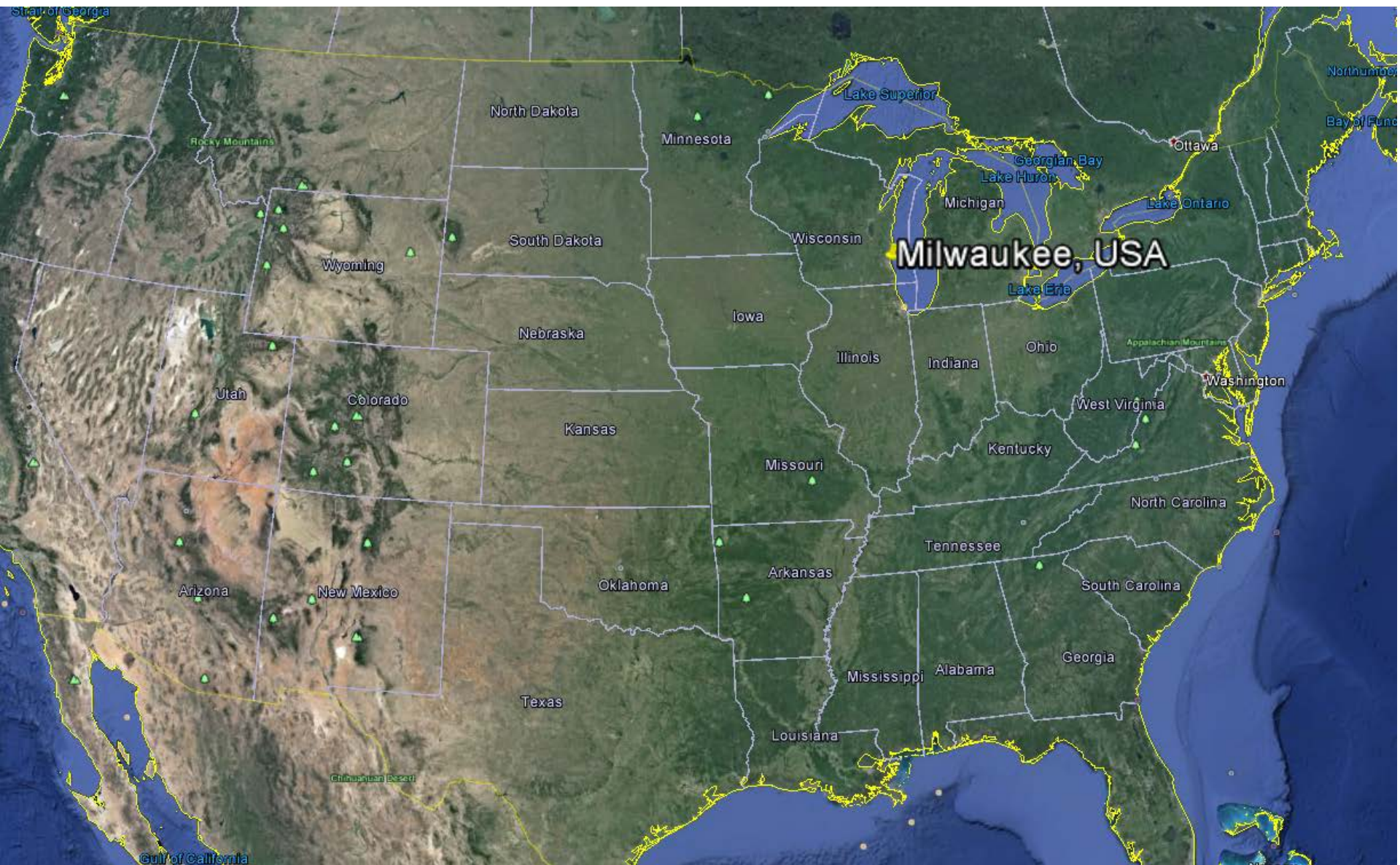




Milwaukee, WI, USA

North America's *"Smart Energy Hub"*



Milwaukee Background

- Located next to Lake Michigan
- Population of City: 600,000 (1.6m in metro area)
- Key industries
 - Manufacturing
 - Energy, Power, and Controls
 - Water Technologies
 - Food and beverage processing
- Climate: Warm, humid summers and cold, snowy winters





“I want to create an alignment of economic and environmental interests that improve Milwaukee’s quality of life.”

– Mayor Tom Barrett

Mayor Barrett's Energy & Environmental Leadership

- 2013 and 2014 Climate Protection Awards from US Conference of Mayors
- The City and MMSD won 2011 Leadership in Stormwater Management Award from Great Lakes & St. Lawrence Cities Initiative
- Supporting our manufacturing base with sustainability solutions
- “Sustaining, enhancing, and promoting Milwaukee’s natural environmental assets” is one of the Mayor’s six key goals
- Invited to give keynote speech at US Department of Energy’s Better Buildings Summit



- Sustainability implemented throughout city government

Milwaukee Office of Environmental Sustainability

- Created by Mayor Barrett in 2006
- Initial Focus Areas
 - Energy
 - Green Infrastructure
 - Green Jobs
- Energy Efficiency → Economic Development
- Programs that make City operations and the community more sustainable





ReFresh Milwaukee



- Milwaukee's Sustainability Plan
- Stakeholder input and public outreach
- Vision & strategic plan for community sustainability
- Federal stimulus funding in 2010 jump-started our programs
- Eight issue areas



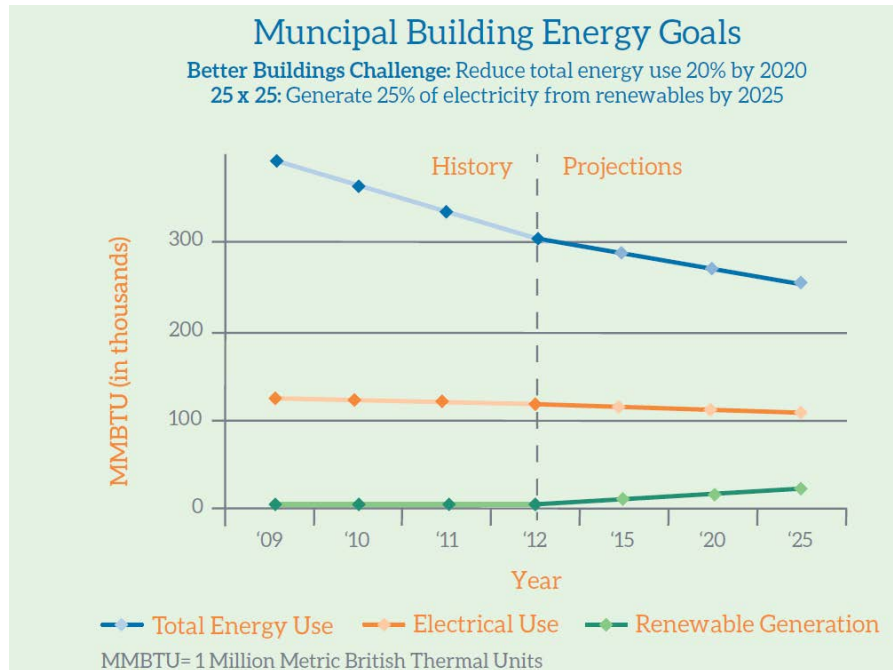
Energy Chapter

- City Energy Management Plan (Municipal Facilities)
- Innovative Financing Options for Energy Efficiency and Clean Energy (e.g. PACE)
- Promote and enhance Milwaukee's Smart Energy Hub and energy innovation center
- Advocate for a Sustainable Energy Future (energy priorities law as basis)



1. City Energy Management Plan

- Energy Reduction Team (efficiency first)
- Better Buildings Challenge (reduce energy 20% by 2020)
- Renewable energy (25% by 2025)



2. Innovative Financing for Efficiency and Renewable Energy

- Financing so homeowners and businesses “pay as the save” for efficiency projects
- Me² residential energy efficiency loans
- Commercial PACE Financing
- Solar group buys



3. Smart Energy Hub



- Milwaukee as national leader in energy tech companies
- Midwest Energy Research Consortium (M-WERC) headquartered in Milwaukee
- Coordinates university research and business development
- Energy Innovation Center at Century City Tower

4. Advocate for a Sustainable Energy Future

- Energy Priorities law as basis (energy efficiency first)
- Demonstrate that energy efficiency and renewable energy is *cost effective* and *technically feasible*.
- Advocate for improvements at utility level, PSC, and state legislature



Better Buildings CHALLENGE

U.S. DEPARTMENT OF ENERGY

MILWAUKEE

- Goal: Cut energy use by 20% by the year 2020
- Free internet tool to track and manage building energy use
- Promote awareness of energy efficient buildings to attract tenants
- City leads by example



New Project:

Location, Location, Efficiency

- Comprehensive energy management offering for commercial building owners
- Bundled Service Delivery for:
 - Energy Audits
 - Data Management
 - Financing
 - Incentives
 - Tenant Engagement
 - Awards and Recognition



Contact

Erick Shambarger
Director of Environmental Sustainability
(414) 286-8556
eshamb@Milwaukee.gov
www.milwaukee.gov/sustainability