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City of Bloomington Sustainability Action Plan

Name of Working Group

Meeting 3

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SPEA

Lead for the Greater Good





Current Situation in Bloomington

- Renewable Energy
 - Indiana generates approximately 85% of electricity from coal
 - Bloomington's renewable energy supply is 0.3% (STAR Communities) (6% from GHGI)
 - Positive public support for solar initiatives
 - Rising demand for community and residential solar initiatives
 - Solarize Bloomington Project
 - More requests in 2017 than contractors could install (via SIREN)
 - SIREN (Solar Indiana Renewable Energy Network)
 - Outreach and education
 - Grant-writing assistance
 - Site assessments for solar potential



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Renewable Energy & Green Buildings

Current Situation in Bloomington

- Green Buildings
 - Green Buildings Incentives Program
 - Open House feedback: no data tracking usage and little to no incentives given out
 - No catalogue of green buildings exists currently
 - Some information on greenspace percentage
 - Increased for the first time in 2011 by 7 acres
 - Green Building Ordinance exists but lacks clarity



Renewable Energy & Green Buildings

Community Goals found in Bloomington Documents

- Renewable Energy
 - Integrate renewable energy into new and existing city facilities (BCP)
 - Incentivize renewable energy sources (BCP)
 - Broad objective to create a renewable energy portfolio (BEAP)
 - No specific goals/ percentages set
 - Create/ clarify green building ordinances (BEAP)
- Green Buildings
 - Implement rain gardens (BCP)
 - Reduce impervious surface areas (BCP)
 - Make green spaces a standard element of redevelopment (BCP)
 - Reach 40% canopy cover by 2020 (BEAP)
 - Adopt one green infrastructure technique in each city building (BEAP)
 - Adopt a city-wide green infrastructure policy (BEAP)
 - Promote permeable/ high albedo pavement (BEAP)



Renewable Energy & Green Buildings

Metrics Recommended in ISO 37120 and STAR

- Renewable Energy
 - STAR flexible Indicator #8: Portion of a city's electricity supply coming from renewable energy
 - Can include renewable energy credits if Green-e certified
 - *Generating capacity* of renewable sources/ total generating capacity of electric plants
 - ISO core indicator standard 7.4: percent of total energy *consumption* in a city derived from renewable sources
- Green Buildings
 - STAR flexible Indicator #21: climate adaptation benefits of green infrastructure beginning at 35% green infrastructure
 - ISO core indicator Standard 19.1: green area of a city
 - Total green area divided by 1/100,000 of the city's total population
 - Number of trees per 100,000 population



Renewable Energy & Green Buildings

Metrics Found in Bloomington Documents

- Renewable Energy
 - STAR: percent of generating capacity that is renewable
 - 0.3% (STAR Communities) OR (6% from GHGI)
 - Leading indicators:
 - Installed solar for 100 homeowners generating 1MW (via Solarize Bloomington)
 - Doubled the amount of solar in Bloomington
- Green Buildings
 - Percent of green infrastructure (not reported)
 - City-level LEED member
 - 2015 data 1 building LEED certified
 - Various more IU buildings LEED certified
 - Greenspace acreage increased by 7 acres in 2011
 - Poor reporting in recent years



Renewable Energy & Green Buildings

Metrics Used in Other Cities

- Renewable Energy
 - STAR: percentage of green energy supply
 - Iowa City, Iowa: 47%
 - Columbia, Missouri: 7.2%
 - Lawrence, Kansas: 14.3%
 - Ann Arbor, Michigan: 4.8%
- Green Buildings
 - STAR: Iowa City, Iowa
 - 41.4% land area covered by vegetative or porous surfaces
 - LEED member: Iowa City, Iowa; Lawrence, Kansas; West Lafayette, Indiana
 - CLEAN Communities member: West Lafayette, Indiana



Renewable Energy & Green Buildings

Actions Used in Other Cities

- Renewable energy
 - Removed regulatory restrictions on renewable energy installations (Iowa City, Lawrence, Ann Arbor)
 - Partnerships with local energy providers (Iowa City, Columbia, Ann Arbor)
 - Consumer purchase options (College Station, Columbia, Ann Arbor)
 - Rebate/incentive programs (all)
 - Created a comprehensive community plan (Columbia, Lawrence, Ann Arbor)
- Green Buildings
 - Created zoning/policy requirements for green infrastructure (Iowa City, Columbia, Lawrence, Ann Arbor)
 - Use of rain barrels/gardens (West Lafayette)
 - Held green events and conferences (Iowa City)
 - LEED certification of municipal buildings (Ann Arbor, West Lafayette)



Renewable Energy & Green Buildings

Actions Recommended in STAR

- Renewable Energy
 - Develop a community-wide plan
 - Remove zoning and regulatory restrictions on renewable energy installations
 - Incentive programs
 - Municipal facility and infrastructure improvements
- Green Buildings
 - Develop a green infrastructure plan
 - Require green infrastructure practices in new developments
 - Stakeholder engagement and education
 - Incentives and reporting



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Thank You

Questions and Answers