

The Smart Grid City

Xcel Energy's Smart Grid Consortium is working towards a future when our energy grid can predict its problems and strengths while optimizing available resources.

The Consortium has announced plans to build Smart Grid City, a community that combines traditional and emerging technology to move the energy grid into the digital age.

This next-generation grid will allow customers and utilities to collaboratively manage power generation, delivery and energy consumption. Smart Grid City will boast a fully inter-connected energy system capable of managing the various parts of the grid involved in producing power and delivering it to consumers.

Key components of Smart Grid City include:

- A dynamic system rich in information technology
- High-speed, real-time, two-way communications
- Sensors throughout the grid enabling rapid diagnosis and corrections
- Decision-making data and support for peak efficiency
- Distributed generation technologies (such as wind turbines, solar panels, and plug-in hybrid electric vehicles)
- Automated "smart substations"
- In-home energy control devices
- Automated home energy use

