

A glass flask with a black cap is positioned on the left side of the slide. The flask is filled with a clear liquid, and the landscape image of a city nestled in a green valley is visible through the glass, symbolizing a 'living lab' for sustainability.

Cities and Universities as Living Labs for Sustainability

Presentation at
Regional Approaches to Urban
Sustainability
NAS Workshop
Portland, OR

John Robinson, UBC
May 28-9, 2013

Outline

- Cities and climate change
 - MC3 project
- Role of universities in working with cities on sustainability issues
 - Greenest City Conversations Project
 - Regenerative Neighbourhoods Project
 - MOU with City of Vancouver

Meeting the Climate Change Challenge (MC3)



Meeting the Climate Change Challenge

British Columbia (BC) is on the leading edge of what is likely to be a major wave of local government innovation to address climate change in Canada. In response to the threat of anthropogenic climate change, the province has introduced innovative policies that go far beyond those in other North American jurisdictions. These policies have created a unique research opportunity: the province will be a 'living laboratory' of policy innovation for CO₂ mitigation at the municipal and regional scales.

The MC³ project brings together researchers, practitioners and policy-makers from non-governmental organizations, provincial ministries, and three of BC's universities to make the most of this rare opportunity. MC³ will identify emerging best practices and innovations in community climate change responses, develop strategies to share policy innovations, facilitate peer-to-peer learning exchanges, and stimulate the widespread knowledge mobilization needed to move communities beyond the changes required by current legislation and policies.

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LATEST NEWS

[A Summary of the Climate Action Agenda for BC Decision Makers](#)

May 22, 2013

[New Video - Network Learning: Linking Research with Practice](#)

April 26, 2013

[An Action Agenda for BC Decision-Makers released](#)

April 22, 2013

[Victoria Case Synopsis Released](#)

March 6, 2013



BLOG

[Natural gas leakage spurs shorter-term climate change](#)

May 9, 2013

MC3 Research Questions

- How are communities responding to BC climate change policy?
- What are lessons from 11 lead communities?
- How can peer-to-peer knowledge mobilization and social learning techniques facilitate the transfer of learning from one community to another?

MC3 Key Findings

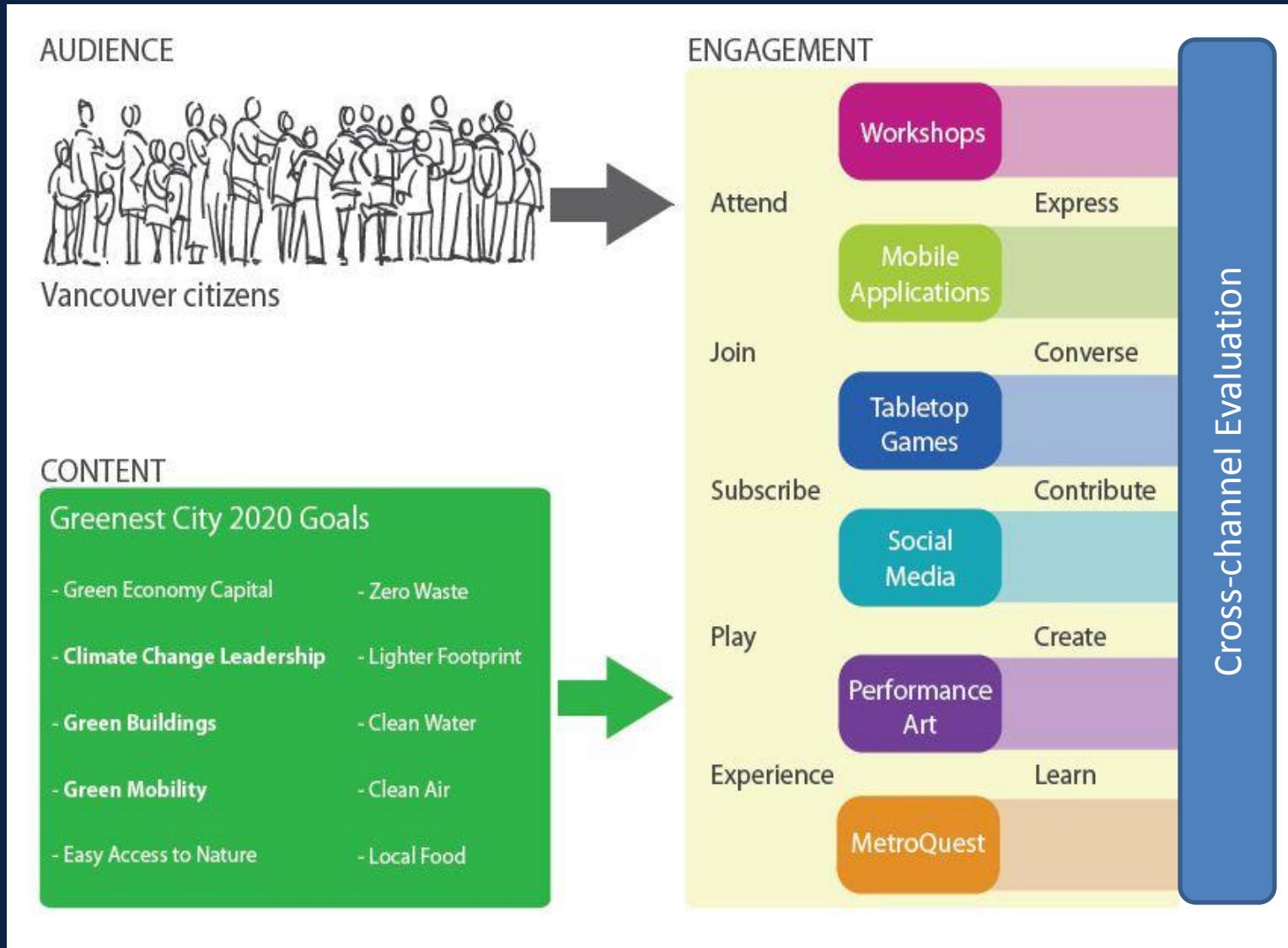
1. Critical importance of provincial policies and incentives
2. Six drivers of innovation
3. Four barriers
4. Five success factors

www.mc-3.ca

MC3 Two General Findings

- Framing climate change as a sustainability issue
- Expanding governance by participatory processes
- Vancouver example:
 - 10 Greenest City goals
 - GCAT was external to City

Greenest City Conversations project



GCC Outcomes

- different demographics than town hall meetings or City online survey 
- Desire to engage online is higher than desire for individual privacy 
- Designing for emergent dialogue promotes peer-to-peer interaction 
- Inter-institutional collaboration is critically important but has many barriers (different cultures, expectations, timeframes) 

Workshops

Mobile Applications

Social Media

Performing Arts

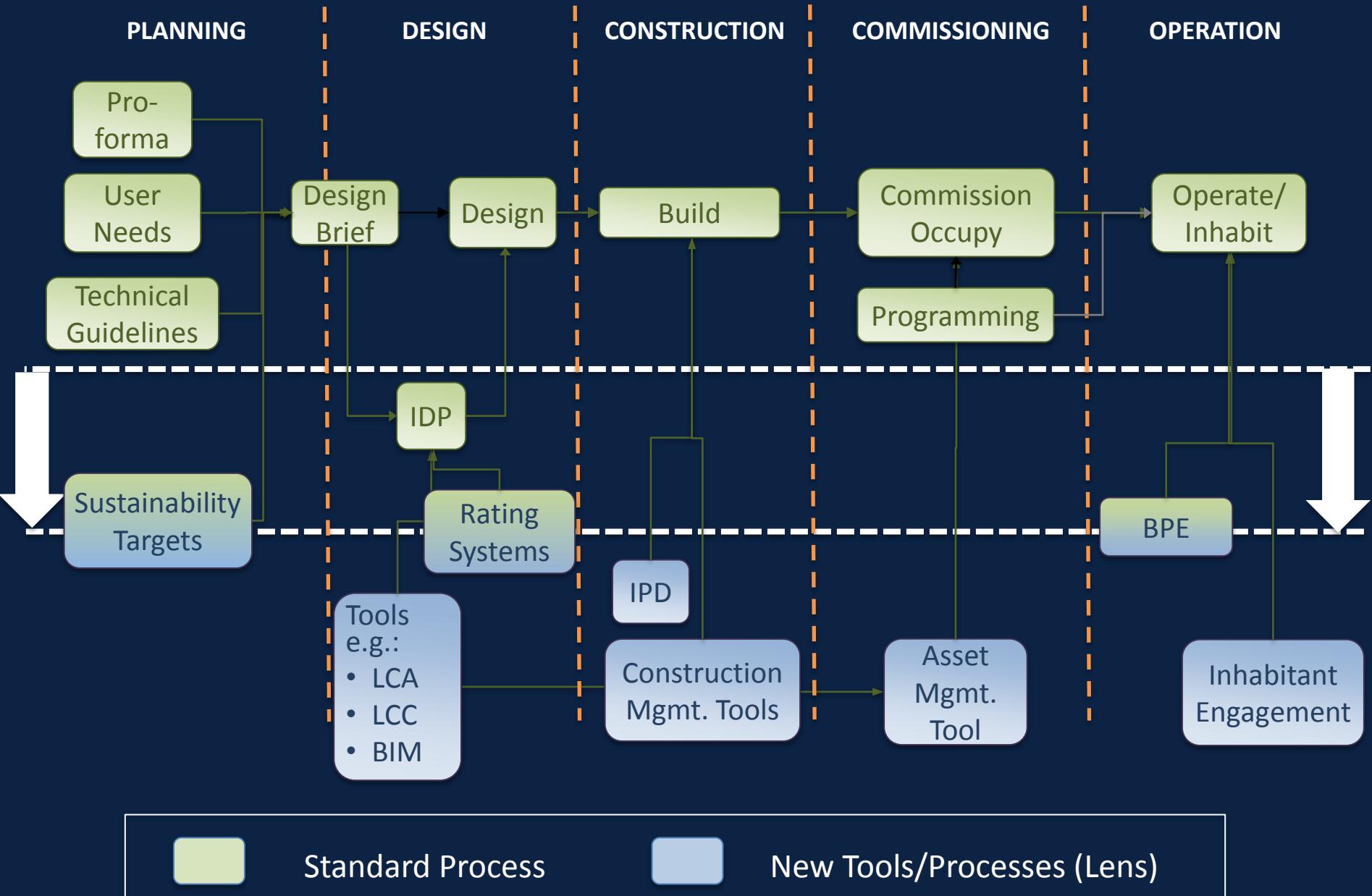
MetroQuest

Tabletop Games

Regenerative Neighbourhoods Project

- scale up from regenerative buildings and down from sustainable cities
- develop lens and gradient by working with UBC planning and operational staff
- Build network of practitioners and researchers in region (Pacific NW)

Regenerative Sustainability Lens and Gradient



UBC/COV MOU

1. Context: campus as living lab/agent of change
2. Greenest City Scholars
 - 10 per year
 - 4/30 hired
3. District Energy Collaboration
 - Initial workshop with regional participants
 - 3 more planned (costing, utility partnerships, system performance & evaluation)
4. Behaviour Change
 - Initial focus on recycling and transportation

MC3 additional info

MC3 Key Findings

1. Critical importance of provincial policies and incentives
 - Leverage existing activities
 - Taken on CC because of provincial policies
 - Charter and reporting requirements changing how cities make decisions

MC3 Key Findings (cont)

2. Drivers of innovation

- Leadership at multiple scales
- External funding opportunities (e.g. CARIP, FCM, GMF, BCH)
- Mainstreaming climate policies
- Development of cost-effective alternatives (e.g. DE)
- Baseline inventories (CEEIs)
- Experience of extreme events

MC3 Key Findings (cont)

3. Barriers

- Lack of funding
- Electoral cycle swings
- Human resource constraints
- Lack of leadership

MC3 Key Findings (cont)

4. Success factors

- Alignment between staff and politicians
- Systematic frameworks for policy-making and implementation (e.g. measure-reduce-effect)
- Institutionalization within larger sustainability agenda (OCPs, ICSPs)
- Partnerships with governments, NGOs, citizens, business
- Innovative funding solutions (e.g. green revolving fund, DE, density requirements)