### Go Green Illinois, September 10, 2019

## **Energy Use/Environmental Impact of Energy**

#### Minutes

## Reducing Carbon through Taxes or Fees, David Holmquist, Citizens Climate Lobby

Putting a price on carbon has been proposed for years in the belief that if power companies were taxed for producing carbon, they would have an incentive to reduce carbon. Similarly, if electricity customers had to pay a carbon tax, they would also have an incentive to use less energy and consider renewable alternatives. The revenue of the tax could fund renewable energy, or pay a dividend to taxpayers. There is a video explanation of the carbon tax posted at: https://www.gogreenillinois.org/carbon-tax/.

This is a very complicated strategy, so it has been difficult to pass a bill. Columbia University researched this issue. (More info at: https://www.gogreenillinois.org/carbontax/). There are many bills in pending in Congress with different impacts. A steeply rising carbon tax would strongly encourage updates to the energy regulatory agencies. More information on carbon pricing is at: https://www.rff.org/publications/explainers/carbon-pricing-101/,

Energy Innovation and Carbon Dividend Act - sponsored by Ted Deutsch: This bill would tax producers or tax carbon as it comes out of the ground. The revenues would go back to customers. There is also the Climate Action Rebate Act - sponsored by Chris Coons and Diane Feinstein – but it needs a Republican co-sponsor. These 2 bills create a disincentive to investment in fossil fuels. The Deutsch bill would bring in significant sums of money that would benefit lower income communities while meeting goals of the IPCC in terms of carbon reduction.

Other bills have been introduced by Rep. Lipinski of Illinois and by Reps. Larson, Whitehouse, Rooney and Curbelo. These bills do not have a strong trajectory or disincentive to move away from fossil fuels.

Question: Do these bills address subsidy issues? No. The object is to keep the bill as simple as possible because complicated bills tend to fail. A direct dividend is a simple and transparent strategy.

One of the bills added a suspension of enforcement of the clean energy act. That was to give those opposing a carbon tax (Republicans) more incentive to support the bill.

Any organization can sign on to support Energy Innovation and Carbon Dividend Act. Contact David Holmquist at drholmquist@gmail.com.

Accelerating CO2 Reduction with Renewable Energy Credits (RECs), Bill Hayes

There is an urgent need to cut CO2 emissions in half by 2030 to mitigate carbon change. Any organization can cut their CO2 emissions by about half by using RECs. From Bill's research, about 1% of Illinois organizations use RECs to cut their emissions.

What Are Renewable Energy Credits (RECs)?

In Illinois, renewable energy has been separated from its environmental benefits for financial purposes. RECs are the environmental attributes associated with the carbon reduction made from renewable energy. Everyone who creates renewable energy produces both the energy and the environmental benefits. The environmental benefits can be bought and sold and help to provide financing for renewable energy.

What is the benefit of creating RECs?

- Allows for the tracking of the renewable energy.
- A market is created that expand supply and demand for renewable energy.

A carbon tax is a payment from fossil fuel generators, while a REC is a payment to renewable energy generators.

Wind producers supply 68% of the RECs, with solar and biomass each supplying approximately 16%. Over 70% of the buyers of RECS are power companies forced to buy them by state law. The rest are voluntary purchases by companies and organizations that choose to support renewable energy by buying RECs. The majority of residential purchases are related to municipal aggregation, like Evanston.

Conclusion – To meet our carbon reduction goals, we need

- Federal law mandating carbon reduction
- State policy that supports purchase of RECs (Clean Energy Jobs Act)
- Voluntary purchases
  - o Residential through aggregation with an opt out, not an opt in program
  - o Commercial/Industrial/Public Sector

# How Municipalities Can Support Energy Efficiency, Green Energy and Greenest Region Compact, Edith Makra, Metropolitan Mayors Caucus

The Metropolitan Mayors Caucus is a council of governments. Membership is comprised primarily of Mayors. It is also important for citizens and Go Green groups to support/urge their communities and town governments to move toward sustainable policies and practices.

The MMC created the Greenest Regions Compact. There are 127 Chicagoland municipalities that have signed onto the Greenest Region Compact 2 (GRC). Some are also using the GRC Framework to create sustainability plans and guide progress.

Municipalities can set high level goals for energy and meet them through using renewable energy (or RECs) and instituting efficiency programs. (Note: Villages get "free" electricity from ComEd, so this creates a disincentive to do this.)

Building Energy Codes – All our communities could contribute by voting to support strong building energy efficiency codes, See Energy-Efficient Codes Council post on website. Contact Kim Stone about how your community can vote for stronger Building Energy Codes. Municipalities must register voters by Sept. 23, and can vote between November 13 and 27. Every Go Green groups should contact their government to support this. Links are on the GGIL website. Voting is done on line.

Supporting energy efficiency is one of the most important things a community can do.

### **On-site Solar for Public Facilities**

- Must have energy demand
- Must have roof/land and infrastructure
- Must demonstrate cost saving
- Must have an agreement between a developer and user

There are incentives for solar development but some incentives do not work for municipalities (e.g. tax credits). Also, our municipalities do not pay for energy on non-revenue producing buildings under their franchise agreement with ComEd. This is a huge disincentive for our communities. Water utilities are an exception.

### **Community Solar**

The program is for municipalities and non-profits and is open for subscribers. Residential Community Solar has just been finalized. Most projects will not go on line until 2020.

New project: Community Solar Clearinghouse Solutions Program CS2 (Kim Stone is on this committee. Mark Pruitt is lead investigator.) This program assembles small municipal accounts into a pool to purchase community solar. 34 municipalities are involved in the first pool. They may create a second pool. This would involve a 20 year contract for credit worthy communities.

**Embodied Energy in Buildings & Deconstruction,** Aina Guiterrez and Anne Nicklin, Evanston Rebuilding Warehouse (ERW)

ERW's purpose is to save building materials from landfills and provide a workforce job training program doing deconstruction work. They provide affordable home products to a large community. They are building a culture of reuse in their community. They have workshops to teach people how to build and create, fix and learn for reuse and repair.

Deconstruction is the careful dismantling of built structures to salvage and reuse materials. They pay their trainees for five months, train them and then support them in other employment for up to two years.

Destroying buildings without salvaging materials rarely happened in the past. But then we designed machinery that could crush materials and quickly destroy entire buildings. That became standard practice as it was cheaper and faster than salvaging materials.

The Army is one of the great examples of deconstruction. They have well-developed standards that result in high recovery rates.

ERW can do a complete structural deconstruction but selective/partial deconstruction is an option, too. Older construction is easier to deconstruct. Newer construction is glued together and can be very difficult to deconstruct. What is the impact of deconstruction? They can save 95% of the materials and it reduces demolition health hazards. No communities that they know of require or incentivize deconstruction. There are some laws that may require recycling but not deconstruction. It is more expensive to deconstruction than demolish. Portland, Oregon now requires deconstruction.

## Replicable Projects/Campaigns

- 1. Zero Waste Picnic and Toy Swap Highland Park
- 2. National Wildlife Federation Habitat Certification Habitat Evanston
- 3. Sustainability Map Highland Park
- 4. Sustainable Yard Tour Park Ridge, Winnetka & Wilmette
- 5. Tree Walk Wilmette & Others?
- 6. Film Series Wilmette & Others
- 7. Go Green Reads Winnetka & Northfield
- 8. Beach Clean Ups Winnetka, Highland Park & Wilmette no plastic gloves and bags, make art with collected materials
- 9. Bike Rides Highland Park, Northbrook, Winnetka
- 10. Bike Racks Wilmette
- 11. Electric Car Exhibits Highland Park, Northbrook, Wilmette