

Objectives

- Learn about West Union's downtown district geothermal system connected to nearly 60 buildings
- Learn about Farmers Electric Cooperative's innovative solar projects around Frytown, IA
- Share information on Iowa community wind projects
- Learn about a net-zero energy housing development project in Charles City
- Gain knowledge of Dubuque's parcel-by-parcel renewable energy asset map
- Hear about the technical and financial benefits to partnering for LED street lights
- Discover how four Iowa communities recently competed to reduce community electricity use
- Learn about the Iowa Association of Municipal Utilities whole town audit project
- Network with your community and utility peers

Topics Covered

- Project development process, how to put a project together
- Examples of types of local systems, capacity, location, how the systems work
- Securing system users, building the business case building-by-building
- System operations and maintenance
- Risk mitigation, policies, rate structure, governance structure, ownership
- Partnering for results
- Project funding, cost and revenue information

Target Audience

- Utilities – municipal, investor-owned, rural electric cooperatives
- Local government planners and decision makers
- Energy efficiency service providers
- Renewable energy service providers
- Councils of government

RSVP

Please RSVP by August 20, 2013 to guarantee enough resource materials and refreshments

More Information

Jeff Geerts, jeff.geerts@iowa.gov or 515.725.3069 or iowaeconomicdevelopment.com/EnergyWorkshop

Community Efficient and Renewable Energy Workshop

August 27, 2013
9:30 AM – 4:00 PM

American Legion
103 East Main Street
West Union, IA 52175

FREE

More Reasons to Visit West Union!

- District ground source loop heating and cooling system stubbed to nearly 60 downtown buildings
- LED streetlights to reduce energy and maintenance costs and improve lighting;
- Energy audits performed throughout downtown;
- Six-block long porous paver system to infiltrate, cleanse and cool stormwater;
- Crosswalk treatments improving pedestrian safety and encouraging walking;
- Rain gardens managing stormwater while adding native plantings to downtown;
- Accessibility improved to many downtown buildings;
- Plug-in hybrid vehicle station;
- Courthouse square plaza as central gathering place supporting strong sense of place;
- 12 upper-story housing units being added;
- Multiple store fronts being rehabilitated; and
- Local art crafted locally to add beauty and support the local economy.

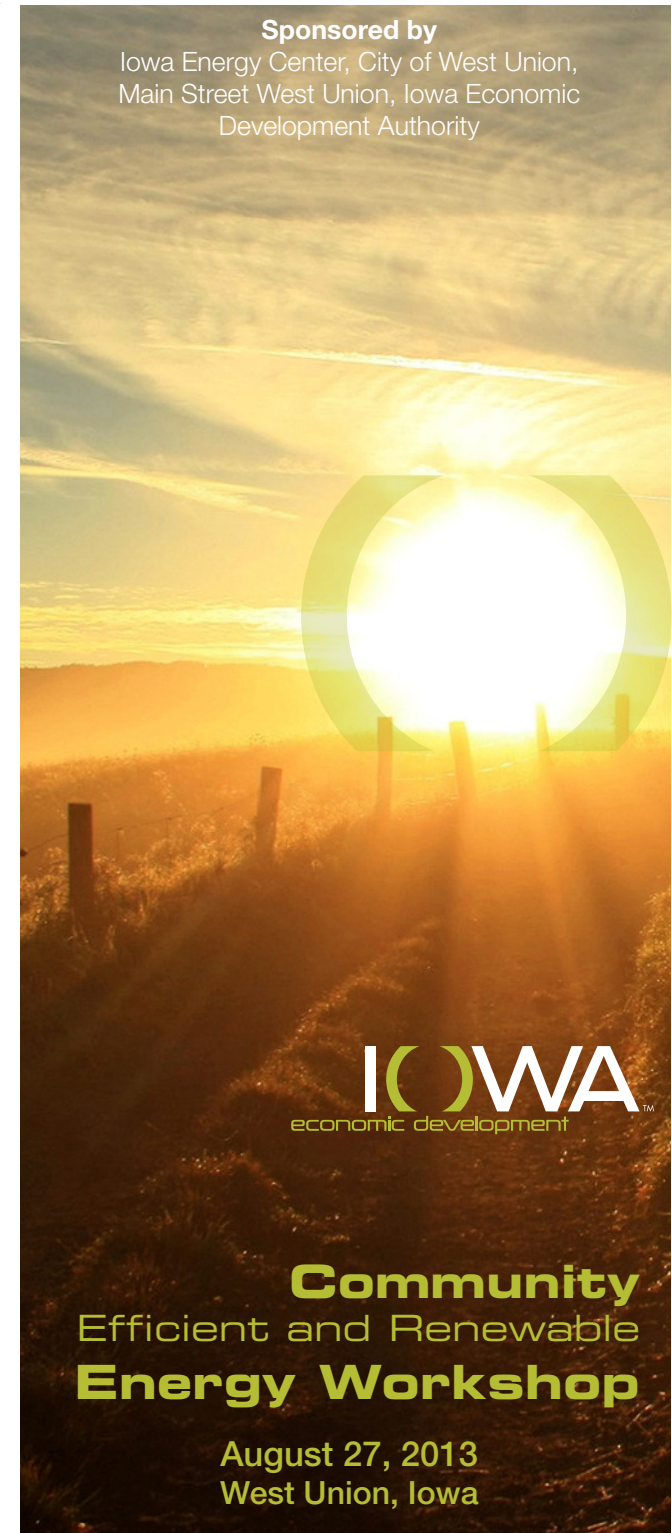
A **free bus shuttle** from Ames and Des Moines are tentatively planned for the following:

- Ames - depart 6:45am, return 7:00pm
- Des Moines - depart 6:00am, return 7:30pm

Please indicate on your RSVP if you would like to participate in the bus shuttle option.

Sponsored by

Iowa Energy Center, City of West Union,
Main Street West Union, Iowa Economic
Development Authority



9:30am **Introductions, Goals and Agenda**
Room introductions, why are you here, what type of project, if any, are you considering?

10:00am **West Union District Geothermal Heating & Cooling System**
(Brian Kuhn, IBC Engineering; Jon Biederman, Tekippe Engineering; Bob Vagts, West Union)
West Union recently installed a district distributed ground source loop system (geothermal system) connected to nearly 60 downtown buildings for heating and cooling. Learn about this nationally innovative approach to enhance Main Street business through energy efficiency. Topics covered:

- Type of system, capacity, location, how the system works, etc
- Reduce the energy load first, promoting/supporting energy efficiency
- Securing system users, building the business case building-by-building
- System operations and maintenance
- Risk mitigation, policies, rate structure, governance structure, ownership
- Project cost and revenue information
- Project evaluation and future steps

10:50am **Break**

11:05am **Iowa Community Wind Projects – Public and Private Owned**
(Tom Wind, Wind Utility Consulting)
This session will highlight different successful approaches being used by Iowa communities to add wind to their energy portfolio. Participants will also learn how to determine if a wind project is right for their community. Topics covered:

- Project development process, how to put a project together
- Types of systems, capacity, location, how systems work
- System operations and maintenance
- Risk mitigation, policies, rate structure, governance structure, ownership
- Project cost and revenue information
- Determining if a wind project is feasible for your community

11:45am **LED Street Lights – Communities Partnering for Technology Knowhow and Cost Savings**
(Anne Kimber, Iowa Association of Municipal Utilities)

12:00pm **Whole Community Energy Audits**
(Joel Logan, Iowa Association of Municipal Utilities)

12:15pm **Lunch**

1:00pm **Dubuque Renewable Energy Asset Mapping Project**
(Nick Benson, Iowa Initiative for Sustainable Communities University of Iowa)
Wondering if a renewable energy project is right for your community? Are property owners in your town considering renewable energy? The city of Dubuque and the Greater Dubuque Development Corporation in partnership with the Iowa Sustainable Communities Initiative at the University of Iowa recently completed the nation's first comprehensive urban scale renewable energy study and policy analysis. Available energy capacity for solar photovoltaic, solar hot water, wind, and ground-source heat pump (geothermal) systems were mapped using ArcGIS, to better understand the ability to produce energy on-site at the parcel level.



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1:30pm **Community Solar Project – Farmers Electric Cooperative**
(Warren McKenna, Farmers Electric Cooperative)
With utility customers having purchased a total of 112 modules on 16 photovoltaic arrays in a community “solar garden” and more than a dozen distributed renewable energy projects installed on location at utility customers, Farmers Electric Cooperative is an Iowa leader in promoting solar power installations. Topics covered:

- Project development process, how to put a project together
- Type of system, capacity, location, how the system works, etc
- Securing system users
- System operations and maintenance
- Risk mitigation, policies, rate structure, governance structure, ownership
- Project cost and revenue information

2:15pm **Break**

2:30pm **Net Zero Development – Charles City**
(Mark LaCroix, KCL Engineering)
Parkside Development in Charles City will be a showcase neighborhood of 30 super energy efficient homes producing as much energy per year as they use while also managing all stormwater within the neighborhood through green infrastructure practices.

3:00pm **Get Energized Iowa! Where communities Compete to Conserve**
(David Osterberg, Iowa Policy Project)
The communities of Dike, Fairbank, Hudson and Readlyn recently completed a year-long competition to see which community could reduce electricity use the most in 2012. The winning team of Readlyn and Fairbank reduced community electricity use by 6.4% with Readlyn alone seeing a 12% reduction in electricity use in 2012. Come learn how they did it.

3:30pm **Closing thoughts, comments, Q & A**