Engaging Local Governments in Climate Change Adaptation

Bridging to the Future

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Bridging to the Future

- Adaptation to climate change is focused on the future
  - How will climate change?
  - What impacts will it have?
  - How can we adapt to reduce negative impacts?
  - What can we do to make something positive out of the changes and our responses to them?

- With a few exceptions, not much positive imaging/visioning of a sustainable future in this work
Adaptation and Sustainability

- The best of adaptation integrates with efforts to increase overall sustainability and where possible, with climate change mitigation.
- But need not only to make adaptation sustainable, but to integrate adaptation into sustainability work.
Why Engage Local Governments?

- Responsible for critical infrastructure and essential services that make our communities livable and will be affected by climate change
  - Land-use planning
  - Building standards
  - Water and stormwater
  - Transportation
  - Public health
  - Parks and green space
  - Emergency management...

Shawn Dalton, 2008
What Motivates Local Adaptation?

- Extreme weather events
  - Storms & storm surges – BC coast 2007, Atlantic Canada
  - Heat waves – Toronto 2005

- Slower-moving, climate-related threats
  - Permafrost decay – Canada’s arctic communities
  - Impacts on fruit, grape production – Niagara Region
Combined with...

- Leadership by some elected officials & municipal staff
- Advocacy and capacity development

Ron Sims, King County Executive
- Clean Air Partnership, 2007
Who Has Worked to Engage Local Governments in Adaptation?

- NGO’s
  - Some with specific climate change mandate
  - Others with broader mandates
- Staff from Environment Canada and Natural Resources Canada***
- Professional organizations
  - Insurance
  - Engineering
  - Planners...
- Academics and research consortia
- Some consulting firms
What’s Happening as a Result?

- Many local governments are ramping up protective activities.
- Some incorporating climate vulnerabilities into sectoral projects and planning.
- Modest number engaged in comprehensive adaptation planning.
- A few are integrating adaptation and sustainability planning.

City of Toronto, 2010
Some NGO Approaches to Engaging Local Governments

- Municipal capacity building, e.g.
  - C-CIARN and its successors
  - Clean Air Partnership activities
  - Engineers Canada initiatives

- Community engagement processes, e.g.
  - Columbia Basin Trust
  - Northern Climate Exchange and others

- Municipal planning – milestones approach, e.g.
  - ICLEI’s Changing Climate: Changing Communities Program
CAP’s Capacity Development Work

- First initiative involved collaborative research and workshops with City of Toronto
  - Scan of Impacts of Climate Change on Toronto (2006)
  - Six Cities Study (2007)
  - Working groups (& reports) on heat and urban forest adaptation (2007)
  - Workshops with City staff (2005 & 2006)
- Followed by advocacy to include adaptation in City’s climate change and clean air planning
Led to:

- *Ahead of the Storm* (2007), an adaptation framework for the City
- Local climate trends and projections report
- Departmental risk assessments (Transportation & Shelter, Support and Housing)
- Infrastructure risk assessments (Culverts & High-rise buildings)
- Heat vulnerability studies and assessment of Heat Alert and Response System
- Inclusion of adaptation in the Green Building Standards and Official Plan ...
Currently

- Right-wing mayor with council majority looking to slash budgets and potentially dismantle the Toronto Environment Office
- Staff on the defensive
- Climate change risk assessments were to be done by all major divisions, but that seems unlikely
- Adaptation work in Public Health, Planning, and Watershed Management is well-embedded and will likely continue
Expanding Capacity Building

- **Alliance for Resilient Cities Webinars (2007-2010)**
  - 8 webinars per year aimed primarily at municipal staff across Canada

- **North-South (Ontario) Climate Change Network (2009-10)**
  - To facilitate discussion and interaction between communities in northern and southern Ontario

- **Municipal Adaptation Training Program (2011)**
  - 4-day training sessions with municipal staff in 4 regions of Ontario
  - Followed by Train-the-trainer program for replication

- **Community Adaptation Initiative (2011-12)**
  - Workshops on specific areas of impact
  - Videos
  - Case Studies
Alliance for Resilient Cities

- Started strong - 50+ participating municipalities
- 8 webinars / year for three years on climate change impacts and adaptation topics of interest to municipalities and presentations by adapting communities
- Webinar medium not conducive to engagement if participants don’t already have relationships
- Minority of presenters able to speak effectively to municipal staff
Municipal Adaptation Training Program

- 2 2-day intensive sessions in four Ontario regions
- 15-22 participants from 10-15 municipalities in each
- 12 modules, each with a chapter for later reference
- Presentations, small & large group exercises & discussions
- “Train-the-Trainer”
Popular (Engaging) Activities

- Wall exercise identifying current municipal activities that already provide some protection from climate change
- LCLIPs exercise – analyzing community vulnerability from analysis of news stories of weather events
Some Results of These Types of Engagement Activities

- Municipalities recognizing potential impacts and committing to tackling them
- Capacity building
- Delivery of adaptation projects & programs
- Establishing indicators and monitoring
Recognizing the Problem; Making a Commitment

Initial Commitment

- 14 Municipalities participating in ICLEI’s Changing Climate, Changing Communities Program
- Official Plans by Town of Ajax, District of Elkford and others incorporating commitment (and specific steps) to adaptation

Initial Strategy Document

- Halifax Regional Municipality – Climate Change Risk Management Strategy
- City of Toronto – Ahead of the Storm
- The Corporation of Delta...
Capacity Building

Acquiring Information & Risk Assessment
- Climate trends & projections
- Flood plain mapping
- Updating IDF curves
- Heat vulnerability mapping
- PIEVC infrastructure risk assessments

Awareness Raising and Targeted Education
- Adaptation webpages
- Workshops for municipal managers

Collaborative Networks & Partnerships
- Often involve EC or university-based climate researchers, NGO’s & neighbouring governments
Delivering Adaptation

- Pilot and demonstration projects
- Retrofitting & redesigning threatened infrastructure & services
- Employing economic instruments, negotiated agreements and voluntary guidelines to change business and household behaviour
- Regulations and standards
Where are We Now?

Positive

- Profile of climate change impacts and adaptation has increased
- Surge of activity on local adaptation in the past 3 years in several regions
- Increased interest and support by some provincial governments

Negative

- Most elected officials difficult to engage
- Many adaptation projects are limited to technical tinkering
- Conservatives dismantling team at Environment Canada

Fredericton Flood
Shawn Dalton, 2008
What is Common to Successful NGO Engagement Efforts

- Sustained effort to build relationships, knowledge, credibility and trust
- Scientific support available
- Financial support available
- Face-to-face, interactive events
- Learning networks approach supplies opportunities for regular contact through workshops, webinars, newsletters, social media and peer-to-peer learning
- Innovative use of old and new tools
- Formal training and train-the-trainer activities
- Case studies that share with other communities lessons about how the work has been done elsewhere
Lessons for Successful Engagement

- Prepare for sustained effort
- Make friends with climate scientists (or become one)
- Develop an attitude of mutual learning
- Look concretely at how current climate variability is already affecting communities and then project to the future
- Recognize what is already being done to safeguard the community from extreme weather and climate change
- Demonstrate that others (preferably nearby) are acting – Most municipalities are reluctant to be first movers
- Share real experiences – lively case studies that say how things were done, what barriers were encountered, etc.