CASA Clean Air Strategic Alliance 2004 Annual Report

– celebrating 10 years

1994-2004

CASA
Clean Air Strategic Alliance
10th anniversary 1994-2004

About CASA

The Clean Air Strategic Alliance (CASA) is a non-profit association composed of diverse stakeholders from three sectors – government, industry, and non-government organizations such as health and environmental groups. All CASA groups and teams, including the board of directors, make decisions and recommendations by consensus. Recommendations are likely to be more innovative and long lasting than those reached through traditional negotiation processes.

Vision

The air will be odourless, tasteless, look clear and have no measurable short or long-term adverse effects on people, animals or the environment.

Mission

The Clean Air Strategic Alliance is a stakeholder partnership that has been given shared responsibility by its members, including the Government of Alberta, for strategic planning, organizing and coordinating resources, and evaluation of air quality in Alberta through a consensus building collaborative approach.

Mandate

CASA was established by Ministerial Order as an advisory committee under the Environmental Protection and Enhancement Act and the Department of Energy Act to undertake and report on:

1. The operation of the Comprehensive Air Quality Management System (CAMS).
2. The conduct of strategic air quality planning for Alberta through shared responsibility and the utilization of a consensus building collaborative approach. Planning shall include;
   i. clear identification of issues;
   ii. prioritization of specific problems,
   iii. allocation, and coordination of resources;
   iv. development of action plans; and
   v. evaluation of results.
3. The prioritization of problems with respect to air quality in Alberta and specific actions or action plans and activities to resolve such problems. The action plans will prescribe guidelines for the initiatives to be undertaken, the economic and environmental consequences, and what outcomes are expected from each initiative.

Decisions on matters of policy and action of CASA will be based on consensus. Where consensus policy and action matters is not achieved, yet some action is deemed necessary, specific alternatives will be provided to the Ministers for decision. The alternatives will reflect the extent of consensus and areas of agreement, the specific issues about which there is no consensus, and the reasoning behind the differing views.

Progress reports will measure and compare the actual benefits and results to projected outcomes, responsibility, accountability and performance of the initiatives.

CASA supports the following air quality management goals:

1. Protect the environment.
2. Optimize economic performance and efficiency.
3. Seek continuous improvement.

Contents

ISBN 1-896250-39-4

CASA
Clean Air Strategic Alliance

Highlights

CASA celebrates its first decade

CASA reached an important milestone in 2004, celebrating its first decade. The organization was established at a time when controversy and confrontation still characterized the way many difficult environmental issues were handled. Economic development and environmental protection were seen by many as incompatible. Thus, the multi-stakeholder, consensus-based process that was the foundation of CASA represented a new way of addressing air quality issues in Alberta and was, for many, a big leap of faith. Ten years later, it's clear that this faith was well-placed.

CASA's process of bringing together stakeholders with diverse perspectives and positions to address air quality issues is widely respected in Alberta and Canada, and has sparked international interest. It has become a model for other government consultative processes and has resulted in pragmatic, solid policy advice to government and other partners. Past and present stakeholders acknowledged the many CASA successes over the last ten years at a banquet in Edmonton in November

Rick Orman, one of CASA's founding ministers, receives a plaque from Ron Hicks, president of CASA.

New recommendations will further reduce flaring and venting

Building on the substantial success of its solution gas flaring management framework, CASA's Flaring and Venting Project Team developed new recommendations that will lead to further emissions reductions. In its review of the current framework, the team found that in 2003, solution gas flaring levels were 70 per cent below the 1996 baseline. More recent recommendations on solution gas venting have resulted in a 38 per cent reduction in venting from 2000 to 2003.

New recommendations approved by the CASA board in September address a broader range of solution gas flaring and venting issues in Alberta, including a cumulative time limit on well test flaring, volume thresholds on flaring and venting, and conservation requirements for larger flares that are close to a residence. The team also recommended the preparation of best practices guides for larger solution gas vents that are close to a residence, and for reducing fugitive emissions. Another recommendation is that facilities for conserving solution gas should be designed for 95 per cent conservation with a minimum operating level of 90 per cent.

When implemented, the latest recommendations are expected to produce a 78 per cent reduction in flaring from the 1996 levels, and more than a 70 per cent reduction in venting from the baseline year of 2000.

Solution Gas Flaring and Venting Reductions

	Solution Gas Flaring		Solution Gas Venting
Year	Firm target reduction (%)	Actual reduction (%)	Reduction (%)
1999	none established	30	
2000	15	38	
2001	25	53	15
2002	50	62	29
2003	none established	70	38

Source: ST 2004-60B: Upstream Petroleum Industry Flaring and Venting Report, EUB 2004

Electricity framework becomes Government policy

Following approval of the electricity emissions management framework by the CASA board in November 2003, the Government of Alberta adopted it as policy on March 4, 2004. Alberta Environment is leading the implementation of the framework, and many members of the CASA electricity project team continue to advise on the implementation process.

The work of the Electricity Project Team was publicly recognized when the team won an Emerald Award for Environmental Excellence in June. This public recognition was a tribute to the many people whose dedication and commitment enabled them to reach consensus on the challenge of air emissions from the electricity sector.

In an effort to complete the work on greenhouse gas emissions from the electricity sector, the Greenhouse Gas Allocation Subgroup of the Electricity Project Team developed a conceptual framework that was approved in principle by the CASA board in June. This framework can achieve meaningful reductions in greenhouse gas emissions intensity in the 2010 timeframe as well as further, more significant reductions in the long term to 2020 and beyond. It features a flexible range of compliance tools, including options for industry, and reviews every five years to allow for ongoing adjustments to reflect any future external developments and changing policy objectives.

Trevor Thera from the Alberta Conservation Associaion presents an Emerald Award to David Spink, Martha Kostuch and Joe Kostler.

Airshed zone guidelines updated

Airshed zones are a widely recognized success story, representing an innovative response to the priority that Albertans place on the need to deal with local air quality concerns. The province now has six zones in place, and more are in the developmental stages. To reflect the experiences of existing zones and to meet the needs of emerging zones, CASA's airshed zone guidelines were updated and published in 2004. CASA also set up a new Web site specifically for zones at **http://airsheds.ca**.

Airshed zones are important partners in addressing air quality issues in many regions of the province. They provide accurate, reliable and credible air quality information and give local stakeholders an opportunity to find local or regional solutions to air quality issues in their area. They offer flexibility in the way these issues are addressed, and thus tend to make the monitoring and management of air quality more efficient. The Government of Alberta and CASA both encourage the development of new airshed zones in Alberta.

Board accepts statement of opportunity on CFOs

In November, the CASA board accepted a joint statement of opportunity on air emissions from confined feeding operations (CFOs) from the Intensive Livestock Working Group and Alberta Agriculture, Food and Rural Development. CASA's consensus-driven approach will be used to develop an air quality strategic plan for CFOs. This represents a new area of activity for CASA and a new approach for the intensive livestock industry. It is a chance for stakeholders to collaboratively address concerns about the impacts of odours, dust and air emissions on human health, as well as other issues that affect existing, expanding and new CFO development.

Peter Watson, president

Message from the president

For CASA, 2004 was a year of transition. Not only did it bring new directions for projects, but at the end of the year, CASA President Ron Hicks moved to a new position as deputy minister of Executive Council in the Alberta Government. Ron was a strong advocate of CASA and its consensus approach, and I want to thank him for his leadership over the last two years.

In my former role, as Assistant Deputy Minister with Alberta Environment for several years, I saw CASA's accomplishments mount up. These successes have stoked an interest in CASA by individuals and organizations who thought the process could help them address their issues. The intensive livestock industry recently brought a project to our board, and the willingness of this sector to give the CASA consensus process a try is a good indicator of the confidence that Alberta stakeholders have in the way CASA works.

CASA has accomplished a great deal in its first decade. Seeking and reaching consensus on difficult issues is hard work; it takes continuing commitment and energy to find thoughtful and workable approaches to address complex air quality concerns. But I know from talking to my colleagues in government as well as individuals in other sectors that the outcome has been innovative solutions, strong personal and professional relationships, and a genuine respect for others and for the process.

Although I only became president of CASA in early 2005, I have heard many good things about the organization and am very much looking forward to working with the board, the other members of the executive, and the CASA secretariat.

Board of directors As of Dec. 31, 2004, unless otherwise noted.

Directors

Sector: Industry

Member category	Association/affiliation	Representative
Agriculture	Alberta Beef Producers	Herman Schwenk
Alternate energy	Alternate energy producers	Theresa Howland (from Feb. 4)
Chemical manufacturers	Canadian Chemical Producers Association	Wil VandenBorn (to April 21) Ron Steffan (from April 21)
Forestry	Alberta Forest Products Association	Brian Gilliland (from April 6)
Mining	Mining industry	Wayne Kenefick
Oil and gas (large producers)	Canadian Association of Petroleum Producers	Dave Byler, **CASA vice-president**
Oil and gas (small producers)	Small Explorers and Producers Association of Canada	Mitch Shier
Petroleum products	Canadian Petroleum Products Institute	Dave Barrett
Utilities	Utilities	Bob Page

Sector: Government

Member category	Association/affiliation	Representative
Federal	Environment Canada	Jim Vollmershausen
Local (rural)	Alberta Association of Municipal Districts and Counties	Phyllis Kobasiuk
Local (urban)	Alberta Urban Municipalities Association	Ed Gibbons (to Nov. 6) Darren Aldous (from Dec. 16)
Provincial	Alberta Environment	Ron Hicks (to Dec. 7), **CASA president**
Provincial	Alberta Health and Wellness	Art McIntyre (to Nov. 15)
Provincial	Alberta Energy	Jane Currie

Sector: Non-government organization

Member category	Association/affiliation	Representative
Consumers/transportation issues	Alberta Motor Association	Rob Taylor
Health issues	Alberta Lung Association	Tracy Bertsch (to Nov. 10)
Pollution issues	Pembina Institute	Tom Marr-Laing, **CASA vice-president**
Pollution issues	Toxics Watch Society of Alberta	Myles Kitagawa
Wilderness issues	Prairie Acid Rain Coalition and Bert Riggall Environmental Foundation	Martha Kostuch

Alternates As of Dec. 31, 2004, unless otherwise noted.

Sector: Industry

Member category	Association/affiliation	Representative
Agriculture	Wild Rose Agricultural Producers	Grace MacGregor
Alternate energy	Alternate energy producers	David Baker
Chemical manufacturers	Canadian Chemical Producers Association	Ken Tsang (to April 21) Barbra Korol (from April 21)
Forestry	Alberta Forest Products Association	Neil Shelly (to April 6) Keith Murray (from April 6)
Mining	Mining industry	Ron Laing
Oil and gas (large producers)	Canadian Association of Petroleum Producers	Bill Clapperton
Oil and gas (small producers)	Small Explorers and Producers Association of Canada	Heather Douglas (from Nov. 23)
Petroleum products	Canadian Petroleum Products Institute	Ted Stoner
Utilities	Utilities	Mike Kelly

Sector: Government

Member category	Association/affiliation	Representative
Federal	Environment Canada	Tim Goos
Provincial	Alberta Environment	John Donner
Provincial	Alberta Health and Wellness	Stephan Gabos (to Feb. 2) Alex Mackenzie (from Feb. 2)
Provincial	Alberta Energy	Jane Clerk

Sector: Non-government organization

Member category	Association/affiliation	Representative
Consumers/transportation issues	Alberta Motor Association	Dan VanKeeken
Health issues	Alberta Lung Association	Vacant
Pollution issues	Lake Wabamun Enhancement and Protection Association	Linda Duncan
Pollution issues	Residents for Accountability in Power Industry Development	Ian Peace
Wilderness issues	South Peace Environmental Association	Bob Cameron

Thank you to past board members

CASA gratefully acknowledges the contribution of board members, indicated below, who stepped down in 2004.

- **Tracy Bertsch**
  Alberta Lung Association
- **Stephen Gabos**
  Alberta Health and Wellness
- **Ed Gibbons**
  Alberta Urban Municipalities Association
- **Ron Hicks**
  Alberta Environment
- **Art McIntyre**
  Alberta Health and Wellness
- **Neil Shelly**
  Alberta Forest Products Association
- **Ken Tsang**
  Canadian Chemical Producers Association
- **Wil VandenBorn**
  Canadian Chemical Producers Association

Donna Tingley, executive director

Message from the executive director

For over a decade, CASA has brought together Albertans with diverse perspectives to address challenging air quality issues. Despite their differences, all CASA stakeholders share the goal of finding effective solutions to the issues before them. In recent years, the combined efforts of our board, team members and staff have been recognized through two Premier's Awards of Excellence and two awards from the Alberta Emerald Foundation for Environmental Excellence, and by the requests from other parts of the country and the world for more information on the CASA approach.

This year, new recommendations were made to further improve the very successful framework for managing emissions from solution gas flaring and venting. The board also approved recommendations on transportation demand management which will move to the implementation phase in 2005. And work began in two new areas that the board identified as strategic priorities, namely indoor air quality, and air quality issues related to confined feeding operations.

An important reflection of our commitment to continuous improvement is a performance evaluation every three years. In 2004, an independent evaluator concluded that CASA is an effective organization that is making progress on its mandate, and is very strong in following the principles of shared responsibility, consensus building and collaboration. This assessment demonstrates CASA's ability to respond to issues in a way that is true to the intent and vision of the organization's founders more than ten years ago, while at the same time evolving and adapting to changing circumstances, as all strong, healthy organizations do.

Many people and organizations have been acknowledged this year in celebration of our 10th anniversary. But a great deal of work also goes on behind the scenes to support those who sit at the board or project team table. CASA is very grateful for the substantial and valuable contributions of time and expertise from those individuals who support their stakeholder representatives. On a personal note, I continue to be proud and honoured to be part of such a dynamic and innovative organization, and look forward to the start of our next ten years.

Donna Tingley

Secretariat

Senior project manager
Kerra Chomlak

Science advisor
Marianne English

Project managers
Matthew Dance
Keith Denman (to June 14, 2004)
Ahmed Idriss (from July 1, 2004)

Office manager
Bernice Lloyd

Finance officer
Joanne Dixon

Executive director
Donna Tingley

Communications advisor
Geoff Williams

Administrative assistants
Sherri Clark
Marlene Parker

Thank you to **Ingrid Liepa**, **Christine Macken** and **Kim Sanderson** for applying their skills as consultants to various CASA teams this year. Thank you also to **Sarina Baird** for stepping in to assist with administrative responsibilities for several months in 2004.

Evaluating and measuring CASA performance

2004 performance evaluation

In the belief that "what gets measured gets done," CASA has a strong system for measuring and evaluating its performance. When CASA was established in 1994, an article was included in the bylaws to ensure that overall organizational performance is evaluated on a regular basis. Article 16 of the CASA bylaws requires that *"The performance of the Society will be evaluated upon the expiration of three years from, the date of its incorporation, or the date of its last performance evaluation, by the Members of the Society."*

CASA's previous performance evaluations were done in 1997 and 2001. The third formal assessment, the first to be done by an independent consultant, was launched in June 2004. Based on the independent evaluation, the Performance Evaluation Steering Committee concluded that overall, CASA is an effective organization that is making progress on its mandate and is following its procedures, although there are areas for improvement. Areas where CASA is very strong include the development of action plans once priorities are determined and following the principles of shared responsibility, consensus building and collaboration. Other highlights from the consultant's report were that:

- Considerable progress has been made in implementing the Comprehensive Air Quality Management System (CAMS) in Alberta.
- Substantial progress has been made in prioritizing concerns with air quality in Alberta and in developing specific action plans and activities to resolve the concerns.
- CASA does develop and execute action plans to address concerns once they have been identified, prioritized and accepted within CASA.
- In-kind resource allocations are fundamental to the success of CASA.
- The five elements identified for effective strategic air quality planning have been conducted in a generally thorough and successful manner.
- CASA has conducted effective strategic planning for air quality for Alberta.
- With respect to each of the four key focus areas, pollution prevention/continuous improvement, human and animal health, ecological health, and socio-economic integration, progress is being made toward the relevant objectives.
- CASA operates by the principles it has articulated in the areas of shared responsibility, consensus building and collaboration.
- CASA has conducted its performance measurement function in a very good manner, improving data collection, analysis, and reporting since 2000, and demonstrating an approach and commitment to continual improvement.

The evaluation also identified five areas in which CASA performance could be improved:

- **Public Involvement:** Does CASA engage the public through stakeholder involvement or does it engage the public directly? Do the public stakeholders truly represent the public or to what degree do public stakeholders represent the public component?
- **Implementation:** What is the role of implementation teams within CASA? Are the recommendations of implementation teams on the same level as project teams?
- **Prioritization/Resources:** What process should the CASA board utilize to prioritize concerns with respect to air quality in Alberta? What role does the allocation of resources by members play in the prioritization process?
- **Goals/Key Focus Areas:** Can the current CASA air quality management goals and the CASA key focus areas be amalgamated to clarify how CASA is organizing its resources and to what end?
- **Document Clarification:** Can the CAMS process be restated to more accurately represent the process followed in practice by CASA?

The steering committee proposed, and the board approved a plan for addressing these areas by the middle of 2005. All reports produced during the performance evaluation are available in CASA's online library at **http://casahome.org.**

2004 performance measures results

The CASA business plan contains five performance measures, established by the board of directors, to reflect the organizational performance of CASA. These are:

1. Improved air quality indicators in areas of CASA action.
2. Capability to measure air quality effects on humans and the ecosystem.
3. Number of recommendations through the Comprehensive Air Quality Management System process implemented.
4. Degree of CASA members, partners and clients' satisfaction with the CASA approach.
5. Degree of recognition by emitters and the general public of CASA as a major vehicle for delivering improved air quality management for Alberta.

1. Improved air quality

CASA's mandate includes the evaluation of air quality in Alberta through a collaborative process.

To assess progress, two sets of indicators were defined; one set is based on concentrations of selected substances in the air and the other set is based on exceedances of the Alberta ambient air quality one-hour guideline of three substances. Analysis began with data from 1994 because that was the year CASA was formed.

Concentrations of selected substances

Annual average ambient concentrations and the annual peak concentrations across Alberta are the two indicators chosen for this set. The specific substances, as shown in Figures 1 and 2, were selected because:

- They are substances of concern in Alberta.
- They affect air quality in Alberta.
- They are associated with issues addressed by one or more CASA project teams.
- Data on each substance is readily available in electronic form.

The annual average concentration of wet deposition of acidifying emissions is also analysed as part of this indicator set. Benzo(a)pyrene was included in previous reports, but its monitoring was discontinued in 2001 so it has been dropped as an indicator.

Figures 1 and 2 reflect differing levels of progress for the selected substances. Only benzene and sulphur dioxide showed overall reductions in both average and peak concentrations between 1994 and 2003. Average levels for fine particulates and hydrogen sulphide dropped, but the peak concentrations for both substances rose. For nitrogen dioxide, a small downward trend is indicated for peak concentrations, but a slight upward trend in ambient levels. There were small upward trends in both indicators for ozone. No trend was apparent in the average annual wet deposition.

Figure 1: **Change in average concentration of selected substances (1994 to 2003)**

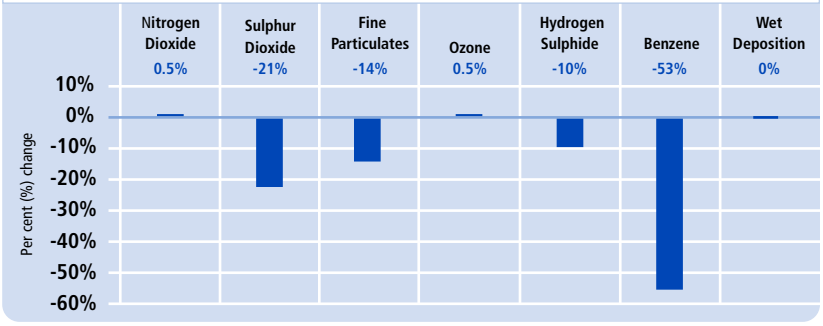
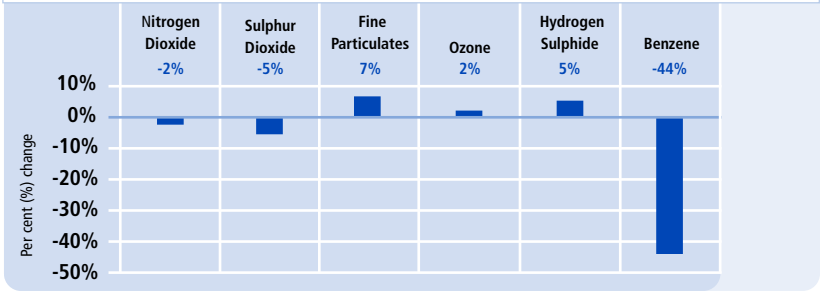


Figure 2: **Change in peak concentration of selected substances (1994 to 2003)**



Exceedances of the Alberta ambient guidelines

Exceedances of the Alberta ambient one-hour guideline across Alberta for three substances (sulphur dioxide, hydrogen sulphide and nitrogen dioxide) provided the second set of indicators. The data was obtained from industrial compliance, airshed and Alberta Environment monitoring stations between 1994 and 2002.

The overall downward trend for sulphur dioxide exceedances continues, and a new significant downward trend was found for hydrogen sulphide exceedances (see Figures 3 and 4). There have been so few exceedances of the guideline for nitrogen dioxide that no charts are provided.

Figure 3: **Sulphur dioxide – Per cent (%) exceedances from industry, airshed and provincial data (1994 to 2003)**

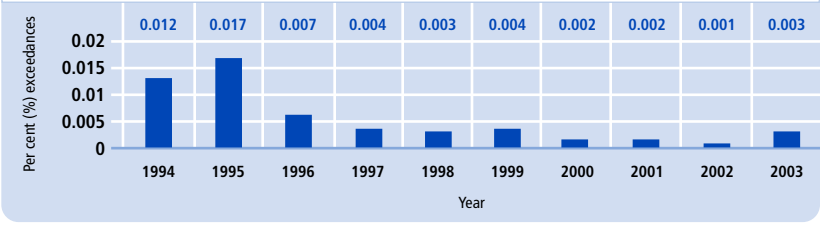
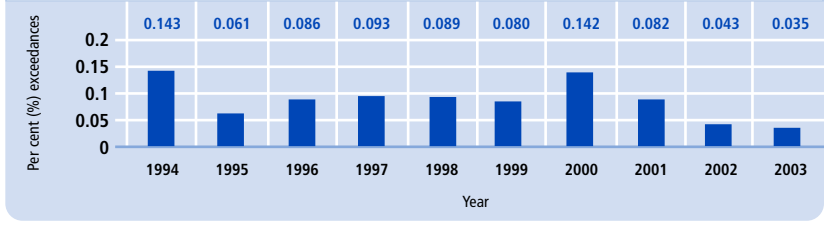


Figure 4: **Hydrogen sulphide – Per cent (%) exceedances from industry, airshed and provincial data (1994 to 2003)**



2. Capability to measure air quality effects

Four indicators were developed to represent capability to measure air quality effects. To keep the indicators simple, efforts focused on monitoring, which is an important part of measuring effects. In order to define air quality effects, a measure of air quality and a measure of the effects are needed, thus resulting in three types of monitoring indicators:

- Ambient air quality.
- Ecological effects.
- Human health effects.

The ambient air quality indicator is based on the number of air quality monitoring sites and instruments in use as a percentage of the number of sites and instruments expected to be in operation in Alberta, as described in the Ambient Air Quality Strategic Plan.

In 1994, the value of this ambient indicator was 31 per cent; and in 2003 it was 48 per cent, up one percent from 2002. This does indicate that progress has been made over the last ten years in our capability to measure concentrations of substances of concern.

Two ecological effects monitoring indicators have been defined. One is based on the number of ecological monitoring sites that have been put in place as a percentage of the number of expected sites, as described in the Ambient Air Quality Strategic Plan. The second ecological effects monitoring indicator is simply the total number of ecological monitoring sites that have been implemented. The results for these two indicators are unchanged from 2002, at 33 per cent and 10 sites respectively. In comparison, there were no ecological effects monitoring sites in Alberta in 1994.

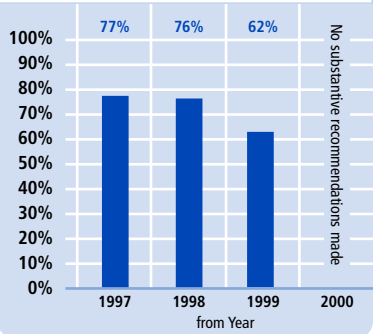
A preliminary human health monitoring indicator was developed in 2004 to indicate the extent to which data of the type required by the CASA Human Health Monitoring Framework (approved by the CASA board in 1999) is being collected in Alberta. The extent to which this monitoring is being done was assessed on a scale of one to five, and compared against the ideal (a score of "5"). For 2004, the rating was 2/5, or 40 per cent, which compares favourably against a value of zero in 1994. This indicator will be used in the short term only, and a more comprehensive human health monitoring indicator is expected to be developed by 2007.

3. Recommendations implemented

CASA teams make recommendations for consideration by the CASA board of directors. The intent of this indicator is to measure the degree to which recommendations that can lead directly to improved air quality (that is, substantive recommendations) have been implemented within three years of their approval by the CASA board. Recommendations accepted by the board that are administrative or operational are not included in this indicator.

In 2004, the year for which recommendations would have been assessed for this indicator was 2000. In 2000, CASA focused on improving administrative and operational processes and a number of new initiatives were launched. As a result, no substantive recommendations were presented to or approved by the CASA board that year. The value of this indicator did decline from 1997 to 1999, as seen in figure 5.

Figure 5: **The performance indicator for Performance Measure 3 – Degree of Implementation of Substantive Recommendations**

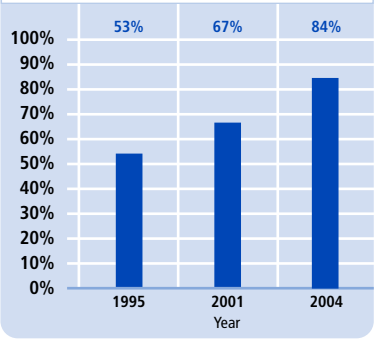


This indicator is a snapshot taken three years after the recommendations were approved, and complex actions may take more than three years to be fully implemented.

4. Stakeholder satisfaction

The indicator for this performance measure was derived from surveys of CASA stakeholders conducted in 1995, 2001 and 2004. These surveys asked CASA members, partners and clients about various things, but the performance indicator for this measure is based on answers to one question on stakeholder satisfaction with the CASA way of addressing air quality issues. As shown in Figure 6, there has been a steady improvement.

Figure 6: **Degree of satisfaction with the CASA approach**



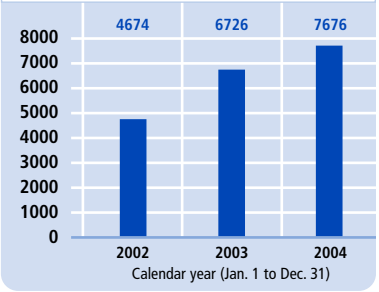
5. Degree of recognition

To measure how well Albertans recognize the CASA organization and its accomplishments, one indicator based on CASA Web site usage and three indicators based on media coverage are calculated each year. After three years of data, the number of repeat visitors to the CASA Web site has increased. The second year of data on news stories indicators shows a decrease.

Web site indicator

In 2004, there was a continuation of the increase in the number of repeat visitors as apparent in Figure 7.

Figure 7: **Number of repeat visitors to the CASA Web site**



News stories indicators

2004 was the second year the news stories indicators were calculated.

Figure 8: **CASA news stories count**

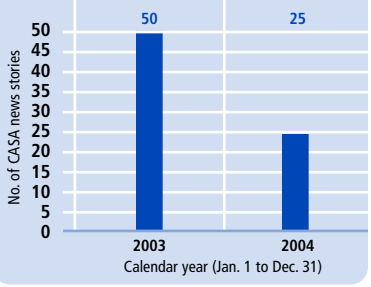


Figure 9: **CASA news stories as a percentage of air quality news stories**

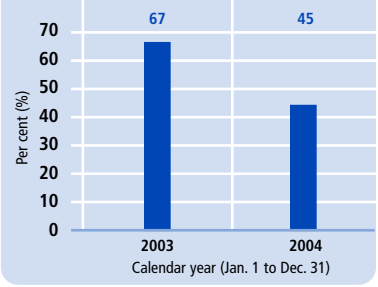
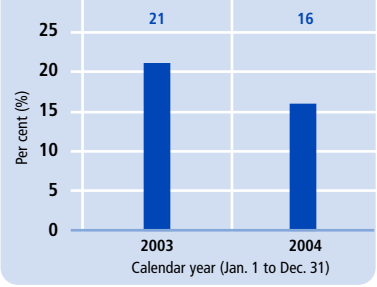


Figure 10: **CASA air quality stories as a percentage of air quality stories**



CASA teams

The work of CASA is achieved largely though the participation of teams of individuals representing stakeholders who share an interest in a specific issue. Most issues are brought to the CASA board in the form of a statement of opportunity. When the board of directors agrees that CASA should take on an issue, a working group is formed to draft terms of reference for a project team. Once the board approves those terms of reference, a project team is formed. The project team is accountable to the board while individual participants are accountable to their stakeholder organizations. As appropriate, recommendations from a project team lead to the formation of another team to oversee their implementation.

The CASA board of directors also forms committees to achieve specific organizational goals not directly associated with project teams.

Reports from CASA teams

Working groups

Indoor air quality

Indoor air quality has become an important health, environmental and occupational health concern in recent years. In its 2003 strategic planning session, the CASA board identified indoor air quality as a priority issue and agreed that an Indoor Air Quality working group should be formed. A working group was established in 2004 to develop draft terms of reference and identify appropriate stakeholders for a project team.

The working group plans to recommend draft terms of reference (including goals, objectives, and potential stakeholders) to the CASA board in 2005.

Project teams

Airshed Zones

Goals

- Achieve consensus on revised CASA guidelines for airshed zones that are consistent with the CASA goals and principles.
- Achieve consensus on the role of CASA in working with Alberta Environment to implement the airshed alliance item of the department's business plan.

Objectives

- CASA will have a clearly defined relationship with the airshed zones and, where appropriate, will be able to assist both Alberta Environment and the airshed zones in fulfilling their mandates.
- The government of Alberta will be able to work with CASA, airshed zones, industry, and community members with the assurance that the roles of zones and CASA in meeting the monitoring needs of the province are clear.
- Stakeholders will understand how airshed zones can be formed and their relationship to CASA and the provincial government.

Report for 2004

The airshed zones project team completed its mandate in the fall of 2004 when it presented its report and recommendations, including updated airshed zone guidelines, to the CASA board. The guidelines were published as a standalone document and are available in print format and online. A new Web site at **http://airsheds.ca** was also established to make it easy to find specific information related to the airshed zones. As well as information on the zone approach, this site also links to each of the six existing airshed zones.

The team concluded that the partnership between Alberta Environment, CASA and the zones is operating effectively and has sufficient flexibility to adapt and evolve as more zones are established and existing ones mature. The role each partner plays is unique and essential to maintaining the well-functioning partnership, and the team's recommendations reflect the roles played by each partner and the opportunities these roles provide.

A key recommendation from the team was that a multi-stakeholder organizing committee be struck to hold a zones workshop in 2005 to facilitate collaboration among zones. Zones in formation would benefit from the experiences of existing zones, and it would be an opportunity for established zones to discuss common issues and concerns.

Ambient monitoring strategic planning

Goal

Alberta will possess a dynamic, effective and efficient framework that provides the foundation for the development of the best ambient air quality monitoring system in the world.

Objectives

1. To build upon and improve the existing framework for the monitoring of ambient air quality in Alberta.
2. To expand the strategic plan to improve the dissemination of ambient air quality data and information in Alberta.
3. To develop an implementation plan based on the revised strategic plan for the monitoring of the ambient air quality in Alberta.

Report for 2004

The ambient monitoring strategic planning project team was formed to revise the original Ambient Air Quality Strategic Plan created in 1995. The CASA board approved the terms of reference for the project team in June 2004. Since then, the team has reviewed ambient air quality monitoring frameworks in other jurisdictions with the intent of identifying the best practices of each that are applicable to Alberta. A workshop is being planned for 2005 to receive feedback from a multi-stakeholder group on the progress to date.

Coordination workshop

Purpose

The Coordination workshop organizing committee was formed to:

1. Plan the CASA Project Team Coordination Workshop.
2. Report to the CASA Board.

Report for 2004

Since the integration workshop in September 1996, CASA has increased its efforts to improve coordination among teams and CASA stakeholders as a whole. One approach has been to periodically bring CASA stakeholders together to:

1. Develop a better understanding of what the project teams are doing, and
2. Provide a forum to identify key linkages and dependencies between CASA teams to help them operate more efficiently.

The CASA board had asked that a formal coordination workshop be held every 1.5 to three years. The first one occurred in 2001, and the second was held in Edmonton at the end of November 2004, attended by more than 70 CASA stakeholders. Over 20 presentations were made and provided information from all CASA teams as well as the board and all six airshed zones. Presenters were asked to address:

- What other teams need to know about your project that may affect their outcome?
- What other issues addressed by other teams may impact your project outcome?

Following the workshop, participants were expected to review any coordination suggestions with their respective teams or zones and decide what action to take, if any. The Workshop Organizing Committee will consider any suggestions for improved coordination and make recommendations to the CASA board in early 2005.

Ecological effects monitoring workshop

CASA has had a longstanding interest in the ecological effects of air quality and in 2004, the board agreed that a workshop to increase board members' knowledge of and commitment to ecological effects monitoring would be valuable. Such enhanced understanding would facilitate support for a possible ecological effects monitoring program in the future. The board also agreed that the workshop should determine what is required for an effective ecological effects monitoring program for Alberta; identify alternatives to improve capability to measure air quality effects on ecosystems in Alberta; and determine the values at risk of not acting based on an evaluation of economic, environmental and social impacts.

A workshop organizing committee was formed to plan and hold the ecological effects workshop and to report back to the CASA board. The committee developed terms of reference and a preferred option for a summer 2005 workshop, both of which were approved by the board.

Electrical efficiency and conservation

Goal

- Implement the energy efficiency and conservation recommendations (65-68) found in the 2003 report of the Electricity Project Team, with the aim of increasing electricity efficiency and expanding conservation efforts within the province. This work will include identifying the resources required to implement the various programs recommended.

Objectives

1. Develop efficiency measurement mechanisms for the electricity supply chain and set a numerical target for electrical energy efficiency.
2. Collect and develop credible information on electricity efficiency to support the proposed targets and programs.
3. Identify tools and mechanisms to implement the energy efficiency and energy conservation recommendations in the November 2003 report of the EPT to the CASA board.
4. Identify the costs, benefits, co-benefits, and barriers and assists to market penetration of electrical efficiency and conservation measures for all users of electricity.
5. Identify cost effective approaches and programs to develop electrical efficiency and energy conservation, including implementers and time frames.
6. Make recommendations to the CASA board.

Report for 2004

The team focused on its first key task area (data collection), commissioning two reports by consultants to use as background in preparing its report and recommendations to the CASA board:

- *Study on the Electrical Efficiency of Alberta's Economic Sectors*, by the Canadian Energy Research Institute (CERI), in September 2004, and
- *A Study on the Efficiency of Alberta's Electrical Supply System*, by JEM Energy, in October 2004.

Given the importance of this topic and the interest in it, the team also considered the need for affected stakeholders to be at the table when the objectives were developed and discussed for each sector. The team agreed that it would first work to set a conservation and efficiency target for the residential sector and possibly for the commercial sector, with progress to be reviewed early in 2005. All potential efficiency improvement measures would be reviewed and categorized in terms of cost effectiveness and energy use reduction.

The team provided a status report to the CASA board in November and aims to complete its work in the first half of 2005.

Electricity

Goal

- To develop an air emissions management approach, including standards and performance expectations for the Alberta electricity sector.

Report for 2004

The Electricity Project Team (EPT) fulfilled its mandate when it submitted its final report and recommendations to the CASA board in November 2003. (Visit **http://casa-electricity.org** for detailed information on this project.) The board approved the recommended emissions management framework and the Government of Alberta subsequently adopted it as policy on March 4, 2004.

The recommendations are being implemented as a cross-departmental initiative of the Alberta Government, led by Alberta Environment. Several advisory groups have been established to assist the implementation process, one of which is an advisory team composed mainly of former EPT members. Committees have also been formed on specific topics, including technical aspects of emissions trading and mercury standards. As well, there will be an opportunity in 2005 for public comment on the implementation process and its progress.

Flaring and venting

Purpose

- To assess the performance of and make recommendations regarding the Alberta solution gas flaring and venting management framework.
- To develop recommendations to address a broader range of flaring and gas venting issues in Alberta.

Objectives

- Determine whether the solution gas flaring reduction targets for 2000 and 2001 have been met.
- Determine, based on improved information, firm future reduction targets, time lines and threshold volumes for solution gas flaring.
- Evaluate the royalty treatment of flared and vented gas and cost sharing programs and their implication for achieving future reduction targets.
- Evaluate the approval process and determine if fixed term approvals are required.
- Review performance requirements and efficiency standards, and determine the feasibility of combustion efficiency standards for all flares.
- Assess research findings and their implication for management of flaring and venting.
- Review information on gas venting and mitigation approaches and recommend a venting management framework, including short-term actions and long-term strategies.
- Review and develop recommendations with regard to EUB Guide 60, and Guide 60 Updates and Clarifications document.
- Develop recommendations for a strategy to respond to the issues associated with flaring and venting.
- Review information and develop recommendations for the regulation of flaring and venting associated with coal bed methane/natural gas from coal development.

Report for 2004

Building on its successful management framework, the team presented 47 new recommendations to the CASA board to address a broader range of flaring and gas venting issues in Alberta. Based on the evaluation of 2002 reduction targets and analysis of relevant data from the Alberta Energy and Utilities Board, the team also thought it was timely and appropriate to set volume thresholds on flaring and venting. Effective January 1, 2006, it is recommended that solution gas flaring or venting at well sites that emit volumes greater than 900 m3 per day be subject to tougher criteria in evaluating the feasibility of conservation.

Other recommendations include a cumulative time limit on well test flaring of 120 hours per well zone and the establishment of a program to collect data on well test flaring across the province to determine a limit after January 1, 2006.

The team also proposed further restrictions on flaring sites that emit more than 900 m3 per day and are closer than 500 metres to a residence, as well as recommending that a best practices guide be developed for solution gas vents that are of similar size and location. The team also recommended that a best practices guide be developed for reducing fugitive emissions.

When implemented, the latest recommendations are expected to produce a 78 per cent reduction in flaring from the 1996 levels, and more than a 70 per cent reduction in venting from the baseline year of 2000. The team will reconvene to review the framework in the first quarter of 2007.

Greenhouse gas allocation subgroup

Mandate

To recommend:

1. A greenhouse gas emissions reduction target or approach for the thermal generation sector;
2. If and how renewables (which includes alternative energy), energy efficiency and conservation, and the new coal unit natural gas combined cycle offset requirement would be part of the greenhouse gas reduction target or approach;
3. How the target would be allocated between coal and gas-fired electricity emission intensity;
4. Whether emissions from cogeneration are included in the target and, if so, how the emissions would be allocated between the host (steam) and power (electricity); and
5. Offset credit details and criteria if offsets are part of the target or the approach.

Report for 2004

The CASA Electricity Project Team (EPT) submitted its final report to the CASA board in November 2003, but was unable to complete its work in the area of greenhouse gases due to the complexity of the issues and the evolving climate change policy landscape in Canada and internationally. The Greenhouse Gas Allocation Subgroup was formed to continue the analysis and recommend an approach for reducing greenhouse gas emissions from Alberta's electricity sector.

The subgroup developed a conceptual framework that can achieve meaningful reductions in greenhouse gas emissions intensity in the 2010 timeframe and further, more significant reductions in the long term to 2020 and beyond. It consists of a flexible range of compliance tools, including options for industry, and reviews every five years to allow for ongoing adjustments to reflect any future external developments and changing policy objectives.

In June 2004, the CASA board approved the conceptual framework conditional on future satisfactory resolution of all integral framework elements, and on government strategies and approaches continuing to develop within the current range of stakeholder understanding. The subgroup recognized that greater certainty is required in the national and international policy environment before substantial further progress can occur, but that there is potentially a role for CASA to play when that time comes.

More information is available on the Electricity Project Web site at **http://casa-electricity.org**.

Priority setting workshop

As part of its mandate, Alberta Environment develops and reviews ambient air quality objectives. Based on the success and feedback from the first priority-setting workshop held in 2000, the department again requested CASA's assistance. The purpose of the 2004 priority setting workshop was to provide input to Alberta Environment on priority substances for which ambient air quality objectives should be developed, or existing objectives reviewed. Participants agreed on a priority list of seven substances: nitrogen oxides, benzene, benzo-a-pyrene, naphthalene, formaldehyde, hydrogen fluoride and carbonyl sulphide. The workshop committee is considering this and other input from the workshop as it develops its recommendations, expected to be presented to the CASA board in early 2005.

Renewable and alternative energy

Goal

- Create recommendations to implement the renewable and alternative energy recommendations found in the 2003 report of the Electricity Project Team (EPT), with the aim of increasing the supply of renewable and alternative electrical energy in the province to meet the target of 3.5 per cent new renewable and alternative electrical energy, as defined in recommendation 58 of the EPT report, by January 1, 2008.

Objectives

1. Develop tools and mechanisms to facilitate meeting the target and to implement the renewable and alternative electrical energy recommendations as described in the EPT report.
2. Develop a renewable and alternative electrical energy target beyond 2008, with corresponding tools and mechanisms.
3. Develop cost effective approaches and programs that enable the development of renewable and alternative electrical energy.
4. Develop interim benchmarks and reporting for the period between the present and January 1, 2008 to determine if the target is achievable and allow for adjustments to ensure the target is reached.

Report for 2004

In 2004, the Renewable and Alternative Energy project team focused on implementation options, methods and mechanisms for ensuring the 3.5 per cent target is met. Team members had a variety of views on the suitability of different approaches, and the three sectors expended considerable effort to ensure the interests of their respective stakeholders were clearly articulated. Members agreed that development of renewable and alternative energy should be encouraged in Alberta. Various approaches were proposed, including voluntary and voluntary combined with regulatory backstop strategies, and team members were discussing potential options with their stakeholders at the end of the year.

The team made an interim report to the CASA board in September 2004 and expects to submit its final report to the board by mid-2005.

Implementation teams

Ambient monitoring operations steering committee

The Ambient Monitoring Operations Steering Committee (OSC) provides overall direction, tracks progress and makes budgetary decisions regarding the implementation of the provincial ambient air quality monitoring network.

Purpose

The OSC:

- Provides overall direction for the provincial ambient air quality monitoring network.
- Oversees the implementation of the ambient monitoring strategic plan.
- Sets an annual budget for and oversees the development of the CASA Data Warehouse located online at **http://casadata.org**.
- Revises the strategic plan as necessary.

Report for 2004

In Alberta, a comprehensive network of stations operated by Alberta Environment, airshed zones, Environment Canada and industry monitors air quality. Air quality data from almost 30 continuous (hourly) monitoring stations and close to 40 passive (monthly) monitoring stations is routinely provided to the CASA Data Warehouse every month from the following organizations: Alberta Environment, Environment Canada, Parkland Airshed Management Zone, Peace Airshed Zone Association, Strathcona Industrial Association, West Central Airshed Society, and Wood Buffalo Environmental Association. The data warehouse contains historical data back to 1989 from AENV stations. Some data collected by non-continuous methods such as particulate data and air toxics data has recently been added to the data warehouse.

The monitoring network proposed in the 1995 Strategic Plan for Air Quality Monitoring in Alberta moved from being 31 per cent complete in 1994 to 48 per cent complete in 2004, through the combined efforts of the province and airshed zones.

The OSC successfully presented a Statement of Opportunity to the CASA board that resulted in the formation of a new team. The mandate of this team is to revise and update the 1995 "Strategic Plan for Air Quality Monitoring in Alberta" and develop an implementation plan.

The online CASA data warehouse provides timely, accurate and comprehensive information about air quality in Alberta and has proven to be a valuable tool for a wide range of data users. More information is available on the CASA data warehouse Web site at **http://casadata.org**.

Human and animal health

Purpose

- Provide a plan for implementation of the recommendations from the Human Health Project Team and the recommendations from the Animal Health Project Team.
- Successfully complete specific objectives.

Objectives

- Review and provide an implementation plan for the recommendations from the Human Health Project Team and support the implementation of the plan as appropriate.
- Provide an implementation plan for the recommendations from the Animal Health Project Team and support the implementation of the plan as appropriate.
- Identify emerging issues in the area of air emissions and their effects on human and animal health.
- Organize a workshop(s) to disseminate information about the Herd and Environmental Record System (HERS).
- Receive information about current and future research in the areas of human and animal health.
- Make recommendations to the CASA board to address emerging issues and research.
- Provide information support to other project teams.
- Periodically evaluate, review and make any needed changes to the Herd and Environmental Record System and the Community Monitoring Brochure.
- Ensure adequate and appropriate communication with all stakeholders.

Report for 2004

The CASA board approved the terms of reference for this team in March 2004. The team has focused its efforts this year on staying abreast of related developments in the human and animal health fields and on monitoring the implementation of recommendations from the CASA human health and from the animal health project teams. Specifically, Alberta Health and Wellness has provided regular information to the team on implementation of the human health effects recommendation and its various components. The team has also endeavored to stay apprised of the activities of other CASA project teams and any implications their work might have for human or animal health. Near the end of 2004, the team examined avenues for wider distribution of the two versions of HERS.

Vehicle emissions

Goal

Recommend initiatives to reduce vehicle emissions and support the CASA vision of clean air.

Objectives

- Identify, evaluate and recommend areas of further action to reduce vehicle emissions.
- Implement initiatives approved by the CASA board of directors.
- Influence/advocate implementation of policies and programs that reduce transportation emissions.
- Serve as a resource and give expertise to CASA teams and other organizations.
- Identify and recommend communication/public education on vehicle emissions.
- Identify gaps and make recommendations to fill gaps.

Report for 2004

The vehicle emissions team continues to make substantial progress in meeting its goals to pilot, monitor and evaluate vehicle emission reduction initiatives approved by the CASA board of directors. Although the core vehicle emissions team (VET) remains focused on emission reductions from passenger vehicles in major urban areas, the nature of the team's work has evolved and now includes three different projects by members of two sub-groups.

Diesel particulate filter project

Two diesel-powered Edmonton Transit Service buses were retrofitted with diesel particulate filter emission reduction devices to test filter effectiveness in cold climates while the buses operated as part of the regular fleet. The project, which ran from January 2003 to January 2004 yielded reductions in total hydrocarbons of 51-87 per cent, reductions in carbon monoxide of 67-89 per cent, and reductions in total particulate matter of 60-75 per cent. The filters performed effectively even in the very cold weather experienced during the test period. The VET will make recommendations to the CASA board in 2005 based on these results. More information is available at **http://CleanBus.ca**.

Employer-based transportation demand management (TDM)

Using the findings from a report it commissioned on opportunities to reduce vehicle emissions through employer-based TDM measures in the major urban regions of Alberta, the VET developed and recommended four strategies, which were approved by the CASA board. Among other things, the recommendations will encourage employers in urban municipalities, particularly Calgary and Edmonton, to report on existing TDM programs and to consider establishing new ones.

Off Road Big Industrial Truck Project (ORBIT)

Off-road heavy equipment is an important source of emissions in major developments such as mining and oil sands operations. A sub-group is now looking at the best way to gather information and determine a path forward on this issue.

CASA board committees

Communications Committee

Goals

1. Increase and maintain stakeholder awareness, understanding, support for, engagement, and commitment to the CASA process and vision.
2. Increase individual Albertans' awareness, understanding, support for, engagement, and commitment to the CASA process and vision.
3. Move toward influencing individual Albertans' decisions and behaviours related to air quality, in support of the CASA vision.

Objectives

1. Develop a clearly defined communications framework, priorities, and plans that sustain stakeholder involvement in order to:
   - Foster ongoing support and commitment to CASA's vision and process.
   - Foster effective communications among project teams.
   - Communicate project teamwork and results to stakeholders and individual Albertans.
2. Ensure ongoing evaluation of progress in relation to the communications framework, priorities and plans, and report regularly to the CASA board of directors.
3. Bring together stakeholder organizations involved in education and outreach related to air quality management in order to leverage, focus and amplify efforts to influence individual Albertans' behaviours.

Report for 2004

In support of its education and outreach objective, the committee undertook an online survey in partnership with Alberta Environment, and also organized and held a workshop to obtain input from organizations actively involved with air quality education and outreach initiatives in Alberta. The purpose of the workshop was to identify opportunities for education and outreach activities that could be undertaken collaboratively. Results from the survey and the workshop will be used to prepare a report and recommendations to the board in early 2005.

The second major focus for the Communications Committee was developing and implementing a plan to commemorate CASA's tenth anniversary. CASA's 10th anniversary was an opportunity to thank our stakeholders for their continuing commitment to the CASA process and the people that support our stakeholders behind-the-scenes. A key product was an attractive and succinct one-page summary of ten CASA successes in ten years. Tenth anniversary celebrations culminated in a banquet the evening before the November 2004 board meeting.

To measure how well Albertans recognize CASA's accomplishments the communications committee worked with the performance measures subcommittee to create and calculate indicators for CASA's organizational degree of recognition performance measure. There are three indicators based on media coverage and another based on CASA Web site usage. The results for the performance indicators are available in the Measuring CASA performance section of this annual report.

Membership on the Communications Committee expanded in 2004 and all three sectors of CASA are well and ably represented.

Executive committee

The executive committee is composed of four positions; the president, two vice-presidents, and the secretary-treasurer. Members from each sector (government, industry and non-government organizations) are represented on the executive committee.

The members of the executive committee were:

Ron Hicks, president*
Representing the government sector

Tom Marr-Laing, vice-president
Representing the non-government organization sector

Dave Byler, vice-president
Representing the industry sector

Donna Tingley, secretary-treasurer
Executive director of CASA

* In late November, Ron Hicks was made Deputy Minister of Executive Council and stepped down as CASA president at that time.

Performance measures

Objectives

- To define one or more appropriate performance indicator(s) for each of five numbered performance measures.
- To develop a plan for obtaining a baseline for each indicator and calculate the indicator.
- To assess progress by comparing the current value of the indicator with the baseline.
- To report to the CASA board on performance.

Report for 2004

The subcommittee developed a human health monitoring indicator for performance measure #2 (capability to measure effects), which was approved by the board. This will be an interim indicator, as the subcommittee intends to develop another, more comprehensive, human health monitoring indicator.

The subcommittee also presented the results of its work on the four indicators for performance measure #5 (degree of recognition) for 2003 to the board, and these results were accepted and endorsed by the board.

All five of CASA's performance indicators were calculated to the most recent year for which data are available, and they show a general improvement across the board. The subcommittee presented a detailed report to the board in September, as well as a methodology report on the CASA performance measuring process.

The results for all the performance indicators are available in the Measuring CASA performance section of this annual report.

Implementation progress reports

Data issues

The final report of the Data Issues Group was approved by the CASA board in March 2003. It contained a list of 46 prioritized actions, which if implemented, would resolve outstanding data gaps and issues identified by CASA teams and air quality forums prior to 2001. In March 2004, the implementers prepared a progress report on the 46 actions, advising the CASA board that nine of the 46 actions had been completed; some progress had been made on 32 actions; no progress had occurred on three; and two actions had not yet been started. A progress report will be provided annually to the CASA board.

Progress report on pollution prevention and continuous improvement

One of the four key focus areas in CASA's business plan is pollution prevention/continuous improvement (P2/CI). A P2/CI approach has potential to produce desirable environmental outcomes beyond what can be achieved through regulation. In June 2002, the board approved the recommendations of the CASA P2/CI project team, and added a requirement that implementation progress of the recommendations be reviewed and reported on two years later (June 2004).

Stakeholders were asked in March 2004 to provide a short report describing their progress in implementing the recommendations directed to them in 2002. Five of the 20 recommendations have been completed and substantial actions have been implemented for 13 of the recommendations. The progress report provides a valuable snapshot of stakeholders' efforts to pursue P2/CI initiatives. The breadth and extent of P2/CI activities listed is an encouraging record of action. A report will be prepared for the CASA board in 2006 on further progress in implementing the recommendations in the 2002 report.

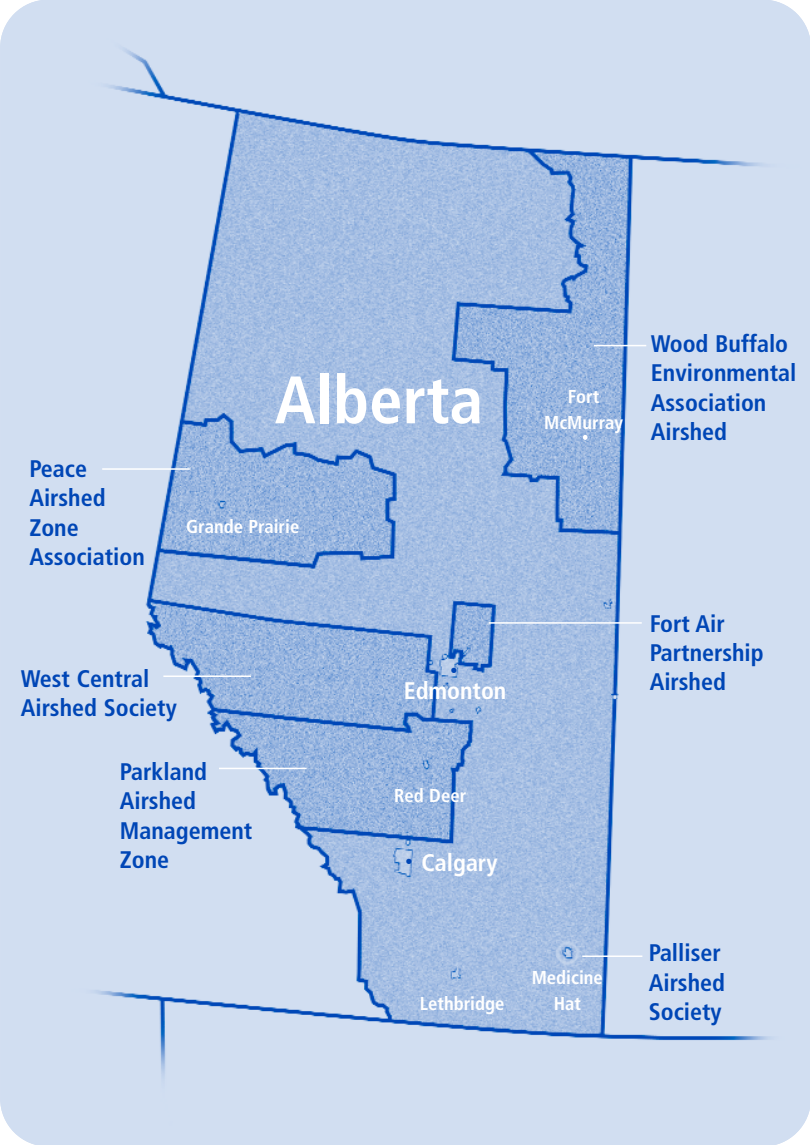
For more on P2/CI, visit the CASA Web site P2/CI section at **http://casahome.org/for_albertans/P2CI/index.asp**.

Airshed zones

Airshed zones are established by local stakeholders to deal with air quality issues in a specific region. CASA provides the framework within which an airshed zone functions but each operates independently from CASA as a non-profit society. Airshed zones are consensus-based and support the CASA vision.

Passive and/or continuous ambient air quality monitoring is conducted in each airshed zone and is funded by the partners in the airshed zone.

In 2004, six airshed zones were operating in Alberta. Interest in forming new zones has been expressed in the Cold Lake area, the Edmonton-Wabamun area, the Calgary/Bow Valley corridor, and the Lethbridge region.



Reports from CASA airshed zones

Fort airshed

During 2004, the Fort Air Partnership continued to empower the community with timely, accurate and reliable information so that they can make appropriate choices and decisions about managing their air quality and its impacts on human health. The data collected also allows industry, Alberta Environment and Capital Health to better manage air quality within the region. By making air quality information accessible, the group also helps to ensure accountability for air quality emissions that may impact public health.

Myra Moore became the Fort Air Partnership's executive director, effective January 5, 2004. Her solid scientific background, strong interpersonal skills and her management abilities are proving to be invaluable to the organization.

Early In 2004, the Fort Air Partnership released its first-ever annual report, which contained information on: accomplishments and challenges in 2003, air quality monitoring results, air quality and human health, financial statements, members, funders and more. The organization also continued distributing community reports, which provide an overview of air quality in our airshed zone and much more, on a semi-annual basis.

During 2004, the Fort Air Partnership began partnering with the Sturgeon Creek Post, a local weekly newspaper, to provide residents with weekly air quality reports, which rate the air as good, fair, or poor using Alberta Environment's air quality index, and provide some explanatory narrative.

On June 14 and 15, 117 local motorists found out how their vehicles were performing environmentally during the no fees, no fines Let's Drive Green vehicle emissions clinic co-sponsored by the Fort Air Partnership and the City of Fort Saskatchewan.

On August 9, the Fort Air Partnership linked the last of its eight air monitoring stations (Elk Island National Park) to its Web site at **http://fortair.org**, making data from it publicly available.

During the summer, the Fort Air Partnership produced a resource binder on air quality and human health. Early in the fall, copies of the binder were provided to 25 libraries in the region, including all schools that offer the junior high school curriculum to support local school systems in linking air quality and air quality monitoring to the approved Alberta program of studies.

Fort Saskatchewan and area residents will get a more complete understanding of the quality of their air as a result of a one-year program to monitor volatile organic compounds (VOC). The program - a joint project of the Fort Air Partnership and Environment Canada – began in September 2004. The monthly monitoring results are being made available to residents, government and industry through local and regional media and via the Fort Air Partnership website.

The Fort Air Partnership was a finalist in the leadership category of Capital Health's 2004 Prevention Power Community Awards. These awards recognize the individuals, teams and organizations who contribute significantly to health promotion and disease and injury prevention in their communities.

Palliser airshed

The Palliser Airshed successfully completed its first year of operations. The society operates one continuous air monitoring station and six passive stations. The airshed boundaries include the City of Medicine Hat and the Town of Redcliff. The monitoring program has provided some interesting information regarding nitrogen oxides (NO_X) concentrations. Previous to the monitoring program, modeled predictions showed some high NO_X potential in the Medicine Hat area; data collected to date indicate concentrations much lower than those modeled. Palliser air quality has been found to be consistently well under government guidelines.

The Palliser monitoring program continues to evolve with expectations to include additional analyzers in 2005. The goal is to have the ability to provide an air quality index. Indexing will go a long way to enhance the communication plan.

Parkland airshed

2004 marked the sixth year of operation of the Parkland Airshed Management Zone Association's (PAMZ) regional air quality monitoring (AQM) program. Data collected by the program is providing a better understanding of air quality and long-term trends in the region and is being used in the development and evaluation of strategies that address priority zone-wide air quality issues. Passive monitoring data collected by the program generally indicate average regional sulphur dioxide (SO_2) levels are now a third of what they were when the program began in 1999. These results support the effectiveness of the strategies employed to reduce flaring volumes throughout the region and the efficiency improvements made to several large gas processing plants located within the zone.

Throughout the year monitoring capability was added to the Raven Portable AQM Station, including analyzers for nitrogen oxides (NO_X) and total hydrocarbons (THC). In 2004, this station was used primarily to help build a geographical air quality database for the zone especially for medium-sized towns where historically there has been no air quality monitoring. In 2004, the residents of Rocky Mountain House, Innisfail and Sundre all benefited from a better understanding of the air quality in their communities. In the summer a prospective regional background site was established and operated at a picturesque site on Limestone Mountain, in the West Country approximately fifty-five km northwest of Sundre.

In May, a public meeting to identify possible locations for the PAMZ Peregrine Air Quality Monitoring Station for 2005 was held in Crossfield. The five locations chosen, based on input received at this meeting were Acme, Bentley, James River, Gasoline Alley, and Malmo.

In June, PAMZ again hosted a two-day Environment Canada "Let's Drive Green" Vehicle Emissions Inspection Clinic in Red Deer at the Bower Mall Shopping Center. The event was even more successful than the previous year with 283 vehicles tested and a pass rate of 83 per cent.

July marked the conclusion of the ozone research monitoring program conducted at the Harlech Station located northeast of Nordegg that had first begun in December 2001. The program had grown and evolved into a successful partnership between PAMZ, Environment Canada, the Saskatchewan Research Council and Alberta Environment. Environment Canada is now reviewing the data collected by the program and a summary report of their findings is expected in the near future.

Throughout the year PAMZ continued to work with Alberta Health and Wellness and the David Thompson Health Region on the design and development of a community exposure and health effects assessment program for portions of Clearwater and Mountain View Counties, an area with a significant amount of oil and gas development and long-standing concerns about the effects of air quality on human health. Significant progress was made with the collection of seed funding and finalization of the design and the study boundaries. Implementation of the program is now planned for late 2005.

During 2004, PAMZ continued its series of public presentations to raise public awareness and knowledge of air quality issues including flaring and venting, new and emerging sulphur recovery technologies, the CASA electricity emissions management framework and financial incentives for corporations to reduce greenhouse gas emissions.

Peace airshed

2004 was an important year for the Peace Airshed Zone Association (PASZA) with the start-up of the continuous portion of its regional air quality monitoring (AQM) program.

Early in January, the continuous program's first AQM station was installed in the scenic Muskoseepi Park located in Grande Prairie. The station is dedicated to the memory of Henry Pirker (1929-2003) a lifelong environmentalist, apiarist and resident of the Debolt area. Henry made important contributions to PASZA in its formative years and to other organizations, including CASA, all with the common goal of improving air quality. A very moving and well-attended dedication ceremony was held at the station on a blustery day in March.

The Henry Pirker station continuously monitors Grande Prairie's air quality by measuring concentrations of five pollutants: carbon monoxide, fine particulate matter, nitrogen dioxide, ozone and sulphur dioxide. From these measurements an hourly air quality index (AQI) is calculated and published on the PASZA Web site at **http://pasza.ca**. The AQI provides Grande Prairie residents with an indication of their air quality that is simple and easy to understand.

The Henry Pirker Station is also an important part of the provincial monitoring network feeding data into the CASA Data Warehouse at **http://casadata.org** so that air quality issues can be better understood and addressed at a broader provincial level. In the near future the Henry Pirker Station will also be tied into the National Air Pollution Surveillance System so that its data can be used by this network to better understand national issues such as climate change, trans-boundary pollution and ground-level ozone.

Early in the year, sixteen member facilities received amendments to their Alberta Environment operating approvals that recognized their participation in the passive monitoring portion of the PASZA regional AQM program.

Throughout the spring of 2004, work continued on the finalization of the design and implementation plan for the remainder of the PASZA continuous AQM program. Data collected by PASZA's forty-three station passive AQM network has proven especially useful in choosing locations for four of the five additional continuous stations planned for deployment from 2005 through 2007. This work was completed by the PASZA technical committee in June and in July; a new joint application was made to amend the operating approvals of eight member facilities based on the implementation of the continuous program.

At the close of the year the majority of the application's participants had received their approved amendments with the remainder expected in early 2005. Work had also begun on the preparation of two continuous monitoring sites, one located just southeast of Grande Prairie and the other in the Smokey Heights area of the zone approximately 45 km northeast of Grande Prairie.

Communication with the public is a fundamental principle of the association and to this end PASZA participated in several community events and locally held trade-fairs including the Communities in Bloom Showcase in July and the Northern Care Conference in early September.

West central airshed

2004 has been a year of growth and challenge for the air monitoring program and a year of completion of our agriculture bio-monitoring study.

We have added continuous monitoring stations in Hinton, Genesee, Wabamun, Sundance Beach, Keephills and Edson. A portable station was also added to the continuous monitoring program.

The additional data received improves our ability to understand the air quality in the region. Monitoring in the urban centers will provide a new dimension of monitoring. The portable station will allow us to fill in any data gaps that might be identified in the region. West Central Airshed Society (WCAS) staff has managed to implement all the changes and still keep the "up time" for all equipment at 98 per cent up.

A passive monitoring grid has been implemented between Wabamun, Genesee and Edmonton. These monitors provide a better understanding of the quantity of sulphur dioxide (SO_2), nitrogen oxides (NO_X) and ozone coming from the Edmonton region as

well as an understanding of what is moving to the city from the airshed.

Our expanded air monitoring program has included monitoring for mercury and metals analysis of fine particulates. Our acid deposition program has been expanded into the Genesee station with monthly samples collected by an annular denuder.

This year WCAS commissioned a study of ambient ozone concentrations. Dr. Warren Kindzierski along with a graduate student from the University of Alberta will be conducting the study and its completion is anticipated for early 2005.

Our biggest challenge this year is with our Hightower station. This station is located on a ridge sixty-five kilometers north of Hinton. Its purpose has been to provide data on air moving in from British Columbia and is located in the most undisturbed area of the region.

Data collected has been used to compare to the more populated areas of the region. Alberta Environment, Environment Canada and other airsheds have relied on Hightower for background data for several years. This year the power provider advised WCAS of an increase in power costs from twelve hundred dollars per year to thirty-five thousand dollars per year. WCAS decommissioned Hightower at the end of September. Alternate power sources and new locations have been under review. A final determination of the Hightower station will be made in 2005.

For several years WCAS has funded an agriculture study on "Crop responses to air quality in the west central region of Alberta." The report by Dr. Sagar Krupa of the University of Minnesota was presented to the WCAS board in March. Dr. Krupa's report is available on the WCAS website at **http://wcas.ca**. The report shows a correlation of crop response to air quality and suggests more work is to be done before more accurate predictions can be made. WCAS plans to continue with the agriculture program after a re-evaluation of the program. Expanding the program into the Genesee area will be part of the agriculture program review.

Communications continue to be a large part of the WCAS initiative. With the inclusion of urban stations into the network, local radio stations have agreed to WCAS data for their weather reports. With some additional equipment and the possibility that one of the urban stations will be designated a National Air Pollution Surveillance System station, it will be possible to provide the public with real time air quality index information.

Wood Buffalo airshed

The Wood Buffalo Environmental Association (WBEA) is a community-driven, environmental, non-profit organization dedicated to the operation of state-of-the-art environmental monitoring programs. We monitor and communicate information on air quality and air-related environmental impacts in the Wood Buffalo region.

In the mid 1980's the community of Fort McKay expressed concerns about the natural environment and the impacts of oil sands development on those living and working in the Athabasca Oil Sands region - momentum for effective environmental monitoring began to build. Today, our organization continues to evolve. We are actively engaged in developing and operating an adaptive ambient air monitoring network in the Regional Municipality of Wood Buffalo located at the northeast corner of Alberta.

The WBEA ambient air monitoring network and terrestrial environmental effects monitoring program collect scientifically credible data related to human and ecosystem health and report it to the public at large. Our human exposure monitoring program is now monitoring exposure to airborne emissions at the individual level. WBEA's communications committee is proactively involved in informing and educating the public about our monitoring activities, programs, and related issues.

WBEA's activities currently fall within four core operational areas: 1) Monitoring environmental quality, 2) focused investigation, data and information gathering, 3) communicating information on environmental quality, and 4) collaborative environmental decision making and action.

Monitoring environmental quality

Ambient air monitoring

WBEA's ambient air monitoring operations have continued uninterrupted since the transition to a new contractor at the beginning of the year. Our network has been upgraded with the purchase of capital equipment in the form of new instrumentation,

wind sensors (to provide a more reliable data flow and increase longevity) and the purchase of a new calibration unit to improve data reliability. Ongoing maintenance of our passive network has included consideration of a possible expansion in monitoring locations.

Successful capital equipment and Alberta Environment audits and a current independent data review have contributed to WBEA's goals of maintaining regulatory compliance and continuous improvement in data reliability.

Terrestrial environmental effects monitoring (TEEM) program

TEEM's 2004 field season has yielded the successful gathering of lichen and acidification data. TEEM's enhanced communication materials were well received at a December open house event held in the community of Fort McKay.

Ongoing challenges in reconciling divergent approaches to the monitoring of eutrophication (waters rich in mineral and organic nutrients that promote a proliferation of plant life) and gaseous effects are producing new innovations. Members are now examining ways of effectively addressing enhanced access to independent scientific advice.

Human exposure monitoring (HEMP) program

Considerable hard work and preparation in previous years, coupled with the steadfast efforts of the committee during the year resulted in the HEMP program entering its operational phase in 2004. Community presentations and the recruitment of volunteers in the communities of Fort McMurray and Fort Chipewyan have been completed and have paved the way for monitoring now underway in 2005.

Focused investigation, data and information gathering

Ongoing reviews of intermittent data and metals issues combined with the implementation of a new VOC program are contributing to fulfilling WBEA's mandate of providing timely and relevant monitoring services. TEEM's efforts at consensus building are leading to new ways of achieving the above objectives through its various programs.

Communicating information on environmental quality

WBEA's 2004 operating year has seen the revitalization of the association's communications activities. Our annual report has been reformatted. A successful photo competition and calendar along with enhanced print and radio exposure, school presentations, and participation in the municipality's Science Fest have contributed to raising the association's local profile. Air Quality Index (AQI) links to Alberta Environment's Web site have been restored and provide a graphic representation of WBEA data on the Internet. An enhanced tradeshow presence and the initiation of joint community open houses along with the Cumulative Environmental Management Association (CEMA) and regional aquatics monitoring program (RAMP) have served to strengthen links between WBEA and the communities and between ourselves and these and other regional organizations.

Collaborative environmental decision-making and action

WBEA and its committees continue to provide a forum for collaborative environmental decision making and action among regional members and stakeholders. Discussions have been initiated with CEMA on how best to develop a workable protocol for the handling of requests for work between the two entities. We are now considering ways in which we can incorporate a wealth of local traditional environmental knowledge within our organization and its future monitoring operations.

Organizational imperatives

The above highlights are linked to three organizational imperatives identified prior to the commencement of the 2004 operating year. These are: 1)strategic planning, 2)human resources, and 3) communications.

Strategic planning

Strategic planning activities have been re-initiated during the year with the completion of a board development session in the fourth quarter of 2004. Roles and responsibilities have been clearly outlined and the WBEA governance committee has been empowered in its role of providing strategic direction. This process is scheduled to continue in 2005.

Human resources

WBEA's restructuring at the staff level has resulted in revitalised communications and HEMP operations, enhanced data reporting and documentation, and improved bookkeeping and reporting. Highly productive WBEA team building sessions were held during 2004 and human resource procedures were also developed during the year.

Communications

Enhanced internal reporting procedures were implemented during the period. For details on external communications, refer to the previous communicating information on environmental quality section.

Funding

The core operations of CASA are supported by equal financial contributions from Alberta Environment, Alberta Health and Wellness, and Alberta Energy. Industry, government and non-government organizations provide additional funding and in-kind support for CASA teams and in-kind support and funding for the airsheds.

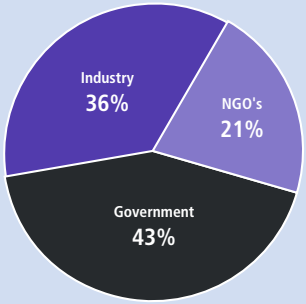
CASA has tried to put an actual dollar figure on the support and assistance provided by each sector. The figures are compiled by examining time and travel costs, as well as cash and in-kind contributions and almost certainly under-record and under-estimate the actual value of stakeholder contributions.

These figures are offered in the spirit of acknowledging and recognizing participant involvement.

CASA teams

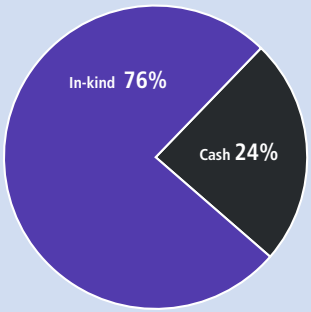
Cash and in kind contributions by sector:

Industry:	$ 429,262
Government:	$ 523,425
Non-government organizations:	$ 249,075
Combined:	**$ 1,201,762**



Total cash and in kind contributions:

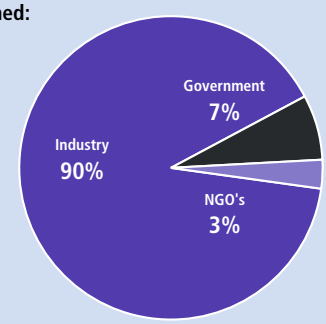
In kind:	$ 918,762
Cash:	$ 279,400
Combined:	**$ 1,201,762**



Airsheds

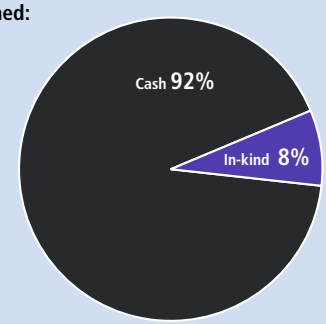
Cash and in kind contributions by sector:

Industry:	$ 4,934,275
Government:	$ 355,976
Non-government organizations:	$ 138,900
Combined:	**$ 5,429,151**



Total cash and in kind contributions:

In kind:	$ 444,300
Cash:	$ 4,984,851
Combined:	**$ 5,429,151**



The airshed figures are provided by the following organizations: ■ Fort Air Partnership Association ■ Palliser Airshed Society ■ Parkland Airshed Management Zone Association ■ Peace Airshed Zone Association ■ West Central Airshed Society ■ Wood Buffalo Environmental Association.

The people

The following 222 people have given their time, effort, goodwill and expertise in the pursuit of the CASA vision. A profound thank you goes out to all our stakeholders and the organizations with which they are affiliated.

Randy Angle
Janet Annesley
Dianne Atkins
Ron Axelson
David Axford
Justin Balko
Trent Bancarz
Keri Barringer
Larry Begoray
Tracy Bertsch
Peter Blackall
Laura Blair
Bill Bocock
Karina Bodo
Alex Bolton
Jim Bolton
Matthew Bower
Michael Brown
James Brown
Alan Brownlee
Dave Byler
Geraldine Byrne
Christine Byrne
Robert (Bob) Cameron
Mark Campbell
Harvie Campbell
Claude Chamberland
Denise Chang-Yen
Larry Charach
Cindy Chiasson
Ward Christensen
Julia Ciccaglione
Bill Clapperton
Simon Cobban
Jeff Cormier
Marilyn Craig
Roger Creasey
Jennifer Cummings
Jane Currie
Christina Davidson
Gur Dhaliwal

Patricia Dickson
Frans M.J.A. Diepstraten
Jim Dixon
Randy Dobko
Stephen Dobson
John Donner
Susan Dowse
John Drinkwater
Linda Duncan
Kim Eastlick
Gerry Ertel
Rob Falconer
Eric Flanagan
Jillian Flett
Shannon Flint
Alexandra Frison
Paris Fronimos
Long Fu
Darcy Garchinski
Pat Garvin
Dave Geake
Ed Gibbons
Greg Gilbertson
Brian Gilliland
Tim Goos
David Graham
Geoff Granville
Mary Griffiths
Kevin Gunn
Jim Guthrie
Bart Guyon
Lenore Harris
Howaida Hassan
Karen Haugen-Kozyra
Bob Hearn
Doug Heath
Jill Hendren
Ron Hicks
Wayne Hillier
Nolan Hindmarsh
Milton Hommy

Gordon Howell
Theresa Howland
Bill Hume
Paul Hunt
Judy Huntley
Rick Hyndman
Les Johnston
Ila Johnston
Wayne Johnston
Peter Jones
Roy Kanten
Markus Kellerhals
Mike Kelly
Joe Kendall
Wayne Kenefick
Myles Kitagawa
Simon Knight
Phyllis Kobasiuk
Brent Korobanik
Barbra Korol
Joe Kostler
Martha Kostuch
Patrick Kyle
Bevan Laing
Brent Lakeman
Kirk Lamb
Frank Letchford
David Lewin
Satwant Lota
Wendy Lyka
Grace MacGregor
Glenn MacIntyre
Alexander MacKenzie
Doug MacLeod
Ken Mallett
Tom Marr-Laing
David McCoy
Kristen McKell
Laura McLeod
Sandra McMillan
Lynn McNeil

Sonja Mihelcic
Brian Mitchell
Russell Miyagawa
Myra Moore
Al Morin
Larry Morrison
Penny Mosmann
Bettina Mueller
George Murphy
Keith Murray
Bob Myrick
Carol Newman
Steve O'Gorman
Ken Omotani
Bob Page
John Parr
Bob Patrick
Rick Paul
Mike Pawlicki
Ian Peace
Janet Peace
Bill Peel
Roxanne Pettipas
George Pfaff
Bob Piro
Albert Poulette
Steven Probert
Keith Purves
Mike Queenan
Barry Ranger
Dwight Redden
Scott Rempel
Doreen Rempel
Terry Rendflesh
John Rilett
Greg Ritz
Jonathan Robb
Mark Roedel
Jesse Row
Kim Royal
Jagtar Sandhu

Ron Schafer
Lawrence Schmidt
Al Schulz
Herman Schwenk
Kevin Scoble
Bob Scotten
Morris Seiferling
Chris Severson-Baker
Doug Shaigec
Nashina Shariff
Neil Shelly
Mitch Shier
Rob Shymanski
Song Sit
Richard Slocomb
Colin Smigelski
Ralph Smith
Michael Smith
Jim Spangelo
David Spink
Ken Spinner
John Squarek
Roger Steele
Dennis Stefani
Ron Steffan
Dennis Stokes
Robert Stone
Ted Stoner
Lisa Strosher
David Swann
John Taggart
Karen Taguchi
Halyna Tataryn
Terence Taylor
Rob Taylor
Gloria Trimble
Ken Tsang
Reed Turner
Kerry Van Camp
Joyce Van Donkersgoed
Wil VandenBorn

Dan VanKeeken
Didem Varol
James Vaughan
B. J. (Brendan) Vickery
Jim Vollmershausen
Jan Volney
Brian Waddell
Sarah Waddington
Evelyn Walker
Kevin Warren
Don Wharton
Chris Whitehead
Brian Wiens
Raymond Wong
Brenda Woo
Ruth Yanor

Volunteers behind the scenes

A lot of effort is applied from those behind the scenes who support those who sit at the board or project team table. CASA is very grateful for the substantial and valuable contributions of time and expertise from those individuals who support their stakeholder representatives.

Thank you also to Laura Ferguson, CMA, and Pat Humphries who volunteered their time to assist with the administrative needs of CASA. Their contributions are truly appreciated.

The organizations

The following 97 organizations have offered financial and in-kind support to CASA. This support ensures the continuing success of CASA.

Alberta Agriculture, Food and Rural Development
Alberta Association of Municipal Districts & Counties
Alberta Beef Producers
Alberta Cattle Feeders' Association
Alberta Energy
Alberta Energy and Utilities Board
Alberta Environment
Alberta Farm Machinery Research Centre
Alberta Forest Products Association
Alberta Health and Wellness
Alberta Lung Association
Alberta Motor Association
Alberta Motor Transport Association
Alberta Transportation
Alberta Urban Municpalities Association
AltaLink
AMAROK Consulting
ATCO Electric
ATCO Gas
ATCO Power
Balancing Pool
Bert Riggall Environmental Foundation
BP Canada Energy Company
Building Owner & Managers Association of Edmonton
Calgary Health Region
Calpine Canada
Canada Mortgage and Housing Corporation
Canadian Association of Petroleum Producers
Canadian Chemical Producer's Association
Canadian Hydro Developers Inc.
Canadian Natural Resources Limited
Canadian Petroleum Products Institute
Canadian Society for Unconventional Gas
Capital Health
Citizens for Better Transit
City of Calgary
City of Edmonton
Climate Change Central
ConocoPhillips Canada
David Thompson Realth Region
Direct Energy Marketing Limited
Dow Chemical Canada Inc
Dr. Joyce Van Donkersgoed Veterinary Services Inc.
EnCana Corporation
Enervision
ENMAX Energy Corporation
Environment Canada
Environmental Law Centre
EPCOR
Fleetguard Emission Solutions
Focus
Fort Air Partnership
Graymont Limited
Health Canada
Heenan Blaikie LLP Lawyers
Howell Mayhew Engineering Inc.
Husky Oil Limited
Imperial Oil Resources
Inland Cement Limited
Intensive Livestock Working Group
Lafarge Canada Inc.
Lake Wabamun Enhancement & Protection Association
Luscar Ltd.
Mariah Energy Corp.
Mewassin Community Action Council
MGV Energy Inc.
National Farmers Union
Natural Resources Conservation Board
Nexen Marketing
Northern Forestry Centre
Northern Lights Health Region
NOVA Chemicals Corporation
Palliser Airshed Society
Parkland Airshed Management Association
Peace Airshed Zone Association
Pembina Institute
Petro-Canada
Prairie Acid Rain Coalition
Pristine Power Inc.
Red Deer River Naturalists
Residents for Accountability in Power Industry Development
Rocky Mountain House Community Health Centre
Rose Ridge Citizens
Shell Canada Limited
Sierra Club of Canada - Prairie Chapter
Small Explorers & Producers Association of Canada
South Peace Environmental Association
Suncor Energy Inc.
Toxics Watch Society of Alberta
TransAlta Corporation
TransCanada Pipelines Limited
Vision Quest Windelectric Inc.
West Central Airshed Society
Weyerhaeuser Company Ltd.
Wild Rose Agricultural Producers
Wood Buffalo Environmental Association

Financial Statements of The Clean Air Strategic Alliance Association, December 31, 2004

Auditor's Report

To the Members of
The Clean Air Strategic Alliance Association

We have audited the balance sheet of The Clean Air Strategic Alliance Association as at December 31, 2004 and the statements of revenue, expenditures and fund balances and cash flow for the year then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Association as at December 31, 2004 and the results of its operations and changes in its financial position for the year then ended in accordance with Canadian generally accepted accounting principles.

Chartered Accountants
February 2, 2005

Deloitte Touche

Deloitte & Touche LLP
2000 Manulife Place
10180 - 101 Street
Edmonton, Alberta T5J 4E4

Telephone: (780) 421-3611
Facsimile: (780) 421-3782
www.deloitte.ca

Balance sheet

Year ended December 31, 2004

	2004			2003
	Core	External Projects	Total	Total
Assets				
CURRENT				
Cash	$ 29,984	$ 165,267	$ 195,251	$ 231,412
Investments	600,000	110,000	710,000	836,000
Accrued interest	600	110	710	563
Accounts receivable	34,089	50,630	84,719	42,699
Interfund receivable (payable)	(5,447)	5,447	-	-
Prepaid expenses	3,212	-	3,212	2,658
	662,438	331,454	993,892	1,113,332
CAPITAL ASSETS (Note 3)	5,028	-	5,028	7,183
	$ 667,466	$ 331,454	$ 998,920	$ 1,120,515
Liabilities				
CURRENT				
Accounts payable	$ 40,628	$ 39,404	$ 80,032	$ 60,494
Deferred contributions (Note 4)	349,752	292,050	641,802	524,188
Due to National Climate Change Secretariat	-	-	-	269,222
	390,380	331,454	721,834	853,904
FUND BALANCES				
Board restricted	200,000	-	200,000	200,000
Unrestricted				
Invested in capital assets	5,028	-	5,028	7,183
Available for operations	72,058	-	72,058	59,428
	$ 667,466	$ 331,454	$ 998,920	$ 1,120,515

APPROVED BY THE BOARD

Peter Watson, director

Donna Tingley, director

Statement of revenue, expenditures and fund balances

Year ended December 31, 2004

	2004			2003
	Core	External Projects	Total	Total
REVENUE				
Grants	$ 743,610	$ 261,182	$ 1,004,792	$ 1,280,383
Interest	10,475	4,758	15,233	24,370
	754,085	265,940	1,020,025	1,304,753
EXPENSES				
Projects	309,572	-	309,572	496,920
Communications	100,370	-	100,370	82,554
External Projects	-	265,940	265,940	366,761
Board support	87,168	-	87,168	70,128
General and administrative	244,020	-	244,020	256,988
Statement of concern	2,480	-	2,480	15,201
	743,610	265,940	1,009,550	1,288,552
	10,475	-	10,475	16,201
NET REVENUE				
FUND BALANCE, BEGINNING OF YEAR	266,611	-	266,611	250,410
FUND BALANCE, END OF YEAR	$ 277,086	-	$ 277,086	$ 266,611

Statement of cash flow

Year ended December 31, 2004

	2004	2003
NET INFLOW (OUTFLOW) OF CASH RELATED TO THE FOLLOWING ACTIVITIES		
OPERATING ACTIVITIES		
Net revenues	$ **10,475**	$ 16,201
Add item not requiring an outlay of cash		
Depreciation	**2,155**	3,078
	12,630	19,279
(Increase) decrease in accrued interest	**(147)**	143
(Increase) decrease in accounts receivable	**(42,020)**	3,569
(Increase) decrease in prepaid expenses	**(554)**	190
Increase in accounts payable	**19,538**	43,503
(Increase) decrease in deferred contributions	**117,614**	(260,339)
(Decrease) increase in Due to National Climate Change Secretariat	**(269,222)**	269,222
(DECREASE) INCREASE IN CASH AND SHORT-TERM INVESTMENTS	**(162,161)**	75,567
CASH AND SHORT-TERM INVESTMENTS, BEGINNING OF YEAR	**1,067,412**	991,845
CASH AND SHORT-TERM INVESTMENTS, END OF YEAR	$ **905,251**	$ 1,067,412
REPRESENTED BY:		
Cash	$ **195,251**	$ 231,412
Treasury bills with maturities under 90 days	**710,000**	836,000
	$ **905,251**	$ 1,067,412

Notes to financial statements Year ended December 31, 2004

1. DESCRIPTION OF OPERATIONS

The Clean Air Strategic Alliance Association ("CASA") is a non-profit organization incorporated March 14, 1994 under the Societies Act of Alberta. The Association is comprised of members from three distinct stakeholder categories; industry, government and non-government organizations. The Association has been given shared responsibility by its members for strategic air quality planning, organizing and coordination of resources, and evaluation of results in Alberta. In support of these objectives, the Association receives cash funding from the Province of Alberta as well as cash and in-kind support from other members.

2. ACCOUNTING POLICIES

These financial statements have been prepared on a fund accounting basis using the deferral method of accounting in accordance with Canadian generally accepted accounting principles and include the following significant accounting policies:

Funds Maintained:

Core Project Fund:

Funds provided by governments together with interest earned are used to support general operations. The fund balance is an accumulation of interest earned. In 2000, the Board of Directors internally restricted the accumulation of this fund to $200,000 to pay necessary expenses in the event of the wind down of the Association. The unrestricted portion of this fund consists of:

- the undepreciated balance of capital assets entitled investment in capital assets; and
- the remainder of the fund entitled available for operations.

The change on the investment in capital assets represents the amount of depreciation recorded during the year.

External Projects Fund:

Funds provided by CASA stakeholders together with interest earned are raised and expended by project teams for specific purposes.

Cash and cash equivalents

Cash and cash equivalents consist of cash in bank and term deposits with original maturity dates not exceeding 90 days.

Capital assets

Capital assets are recorded at cost. Depreciation, which is based on the cost less the residual value over the useful life of the asset, is computed using the declining-balance method at the rates disclosed in Note 3.

2. ACCOUNTING POLICIES (continued)

Non-monetary support

Association members contribute non-monetary support including staff resources, meeting space and publication support. The value of this non-monetary support is not reflected in these financial statements.

Revenue recognition

Grants are recognized as income at an amount equal to expenses incurred. The net revenue for the year represents interest earned from funds on deposit computed on the accrual basis.

Use of estimates

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the recorded amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from these estimates.

Interest rate and credit risk

The Association is exposed to interest rate risk on interest earned from term deposits because the interest rate fluctuates with the prime rate. The Association is exposed to credit risk through accounts receivable. This risk is minimized as the core funding is received from governments and project funding is received prior to expenditures being incurred.

Fair value of financial instruments

TThe carrying amounts in the balance sheet of all financial assets and liabilities approximate the fair value due to the short-term maturities of these instruments.

3. CAPITAL ASSETS

	2004				2003
	Depreciation Rates	Cost	Accumulated Depreciation	Net Book Value	Net Book Value
Computer equipment	30%	$ 32,659	$ 27,892	$ 4,767	$ 6,811
Furniture and equipment	30%	4,419	4,158	261	372
		$ 37,078	$ 32,050	$ 5,028	$ 7,183

4. DEFERRED CONTRIBUTIONS

Core Fund:

During the period, the Association received grants totaling $816,875 (2003 - $758,751) from the Province of Alberta. The purpose of the grants is to provide core funding in support of the Association's objectives as described in Note 1. The regulations to the Department of the Environment Act, the Department of Energy Act and the Department of Health Act, under which the grants have been provided, specify that grants must either be used for the purposes specified in the grant, be used for different purposes if such different purposes are agreed to by the applicant and the respective Minister, or be returned to the Province. Accordingly, in the event that the Association does not utilize the funds in pursuit of its objectives, any unexpended grant monies remaining may have to be repaid to the Province of Alberta.

	2004	2003
Deferred core fund contributions, beginning of year	**$ 258,609**	$ 384,774
Grant monies received	**816,875**	758,751
Grants receivable	**-**	11,875
National Climate Change Secretariat investment income	**6,727**	-
Other funds received	**16,650**	-
Grant funds received allocated (to) from external projects	**(5,500)**	25,000
Revenue recorded based on allowable expenditures	**(743,609)**	(921,791)
Deferred core fund contributions, end of year	**$ 349,752**	$ 258,609

External Projects Fund:

Deferred external project contributions are comprised of monies received for specific external projects, which have not been expended for the purposes specified in the mandates of the projects.

	2004	2003
Deferred external project contributions, beginning of year	**$ 265,579**	$ 399,753
Grant monies received and interest earned	**286,911**	257,587
Grant funds received allocated from (to) core projects fund	**5,500**	(25,000)
Revenue recorded based on allowable expenditures	**(265,940)**	(366,761)
Deferred external project contributions, end of year	**$ 292,050**	$ 265,579

Cover photography by Rona Marak and Shannon Jacobi

CASA – celebrating 10 years

1994-2004

This annual report is recyclable and has been printed using vegetable-based inks.
The paper used contains a minimum of 10 per cent post-consumer fibre.

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CASA
Clean Air Strategic Alliance
10th anniversary 1994-2004