

Non-Minneapolis Visions and Plans

As climate change has increasingly become a concern to localities around the world, many cities, states, and countries have carved out energy visions and goals to reduce their impact on the climate. This document highlights energy visions both within Minnesota, and from cities across the U.S. The purpose of this document is to provide context, insight, and support for Minneapolis as it moves forwards with its own energy vision. The document is divided into two sections, first highlighting existing visions/plans (both public and private) within Minnesota. The second section examines what other cities in the country are doing.

Minnesota Examples

1. The Next Generation Energy Act

[The Next Generation Energy Act](#) was signed into law in 2007. The law aims to boost investments in renewable power, increase energy conservation and decrease Minnesota's contribution to global warming. The law established two overall energy goals for the state: 1) reduce per capita use of fossil fuels by 15 percent by 2015, and to derive 25 percent of the total energy used in the state from renewable power sources by 2025. The law also calls for cutting the state's greenhouse gas emissions to 15 percent below 2005 base levels by 2015, 30 percent by 2025 and 80 percent by 2050. The law aims to achieve these goals by a combination of energy conservation and renewable energy generation.

2. Xcel Energy

Xcel Energy's vision is to:

Be a responsible environmental leader, while always focusing on our core business – reliable and safe energy at a reasonable cost.

Under Minnesota Statute 216B.241, Xcel Energy is required to achieve an energy savings goal of 1.5 percent of average retail sales annually. Additionally, the state enacted legislation in 2007 (part of the Next Generation Energy Act) that established a [renewable portfolio standard](#) (RPS). Under this standard, Xcel Energy is required to follow this RPS schedule:

- 15% by 2010
- 18% by 2012
- 25% by 2016
- 31.5% by 2020 (including 1.5% solar)

In addition to state mandates, in response to legislation from 2001, Xcel Energy voluntarily initiated the Minnesota [Metro Emissions Reduction Project](#) (MERP). This \$1 billion program involves significantly reducing air emissions from three Twin-

Non-Minneapolis Visions and Plans

Cities area power plants. This included the Riverside plant conversion where Xcel replaced two existing coal-powered units with a natural gas combined cycle.

3. CenterPoint:

CenterPoint Energy's vision is to:

To be recognized as America's leading energy delivery company...and more.

CenterPoint Energy only provides natural gas to Minneapolis and is not subject to the renewable portfolio standards that are required for electric utilities. However, CenterPoint must comply [conservation standards](#) and reduce its average energy sales by 1.5 per each year.

4. Minneapolis Energy Options:

Minneapolis Energy Options seeks to advance a [Clean, Affordable, Reliable, and Local](#) energy future (CARL). MEO defines CARL as:

Clean

Currently, less than 1% of the energy used in Minneapolis comes from clean sources within the city. MEO wants to increase that percentage to reduce environmental impact and keep dollars local.

Affordable

A municipal utility could cut costs and save residents money on their energy bills by not being beholden to shareholders.

Reliable

Upgrade and maintain electrical and natural gas distribution networks and develop smart grid technologies to improve grid responsiveness and reliability.

Local

Increase local jobs and keep dollars in the city through city ownership of our energy system.

Non-Minneapolis Visions and Plans

National Examples

1. CPS Energy - San Antonio, TX

[CPS Energy](#) is the largest municipal utility in the country providing both electric and natural gas service to residents of San Antonio, TX. The current mix of generation is comprised of 47% from coal, 32% from nuclear, 12% from natural gas, and 9% from renewable sources.

CPS Energy's [Strategic Plan Objectives](#) include:

Increase Energy Efficiency Efforts: Reduce demand for electricity by 771 megawatts by 2020.

Expand Renewable Energy Sources: CPS Energy is well on its way of achieving its goal of 20 percent renewable energy by 2020.

Provide Cost-Competitive Electricity: CPS Energy uses diverse energy sources to keep energy rates low. In 2010, CPS Energy built a 750 MW coal-fired plant, quick-start natural gas units have been installed, and plans are underway to remove several older and less efficient natural gas plants from service. Additionally, CPS Energy owns 40 percent of the 2 existing nuclear power plants.

Maintain Our Strong Environmental Commitment: CPS Energy has upgraded existing coal plants with the latest in emissions-control systems. They also operate a fleet of alternative-fueled vehicles, plant thousands of trees, and increase use of renewable energy.

In March 2013, CPS Energy [announced](#) a partnership to deploy a smart grid network.

2. Seattle City Light – Seattle, WA

Seattle City Light is a publicly owned utility dedicated to exceeding its customers' expectations in producing and delivering environmentally responsible, safe, low cost and reliable power. In 2012, the City of Seattle adopted an aggressive goal of **carbon neutrality by the year 2050** as part of its [Climate Action Plan](#). Seattle City Light is the lead agency on a number of energy-based mitigation actions including:

- **Outcome-Based Incentives:** Seattle City Light should coordinate with other utilities to pilot a performance-based utility incentive program.
- If pilot is successful, identify resources to scale up and expand Seattle City Light's retro-commissioning pilot program.

Non-Minneapolis Visions and Plans

- Support the rapid deployment of advanced metering infrastructure
- Maintain Seattle City Light commitment to meet load growth with conservation and renewables, as well as to providing zero net emission electricity

3. Portland General Electric – Portland, OR

Portland General Electric (PGE) is an investor-owned utility that provides electric energy to the residents of Portland as well as other communities in Oregon. The current [resource mix](#) is comprised of the following:

- 28% Natural Gas
- 25% Coal
- 16% Hydro
- 11% wind
- 9% Market Purchases
- 5% Long-term Market Contracts

While the PGE does not have specific targets for greenhouse gas emissions reductions, it is taking the following [steps to reduce emissions](#):

- Increase renewable resources ([25% by 2025 – state law](#))
- Promote energy efficiency
- Operate generation plants as efficiently as possible
- Promote renewable power to customers
- Support transition to electric vehicles

In contrast to Portland General Electric, the City of Portland adopted a [Climate Action Plan](#) in 2009. The plan calls for a **40% reduction** of GHG emissions by 2030 (below 1990 levels) and **80% by 2050**.

4. Commonwealth Edison (ComEd) – Chicago, IL

The City of Chicago adopted a [Climate Action Plan](#) that calls for **an 80% reduction in emissions by 2050**. The plan consists of 5 strategies and 35 actions to meet its goals. [Energy mitigation strategies](#) include:

- Upgrade power plants
- Improve power plant efficiency
- Build renewable electricity
- Increase distributed generation
- Promote household renewable power

ComEd is the electric utility for the City of Chicago and was part of the Clean and Renewable Energy Sources Working Group that developed the mitigation strategies. ComEd is a member of the voluntary EPA SF6 Emission Reduction Partnership for Electric Power Systems Program. Some [actions ComEd is taking include](#):

- Creation of industry-leading green supply chain network

Non-Minneapolis Visions and Plans

- Building one of the country's largest alternative fuel and energy-efficient hybrid vehicle fleet
- Energy efficiency programs
- Prairie restoration
- Increased recycling efforts

ComEd supports its parent company's, Exelon, 2020 plan, which is a Low Carbon Roadmap. Exelon 2020 has the goal to reduce, offset, or displace more than 15 million metric tons of GHG by its family companies.

5. Sample of U.S. Cities with 80% Reduction by 2050

- Portland, OR (see above) (Pop. 594,000)
- Chicago, IL (see above) (Pop. 2.7 million)
- Berkeley, CA (Pop. 113,905)
- Cambridge, MA (Pop. 106,000)
- San Francisco, CA (Pop. 813,000)

6. Sample of U.S. Cities with Net Zero goal by 2050

- Seattle, WA (see above) (Pop. 620,000)
- [Davis, California](#) (Pop. 66,000)

7. Other U.S. Cities' Climate Goals

- Denver, CO [25% Reduction by 2020](#)
- Boston, MA [25% Reduction by 2020](#)
- Austin, TX:
 - All city facilities and fleet operations [carbon neutral by 2020](#)
 - Make Austin Energy the leading utility in the nation for greenhouse gas reductions
 - Strategies are being explored for the possibility of community-wide carbon neutrality by 2050.
- Eugene, OR [75% reduction by 2050](#)
- Oakland, CA [36% reduction by 2020](#)
- Kansas City, MO [30% reduction by 2020](#)
- Madison, WI [40% reduction by 2030](#)