



Notes from Medicine Hat Public Discussion on Alberta's plan to renew its Climate Change Action Strategy – April 3, 2007

This public discussion was facilitated and documented by consultant Bill McMillan (Defining Common Ground). The following notes describe the public comments provided to government at the meeting. These notes were edited for readability (i.e. grammar, redundancy or context-specific comments). In some cases, comments were placed in the categories they addressed, even though the participant may have made the comment during another part of the meeting. Participants also completed workbooks at the meeting (see reference to workbooks attached to these notes).

Number of participants: 46

Welcome and Opening Remarks: The Honourable Rob Renner, Minister of Environment, Deputy Government House Leader, MLA for Medicine Hat. Len Mitzel, MLA for Cypress-Medicine Hat was also present.

Brief Overview on Climate Change: Don MacDonald, Alberta Environment.

DISCUSSION

Audience comments form the first part of each section. In cases where a question is asked, the answer follows in italics.

Expectations of a provincial action plan

- You have told us that this is an amendment to the existing plan. What does the existing plan say? *A. The existing plan established an emissions intensity reduction of 50% by 2020, with a check up at 2010. Government is taking leadership action. The Legislature is currently reviewing Bill 3, which would establish the Climate Change and Emissions Management Amendment Act that includes mandatory reporting, regulations on intensity targets – the first of its kind in Canada. The bill also includes efforts in energy efficiency, conservation and technology (* Bill 3 passed, effective July 1, 2007). Climate Change Central (a private/public partnership)was established to promote appropriate climate change action and to monitor results*
- *Minister of Environment:* It's interesting that you would wonder what our policy is – it seems to be the best kept secret. We need to make it clear we do have a policy. As part of the update, I suggest one strategy should be that we need to inform Albertans and Canadians.
- I would like to see more emphasis in the plan on things that directly impact the population in general – that we would notice (e.g. limiting our consumption of energy). Australia has banned incandescent light bulbs. Haven't seen anything like that here.

- What were your expectations for the first plan – a specific end result – reduction in green house gasses by 2020? *The Minister's response: "The 2002 plan had a target of 50% reduction in GHG intensity by 2020. We've had some success—so far reduced by about 16%. Bill 3, including compliance and disincentives, will double the 16%. The balance leading up to 2020 would rely on us. Industry is responsible for 70% of GHG emissions, the rest is us, manufacturers, transportation, etc. Consider it in the context that we also need to continue to grow. Our economy is largely based on the production of CO₂. Along with the strategies that allow us to conserve and reduce the amount of CO₂ we produce, we acknowledge that we must learn how to manage the CO₂ we produce – particularly from large emitters. We need conservation on the small scale. We need emissions management on the industrial side. The Alberta Research Council is enthusiastic about development of designer algae – custom designed to be in place at various facilities – that feed from flue gasses, harvested occasionally. Once this innovation is put into commercial application it could potentially soak up 100 million tonnes of CO₂ per year in Alberta, but we also need to work on the small-scale personal involvement side. Government has not yet established concrete numbers for future GHG reductions in the province. Long-term reductions in CO₂ will be dependent on technologies.*
- Government should make industry solve their own problem. They're the ones making money at the cost of the environment. We've changed fast in the last 100 years and will change faster in the next. We need to put the brakes on and learn to live in ways less demanding on the climate.
- Put an immediate moratorium on the tar sands project. Industry does not have the right to pollute. A sick environment means sick people. What will the temperature be in Medicine Hat in 2080? Will we be able to grow crops? Industry has the technology to stop their emissions; they're just waiting to be told what to do. We need a "stable" and vibrant economy (not growing). Our difficulty in meeting targets has been our fast growth. We don't need to grow. I prefer a "stable" economy rather than growth.
- The plan should include a goal to manage the economy for long-term stability. I heard a goal of managing the emissions with new technology but there's not a lot of new technology available at the moment. We need changes in lifestyle habits.
- We need adaptation strategies. Climate change will happen even with new technologies. Will we have the strategies for adapting approaches so we can live with the climate changes?
- We're not dealing with an issue that can be resolved within our borders. It's a global, not a local problem. If we shut down industry, it will move to China (where there is less control of emissions, less regulation). We only control what happens here. Driving production out will make the situation worse.
- Alberta needs to continue to have a vibrant economy. We're dragging Canada. We also need to have some balance in terms of the environment. I'm not totally convinced GHGs are causing climate change, some doubt that humans are the cause. Scientists do not agree. Alberta should assess the science more. However, I'm not against reducing GHGs.
- Leave resources in the ground until the technology for production and use is under control. Province has a surplus of revenue, but not enough labour. We're extracting resources that will keep if we leave them underground for the future. What's the hurry? Extraction and production is the source of 30% of the CO₂. Keep those resources under the ground to reduce

our expanding, sprawling cities. Calgary has doubled their per capita use of gasoline. We don't need to grow so fast.

Emissions targets

- Absolute targets definitely. Production is increasing so GHGs are increasing. Set absolute targets. Otherwise, where are we going?
- We require enforcement also.
- Do not feel intensity targets are the way to go. We need to put some timelines on the growth we are experiencing. Alberta is looking at expanding coal-fired plants. We've been producing gas emissions for years. Only recently, China is following in our footsteps. We have to have strict guidelines that are enforced by the government. Why not have an environmental fund from oil company profits to clean up the mess they leave us with (e.g. tar ponds). *A. Bill 3's regulations will put the brakes on industry emissions. Industry can buy offsets (e.g. invest in wind turbine, forest plantation) and make improvements within their facilities. They can also pay \$15 per tonne into a management technology fund that will be used to reinvest in technologies in the province for future (long-term issues).*
- We need absolute targets (as in Europe and California): a reduction of 80% of 1990 levels by 2050.
- It's far cheaper for companies to pay \$15 a tonne. It builds a big fund but does nothing in terms of the real problem. Think in terms of harmonizing time lines. Other jurisdictions have shown we can be more aggressive with royalties, emission targets and clean up funds. There will be some resistance but unless we do this, companies will continue to exploit.
- Leaving the oil in the ground will accomplish the goals of the plan. No further expansion.
- The expectation is for government to enforce. But we also need to educate people. The will of the government has to be supported by the will of the people. Public education will get things rolling. We could accomplish more if more people are onside.

Technology

- Those who develop industry in Alberta should have to live here.
- Companies should be legislated to pursue technology.
- The government needs to enforce limits. Companies themselves should develop technologies to reduce energy use: they make more money and we get a cleaner environment – win/win situation.
- Use incentives from government to industry to stimulate.
- Some CO₂ can be used in other areas. Plants need to do this. Industry should foot the bill themselves. People should be subsidized to cut emissions from their furnace and car. Government should be involved. Need a new process to refine CO₂ in the tar sands – government should be involved with that.
- Companies need to be held responsible and government has the power to hold them responsible. I worry that focusing on technology may lead us to think there is a magic solution. We need to also consider consumption and demands.

- Balance: technology doesn't always move that quickly. Demanding it is the same as putting down hard targets. Government needs to take a leadership role—they don't need to fund it but should certainly stimulate it.
- Critically important for large public sector involvement. If research is only conducted by companies, the patents will rest with them when it should benefit people as a whole. ARC¹ has allowed exploitation of the tar sands. We need public sector participation: arm's-length bodies largely funded by levies.
- Wind power – some people don't like the windmills. We have lots of coal but need to find a way to harness the emissions.
- Government should take a leadership role in developing technology. There are a lot of small companies, emitters, who don't have the resources. Some have gotten together to share the responsibility. Government should encourage that.
- No safe way to dispose of nuclear waste – let's not get involved with that – it's a terrible legacy for our children.
- Carbon capturing is happening in Weyburn – it's not a new technology. Companies have to pay but of course they don't want to; they want the public to pay.
- Why aren't we doing it [carbon capture]? *A. We are. There are one or two plants so far. It's a matter of economics. If you have the right formation with a high purity source of CO₂ close by, then the economics are good. The further you have to move the CO₂, the poorer the economics. We are looking at the option of a CO₂ pipeline for the whole province.*
- Is nuclear a useful source of energy? *A. Possibility for use in the oil sands. Currently use a lot of natural gas. Some concern about the long-term supply. Companies are looking at other options, including deep geo thermal.*
- Nuclear energy will make a big comeback. It's a reasonably mature technology but has some issues with waste, fairly small quantities of waste. Oil and coal-fired also has waste issues with huge quantities.
- It's not reasonable to compare waste products. There are tonnes of radio active material in the U.S. alone with no place to put it that will be poisonous for another 100,000 years. We don't want that kind of legacy in Alberta.
- Carbon tax: It's much more efficient to tax consumption rather than to tax income. Use a carbon tax and drop income tax to 5%.
- Studies on solar energy (perfect for Medicine Hat). We could patent and sell from Alberta.
- Some industry doesn't care about the emissions they're putting out. Don't know how it is monitored but companies should be forced to comply. A government or agency could monitor but government needs to monitor them.
- I'd like to remind you of Chernobyl. Nuclear energy is not safe.

Actions each Albertan can take

- Hope results [of workbook responses] are taken in a positive fashion. Most seem like rational choices so it would seem people need more information if they disagree.

¹ Editor's Note: ARC may refer to the Alberta Research Council – an applied research and development corporation that develops and commercializes technology to grow innovative enterprises.

- Would like to be able to afford the technology for efficiencies. Need a rebate incentive.
- We want to be more efficient but need suggestions on how to do it without throwing away existing vehicles/houses – that has a cost also. We need technologies and incentives to upgrade.
- How did we get here tonight? Was there an alternative? We need to address public transportation in smaller communities. Give people alternatives to get them out of their cars or reduce the need for a car. Is there a requirement for builders/city to provide alternative transportation in new areas or make it accessible to go to services in their local area without requiring a car?
- AMA suggested that when baby boomers are too old to drive themselves, they set up a system of small vans to provide transportation. Their reasons were different but the suggestion is still helpful for these purposes.
- Geo thermal technology is available but we don't have a good economic model. It's not just about finding a technological solution. Need to talk to bankers to provide an opportunity to lend. Government and funders should work together. Equally an issue with cars – urban planning and design. It's a long way from place to place in Alberta. Trend in the U.S. is that people are moving back into the core, and looking at work at home options. Needs some encouragement and leadership.
- We asked Council to add bicycle lanes to some roads but it wasn't accepted. Perhaps provincial government should help to add bicycle lanes and trails for both commuting and recreation. Council worries about construction costs but does not factor in the health benefits (less pollution and people in better physical shape). Provincial government should step up and support. Make municipalities provide options for people to walk and cycle to work.
- Land use planners design for the automobile. Not willing to contemplate anything else.
- For those who are prepared to commute by alternate methods, why not provide separate lanes? Toronto announced 1,000 kms being developed for cycling routes. Province should step up and investigate these alternatives.
- Buses are not feasible here. Energy efficiency: water vs. power. Rebates available but we are not informed. Government should bring information to people. Would like to upgrade my furnace but need the information.

Investment in renewable and alternative energies

- Alberta Environment should be strengthened. Each department vies for what is important to them. We have a lot of interests in Alberta and Environment is not considered a force in the government able to control the other departments. We are deforesting northern Alberta, pouring water down wells for oil. Gas prices should be raised to force people to drive small cars (although higher energy prices would promote more development).
- We need enforcement of regulations. Can we involve Aboriginal communities or other groups to share in policing?
- Funding to municipalities for new construction to provide efficiencies in buildings.
- Enhance credibility and belief in the process. Make use of existing organizations and agencies to raise public awareness (Eco Trust, Parks & Recreation, Municipalities) about the positive things we can do.

- Support municipalities to explore alternatives and beef up their environmental departments.
- Grid being built for wind power is way behind. Province could speed that up. If we do have excess power we could sell it south.
- Province should lead and demonstrate energy efficiency in new provincial buildings (including schools, colleges, universities, hospitals and prisons) and retrofit old ones. Would provide all sorts of benefits, including familiarizing trades people with new technologies (solar panels, co-generation). Private developers need to have profit as a consideration but public facilities can demonstrate new technologies...
- Net metering technology seems to exist. What is holding it up? *A. Alberta Energy is working on changes to net metering and is committed to taking action in the coming year.*
- How are we to know if industry will use incentives for what we intend? There must be accountability. If they use their own money, they'll be efficient.
- Incentives can kick start but long-term, the technology has to be self sufficient. It won't be supported long-term if not viable.
- Province should have higher energy efficiency building codes for new buildings (now, rather than retrofit).
- Can we set up clean communities such as the Okotoks program? It would be wonderful if we could learn from them (share information).
- Taxation system should recognize people with industry in their own back yard then there would be more accountability in industry.
- Long-range planning for subdivisions. Why couldn't a whole subdivision be heated by a central geo thermal system (work together)?
- Would like to see micro producers (individuals or small communities) rather than depending on the grid. Why don't we have our own wind turbines for Medicine Hat and solar panels for our homes? First step is conservation, recognizing there are limits. We can't keep doing more, getting more. If we could see the actual costs, and are willing to live with what is producing our energy (coal-fired plants), so be it. But we shouldn't be able to "have" and have someone else live with the consequences.
- Educate, but not just with more brochures. During the climate change disaster of the 1930s, intense measures were taken to educate everyone on the land. A whole range of methods was introduced when something needed to be done quite quickly.
- Solar panels are expensive. Many people don't have the means to install them. Government shouldn't necessarily have to pay but could help with financing.
- Government can impact how we address environmental issues. An environmental "lens" should be applied to all government decisions because the environment affects us all.
- An environmental lens should be applied to the arena for Medicine Hat. It would cause us to pause.
- *Minister: In the local context, the City is a large industrial emitter. We are the problem. We own our own utility here and if the City has to pay penalties, they will pass it on to the consumer (us). That same principle applies for other industries also.*
- Consider what sacrifices are we willing to make to implement some of these ideas? Without a doubt, there will be some. Cheap and convenient; is that the most important?

- This is why we need to build up our environmental department so they can look after us. We need a good environmental program.
- In a recent survey, the importance of the environment and getting rid of GHGs was rated highly but are you prepared to give up your SUV? How do you convince Canadians?
- Make SUVs energy efficient.
- There's often no financial benefit to being the first to adopt measures.

Adapting to climate change

- Focus on land use policies for southern Alberta. Future generations should be able to enjoy what we have. Look at irrigation systems, moving water from north to south, tar sands and boreal forest development—what are we doing with those?
- Be prepared to address by a cooperative effort at a government level anything that doesn't have an immediate payoff—as it won't be undertaken by industry.
- Does B.C./Alberta have any plan re pine beetle? *A. There is a cooperative effort to address the problem.*
- In Paris, I saw a display of the effects of silting on the Ganges River from a global perspective. We should have a similar type of presentation illustrating climate change and tour it around the province.
- Government should push for the use of dams to conserve water for dry years. Include hydro power also so dam eventually pays for itself. Only 50 farmers benefit but it also benefits environmental conditions.
- Learn from others (Colorado River, how not to do it). But a lot of people are also getting an advantage out of that.
- As well as reducing GHGs, the government's most important role is to show us how climate change will affect us.

Additional comments

- Look at waste from civic/industrial endeavours. Match productivity not only to product itself but to how the waste affects our air, land and water quality and quality of life.
- Municipalities and the province are also big industries. Province should take a leadership role to change mind sets—municipalities are not currently on board and are building to minimal standards. Province should look at municipal standards.
- Need to look at sacrifice as a positive change.
- All levels of government, citizens and industry in this together—work together.
- Government should also consult with scientists, experts.

END OF DISCUSSION

Thanks and Closing Remarks: Mr. Len Mitzel, MLA for Cypress-Medicine Hat



Attachment 1: Summary of Workbooks Handed in at the Medicine Hat Meeting, April 3, 2007

Response to Draft Goal Statements (n=24 or 25, except where noted)

Draft Goal Statement	% In Agreement
Alberta will reduce overall greenhouse gas emissions	76%
Alberta will lead Canadian provinces in the use of renewable and alternative energy sources	84%
Albertans will have the knowledge and tools to deal with the impacts of climate change	84%
Alberta will maintain a vibrant economy and high quality of life while addressing this global issue	56%

Options Regarding Use of Intensity and Absolute Targets	% In Agreement
Alberta should continue with intensity targets only.	8%
Alberta should adopt absolute targets as quickly as it can	54%
Alberta should continue with intensity targets, but adopt absolute targets prior to an established deadline.	38%

Timelines to Adopt Absolute Targets (n=10)	% Who Selected
2015 or earlier	40%
2015 to 2021	40%
After 2021	10%

Technology Category	% Who Selected 4 or 5 on a 5 Point Scale of Importance
Energy Efficiency and Conservation	91%
Renewable and Alternative Energy	96%
Carbon Capture and Management	75%
Clean Coal Technology	42%
Nuclear Energy	30%

Nearly all of the participants in this consultation felt that the government must take action to increase use of renewable and alternative energy sources (only 8% agreed with the proposal that the government should “take no action”). Respondents indicated support for a wide range of government initiatives in this area, including:

- Incentives to consumers (96% agreed)
- Incentives to producers (83% agreed)
- Requiring companies to use renewable and alternative sources for a portion of their energy use (81% agreed)
- Mandating that a percentage of provincial electrical production must come from renewable and alternative energy (92% agreed)

Nearly everyone who participated in the consultation felt that the government must take action to improve energy efficiency and conservation (4% supported the proposition that the government “take no action”). Respondents indicated support for a wide range of government initiatives including:

- Providing incentives to consumers (100% agreed)
- Providing incentives to industry (83% agreed)
- Requiring companies to use energy efficient technology (79% agreed)
- Establishing energy efficient standards for products (100% agreed)
- Increasing the energy efficiency standards in our provincial building codes (100% agreed)
- Using a portion of the natural gas rebate to provide incentives for energy efficiency (85% agreed)

Potential Tools to Support Reduced GHG Emissions	% Who Selected 4 or 5 on a 5 Point Scale of Importance
Investing in research and development	88%
Establishing regulations	88%
Providing incentives	85%
Providing information and education	88%
Taxes and surcharges on fuel and electricity	68%
Voluntary measures	58%

Potential Tools to Support Adaptation	% Who Selected 4 or 5 on a 5 Point Scale of Importance
Explore ways to reduce water use in the energy industry and agriculture	96%
Put land use practices in place to preserve wetlands	89%
Provide information and education	92%
Invest in research on new adaptation technologies	81%
Develop strategies to decrease risk to forests (fire, insects)	77%
Develop crops that are more resistant to drought	75%
Take advantage of longer growing season	54%
Increase pest and disease preparedness	65%
Build and enhance infrastructure to withstand challenges of climate extremes	65%
Provide strategies to respond to loss of northern roads (ice and gravel)	81%
Enhance weather monitoring and emergency response systems	54%

Note: Data about personal behaviours and GHG emissions has been tabulated in the summary of all ten meetings (see Attachment 1 in Summary of Public Input Received Regarding Alberta's Climate Change Action Plan (March 23 to April 25, 2007)).