

# 2010 Science Poster Contest

The [Air and Waste Management Association](#) (A&WMA), in conjunction with the [Calgary Science Network](#) (CSN) and the [Calgary Region Airshed Zone](#) (CRAZ), is organizing a student poster contest for Grades 1 - 9 for the elementary and secondary schools in Calgary relating to the 2010 conference theme:

## “Energy and the Environment”

**Alberta Energy** (a Department within the Government of Alberta) is serving as the sponsor for this competition. The objective of the contest is to facilitate the continued understanding of Alberta’s energy resource development, the resource options available for development, the benefits and impacts of each energy resource option, and the importance of conserving energy. These are all important aspects for understanding Alberta’s energy future.

Contest entries will be judged within three grade groupings:

**Grades 1- 3**

**Grades 4 – 6**

**Grades 7 – 9**

Posters may be submitted on any topic that fits within the general theme of Energy and the Environment. Here are examples of possible topics that students may use or they may generate their own topic as long as it is related to the overall theme of Energy and the Environment.

### ***Generating Energy by Combustion (coal, oil, natural gas, wood, biomass, etc)***

Where do we find these resources, how where they formed? How are they extracted from the earth and turned into usable energy? What do we use them for? What are some of the impacts of generating energy by burning carbon? Describe the carbon cycle.

### ***Renewable Energy (Hydroelectricity, tidal power, wave power, wind power, solar energy, biomass, etc)***

Describe a possible form of renewable energy. What are the benefits of using renewable energy sources? Are there negative impacts of using renewable energy, e.g. building dams to generate hydroelectricity? What prevents us from generating more energy from renewable sources of energy?

### ***Impacts of energy generation and use (on plants and animals, climate, people’s health, heating our homes, transportation)***

Is it possible to balance our energy needs with protecting the environment? What are some of the negative and positive impacts? How do we change how we do things? What are the impacts on living things? Explain energy conservation and the benefits.

## Contest Information

**Size:** Not to exceed 65 cm by 92 cm (approximately 25" x 36").  
Entries must be in poster form; electronic submissions will not be accepted.

**Judging:** Judging will be based on relevance to the conference theme, presentation and information conveyed in the poster. A rubric is attached.

**Prizes:** Prizes will be awarded in each of the three grade levels.

1<sup>st</sup> \$400

2<sup>nd</sup> \$200

Prizes to 3 schools of top winning entries \$300

**Displays of Winning Posters:** Winning posters will be displayed at the Annual Conference of the Air and Waste Management Association held in Calgary from June 22 to June 25. Posters may also be published or displayed on the sponsoring organizations' web sites and in publications.

**Entry Deadline:** [May 17, 2010](#)

**Please submit poster contest entries to:**

**Calgary Board of Education Schools – University School, attention Calgary Science Network, 3035 Utah Drive N.W., Calgary, AB T2N 3Z9**

**Calgary Catholic School Board – (Science Poster Contest), St. Paul Centre, 124 - 24 Avenue NE, Calgary, AB T2E 1W6**

**Other schools – Attn: Eric Leavitt, 648 Parkvalley Road SE, Calgary, AB, T2J 4V8**

**Need more information?** Contact Kate Vasicek at (403) 297-3803 or Eric Leavitt at (403) 701-1796 or email [edleavitt@shaw.ca](mailto:edleavitt@shaw.ca).

### Contest Rules:

1. 1 entry per student – students may work in groups
2. All posters must be accompanied with an *Entry Form* and signed *Consent to Participate* from the student's parent or legal guardian.
3. Winners will be notified by their school.
4. Posters will not be returned.



CALGARY  
SCIENCE  
NETWORK



### Information about the conference and the associations

**ACE:** Annual Conference and Exhibition for the A&WMA. ACE2010 will feature a technical program of 500 speakers, hundreds of exhibitors displaying the latest in environmental technology and innovation, social and networking events and professional development courses taught by industry leading instructors. This year, the conference will be held in Calgary from June 22 to June 25.

**A&WMA:** The Air & Waste Management Association is a nonprofit, nonpartisan professional organization that enhances knowledge and expertise by providing a neutral forum for information exchange, professional development, networking opportunities, public education, and outreach to more than 8000 environmental professionals in 65 countries. A&WMA also promotes global environmental responsibility and increases the effectiveness of organizations to make critical decisions that benefit society.

**CSN:** The Calgary Science Network seeks to increase science literacy by providing interactive science experiences that support the Alberta curriculum. Their role is to provide leadership in science outreach, and with its many partners, volunteers and donors, facilitate teacher access to resources and best practices.

**CRAZ:** The Calgary Region Airshed Zone is a multi-stakeholder non-profit organization consisting of industry, local governments, environmental non-government organizations, Alberta Environment, Alberta Energy Resources Conservation Board, Alberta Health Services and members of the public. CRAZ's mission is to monitor, analyze and provide information on air quality and develop strategies to manage air quality issues within the region. The region covers a 32,000 kilometer area and has the largest population bases of all Airshed Zones in Alberta.

**Sponsor:** Alberta Energy, on behalf of the Government of Alberta, manages the development of provincially owned energy and mineral resources by industry and the assessment and collection of non-renewable resource revenues in the form of royalties, freehold mineral taxes, rentals and bonuses. The Department promotes development of Alberta's energy and mineral resources, recommends and implements energy and mineral related policy, grants rights for exploration and development to industry and establishes and administers fiscal regimes and royalty systems. The Department's resource portfolio includes natural gas, conventional oil, oil sands, petrochemicals, electricity, coal and minerals, renewable energy (wind, bio-energy, solar, hydro, geothermal, etc.) and energy efficiency and conservation.

## Poster Scoring Rubric

	Level I	Level II	Level III	Level IV
<b>Accuracy and content</b>	<ul style="list-style-type: none"> <li>Facts and information is not correct</li> <li>References are not provided</li> </ul>	<ul style="list-style-type: none"> <li>Some facts and information are correct</li> <li>Few references are provided</li> </ul>	<ul style="list-style-type: none"> <li>Most facts and information are correct</li> <li>Several references are provided</li> </ul>	<ul style="list-style-type: none"> <li>Facts and information are correct</li> <li>References are clearly provided</li> </ul>
<b>Level of information</b>	<ul style="list-style-type: none"> <li>Little content</li> <li>No analysis of science topic</li> <li>No use of resources</li> </ul>	<ul style="list-style-type: none"> <li>Poor explanation of topic</li> <li>Inaccurate science connection</li> <li>One resource used</li> </ul>	<ul style="list-style-type: none"> <li>Adequate explanation</li> <li>Science connection present but could be further developed</li> <li>More than one resource used</li> </ul>	<ul style="list-style-type: none"> <li>Content is accurate and well laid out</li> <li>Concept fully and properly explained</li> <li>Science connection made</li> <li>Excellent use of resources</li> </ul>
<b>Labels and legends</b>	<ul style="list-style-type: none"> <li>Labels are too small to view</li> <li>No important items were labeled</li> </ul>	<ul style="list-style-type: none"> <li>Several items of importance were labeled</li> <li>Labels can be easily read</li> </ul>	<ul style="list-style-type: none"> <li>Almost all items of importance are clearly labeled</li> <li>Labels can be easily read</li> </ul>	<ul style="list-style-type: none"> <li>All items of importance are clearly labeled</li> <li>Labels can be easily read</li> </ul>
<b>Organization, neatness, visual appeal, and creativity</b>	<ul style="list-style-type: none"> <li>Clutter, no definitive sections</li> <li>Task difficulty not suitable for grade levels</li> </ul>	<ul style="list-style-type: none"> <li>No headings</li> <li>Hard to follow, requires assistance</li> <li>Needs work</li> <li>Little use of colour or pictures to hold attention</li> </ul>	<ul style="list-style-type: none"> <li>Task difficulty could be further developed</li> <li>Some level of understanding shown</li> <li>Some use of colour, effort</li> </ul>	<ul style="list-style-type: none"> <li>Difficulty appropriate for grade level</li> <li>Understanding present and apparent</li> <li>Visually stimulating</li> </ul>