

Energy Efficiency and Conservation – Working Group Meeting #4

May 24, 2016; 1:00 pm – 3:00 pm

Meeting Summary

I. Meeting Objectives

- To **develop draft objectives** for recommendation to the energy plan leadership team.
- To **develop draft strategies** for recommendation to the energy plan leadership team.

II. Revised Vision Statement Discussion

During the meetings facilitators presented a revised vision statement for the Iowa energy plan to working group members. The vision statement was revised using comments received from working group members and the public during the third working group meeting (April 26, 2016).

Iowa is committed to the development of an affordable, reliable and clean energy system that maximizes economic benefits for our state. We will continue to embrace a mix of energy resources, infrastructure, and technologies while prioritizing energy efficiency and conservation to position all of Iowa – both rural and urban – for future growth. As an energy leader, our efforts will drive innovation, foster research and development, create business opportunities and promote environmental stewardship.

III. Revised Guiding Principles Discussion

During the meetings facilitators presented revised guiding principles for the Iowa energy plan to working group members. The guiding principles were revised using comments received from working group members and the public during the third working group meeting (April 26, 2016).

The objectives and strategies put forth in the Iowa Energy Plan will:

- *Foster long-term energy affordability and price stability for Iowa's residents and businesses.*
- *Increase the reliability, resiliency and security of Iowa's energy systems and infrastructure.*
- *Stimulate research and development of new and emerging energy technologies and systems.*
- *Provide predictability in Iowa's energy market by encouraging long-term actions, policies and initiatives.*

- *Expand opportunities for access to resources, technologies, fuels and programs throughout Iowa.*
- *Seek diversity in the resources that supply energy to and within Iowa.*
- *Support alternative energy resources, technology, and fuel commercialization in proven, cost-effective applications.*
- *Promote the protection of the environment and Iowa's natural resources.*

IV. Development of Objectives and Strategies

During the meeting working group members participated in a facilitated brainstorming exercise to identify objectives and strategies for the energy plan correspond to the energy pillar “Energy Efficiency and Conservation.”

Attached is a summary of the rough objectives and strategies that were discussed during the session. The summary does NOT represent any final recommendations. Ideas put forth were recorded during the meeting and the group will continue to contribute additional thoughts and refine ideas through the end of June.

V. Comments and Questions Received from the Public

- Comment on efficiency in the principles: Including EROI (not pork-barrel) and ERoEI (efficient use of resources for a task) would both steer the principles towards good stewardship of both natural and human resources.
- Comment on Objectives - 3rd bullet “realistic & attainable... within timeframe”; I would be fine with an objective which likely can only be halfway met within the plan's timeframe. When JFK proposed going to the moon much of that tech didn't exist. Setting a “realistic goal” might become a low goal which new technologies or working relationships could make easy. Allow room for long-term serendipity.
- Comment on affordability; Protecting natural & civic resources is more important than cheap energy. Most would be willing to pay slightly higher costs if it does not create long term damage to the environment, society (families & communities), and the infrastructure between them all. Affordability is a close 2nd to protecting current & future resources.
- Comment on strategy; Explore & implement multi-use energy streams (heat & power).
- Comment on vehicle efficiency; Encourage development of robust public transportation – especially synthetic fuel or electricity powered.
- We listened to the past discussions and reviewed the meeting notes. Based on our review, we wanted to highlight a few things specifically related to energy efficiency in Iowa.
 - The energy efficiency-related provisions of the energy plan should build off of the past and current efficiency programming successes.
 - Energy efficiency is the cheapest energy resource in Iowa, at an average of \$19 per megawatt hour. New natural gas and coal-fired power plants are three times

more expensive, as seen in the graph to the right. Wind generation is more than twice the cost of energy efficiency.

- Iowa is currently a regional leader in energy efficiency programs, specifically in industrial efficiency.
- In addition to energy savings, energy efficiency investments improve business competitiveness, save consumers money on their bills, and make homes and businesses more comfortable places to live and work.
- Energy codes are a crucial part of achieving energy reduction and should be considered part of the Iowa Energy Plan. It is important to keep the codes strong and continue striving for greater efficiency to keep buildings healthy, high-quality, and affordable to operate.
- Tracking energy use is a key first step to energy reduction in buildings. MEEA supports benchmarking practices and disclosure ordinances as methods to measure, evaluate and help achieve energy savings in buildings. Historically opt-in benchmarking policies get low participation and lower energy reduction than mandatory benchmarking practices. Free benchmarking software is readily available.
- Utilizing utility financing, such as with the CANDi program in Illinois, can assist with energy code compliance and lead to deep energy savings.
- In the most recent meeting, you considered the following Draft Vision Statement for the working group:
 - *The Iowa Energy Plan will set out Iowa's priorities to ensure energy affordability, reliability, and predictability for all through encouraging economic growth and improve Iowa's environment for years to come. The plan will leverage the state's renewable energy successes and promote innovation.*
 - After reviewing this statement, we suggest the following:
 - a) The vision statement should be more closely tied to energy savings and reduced need for new generation due to cost-effective energy efficiency.
 - b) It should be clear that energy efficiency can and should be the starting point to achieving affordability, reliability and predictability.
- During the April 5th meeting, the notes mention that a list of current efficiency program offerings shared across utility territories will be shared with the working group – can this list also be made available to the public?
- During the April 5th meeting, the notes reflect an interest in example energy plans. Please find the recently released Missouri Energy Plan [here](#).

NUMBER	OBJECTIVE	NUMBER	STRATEGIES
1	Reduce energy intensity by 25% (energy intensity by gross state product)	1.1	Increase use of Combined Heat and Power for resiliency benefits.
		1.2	Assist companies who want to pursue ISO 50001 EMS certification
		1.3	Develop private/public education and recognition programs for those making improvements (e.g. Healthy State Initiative).
		1.4	Leverage utilities to help promote energy efficiency for industries.
		1.5	Ask industries to commit to energy reductions (e.g universities making carbon neutral statements, DOE better building program.
		1.6	Provide training
		1.7	Provide audits
2	Create a one stop shop for information, programs, and policies related to energy efficiency.	2.1	Develop a central inventory of opportunities, new technologies, programs, and policies that are available to support energy efficiency
		2.2	Effectively market the clearinghouse of information so it is used.
		2.3	Leverage private sector resources.
		2.4	Develop training programs and materials that are available to the public.
		2.5	Analyze state energy office programs for clearinghouse models (PA and CO to start)
		2.6	Establish funding source for developing and maintaining clearinghouse
3	Position Iowa as a leader in R&D. Make Iowa the place that people want to come to for energy ideas and new technologies.	3.1	Streamline and review interconnection standards.
		3.2	Evaluate policies and factors that prompt research and development activities to occur in other states.
		3.3	Develop an incentive program to bring new companies to Iowa.
		3.4	Establish an energy engineering field of study.
4	Incentivize (continue to foster) innovation for applied projects (not just R&D).	4.1	Establish an energy efficiency component for research & development activities conducted in Iowa.
		4.2	Provide grants to utilities and others that want to innovate and experiment with new technologies.
		4.3	Develop a catalogue of grants and financial assistance available.
		4.4	Provide access to capital via private lending and funding.
		4.5	Provide administration support for entities that want to pursue innovation
5	Be a leader in new opportunities in energy efficiency.	5.1	
6	Improve the energy performance of existing buildings (plants, operations, transportation).	6.1	Building codes. 2012 IECC currently. Are we looking at the next one?
		6.2	Develop a program to fund behavior change.

NUMBER	OBJECTIVE	NUMBER	STRATEGIES
		6.3	Implement pay for performance incentives.
		6.4	Encourage the installation of smart meters in buildings.
		6.5	Encourage additional participants of the B3 public benchmarking program.
		6.6	Weatherization of low-income funds and more private/public partnerships.
		6.7	Explore pilot program for renewable energy for low-income (e.g. geothermal) to determine the return on investment
		6.8	Make the Leadership in Energy and Environmental Design (LEED) certification more easily accessible (less costly).
		6.9	Clarify performance contracting legislation in public buildings.
		6.10	Develop a strategy to target rental units and solve the split incentive barrier.
		6.11	Adjust the code for Iowa Green Streets for green/brownfield programs to make it applicable for other uses that include energy efficiency.
		6.11	Improve Iowa's energy code
7	Improve the energy performance of new buildings (plants, operations, transportation).	7.1	Enforce code compliance.
8	Increasing energy efficiency awareness across all sectors (consider workforce, general public, consumers, facility owners).	8.1	Leverage existing community distribution channels (CIRAS, extension programs)
		8.2	Catalogue existing networks and channels of communications in the state.
		8.3	Develop a marketing campaign to promote what the state has done so far and further encourage energy efficiency (eg milk does a body good or Iowa's live healthy program).
9	Reduce energy consumption in homes.	9.1	Target homes that have a higher level of energy use per square feet.
		9.2	Foster innovation around renewable energy practices in low income properties. Maybe trying some incentive initiatives. – geothermal should be named specifically.
		9.3	Focus strategies on low and moderate income education.
10	Expand energy education.	10.1	Developing energy-focused curriculum in K12 environment.
		10.2	Develop a Mission Critical Operations (MCO) program or degree.
		10.3	Incorporate field trips for energy efficiency and determine how to fund them.
11	Establish a baseline for affordability.	11.1	Define affordability.
		11.2	Determine if energy is affordable.
12	Increase efficiency of vehicles.	12.1	Increase or deploy a network of charging stations
		12.2	Establish efficiency standards for vehicles registered in Iowa.

NUMBER	OBJECTIVE	NUMBER	STRATEGIES
		12.3	Develop a statewide complete streets policy.
		12.4	Develop an emissions testing regime for vehicles in Iowa.
		12.5	Offer more public transportation options.
		12.6	Use performance contracting to replace state fleets with more efficient vehicles (example from another state).
13	Improve access to capital for energy efficiency improvements.	13.1	Remove limitations for state treasurer office from 6 years and expand to 15 years.
		13.2	Establish on bill financing opportunities.
		13.3	Enact PACE financing legislation.
		13.4	Identify uses for the Qualified Energy Conservation Bonds (QECCB) program.
14	Expand the energy-related workforce and general knowledge of the industry.	14.1	Create an audit process to improve the quality of inspectors.
		14.2	Commission and retrocommissioning engineers, energy management technicians. Are hard individuals to come by in the industry – can we evaluate the needs and invest in this?
		14.3	Leverage the state's STEM initiative.
15	Better to evaluate the benefits of energy efficiency.	15.1	
16	Evaluate programs and policies.	16.1	