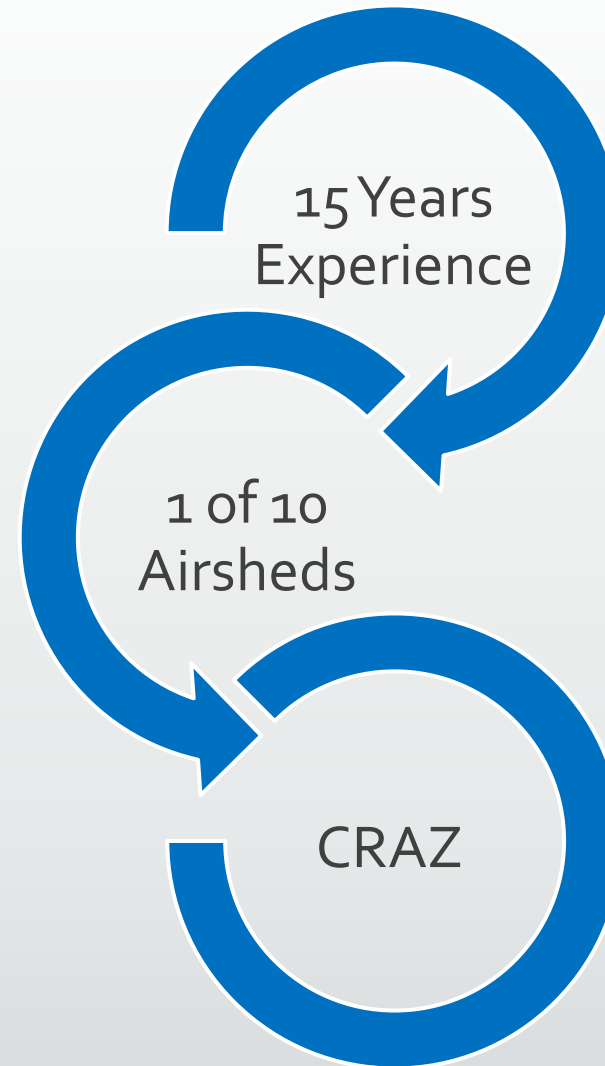




Calgary Region Airshed Zone

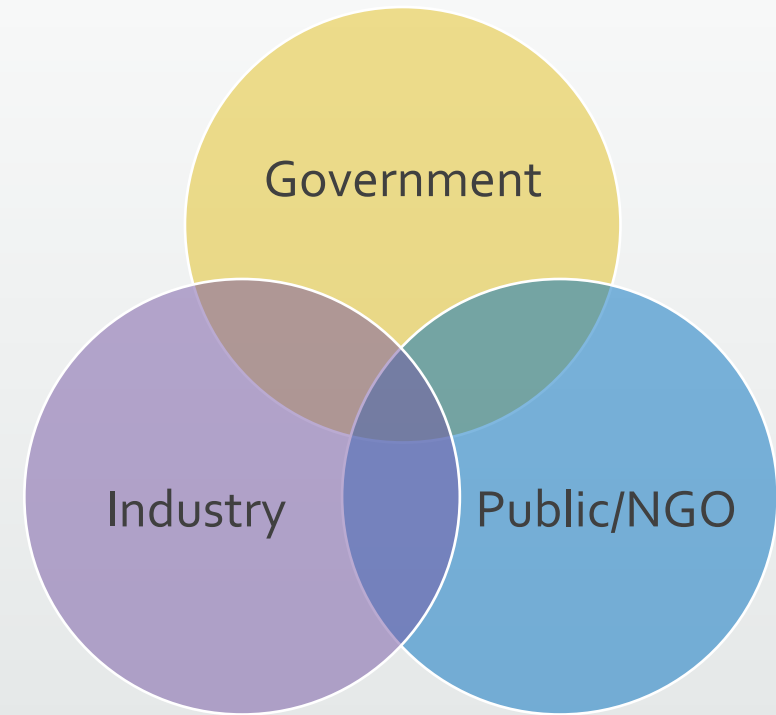
Jill Bloor, Executive Director

Tanya Carlson, Engagement Program Manager



CRAZ is comprised of three sectors and expertise:

- **Government**
 - Federal
 - Provincial
 - Municipal
- **Industry**
 - Rock
 - Oil & Gas
 - Forestry
 - Chemical
- **Public and Non-Government Organizations (NGOs)**



"Measurement is the first step that leads to control and eventually to improvement. If you can't measure something, you can't understand it. If you can't understand it, you can't control it. If you can't control it, you can't improve it." — H James Harrington

Continuous Monitoring

- Three (3) continuous ambient air monitoring stations:
 - Calgary Northwest
 - Calgary Inglewood
 - Calgary Southeast
- 4th monitoring station in Airdrie being operated by AEP
- Portable Air Monitoring Laboratory (PAML)
- Purple Air Sensors, region wide

Real-time air quality data for continuous monitoring stations is available on the CRAZ website: <https://craz.ca/monitoring>



What we monitor

Parameter	Calgary Inglewood	Calgary Southeast	Calgary Varsity	PAML
Sulphur dioxide (SO ₂)		•		
Oxides of nitrogen (NO _x)	•	•	•	•
Nitric oxide (NO)	•	•	•	•
Nitrogen dioxide (NO ₂)	•	•	•	•
Respirable particulates (PM _{2.5})	•	•	•	•
Ozone (O ₃)	•	•	•	•
Non-methane hydrocarbons (NMHC)	•	•	•	
Methane (CH ₄)	•	•	•	
Hydrogen sulphide (H ₂ S)		•		
Total hydrocarbons (THC)	•	•	•	
Carbon monoxide (CO)	•	•	•	
Wind speed and direction	•	•	•	•
Air temperature	•	•	•	•
Relative humidity	•	•	•	

Air Quality Health Index (AQHI)

- A tool that measures air quality in your community and reports it on a scale from 1 to 10.
- The lower the number the lower the risk.
- Primarily uses $\text{PM}_{2.5}$, O_3 , and NO_2 to calculate AQHI
 - For Alberta, additional pollutants (SO_2 , H_2S , TRS, CO) are included if measured levels exceed the AAAQOs.
- AQHI app for iPhone and iPad



The Impact of Air Pollution in the CRAZ Region

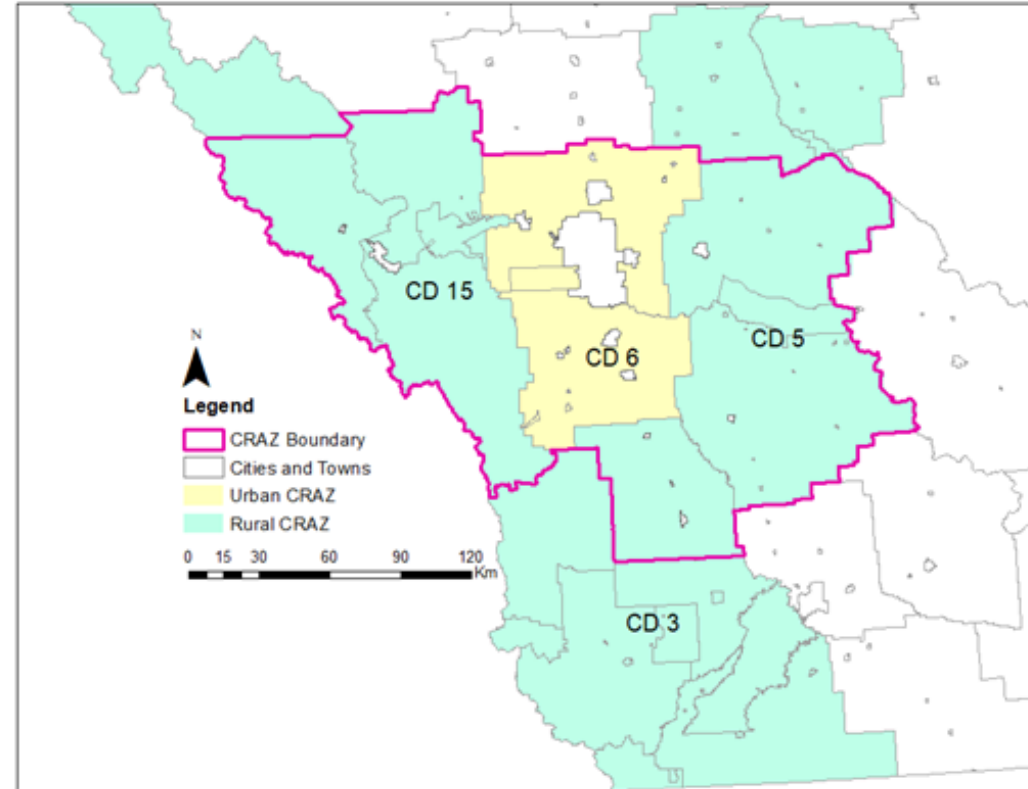
The estimated cost of air pollution in the CRAZ Region is

\$2.94 billion

per year!

That's **\$2.78 billion** from premature mortality and **\$160 million** from illness, disease or lack of health.

Human-caused air pollution in the CRAZ region contributes to **377** premature mortalities per year.



That's equivalent to about **23** in every **100,000**

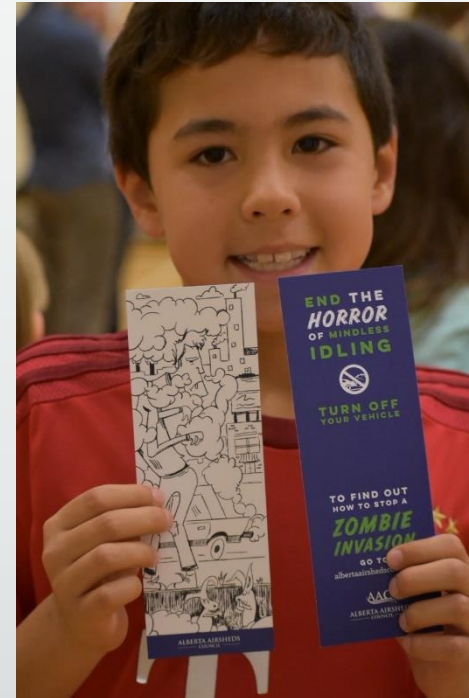
people in the CRAZ Region experiencing premature mortality resulting from air pollution.

There are also approximately **202** emergency room visits and **57** hospital admissions every year resulting from air pollution in the CRAZ Region.

There are approximately **239** adult chronic bronchitis cases and **1,167** child acute bronchitis episodes every year resulting from air pollution in the CRAZ Region.

Commitment to Community

To share knowledge through tours, school programs, and workshops.



Workshops

Building Healthier
Communities
Together

Industry & Air
Quality

Dust Health
Effects and
Suppression

Transportation &
Air Quality

Let's Talk About
Air Quality Forum

Commitment to Learning

To teach about air quality monitoring.



Commitment to Members

CRAZ works hard to empower through initiatives and collaborative learning to schools, municipalities, industries and the general public.



Working with our Members

Community Guide to
Wildfire Smoke and
Health

Air Quality
Management Toolkit:
For Municipalities

City of Calgary
Environmental
Strategy Committee

Calgary Metropolitan
Regional Board
Technical Committee

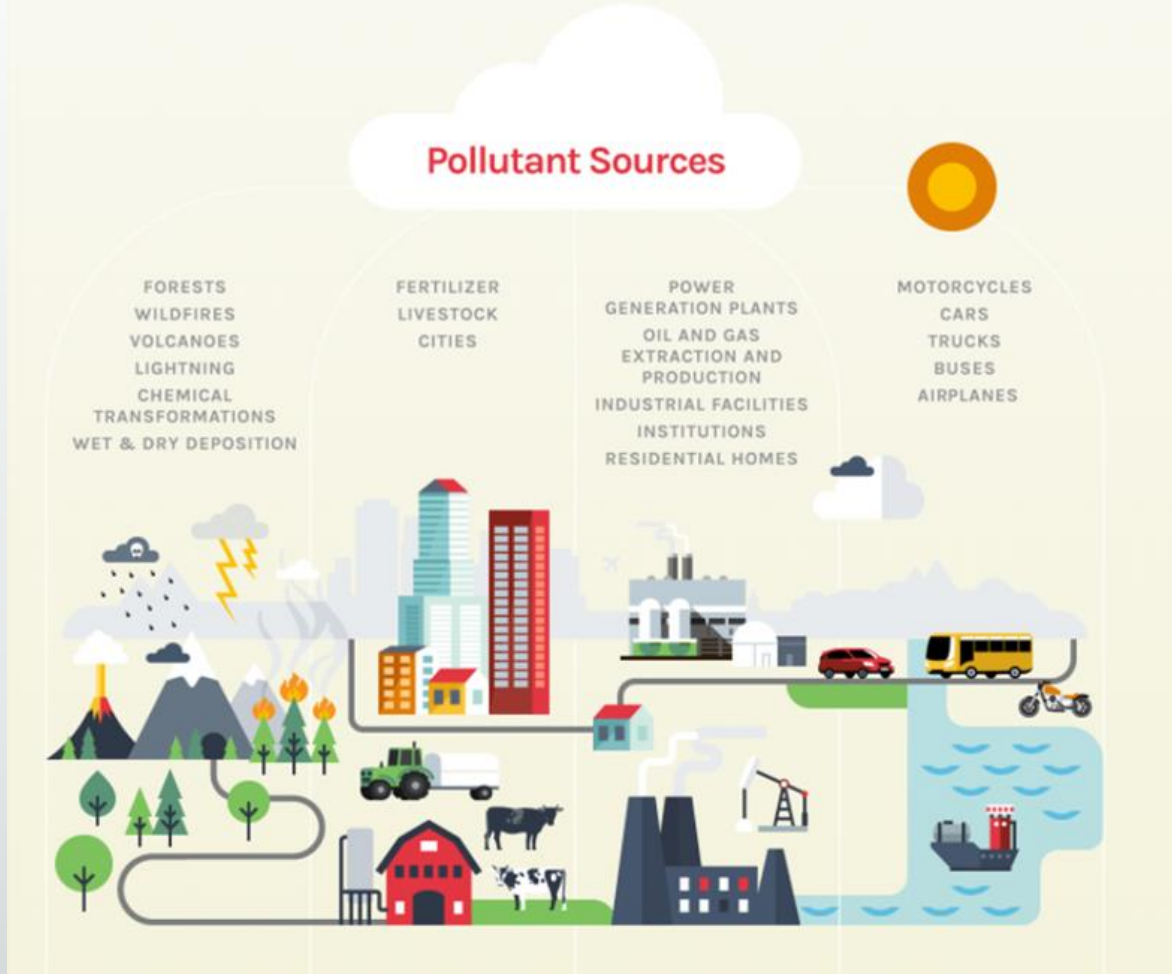
Clean Air Strategic
Alliance Non-Point
Source Technical
Committee

South Saskatchewan
Regional Plan Air
Quality Policy

Regional Air Quality
Management Plan
Updated

Commitment to Climate Change

CCME.ca



CRAZ Committees

Engagement

Air Quality
Management

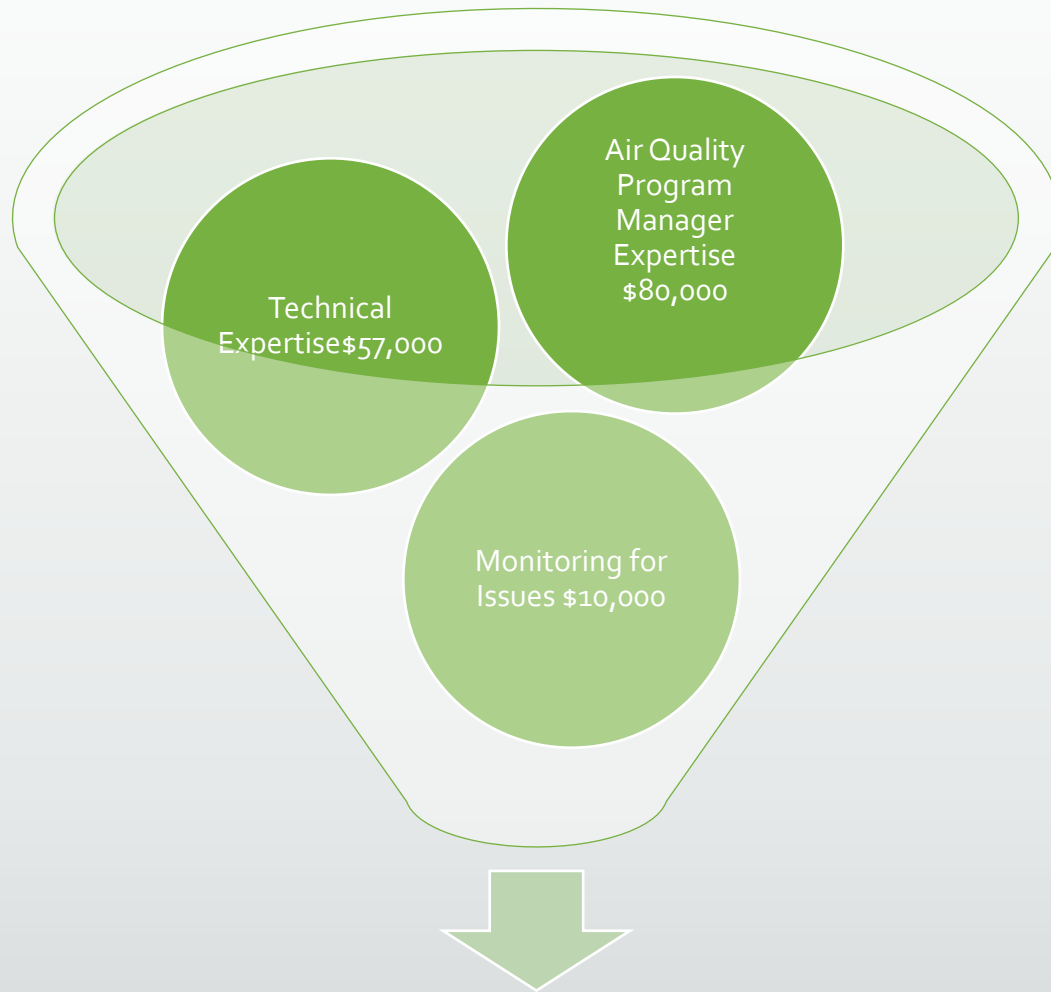
Technical

Finance

Policy and
Research

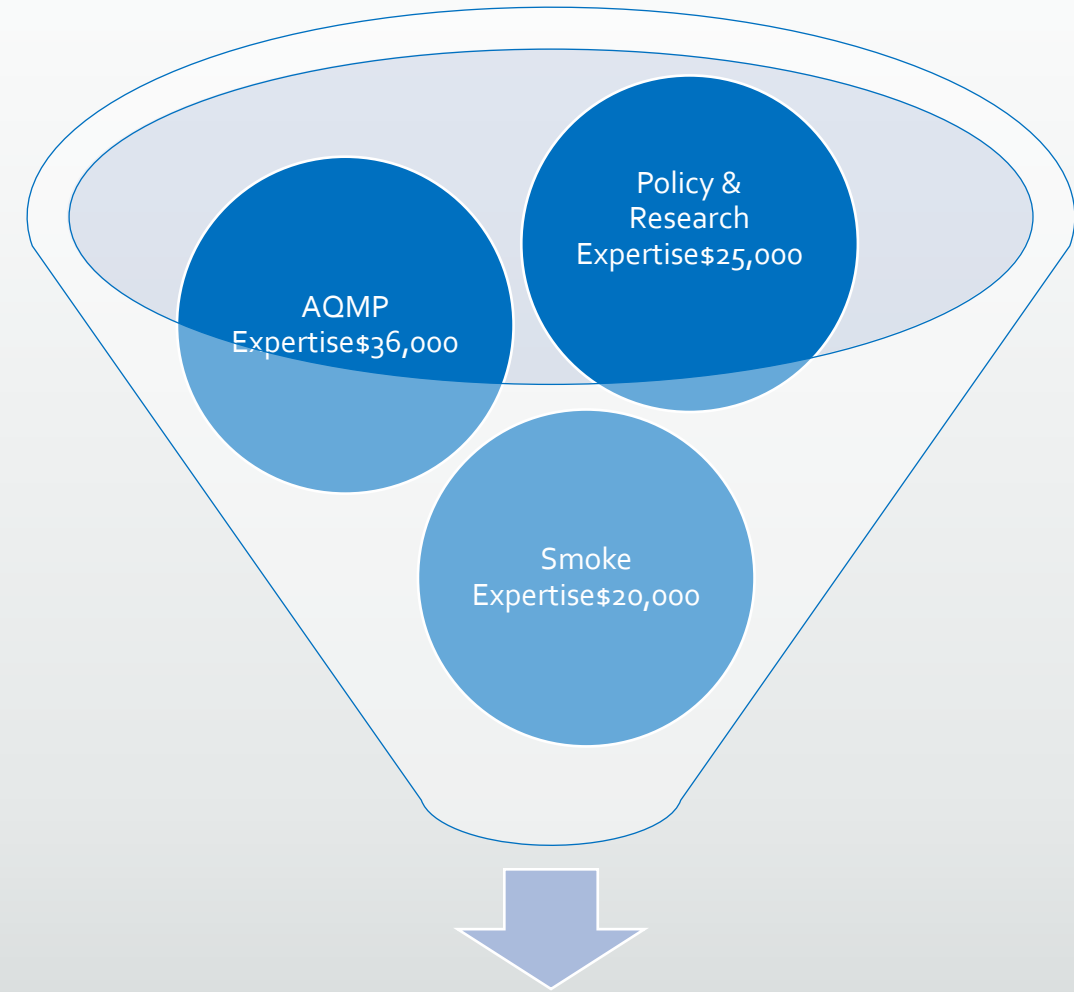
Smoke

Technical Committee



\$147,000/year

Other Committees



\$81,000/year

Collaboration and Consensus

- Multi-stakeholder based organization with a consensus based decision making process that enables all parties to move forward with a common goal

Network and Community

- **Representatives from gov't, industry, public, educators, & technical experts working together**
- Opportunity to build relationships across a broad network of experienced & dedicated professionals

Environment, Social and Governance

- Protect your license to operate
- Shape public policy
- Community investment opportunities

Education and Outreach

- Comprehensive educational and training programs available for members

Trusted Partner

- Recognized as a respected and authoritative ally on air quality
- Platform to find solutions that benefit all members and promote best practices
- **3rd Party Validation**

Membership in CRAZ

\$4,102.80/year

\$0.10/capita

Access to Air Quality Specialists

Partner in outreach campaigns

Fulfill legislated requirements

Advocacy and representation with the province

Access to real-time data

Commitment from Members

Attend the AGM - June

Councillors/staff are welcome to
join a committee



www.craz.ca

www.craz.ca/blog



@CalgaryAirshed



Calgary Region Airshed Zone

VISION

The region's air quality supports and fosters a healthy and vibrant population, ecosystem, and economy.

MISSION

We monitor, analyze, and engage with stakeholders to develop strategies that positively impact air quality within the region.