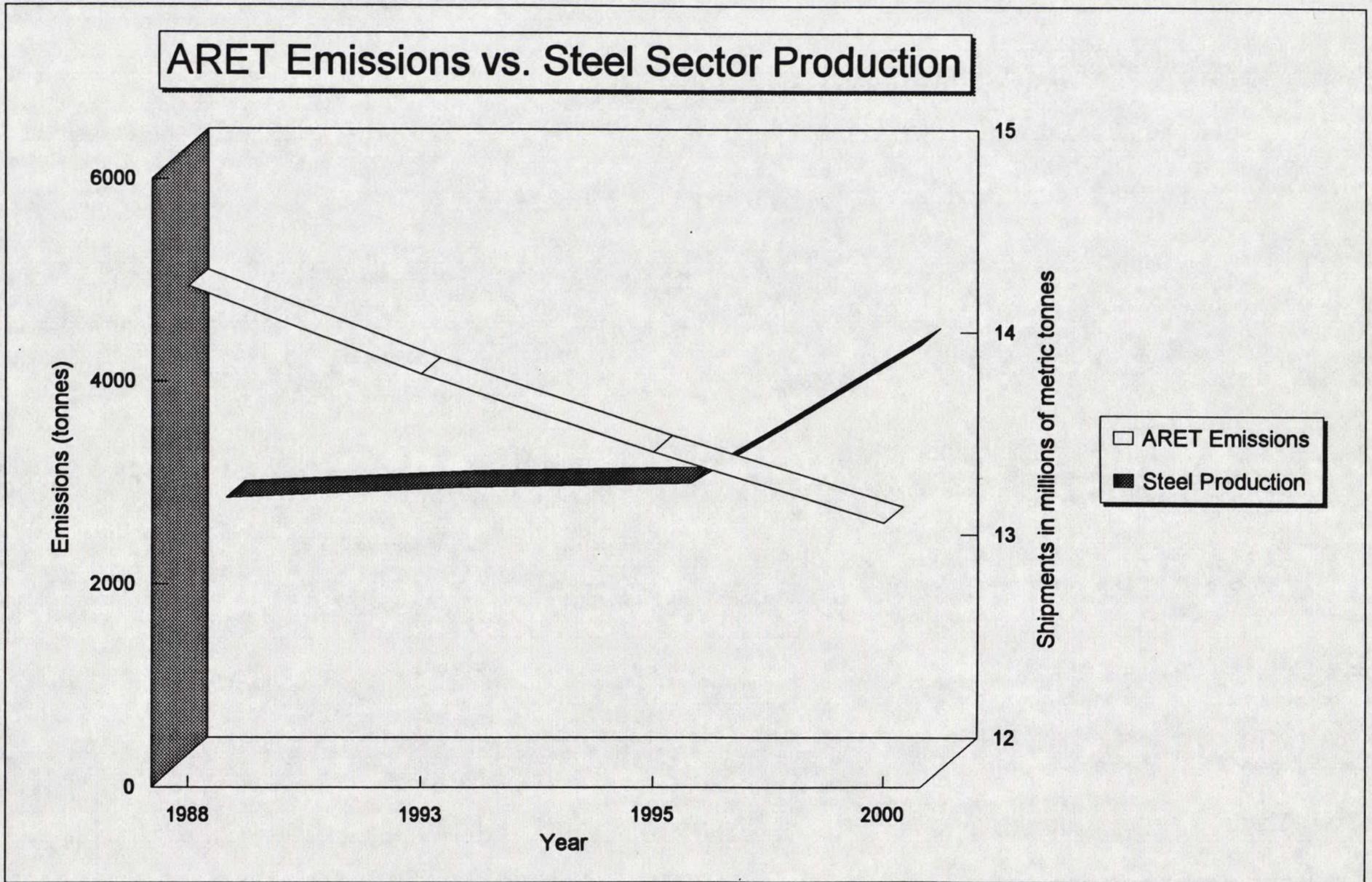
Production figures for this sector includes companies who do not participate in ARET



ARET Emissions vs. Refined Petroleum Products Output (Oil, Gas & Petroleum Sector)







COMMUNITY INVOLVEMENT IN THE ARET PROCESS: A Survey of Participant Views on the Role of the Community in ARET

by
John Cairney
William Leiss & Associates

1.0 INTRODUCTION

Launched in 1991, the ARET project was a multi-stakeholder consultation process including representatives from industry and non-governmental groups (ENGOS). By the time, however, the "ARET Challenge" was issued, the ENGOS had withdrawn over issues of reduction versus elimination of toxics and the decision to make ARET a voluntary rather than mandatory initiative.

Industry participation in the ARET challenge has been impressive and the program is viewed by many to be an effective and innovative way of addressing environmental concerns. The absence of ENGO's and other community groups from ARET, however, may be cause for concern.

Specifically, since the community does not appear to play a prominent role in ARET processes, does this lessen the overall credibility of the mechanisms? Moreover, we may ask, if such a credibility problem exists, would greater community involvement solve the problem?

The purpose of this study is to examine what role community participation may play in the ARET process. In addition, this paper explores the ARET participants perspective on the feasibility of developing a technical assistance component to this voluntary program.

1.1 Objectives of the Study

The objectives of the survey are to identify the role of community involvement in the ARET process from the perspective of ARET participants from various industrial sectors (see Appendix A). Specifically, stakeholders were asked what role they thought community groups should play in the: (1) development of ARET Action Plans; (2) the monitoring and verification of targeted reductions; (3) the possible role municipal governments could play in facilitating community

involvement. Finally, industry participants were questioned about the need for developing a technical assistance component of ARET. Only ARET participants from industry have been interviewed, and therefore this study will review findings based upon this group exclusively. [Note: Several community groups including the Ontario Environmental Network, the Environmental Awareness Service for Educators (EASE), and the Thames Region Ecological Association (TREA) as well as the City of London Ontario, Pollution Control Engineering Department were also contacted. None of these groups knew about the ARET program. Before we could adequately interview community groups to assess their willingness to participate in ARET, we would have to first ensure that the public is aware of the program. The results of these interviews suggest that this may not be so.]

1.2 Methodology

Telephone interviews which were conducted from January 21 to March 4, 1997. A list of all participants selected for the survey are included in Appendix A. Initial contact with each participant was made by faxing a copy of the research protocol and a cover letter explaining the purpose of the study. A follow-up phone call was then made to arrange an interview time which was mutually beneficial to both the interviewer and the interviewee. The length of the interviews ranged from thirty minutes to two hours. Notes from the interviews were analyzed and the results integrated into the body of this draft report.

Although the interview was qualitative in scope, an interview protocol was made available to interviewees and utilized by the interviewer (see Appendix B). The questions in the protocol, however, were designed to elicit discussion of the issues rather than 'yes', 'no' or categorical responses. Thus, although the protocol allowed participants to prepare for the interview, it by no means constrained their responses. In many instances, the questions served merely as a starting point for further discussion. Our goal was to attempt to capture the perceptions of participants on community involvement with minimal interference and direction from the interviewer.

Anonymity was assured to each of the participants prior to the interview. As a result, the data collected are presented without reference to individual participants. Although it is standard in the

reporting of qualitative data to include lengthy quotations from the participants themselves, given the small number of individuals interviewed and the importance of maintaining confidentiality, such quotes are not provided. Instead, the results are presented as an amalgam of the responses from stakeholders.

1.3 Participation Rate

In total, 20 participants (see Appendix A) from the various industrial sectors were contacted. In total, 11 participants were interviewed. After a review of the data collected by the end of February 1997, it was decided that given the high degree of consensus among the participants interviewed, no further interviews were required.

2.0 RESULTS

In order to remain consistent with the objectives of the survey, the results are presented in the order of the areas of interest identified above.

2.1 Community Involvement in the Formation of an ARET Action Plan

Of the eleven interviews completed to date, the majority of the participants have Community Advisory Panels (CAPs) or similar mechanisms already in place to involve individuals from the community in the activities of their businesses. There was, however, a degree of variation in the these panels in terms of the length of time individual companies had been using such programs, and in the degree of input solicited from such panels. Regardless of this variation, however, all of the participants agreed that, in principal, community involvement of some level is beneficial to their respective businesses.

Of the participants who had existing CAPs, all felt that they already had adequate input from the community on ARET and other environmentally related issues. None of the participants who utilize CAPs felt that it was necessary to create another committee, or panel to deal specifically with ARET issues. It is important to note, and was certainly emphasized by several participants, that although CAPs were used, or could be used for ARET issues, this was not their only

mandate. Moreover, given the fact that many of these panels set their own agendas, ARET may, or may not be a high priority for them. As one participant noted, ARET is often not a priority for panel members given other issues such as the threat of plant closure on the economic well-being of the community. Several participants felt ARET was an older concern and thus not foremost on the minds of CAPs members. Participants did not seem to think that it was necessary to promote the importance of ARET over other issues to the panels.

Not surprisingly, all of the participants whose companies had existing CAPs felt that this was the most effective means of involving the community in their businesses operations. Participants were, however, sensitive to the idea of credibility especially concerning issues like emissions reduction. As such, several participants felt that it was important that CAPs remain relatively autonomous and that the company have only a minimal role in the administration of panel activities. For example, two participants felt that membership should be decided by a party outside of the company. Several of the participants noted that their businesses had hired independent consulting agencies to organize and implement their advisory panels. They felt that this added credibility to the process by ensuring unbiased selection of committee members.

2.1.1 Barriers to Community Involvement

The next set of questions dealt with what were perceived by ARET participants to be the major impediments, or barriers to involving community members in the development of ARET Action Plans:

- Several participants noted that one of the most significant barriers was the **lack of technical knowledge among the public**. This meant that quite a lot of time and effort had to be put into “educating” the public on the technical aspects of plant operations. Some participants, especially those whose companies do not currently utilize CAPs, were very concerned that community members could never be adequately educated in this regard and hence were reluctant to involve members of the community in mechanisms such as ARET. Although most participants recognized that it could be beneficial to

educate community panel members about plant operations, all agreed that the lack of technical knowledge was a significant barrier when dealing with the public.

- **A shortage of staff within companies** to work on community out-reach programs was also identified as a barrier. Participants felt that this was an especially salient issue for smaller companies where resources for public relations may not be available, or insufficient to handle the demands of organizing and implementing CAPs.
- **Fear of community involvement** was also a problem for those companies who do not have programs such as CAPs. Many businesses fear community involvement because they believe that it will slow down operations and become too costly. Consistent with the first barrier, many participants also fear that community participants will not understand the technical components of their businesses and thus make unreasonable recommendations.
- Participants expressed that **apathy within the community** was also a significant problem to overcome. They noted it was very difficult to get residents to both commit and stay involved with the advisory panels.
- **The nature of the community itself**, for some participants, presented challenges for community involvement. For example, one company was located in a rural farming community. As such, the participants who sat on the advisory panel could only commit to the panel during the late fall and winter when they were not harvesting their crops. One participant also raised the concern that some plants are located in remote areas which are not heavily populated. The problem then becomes “how do you define community?” Another participant warned that community advisory panels in “single-industry” towns operate quite differently from panels in centres where more than one industry is located. The dialogue between the company and the panel members will not be the same, the participant noted, as panel members will be more sensitive to the “economic importance” of ensuring that the company remains operational. In other words, panel members are acutely aware of the fact that “if the plant shuts down, the town shuts down.”
- Finally, one participant noted that several industries have sites located near the border of the United States and thus have **barriers related to international borders**. For example, a plant that is located near the US, through its production activities (i.e.. emissions), effect

communities on either side of the border. There are obvious logistical problems in terms of organizing and implementing CAPs or other similar mechanisms. As one participant noted, each community may have different economic interests, or concerns which may make dialogue difficult. Instead of having two stakeholder groups, there may be three or more which makes consensus building difficult.

As mentioned above, although the majority of participants interviewed to date utilized CAPs to elicit community involvement, two of the participants interviewed did not have such formal mechanisms in place. Although they were not opposed to the idea of community involvement in principal, it was evident that the barriers identified above were also the reasons given by these participants as to why their companies had not become involved with such mechanisms.

2.1.2 Solutions to Barriers Impeding Community Involvement

When asked to suggest possible solutions to the identified barriers, the participants offered the following:

- One solution was that industry associations (i.e., Mining Association of Canada and the Chemical Producers Association of Canada) could organize a **information exchange meeting between member companies who utilize CAPs with those who do not**. It is believed that many of the concerns or barriers raised above are preventing those companies which do not utilize CAPs from doing so. Once such companies hear first hand, the success that other businesses have had with such programs, it is believed that any concerns that they may have regarding the process will be alleviated.
- Several participants felt that some of the **barriers may be due to a lack of expertise within the company** with regards to the organization and implementation of programs such as CAPs. Many advocated the use of third party consulting groups with expertise in the field of multi-stakeholder negotiations to overcome such barriers.
- It was also suggested that many of the **barriers result from a lack of understanding of the community** in which the company operates. One participant suggested that regular "community audits" be performed by a neutral third party to poll the community's

awareness and understanding of environmental initiatives and other issues of relevance to the company. This information can be used to develop community relation programs. As one participant noted, "understanding the community in which you operate lays the foundation for partnership on issues like ARET."

2.1.3 Role of Community in Monitoring and Verification of ARET Action Plan Targets

Again, for those companies that utilize programs like CAPs, a role for community groups in the monitoring and verification of ARET targets had already been defined. Membership in the Chemical Producers Association of Canada, for example, requires mandatory participation in the Responsible Care program. This includes a regular third party audit to ensure emission targets are being met. As one participant noted, it is usually a three day audit conducted by a group which includes representatives from the community. Another participant felt that in the absence of programs like Responsible Care, communities must be given the power to bring in experts at any time to ensure that reported emission reductions are being achieved. This type of activity, however, need not involve the creation of a separate committee or sub-committee, but could be a function of CAPs.

[Note: The ARET program provides annual public reporting; a company's commitment is thereby measurable against the result. In the case of Hudson Bay Mining & Smelting Co. Ltd., a liaison group has been developed involving community, government, worker representatives, and environmental groups to review and audit the company's environmental performance. These reporting mechanisms are powerful incentives to encourage continuous improvement. (Ref. Environment Canada 1996, ARET presentation at the OECD September conference in Washington D.C.)

It was also suggested that a further "good show of faith" on the part of business may be achieved by means of a formal ARET contract between the community and the company. This would be a written guarantee that the ARET Action Plan would be implemented by the company.

2.1.4 Barriers to Community Involvement in the Monitoring and Verification of ARET Action Plans

Most of the participants identified the same barriers to monitoring and verification of ARET as those identified for involving the community in the development of the Action Plan. Among those participants who did not utilize CAPs, the greatest fear was the perceived lack of technical knowledge among potential community representatives. Again, the best way to address the problem is to solicit those with expertise with the CAPs process. This may be accomplished either through the hiring of independent consulting groups or by information exchange with companies who have such programs in place.

2.2 Role of Municipal Government in the ARET Process

Consistent with other findings, most of the participants, especially those who have CAPs, felt that Municipal Governments (MGs) were already sufficiently utilized in facilitating community participation in ARET. All of the participants recognized the importance of MGs in the process. One participant raised the concern, however, that MGs may hinder the facilitation of community involvement if businesses feel that it is necessary to deal only with MGs and not community groups themselves. This participant felt that MGs must not be viewed as an alternative to dealing with community groups. Another participant felt that MGs could play a useful role in assisting those companies that do not have a program like CAPs. Specifically, MG could provide assistance in the selection of potential community advisory representatives as well as provide a site where meetings could be held.

2.3 Feasibility of Developing a Technical Assistance Component of ARET

Industry Canada felt that the formation of a technical assistance component of ARET could aid in the resolution of some technical problems that may arise in meeting reduction targets. This component would essentially be a forum, organized and funded by industry, for the exchange of technical information (excluding trade secrets and patents for example) that may assist companies in achieving ARET goals. Participants were asked whether or not they would be interested in

creating and participating in such a forum and what, if any, concerns would they have about such a mechanism.

The next section summarizes the results of the survey which dealt with the feasibility of creating a Technical Assistance Component (TAC) of ARET. All of the participants interviewed felt that a TAC was unnecessary for a variety of reasons:

- Many participants felt that there was **already an adequate exchange of technical information** between businesses within their respective sectors regarding technical matters and therefore did not see the need to “re-invent the wheel”. Several businesses, for example, who are currently involved with industry associations already meet regularly to discuss technical issues and exchange information on a variety of issues. A specific ARET TAC for these companies would therefore not be necessary.
- Many of the participants felt that **each business had its own unique technical concerns** and would thus not benefit from such a mechanism. As one participant noted, the solution to the control of releases is an “in-house effort” which is “technically complex” and “geared to the specific and often integrated systems” of a particular industrial process. This would make such an information exchange “difficult at best, useless at worst”.
- Many of the larger, international corporations have **existing infrastructures for dealing with such technical issues**. Thus, if a plant in one part of the world is having technical problems with any aspect of production including emission control, a structure to tap expertise from other sites is already in place.
- Two participants stated that since the beginning of the ARET program, they had **never heard of any technical problems which could not be solved in-house** and, therefore, could not see the value of a TAC.

Participants stated that they would be very reluctant to commit money or time to such a venture since they feel that it would not provide a useful service. Many of the participants questioned whether or not existing mechanisms, such as the ones discussed above, could not be used to address ARET issues without creating new structures. Several participants also questioned how

such a program would be set up. Would there be one committee for all ARET participants or would there be a committee for each sector? Would the government match industry funding for such a program?

3.0 CONCLUSIONS

- There is a perceived need for community participation in ARET from all participants interviewed in this survey. Participants do not feel, however, that measures over and above the ones already in place for community involvement are required.
- Community Advisory Panels are the preferred method among most of the participants surveyed for involving community representatives in the development, monitoring and verification of ARET Action Plans. Among those who do not have programs like CAPs, less formal mechanisms such as regular public information meetings regarding plant activities are sufficient.
- Barriers to community involvement include a lack of technical knowledge among community participants, a shortage of staff within companies to work on community outreach programs, fear of community involvement, apathy within the community and the nature of the community itself (i.e. geographic, demographic, social/cultural defining boundaries).
- Most of the Barriers to involving community participation in ARET can be addressed by tapping into existing expertise (i.e.. companies who already use CAPs or third party consulting groups). There are, however, barriers due to the nature of the community in which the plant is located (i.e.. urban versus rural setting) which require site-specific interventions to overcome or manage.
- In addition to contributing to the development of ARET Action Plans, CAPs could assist in the monitoring and verification of reported results. Participants vary, however, in the extent to which they feel the community should be involved in this role. Members of the Canadian Chemical Producers Association, under their Responsible Care program, advocate third party audits of their operations to ensure reductions are being met. Other participants suggested more symbolic gestures such as a contract between the community

and the company. Still others, those not involved with a mechanism like CAPs, felt that community representatives simply did not have the technical knowledge to be involved in such a role.

- Most of the participants feel that their local Municipal Governments were already sufficiently involved in their community outreach programs. Several felt that MGs could provide a role in facilitating community involvement but warned that the company must not use this as a substitute for community involvement.
- Finally, all of the participants felt that it was unnecessary to form a Technical Assistance Component of ARET. It was generally felt that there was already an adequate exchange of information within industry and that a TAC would simply be a duplication of services.

4.0 RECOMMENDATIONS

- A workshop or similar forum, where those companies with CAPs could interact with those companies who do not could be used to facilitate interest in community involvement in ARET. Companies with proven track records in soliciting community involvement could be used as role models for those companies which are hesitant about having such involvement.
- Since the majority of the participants felt that ARET issues did not require specific or special attention over and above other concerns dealt with by existing programs like CAPs, it is clear that these participants did not perceive a credibility gap in terms of the public perception of ARET. (However, if such a gap exists amongst ENGOs for example, further research should focus on the origins and details of this concern.) Moreover, for those who do not utilize programs like CAPs, effort should be made to convince them of the importance of such community involvement. The barriers identified here could be used to develop mechanisms to overcome impediments to community participation.
- Although the role of ENGOs was not a focus of this survey, many of the participants expressed their desire for this stakeholder group to return to the ARET process. Some participants felt that the government should focus their attention on bringing the ENGOs back into ARET.

- Finally, since many of the companies interviewed in this survey are large, multi-national corporations that already have formal mechanisms for community involvement, similar interviews with smaller companies without such mechanisms may identify different barriers. This information may then be used to design programs that will help encourage smaller corporations to utilize community input in their ARET activities.

Appendix A

[List of Industry Stakeholders. Those in bold have been interviewed as of March 4, 1997.]

Dave Baron, Canadian Pulp & Paper Association

Alvin Bornick, Alta Steel

Roger Cook, E.B. Eddy Forest Products

John R. Dickson, Safety-Kleen Canada

Keith Ferguson, Placer Dome

Gerry Finn, NOVA

Wayne Fraser, Hudson Bay Mining

Pierre Guimond, Canadian Electrical Association

Don Hames, Dow Chemical

Paul Hanson, Chrysler

Walter Kuit, Cominco

Justyna Laurie-Lean, Mining Association of Canada

Darren Lizak, Union Carbide

Joel MacLean, Sydney Steel

Kirke MacMillan, Canadian Forest Products

Jean Marie-Sala, Alcan

Richard Mireault, IBM

Dave Sheppard, 3M

Hennie Velduizen, Noranda

Brian Wastle, Canadian Chemical Producers Association

Appendix B

Interview Protocol for Select ARET participants / Role of Community Based Groups

A. Development of ARET Action Plan

1. What role do you see the local community playing in the development of your company's ARET Action Plan?
2. What, in your opinion, is the most effective way of involving participants from the local community in this role?
3. What barriers do you foresee in involving members of the community in the development of your Action Plan? Are there barriers to community involvement which are unique to the nature of your business? Are there barriers to community involvement which are unique to the nature of your community?
4. How may we best address the barriers a) with regards to the unique nature of your business operations and b) with regards to the unique nature of your community?

B. Implementation of Action Plan

1. What role do you see the community playing in the implementation of your Action Plan?
2. What, in your opinion, is the most effective way of involving participants in this role?
3. What barriers do you foresee in involving members of the community in the implementation of your action plan? Are there barriers to community involvement which are unique to the nature of your business? Are there barriers to community involvement which are unique to the nature of your community?
4. How may we best address such barriers due to a) the nature of your business operations, b) the nature of your community?

Role of Municipal Government in the ARET Process

1. In your view, what role should Municipal Government (MG) play in facilitating community involvement in the ARET process? Will their involvement hinder facilitation of community involvement in any way?

2. Based upon other experiences your business has had with MGs, what, if any, problems do you foresee with the involvement of MGs in the ARET process?

Technical Assistance Component of ARET

1. Would your business utilize an assistance component of ARET to aid in the resolution of any technical problems that you may have in reaching your target reductions?

2. Would your business be willing to participate with other businesses in both the funding and operation of such a component? What conditions would have to be met for your business to participate in the management of such a component?

3. What concerns/problems, if any, do you foresee with such a component? What are the barriers to implementing a technical assistance component?

The Use of Third Party Expertise in Communicating ARET Issues to the Community

Supplement: By John Cairney

William Leiss Associates

INTRODUCTION

In interviews conducted with ARET participants concerning the role of community involvement in ARET-based initiatives (See), it became clear that where it was desirable to involve either ENGOs and/or community organizations, there were difficulties presented by the scope of the technical information "load". One of these difficulties is of course, the availability of evaluation of the science and risk information base, as presented by industry. Such information may have been tabled before a stakeholder group, for example, to support the construction of a priority list such as the "A-1" ARET list.

A review of the draft report was made by representatives from Industry Canada and it was decided that given the strong consensus on this and related issues, little incremental benefit would be achieved by continuing to interview participants. In light of the information load problem however, it was decided that a short interview should be conducted with the remaining participants to assess the feasibility of using third party expert consultation to aid in the communication of science and risk information. This short report documents the results of that exercise.

METHODS

Consistent with the methodology employed in the larger survey, a one page fax outlining the project was sent to three of the remaining participants on the original list (See Appendix A of the 1st Report). This fax contained three strategies for utilizing expert consultation in risk communication exercises:

1. Using funds supplied by industry, the consultative group as a whole seeks to agree on the names of experts who will do an independent and credible evaluation of the information that has been tabled before the group.
2. Using funds supplied by industry, the subset of ENGO and/or community stakeholders chooses their own experts to evaluate the information.
3. Using funds supplied by industry, the stakeholder group as a whole resolves to commission an independent review of the information from an organization such as the Canadian Network of Toxicology Centres or the Royal Society of Canada (Committee on Expert Panels).

Participants were also asked to specify another mechanism whereby this objective could be accomplished. A follow-up phone call was then made to arrange a time for a brief interview. All three participants agreed to be interviewed. Interviews were conducted between March 10 and 23, 1997.

RESULTS

Two of the three participants interviewed felt that using expert consultation for risk communication in ARET processes was useful. There was, however, no consensus between these individuals as to which mechanism was most effective. One participant felt that of all the options provided, the best way to handle issues such as the verification of emissions reductions, was through the commission of an independent review from an outside, credible organization such as the Royal Society of Canada or the CNTC. The other participant felt that third party verification was useful, but that it could be done by sector rather than by individual plant or company. The funding for a such a review could be provided by an industry association, for example, the Canadian Chemical Producer's Association (CCPA). This participant felt that an industry association review of all the industries within a sector could provide the same value as the other options, while also overcoming "local" funding problems (i.e. the lack of funds for third party consultation by individual plants/companies).

The final participant did not feel that third party verification was necessary or desirable. In fact, the participant felt that such an idea was inconsistent with the "voluntary nature" of the initiative. Moreover, the participant felt that the company already had a good rapport with the community due to their established track record in the "aggressive reduction of emissions". Credibility in the community, therefore, was not an issue of concern for them.

DISCUSSION

Although this report cannot be considered "representative" of all the views of ARET participants, the results illustrate the importance of context on ARET issues. For example, for those companies who are already members of associations like the CCPA, third party audits are part of their commitment to the association. Hence, one would expect that these participants would be in favour of the use of expert consultation. This was certainly supported by the findings of this survey. As well, the issue of "perceived" credibility in the community will also affect responses. The participant who did not feel that third party verification was necessary also did not perceive a credibility gap in ARET. Consistent with the findings of the first report, more research is required to assess whether or not, and under what conditions, a credibility gap indeed exists in the ARET program. It is clear from the results of both of these surveys that this problem is perceived by some participants and not others.

Finally, further investigation into the proposal made by one participant concerning the idea of association level review is warranted. For example, the CCPA requires third party audits for emissions verification under their Responsible Care initiative. Barriers to achieving consistency among industry associations across sectors should be identified, and strategies for addressing such barriers developed.

LKC
TD 897.8 .C2 A74 1997
ARET voluntary codes project final report

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