

PROCEEDINGS: THE STATUS OF CLEAN-TECHNOLOGIES SYMPOSIUM



EDMONTON: MAYFIELD INN

March 1, 2010

Event Program: www.ABCtech.ca

CALGARY: CALGARY ZOO

March 3, 2010

Event Program: www.ABCtech.ca



INDEX OF SLIDES

CLEAN technologies



Slide

3. Overview
4. Community Projects-- Axel Meisen/Cliff Soper Moderators
5. Municipal Planning and Engineering--Beth Sanders, Facilitator
6. Renewable Energy Technologies--Simon Knight, Moderator
7. Green Building Construction--Trina Larsen, Moderator
8. Communication and Transmission--Donald Back, Moderator
9. Transportation, Parks and Paths--Peter Lehner, Moderator
10. Water and Waste Management--Chris Godwaldt, Moderator
11. Local Food Production--Joey Hundert, Moderator
12. Financing Clean Technologies--Russ Matichuk, Moderator
13. Lifestyle Changes--Johanna McIntosh, Moderator
14. RampartAvenir.com Project--David Bromley, Presenter
15. Where from here?
16. Corporate Sponsors
17. Marketing Sponsors
18. Symposia Feedback Results
19. Symposia Feedback Comments
20. Thank you

OVERVIEW

CLEAN technologies



The Alberta Council of Technologies and the Alberta Chapter of the Green Building Council co-hosted the conduct of a clean-technologies symposium in Edmonton and Calgary in early March 2010. Participants included 11 moderators, 60 panelists and 350 clean-tech interests including 75 students from Alberta's post-secondary institutions.

The proceedings reflect:

The Market: The Clean tech market has a newfound and common respect for the environment. Clean tech is the fastest growing industry in Alberta-restoring Alberta's reputation and pristine environment. Clean tech is responding to the changing lifestyles of Albertans and their business practices.

Diversity: The breadth and depth of the emerging Clean-tech industry is reflected in the range of panel topics from local food production to green building construction, renewable energies to water and waste management and associated management processes of financing, communications and planning.

Challenges: Common issues and recommendations are identified for advancing the clean-tech market including public education, marketing and financing, standards and policy.

Leadership: Establishing a representative industry body of clean-tech associations for identifying and resolving common challenges.

COMMUNITY PROJECTS

Axel Meisen, Moderator-Edmonton & Cliff Soper, Moderator-Calgary

ISSUES:

CALGARY

- Regulations must be changed e.g.. Setbacks too slow
- Rural Development and revitalization are lagging

EDMONTON

- Creating “urban villages”, built as strong neighborhoods that provide opportunities for sustainable work, life and play.
- Retrofitting existing communities to make them serviceable to become “urban villages”.

RECOMMENDATIONS:

CALGARY

- Get “highly visible champions” to accelerate changes in regulations.
- Resolve water & energy regulation issues

EDMONTON

- Make regulations governing development less prescriptive, more flexible and more outcomes oriented.
- Enhance awareness of sustainable communities thereby creating market demands for them.



MUNICIPAL PLANNING AND ENGINEERING

Beth Sanders–Facilitator

ISSUES:

CALGARY

- Lack of holistic communications approach that involves planners, engineers, public, politicians, business, developers.... Etc.
- Municipal vision is not aligned with regulations, commitments, implementation, provincial/federal priorities etc.

EDMONTON

- Awareness of Options: what kind of life do we need/want social/economic/environment
- Leadership-Community does not know how to proceed within their means.

RECOMMENDATIONS:

CALGARY

- Set conditions for technology mavericks to develop, commercialize and get products to market.
- Policies, standards and regulation need to facilitate not limit adaptation

EDMONTON

- ABCtech creates opportunities for more discussion to disseminate information and sources of information
- ABCtech takes coordinating role with partners– more conversation needed and action amongst us all



RENEWABLE ENERGIES TECHNOLOGIES

Simon Knight–Moderator

ISSUES:

CALGARY

- Insufficient regulatory and financial incentives to help level the playing field for renewable energy.
- Lack of clear information so that constituents can tell their elected officials what they want

EDMONTON

- Finance: Financing renewable energy technologies is difficult without a level playing field.
- Education: many in the market remain uneducated about the alternatives for energy production and energy efficiency which go hand in hand.

RECOMMENDATIONS:

CALGARY

- Develop regulations which challenge development practices and reporting system to tell us if it works.
- The quality of communication needs to be improved between professionals, the public, politicians, NGOs etc, A commitment to renewable energies is a commitment to sustainability.

EDMONTON

- Remove unfair advantage for the established fossil fuels and provide incentives, rebates etc. to support a stronger uptake of renewable energies
- Develop a large scale education program for consumers to develop market pull for renewable technologies



GREEN BUILDING CONSTRUCTION

Trina Larsen–Moderator

ISSUES:

CALGARY

- Innovative technology brings with it an inherent learning curve
- Combination of analyzes, modeling,, measurement, verification and continuation in assessment of building performance is lacking.

EDMONTON

- Lack of understanding or education of codes and application codes
- Financial incentives that drive clean tech and sustainable movement

RECOMMENDATIONS:

CALGARY

- Education: including building owners and operators
- Continuing building measurement and verification and ongoing improvements throughout the life of the building

EDMONTON

- Education, Education, Education
- Financial incentives including government rebates, alternative mortgage & financing, options, education beyond initial investment toward life cycle costs.

Discussion to be Continued at...

SUSTAINABLE BUILDING SYMPOSIUM: May 11/12 Edmonton: MacEwan University . May 12/13 Calgary: SAIT

INFORMATION: <http://www.cagbc.org/chapters/alberta/index.php>



COMMUNICATION AND TRANSMISSION

Donald Back--Moderator

ISSUES:

CALGARY

- Incentives to change are not yet in place

EDMONTON

- Lack of Consumer incentive
- Need policies to set direction.

RECOMMENDATIONS:

CALGARY

- Policy change to flatten the value chain so changes in behavior are directly affected; economic impacts become direct.

EDMONTON

- Change rate schedules to directly couple consumer behavior with lowered costs.
- Government needs to set policies to enable or specify direction.
Waiting for companies to do so --it will not happen.



TRANSPORTATION, PARKS and PATHWAYS

Peter Lehner–Moderator

ISSUES:

CALGARY

- Excessive water use
- Cost effective public transportation

EDMONTON

- Short Longevity of Land Use Plans
- Urban sprawl has spoiled land

RECOMMENDATIONS:

CALGARY

- Return to native species
- Diversify the population policy for greenbelt

EDMONTON

- Continue Education and Engage Shareholder



LOCAL FOOD PRODUCTION

Joey Hundert--Moderator

ISSUES:

CALGARY

EDMONTON

- Local food producers cannot price match non-local produced food
- Our citizen base and politicians do not yet value local food.

RECOMMENDATIONS:

CALGARY

EDMONTON

- Collaboration: several production and marketing cooperatives have sprung up with good success.
- Highly organized political organization. Such groups have altered municipal policy in Edmonton



WATER and WASTE MANAGEMENT

Chris Godwaldt–Moderator

ISSUES:

CALGARY

- It is easier to get traction for new ideas outside Canada than inside.
- One of the largest problems is identifying all the resources entrepreneurs need to move their products from concept to market.

EDMONTON

- Private companies & researchers are working on the same problems without communication.
- Implementation & deployment of clean water and waste technologies requires public & industry awareness of opportunities for innovative solutions to succeed

RECOMMENDATIONS:

CALGARY

- More conversations need to be facilitated
- An organization is needed to be the matchmaker/connector.

EDMONTON

- An ongoing public forum is required to connect & inform industry, researchers, policy makers & financiers.
- Greater effort needs to be made to educate the public and industry about clean technology opportunities.



FINANCING CLEAN TECHNOLOGIES

Russ Matichuk–Moderator

ISSUES:

CALGARY

- What is the role of government in shaping the development of the cleantech sector in Alberta?
- Is there a role for small investors in the space given that there are huge venture funds entering the cleantech space.

EDMONTON

- How do we track venture capital (VC's) funds for Alberta entrepreneurs in the early stage of venture development.
- Lack of international awareness of the opportunities for cleantech development. Example water treatment in oil sands

RECOMMENDATIONS:

CALGARY

- There is a role for government policy that leverages the decisions of private investors.

EDMONTON

- We have great entrepreneurial spirit but need to develop necessary mgmt skills that foster the evolution to commercialization of technologies by attracting support from external experienced management.
- Need to showcase to the world what is going on in Alberta. Focus on what we already do well and get external VC's to witness our success and opportunities.



LIFESTYLE CHANGES

Johanna MacIntosh–Moderator

ISSUES:

CALGARY

- Market driven development of industry to intra-industry business working together on innovations doesn't exist.
- Policy, regulations and government do not support changes

EDMONTON

- Non-existent market demand no pull strategy (demand that pulls technology into a viable market) to facilitate advanced manufacturing and make it more cost efficient for consumers
- No balance between regulation and policy to facilitates market demand–technology there but it falls through the cracks.

RECOMMENDATIONS:

CALGARY

- Set conditions for technology mavericks to develop, commercialize and get product to market.
- Policies, standards and regulation will facilitate not limit adaptation

EDMONTON

- Awareness and education promotion to facilitate adoption of clean technologies with minimal pressure on consumer's pocket book
- Collaboration required between industry, intra-industry & government.





RAMPART AVENIR PROJECT
David Bromley--Presenter

www.RampartAvenir.com

The project was selected for the keynote presentation, given its clean-tech features, and proposed deployment and incubation of clean technologies. David Bromley provided hi-lights of the proposed \$1.6B, 15-year, 6000 unit residential/commercial development designed to attract, develop and deploy clean-technology in the design and operation of North America's first clean-tech community proposed for St. Albert. Open house March 11, 2010 St. Albert Inn 4:30-7:30pm

David Bromley M.Eng., P.Eng.

davidbromley@dbe2000.com

telephone 604 922 0137

fax 604 9220147

CLEAN technologies



WHERE FROM HERE?

Identify and assemble industry leaders to establish an
Alberta Clean Technologies Industry Council and develop an action plan.

—Alberta Council of Technologies



CORPORATE SPONSORS



MARKETING SPONSORS



ALBERTA
Association
CANADIAN
INSTITUTE OF
PLANNERS



Framework



SYMPOSIUM FEEDBACK SURVEY RESULTS

Edmonton (N=88)

# 1	# 2	# 3	# 4	# 5	# 6
1..7	1..8	2.2	2.1	1..9	2.5

1= Strongly Agree 5= Strongly Disagree

Calgary (N= 29)

# 1	# 2	# 3	# 4	# 5	# 6
1.5	1.5	2.0	1.6	1.7	2.1

1= Strongly Agree 5= Strongly Disagree

SURVEY QUESTIONS:

- #1. There is a market for clean technology
- #2. There is a need for an industry council of Clean Tech Assoc to help “demystify clean techs and advance their commercialization”
- #3. Did the symposium meet your expectations?
- #4. Was the Symposium a positive learning experience?
- #5. Was the Symposium engaging—open to opportunities to express your views?
- #6. Do you think the Symposium will be influential in developing recommendations for advancing the clean technology industry?

SYMPOSIUM COMMENTS



- Annual AB clean tech symposium please
- Awesome networking opportunity. How can we promote more?
- Congratulations on your efforts and thank you
- Excellent format—thus excellent ideas and varied discussions
- Wish I could have gone to all the seminars!
- Integral in contacting persons capable in strengthening our business plan
- Nice venue, well arranged, great resource people, good topics
- Thanks for organizing. We need to educate the masses. Some meetings in rural AB is next step
- This & other technologies improvement needs a coordinated effort still seems to separate groups
- Who will "push" forward?
- Zoo, was a nice touch.
- Well organized, thank you
- Great spirited discussions with open panel between audience and panel members

THANK YOU!
MODERATORS, PANELISTS, CLEAN-TECH INTERESTS,
STUDENTS & SPONSORS

