Climate Change Action
Working Group:
Meeting #4
SEVEN GOALS

GOAL 1. Conservation:
Plan, design, develop and manage our region for energy efficiency and conservation to reduce our carbon footprint.

GOAL 2. Mitigation:
Invest in renewable energy production, especially from wind, solar, hydro-electric, and geothermal sources by developing progressive policies and funding mechanisms.

GOAL 3. Adaptation:
Anticipate and prepare to adapt to the already-inevitable impacts of climate change now under way.
SEVEN GOALS

GOAL 4. Education:
Educate people about the implications of climate change on our region and the ways it can be addressed through mitigation and adaptation

GOAL 5. Wealth Creation:
Use the energy policy of conserve/mitigation/adaptation as the economic impetus to create jobs and support new industries and businesses

GOAL 6. Great Lakes:
Protect the Great Lakes and enormous water resource of our Region

GOAL 7. Environment and Social Justice
Strategies / Proposals

• More than 40
• Many of these policies can meet multiple goals
• Implementation is dependent on other working group recommendations
Issues Identified

• Lack of quality usable data
  – Exact extend and nature of change not well understood
  – Nature of impacts vary from minor disturbances to extreme losses
  – Long-term population gains likely

• It is an evolving field of policy planning
Overview of Climate Action Plans

- Two types of climate action plans at the community level

<table>
<thead>
<tr>
<th>Climate Action Plans (Mitigation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Inventory of emissions</td>
</tr>
<tr>
<td>- Emissions reduction targets</td>
</tr>
<tr>
<td>- Strategies/proposals to reduce emissions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Climate Change Adaptation Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Vulnerability and risk assessments (subjective or modeled)</td>
</tr>
<tr>
<td>- Recommendations across different planning sectors</td>
</tr>
<tr>
<td>- Education and outreach</td>
</tr>
</tbody>
</table>
# A Study of 43 Plans

<table>
<thead>
<tr>
<th>Sub-category</th>
<th>Indicators</th>
<th>Breadth (%)</th>
<th>Depth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and collaboration policies</td>
<td>Public awareness, education, and participation</td>
<td>85.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>Inter-organizational coordination procedures (business, government, IPCC, CCP, etc)</td>
<td>82.5%</td>
<td>77.5%</td>
</tr>
<tr>
<td>Financial tools</td>
<td>GHG reduction fee</td>
<td>47.5%</td>
<td>68.4%</td>
</tr>
<tr>
<td></td>
<td>Establish a carbon tax</td>
<td>37.5%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Land use policies</td>
<td>Disaster-resistant land use and building code</td>
<td>17.5%</td>
<td>57.1%</td>
</tr>
<tr>
<td></td>
<td>Mixed Use and compact development</td>
<td>65.0%</td>
<td>88.8%</td>
</tr>
<tr>
<td></td>
<td>Infill development and reuse of remediated brownfield sites</td>
<td>37.5%</td>
<td>80.0%</td>
</tr>
<tr>
<td></td>
<td>Green building and green infrastructure (i.e., urban forests, parks and open spaces, natural drainage systems, standards)</td>
<td>60.0%</td>
<td>85.3%</td>
</tr>
<tr>
<td>Transportation policies</td>
<td>Low-impact design for impervious surface</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Control of urban service/growth boundaries</td>
<td>35.0%</td>
<td>67.9%</td>
</tr>
<tr>
<td>Energy strategies</td>
<td>Alternative transportation strategies</td>
<td>80.0%</td>
<td>85.9%</td>
</tr>
<tr>
<td></td>
<td>Transit-oriented development and corridor improvements</td>
<td>77.5%</td>
<td>88.7%</td>
</tr>
<tr>
<td></td>
<td>Parking standards adjustment</td>
<td>65.0%</td>
<td>90.4%</td>
</tr>
<tr>
<td></td>
<td>Pedestrian/resident-friendly, bicycle-friendly, transit-oriented community design</td>
<td>72.5%</td>
<td>77.6%</td>
</tr>
<tr>
<td>Waste strategies</td>
<td>Renewable energy and solar energy</td>
<td>80.0%</td>
<td>65.6%</td>
</tr>
<tr>
<td></td>
<td>Energy efficiency and energy stars</td>
<td>82.5%</td>
<td>86.4%</td>
</tr>
<tr>
<td>Resources management strategies</td>
<td>Landfill methane capture strategy</td>
<td>70.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>Zero waste reduction and high recycling strategy</td>
<td>82.5%</td>
<td>75.3%</td>
</tr>
<tr>
<td></td>
<td>Waste and storm water management</td>
<td>20.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Implementation and monitoring strategies</td>
<td>Creation of conservation zones or protect areas</td>
<td>7.5%</td>
<td>66.7%</td>
</tr>
<tr>
<td></td>
<td>Watershed-based and ecosystem-based land management</td>
<td>7.5%</td>
<td>50.0%</td>
</tr>
<tr>
<td></td>
<td>Vegetation (forest/ woodlands) protection</td>
<td>30.0%</td>
<td>87.5%</td>
</tr>
<tr>
<td></td>
<td>Establish implementation priorities for actions</td>
<td>55.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>Financial/budget commitment</td>
<td>20.0%</td>
<td>62.9%</td>
</tr>
<tr>
<td></td>
<td>Identify roles and responsibilities among sectors and stakeholders</td>
<td>52.5%</td>
<td>63.3%</td>
</tr>
<tr>
<td></td>
<td>Continuously monitor, evaluate and update</td>
<td>70.0%</td>
<td>73.2%</td>
</tr>
</tbody>
</table>
Global Warming Perceptions

<table>
<thead>
<tr>
<th>Fewer View Global Warming as Very Serious Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How serious is global warming?</strong></td>
</tr>
<tr>
<td>Very serious</td>
</tr>
<tr>
<td>Somewhat serious</td>
</tr>
<tr>
<td>Not too serious</td>
</tr>
<tr>
<td>Not a problem</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
</tbody>
</table>

Source: PEW RESEARCH CENTER March 13-17, 2013. Figures may not add to 100% because of rounding.

Is There Solid Evidence the Earth is Warming?

Yes, solid evidence the earth is warming

Warming mostly because of human activity

Climate Action Working Group

• Mitigation and Adaptation cannot be addressed independently
• Conservation is equally important
• Perceptions/ beliefs cannot be ignored as climate action will require buy in from a variety of stakeholders
Goals for Climate Action

1. Conservation
2. Mitigation
3. Adaptation
4. Education
5. Wealth Creation
6. Great Lakes
7. Environment and Social Justice

- Straightforward
  - General Public Policy Makers Practitioners
  - Important for this region
    - It is part of the regional identity, so should be paid attention to.....But there has been a recommendation to consider it across all of the preceding 5 goals and in proposed strategies

- Should be the basic value of this planning process
Unique Challenges Identified

• Climate action is linked to all other sectors
• Our goals can only be met through policy convergence
• Key sectors – transportation and land use
Overarching Recommendation

• Increase climate change sensitivity in local planning and decision-making
• Climate change action should be part of the development vision
• Strategies to address multiple goals (?)
Summary of Recommendations

- Promote renewable energy
  - Legislations, laws, incentives
  - Strengthen generation and transmission infrastructure
  - Close fossil fuel based plants
  - Objection to Fracking??
Summary of Recommendations

• Change in existing growth pattern: Promote sustainable and smart growth
  – Reduce dependency on automobiles
  – Avoid expansion of urban areas
  – Invest in existing neighborhoods
  – Promote development within existing urban areas
  – Conserve ecological resources
Summary of Recommendations

• Harness the power of non-profits
  – Implementing innovative clean energy projects
  – Green policy implementation
  – Education and outreach
Summary of Recommendations

• Education to increase climate change sensitivity
  – Tools and material for
    • Policy makers/decision makers
    • Practitioners
    • General public
  – Engage with existing organizations, specifically transportation, energy, and local infrastructure development departments
Summary of Recommendations

• Engage with existing organizations, specifically transportation, energy, and local infrastructure development departments

• Collaborative governance for implementation (?)
Next Steps

• Finalize Goals
• Revisit strategies
  – Have we missed anything?
  – Identify cross-linkages with other groups
  – Identify implementation agency
  – Measures of success
The following slides may be used during the working group discussions to focus discussion on identifying implementation agencies and possible measures of success.
Values & Goals

Value Statement: Promote Environment and Social Justice – it is the backbone of sustainability

Primary Goals for a CAP

1. Ensure that the local communities are better prepared in face of changing climatic trends
2. Ensure a balanced approach to addressing climate change through – Conservation, Mitigation, and Adaptation
3. Promote environmental education and information sharing on climate change issues
4. Ensure sustainability of Great lakes and other natural resources in the region
5. Encourage multiple impact strategies with tangible benefits for local economic growth and wealth creation
GOAL 1. Conservation

• Update zoning and building codes for better energy efficiency

Cross-linkages

Implementation Agency

Measure of success
GOAL 1. Conservation

• Develop a revolving loan fund in Erie and Niagara Counties to finance energy conservation and efficiency improvements.
GOAL 2. Mitigation

• Incentives for geo-thermal / ground source heating and cooling

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

• Implement feed-in Tariff policy
GOAL 2. Mitigation

- Community Clean Energy Coop

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

- Remote metering / Solar Garden legislation

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

- Implement PACE (Property Assessed Clean Energy)

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

- Wind Initiative similar to NYS Solar Initiative

Cross-linkages | Implementation Agency | Measure of success
GOAL 2. Mitigation

- Strengthen transmission -- but also consider alternative distribution structures beyond the current grid

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

• Close all fossil fuel power plants
GOAL 2. Mitigation

- Develop real alternatives to car culture, in the physical growth and settlement pattern

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

- Locate future businesses/shopping complexes so as to reduce vehicle traffic

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

• Strengthen neighborhoods to include a mix of uses
GOAL 2. Mitigation

• Develop electric vehicle infrastructure as short term goal

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

• Regionally, create a bi-county corridor - fast reliable transportation on options from NF to Buffalo / train to Toronto.

Cross-linkages

Implementation Agency

Measure of success
GOAL 2. Mitigation

• Create light rail along the Niagara Greenway
GOAL 3. Adaptation

- Regulations and policies to incentivize energy efficient rehabilitation of existing buildings

Cross-linkages

Implementation Agency

Measure of success
GOAL 3. Adaptation

- Review and maintain disaster preparedness (Stronger Disaster and Emergency Preparedness)

Cross-linkages

Implementation Agency

Measure of success
GOAL 3. Adaptation

- Protect biodiversity - lands, waters, creatures, air and other resources

Cross-linkages

Implementation Agency

Measure of success
GOAL 3. Adaptation

• Develop innovative strategies for workforce development and preservation of good work
GOAL 3. Adaptation

- Ensure food security through adaptation of existing farming and marketing practices

Cross-linkages

Implementation Agency

Measure of success
GOAL 4. Education

- Education platform for general public, policy makers and practitioners
GOAL 4. Education

• Enhanced collaboration with UB for education and outreach
GOAL 4. Education

- Education and outreach to non-profits (training of trainers)?

Cross-linkages → Implementation Agency

Measure of success
GOAL 5. Wealth Creation

- Clean energy jobs

Cross-linkages

Implementation Agency

Measure of success
GOAL 5. Wealth Creation

• Investment in sustainable businesses

Cross-linkages

Implementation Agency

Measure of success
GOAL 6. Great Lakes

- Expand collaboration between Ontario Power and NYPA

Cross-linkages  Implementation Agency  Measure of success
GOAL 6. Great Lakes

- Improve transmission within NYISO Region A to enable sun/wind

Cross-linkages

Implementation Agency

Measure of success
GOAL 6. Great Lakes

- Consider repurposing Beck and Moses from backup and lowest cost power to an indispensable balance to enhance Great Lakes wide power grid.

Cross-linkages

Implementation Agency

Measure of success
GOAL 6. Great Lakes

- Adopt a Feed-In-Tariff Demonstration project

Cross-linkages → Implementation Agency → Measure of success