One Region Forward  
Climate Change Action  
Working Team Notes  
Meeting 1, April 2nd 2013

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Michael Licata, TM Montante Solar  
Nate Drag, Alliance for the Great Lakes  
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Online Working Team Contributors:  
Dave Bradley, Buffalo Wind Action group

Comments made by Working Team Contributors online after the in-person meetings are reported using purple font. Click here to learn more about the Working Team Contributor process.

Summary of comments regarding two main issues for 50-year planning

1. Conservation / Efficiency  
2. Development Renewable Energy - stop fossil fuels  
3. Policies to support transition to renewable energy  
4. Upgrades on Transmission  
5. Protection of Great Lakes and water supply  
6. Education on climate change at all levels  
7. Know best practices; be innovative

Ice Breaker: What are the two most critical issues we, as a region, need to address right now to mitigate the effects of, and adapt to, climate change in two sentences?

- Understand wasted energy. Reduction of waste as well as better energy ways, more efficiency in energy use (Mike Licata).  
- What will happen regionally and state and worldwide. Local Governments need more information on what we are planning for. Try to adapt. (Jon. Schultz).
Look at existing source and move to new resources. Educate region about sustainability and climate change (Jim Simon).

Develop renewables and stop burning coal in the region (Erin Heaney).

Consumer education (people want to be clean but they are not really educated on how to do it). Analyze case studies from private sector: see ways on how to make a transition (Kelly Tyler).

Energy policy needs to be global. Many things can’t be done at regional level. Coal will be used worldwide even if we stop here. How to incorporate renewals in a short term? (Jack White).

Need major energy transmission Greater understanding on Great Lakes Global warming, flooding, etc. (Terry Yonker).

Regional transmission improvements Protect water supply (Lou Paonessa).

Thinking how climate change is changing/affecting our lakes (Nate Drag).

**Working Team Contributor Comments:**

- 1. Need to replace all pollution sourced electricity made in NYISO Zone A with renewable sourced electricity - most likely major sources being onshore wind, some biomass and some NYPAs owned offshore wind - and we need to use some of our underused manufacturing capacity to do this.
- 2. Need to replace the methane used for heat with electricity powered ground heat pumps - this also is a great job creation possibility via heat pump systems manufacturing and the installation aspect (small company construction) (Dave Bradley)

Lynda: PPT Presentation

**Working Team Contributor Comments about data points:**

- Much of this is irrelevant to most people in WNY. This will not stop people from using pollution sourced energy/stop the CO2 pollution resulting from fossil fuel consumption. What is needed is a way to couple improved possible economic conditions with most people (and not just the affluent who can afford such long term views) with renewable energy production (e.g. wind turbine component, heat pump manufacturing) and energy efficiency (home insulation, heat pump installation). These 11 pages are more like disaster porno. (Dave Bradley)

**Three Goals from Work so Far:**

1. Plan, design, develop and manage our region for energy efficiency and conservation to reduce our carbon footprint to mitigate the advance of climate change.
2. Invest in renewable energy production, especially from wind, solar, hydro-electric, and geothermal sources.
3. Anticipate and prepare to adapt to the already-inevitable impacts of climate change now under way.
7 Important Issues to Consider:
The team supported these goals and we went into more detailed discussion about how to set the goals and how to move forward to them. This discussion developed 7 important issues to consider, described below:

1. Conservation & Efficiency. Big issue. What are we thinking when we talk about conservation? Language of efficiency is easier to communicate.
   - Example: Lighting: less power to do more (less resources to create more)
   - Difference and connection between Conservation and Efficiency. It is not just about energy but forests, farm land, resources, etc. Differentiate Energy efficiency and conservation.
   - Efficiency = Doing more with less resources
   - Conservation = Natural Resources. Water.
   - Efficiency is major goal. How to make people think about this? Education is a major factor here.

2. Renewables:
   - Types of energy Non-carbon based.
   - Increase jobs with new industries- new renewable energy industries. More jobs/investment in renewables than fossil fuels and nuclear.
   - Jobs beyond installation to include manufacturing and production
   - People need to have the options for alternative energies to make the change. Even educated they need to get access and easy access. Awareness and education is basic to start.

3. Transmission infrastructure needs an upgrade:
   - Where is energy coming from? Where is going? Plan:
   - Replace infrastructure that is aging.
   - Develop smart grid to allow storage renewals when don’t need it and move it where is needed when it is needed (no needed in WNY but down south)
   - How to store and transmit energy.
   - Economic Development Tool: Buff-Niagara is in the epicenter for int’l major producers. We have the opportunity to operate with this system.

4. Great Lakes and Water:
   - Great lakes contribute 15% to global emissions. There is a reason to reduce carbon footprint in the region.
     - We should move towards Coal free industry.
   - Dropping lakes levels going fast; physical, ecological and economic impacts:
   - Economic impacts:
     - Reduce hydro potential.
     - Shipping
     - Dredging, commercial
     - Type of fisheries
   - And other consequences
Toxicity increased by less water in the system impacts health: People/Natural system damage
- Environmental Justice: where are people impacted
  - Lake levels are changing
  - Lake levels: moving fast and it is creating so much damage physically and as climate change.
  - Policy related to land for lake levels. Ownership? Help conserve places and have clean water?
    - There are policies on lake levels but not on ownerships. Who owns?
    - Land ownership of water-land edge.

5. Policy
  - Must have new policies to encourage efficiency, renewable development and transition away from fossil fuels. Need new framework and funding mechanisms
  - Need analysis of current policies and best practices for new policies like the FIT / Feed-In Tariff
  - Question: Where to buy or produce power. Generate locally most efficient.
  - ISO Review.
  - How to create standard operation procedures? Models for mitigation and adaptation based on the evaluation of existing standards and policy regulations based on up-to-date projections
  - Include environmental justice issues in all policy and regulatory changes

6. Education:
  - Resilience: Overcoming possible serious adverse effects; recovery strategies
    - Stress Recovery Organizations for psychological stress related to climate change: How reduce stress, avoid stress from the changes. Think of new programs to put in place. Maybe it’s a good idea to talk about this in this group and not just climate itself, but the issues coming from it affecting population.
    - Example of Australia: ‘Your landscape changes so much that makes you homesick even if you are still at home.’
  - Risk assessment of vulnerabilities. Water for example.
  - Use university research and education mechanisms.
  - Borrow Best Policies - what happening, what can we do?
  - Using Existing Programs: Find the way to let people know about all the new resources. Show the opportunities that are already out there. Programs and financial awareness.
  - Talk at the people level. How to talk about it at a level that everyone can understand.

7. Economics
  - Need good data of possible climate change impacts on agriculture, tourism, jobs, manufacturing, etc. Vulnerabilities and potentials. All plans should include the Economics Impacts such as job potential.
  - Public health. How climate is affecting people health, how can increase health costs in the future. Prevention is always less expensive
  - Major storms events. Natural Hazards issues. Costs of impacts
  - What if we gave new business free or cheap power? Could we boost the economy?
  - Where is the money coming from? How is it going to be incentive? Funding to implement?
    - Educate about financial aspects. Savings.
Doing more with less. Huge amount of savings.

- Avoided costs have to be included in calculations; Think about avoided costs. How much will really cost if we don’t do anything.

**Working Team Contributor Comments:**

- The climate we experience is the RESULT of our actions, and especially our energy consumption habits/source of our energy. Planning for a warmer world should come AFTER we eliminate the CO2 and CH4 pollution that is altering our climate, and is of secondary importance to the economics associated with providing our electricity, heat and transportation fuel. One thing missing is a crash effort at light rail transportation (good job creation, eliminates some oil usage which is also a money export = income and wealth export from region). Another is to "quit stuffing suburbs with money" via subsidies for oil based transportation. Another is to focus on eliminating oil usage/replacing the liquid fuels that can’t be avoided with locally made fuels. And finally, the economics: people who don’t have money cannot be customers for renewable energy and for energy efficiency improvements (like better insulation of residences). There is no comprehension of what Peak Oil will result in - oil prices doubling in price every 5 years is economically devastating to the majority of WNY’ers. We need to focus on the avoidance of most of our current oil consumption (= sub-urban living/automobile lifestyle), and replacement of that which can’t be avoided (farmers tractors, fire trucks, etc) with locally made fuels (Dave Bradley)

**Next Steps:**

**What is our starting point?**

- We need an existing data and analysis. What the existing data at different scales: micro/macro, regional/global?
- What is current energy profile; Energy infrastructure?
- What models are available? Not perfect but better than most people think.

**Where to go? Once you understand what you have, think on where you can go**

- Need to think regionally in relationship to global and need to balance local and global. (Example: Even in different places in the country the air looks different. Coal is going to be difficult-impossible to eliminate globally).
- As much as you prepare things will surprise so we need to be prepared. Promote adaptive strategies that allow for incremental and flexible adaptations. What we think may be the answers may not be the ones in 50 years. We cannot anticipate everything but need to do better than last 50 years.
- We cannot anticipate because technologies and deliveries are changing so fast. Efficiencies, delivery of power is changing and increasing and we don’t know how it is going to be. We need to be adaptable IF things change.
- Create different scenarios that examine possibilities; think of using policies and energy sources that work no matter which way it goes.
• Models are not perfect, but they are better than most people think. We can use them.

• Looking at our region’s future can be scary – Use of WATER.
  o Conservation – Education.
  o Disasters

How to set out goals

• Today we are talking about ISSUES to get to our final GOALS. How to turn this discussion from issues into goals?

Additional Working Team Contributor Comments:

• The focus of this effort seems to be for those in the upper 10% of the income bracket in WNY. Better results might come from ignoring that group and concentrating on the middle section (10% to 90% of wealth/income) bracket. This would get more of a focus on job creation (and please, no references to UB 2020/Kaleida complex, which tends to be net wealth CONSUMPTION), and how that relates to renewable energy generation/energy efficiency improvements. At present, there is a big disconnect between the two, and as long as that continues, we may as well surrender to a future of super-charged Global Warming. The key to bridging that gap is to allow renewable energies to be priced at the cost to make them plus some reasonable profit, and to quit having fossil fuels set the price for renewables and hope that tax avoidance subsidies for the small percent of uber-rich that invest in renewables can make up the difference between RE production costs and whatever the NYISO casino price happens to be. (Dave Bradley)