



Bloomington Sustainability Action Plan Climate, Energy, and the Built Environment Working Group Meeting Three Notes (Part 1)

10 April 2018

City Hall

6 pm – 8 pm

Topic: Identify challenges regarding renewable energy and green buildings and propose solutions.

Facilitator: Stephanie Richards

Computer notes: Steven Chybowski

Attendees: 13 (Anees Azzouni, Cynthia Breithem, Nolan Hendon, Alex Jorck, Molly O'Donnell, Chris Reinhardt, Nejla Routsong, Loren Stumpner, Andrea Webster, Marla Cherney, Steve Chybowski, Autumn Salamack, Stephanie Richards)



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Agenda

6:00 pm – 6:05 pm: Feedback on Sustainability Definition and Vision Statement
6:05 pm – 6:20 pm: Review of Meeting 2 Recommendations for Energy Efficiency and Conservation
6:20 pm – 6:40 pm: Presentation on Renewable Energy and Green Buildings
6:40 pm – 7:00 pm: Root Challenges to Renewable Energy and Green Buildings
7:00 pm – 7:45 pm: Breakout Discussions
7:45 pm – 7:55 pm: Sharing of Breakout Results
7:55 pm – 8:00 pm: Wrap up

Summary of Topics discussed

- Review goals and actions discussed in meeting two
- Background presentation of the current situation of Bloomington renewable energy and green buildings
- Identify challenges the community faces with renewable energy and green buildings
- Discussion of challenges and solutions for renewable energy
- Discussion of challenges and solutions for green buildings

Detailed Notes

Overview of Process

- Stephanie will meet with the Advisory board on May 15
- Stephanie is still reviewing the sustainable community and vision statement definitions
- As a group, we will review recommendations from meeting two and look at the comprehensive plan
- We will do dot voting to prioritize the actions at the end of the next meeting

Review of Meeting Two Notes



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Energy Conservation and Efficiency

Community Goals found in Bloomington Comprehensive Plan

- Goal 3.1: Increase renewable energy sources and reduce community-wide fossil fuel consumption
 - Policy 3.1.1: Serve the community's energy needs using renewable energy sources and target efficiency improvements in the public and private sectors
 - Outcome: Fossil fuel consumption is reduced
 - Indicator: Community-wide electric, gasoline, diesel, and natural gas consumption data



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Energy Conservation and Efficiency

Community Goals found in Bloomington Comprehensive Plan

- Goal 3.2: Drive increased efficiency and reduced environmental impacts in the built environment.
 - Policy 3.2.2: Increase greenspace and protect environmentally sensitive areas.
 - Policy 3.2.3: Encourage and facilitate tree planting on both public and private properties with developed standards to minimize damage to critical infrastructure like sidewalks.
 - Outcome: Green space has increased
 - Indicators: Parks and green space area, vegetative cover in downtown area, percentage of tree canopy coverage, square footage of green roofs



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Energy Conservation and Efficiency

Community Goals found in Bloomington Comprehensive Plan

- Goal 3.7: Reduce Greenhouse Gas Emissions
 - Policy 3.7.1: Promote energy-saving retrofitting of public and private buildings and informed decision-making for building renters based on energy consumption
 - Programs:
 - ✓ Create an energy efficiency program aimed at cost-effective energy-saving strategies for residential households.
 - ✓ Improve the information available to renters and homeowners to encourage increased energy efficiency.
 - ✓ Assess incentive programs that encourage greater energy efficiency and use of renewable energy sources in new developments.
 - Outcome: Carbon emissions are significantly reduced



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Energy Conservation and Efficiency

Relevant Recommendations from Meeting 2

Energy Efficiency Program

- Utility programs to decrease commercial energy usage
- Energy audits performed by nonprofits or energy service companies (ESCOs)
- Group insulation programs
- City partnership with contractors
- Information campaign to make energy efficiency improvements more exciting
- Information on financial returns associated with specific energy efficiency improvements
- Research possible changes to Home Owners Association covenants to improve energy efficiency
- Creation of 2030 districts
- Changes to State Building Code
- Changes to Unified Development Ordinance (UDO)
- Skills classes for homeowners so they can make their own energy efficiency improvements
- Web application to encourage supply of energy efficient rentals
- Bank low-interest loans for energy efficiency improvements



Energy Conservation and Efficiency

Relevant Recommendations from Meeting 2

Improved Information

- Information campaign on the true costs of electricity usage
- HAND green certification program for properties or entire neighborhoods
- Energy disclosure ordinance to require declaration of energy usage

Assessment of Incentives

- Landlord inclusion of utilities in rent
- Tax breaks/subsidies for energy efficiency improvements
- Recognition for landlords that make energy efficiency improvements
- Tax incentives to encourage contractors to build smaller homes
- Higher building permit fees for bigger homes
- Tax breaks for sustainable HOAs
- Double rebates for energy efficiency improvements (in partnership with nonprofit)
- City loans for energy efficiency improvements (e.g. Property Assessed Clean Energy)



Energy Conservation and Efficiency

Relevant Recommendations from Meeting 2

Potential Metrics

- Energy usage data normalized for weather changes
- Per widget energy usage data

Potential Partners

- Indiana University
- South Central Community Action Program
- Chamber of Commerce
- Neighborhood Associations
- Homeowners Associations
- Banks and Financial Institutions
- Nonprofits
- Utilities
- ESCOs

- Most recommendations from meeting two relate to comprehensive plan goal 3.7
- We believe that PACE would have to be passed at the state level first before it could be passed in the city
- A concerted effort to impact the state on energy conservation – mandated energy efficiency from the state – would also impact the block pricing of utilities which would involve IURC
- Our goal “Change state building code” should be more specific and be to “change local level building code that is more stringent than before”
- Can we prioritize the actions based on the ones that will have the biggest impacts? We have a lot of actions already

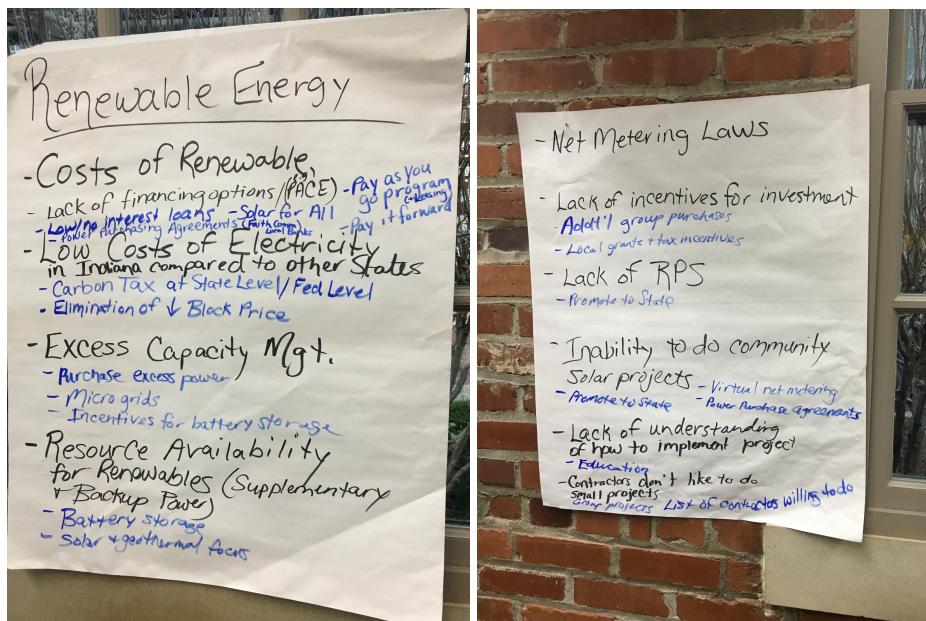
Presentation on Renewable Energy and Green Buildings

- There is variation in the data about how much energy is produced by renewables in Bloomington
- We can make recommendations so that new developments consider sustainable options in their covenants
- We can utilize city ordinances via the Planning Department
- We can partner with the energy provider like other cities
- Consumer purchase options – Duke has a program where you can opt in to buying wind energy
- Promote the Duke program of consumer purchase options – choosing to use wind/solar power
- We can incorporate ideas from our partners

If we Think it is Important to Increase Renewable Energy, why isn't it Happening?

- Cost
- *Possible Solution: Low interest loans*
- *Possible Solution: Solar for all*
- *Possible Solution: Pay as you go – pay as you get benefits*
- *Possible Solution: Pay it forward*
- *Possible Solution: Research power purchasing agreements process – make it more accessible as a solution*

- *Possible Solution:* Partner with local banks and the faith community
- Low cost of electricity compared to other states – payback period for solar is much longer
- *Possible Solution:* Carbon tax – state or federal level
- *Possible Solution:* Elimination of block pricing
- Excess capacity and power management – how can we encourage the optimal level of solar?
- *Possible Solution:* Purchase excess power
- *Possible Solution:* Micro grids
- *Possible Solution:* Incentives for battery storage
- Resource availability – Wind and sun limits
- *Possible Solution:* Battery storage
- *Possible Solution:* Capitalizing on the resources available
- Supplementary power and backup power
- Net metering law
- Lack of state/federal rebates and incentives
- *Possible Solution:* Replicate Bloomington's 2017 program
- *Possible Solution:* Local grants and tax incentives
- No renewable portfolio at the state level
- *Possible Solution:* Lobby the state to adapt Renewable Portfolio Standards
- Inability to do community solar projects
- *Possible Solution:* Promote community opportunities at the state level
- *Possible Solution:* Virtual net metering
- *Possible Solution:* Power purchase agreements
- Lack of knowledge in implementing projects
- *Possible Solution:* Education
- Contractors that are not willing to do smaller projects
- *Possible Solution:* Group projects together
- *Possible Solution:* The City can provide a database of contractors that are willing to do small projects
- Lack of financing options/PACE



What Challenges stand in our way for Green Buildings?

- Lack of knowledge and understanding of green buildings

- Possible Solution: Educational outreach
- Possible Solution: Showcase pieces of green buildings
- Certifications = green washing (not rigorous enough)
- Also, very rigorous to reach the higher levels
- Regulatory barriers
- Possible Solution: Have each department establish goals for barriers
- Contractors not willing to do green building projects
- Possible Solution: Incentives in energy code, UDO
- Possible Solution: Providing contractors with ideas during permitting and require comment
- Cost barriers
- Possible Solution: Tax incentives
- Split incentive problems (owners v. renters)
- Possible Solution: Including utilities
- Possible Solution: Research on demand
- Miscommunication regarding demand
- Promote certifications besides LEED
- Possible Solution: Education
- Possible Solution: Green building tours
- Possible Solution: Conferences hosted here
- Public health component of green buildings is forgotten about
- Awareness of resource efficiency practices
- Possible Solution: Calculating salvage rates

