

Transportation and Infrastructure – Working Group Meeting #4

May 26, 2016; 10:00 am – 12:00 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 28, 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 28, 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 "Transportation and Infrastructure."

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

- In case it is appropriate to submit suggestions for objectives and strategies, I might suggest: 1. Increase use of locally produced Iowa energy resources; 2. Increase renewable energy use, particularly from a diverse portfolio of locally produced renewable energy resources; 3. Establish policies and programs that advance environmental objectives in a cost effective manner.

NUMBER	OBJECTIVE	NUMBER	STRATEGIES
1	Increase renewable fuel blending for ethanol	1.1	Expand the Renewable Fuels Infrastructure Program.
2	Increase renewable fuel blending for biodiesel	2.1	
3	Protect and extend Iowa's unique biofuel leadership and exports	3.1	Extend the Renewable Fuels Infrastructure Program that sunsets in 2017.
		3.2	Increase education to promote off-road biodiesel use (farming).
		3.3	Adjust the state's renewable fuels standard and adjust as needed.
		3.4	Continue research for low-carbon, Iowa-based fuels.
		3.5	Consider the construction of an ethanol pipeline to transport ethanol in an efficient manner to the location where it is blended with gasoline.
		3.6	Co-location of ethanol infrastructure in road rights of way (DOT, county).
4	Provide funding for Iowa's road infrastructure and increase efficiency through a complete transportation system.	4.1	Ensure all system users are paying for maintenance.
		4.2	Support and research alternative funding, including public private partnerships for Iowa's lock and dam system.
		4.3	Investigate a fee on miles traveled vs. fuel tax or other revenue sources.
		4.4	Develop a funding strategy for rail infrastructure to keep traffic off roads.
		4.5	Develop an incentive strategy to promote multi-modal transportation.
		4.6	Identify locations and funding to construct 3 intermodals facilities in Iowa by xx date.
5	Support maintenance of Iowa's transportation infrastructure (highways, roads, lock and dams, railroads, pipelines)	5.1	Most efficient use of movement means that alternatives are available – complete system.
		5.2	Use the least amount of energy
		5.3	Bio economy requires inputs and outputs – needs infrastructure
6	Minimize damage to and preserve agricultural land productivity during the placement of infrastructure.	6.1	
7	Protect energy deliverable reliability.	7.1	Develop a new methodology to fund construction of infrastructure in rural areas of Iowa.
		7.2	Streamline the regulatory permitting process for infrastructure.
		7.3	Create a minimum threshold for voluntary easements before eminent domain can be utilized for projects.
		7.4	Establish a tax credit to encourage the construction and development of underground power lines.
		7.5	Develop standards at the state level that minimize damage to agricultural land, during construction and reclamation of pipelines that are used to transport fuels. Include safety standards such as depth. Need to ensure these standards are federal compliant

NUMBER	OBJECTIVE	NUMBER	STRATEGIES
8	Ensure adequate availability of energy to all of Iowa to increase economic growth and jobs.	8.1	Facilitate local ownership of electrical generation (e.g. ethanol coops).
		8.2	Develop incentive programs and initiatives for distributed generation (e.g feed in tariffs).
		8.3	Review if right of way laws efficiently promote colocation.
9	Provide diversity of Energy to Iowa	9.1	
10	Educate Iowans on energy challenges and opportunities to be better informed on policies and decision making processes.	10.1	Educate fleet owners and operators.
		10.2	Develop a public campaign to educate.
		10.3	Education and outreach of end users for the retailers and the general public to promote the use of alternative energy.
		10.4	Develop high school curricula on energy that could also be expanded to community colleges and universities.
		10.5	Establish a clearing house of information.
11	Create an educational environment to create a workforce that reflects / meets the needs of Iowa's energy future.	11.1	Develop area of excellence.
		11.2	Develop a workforce consortium (utilities and businesses) to predict trends in workforce and develop curriculum with high schools and community colleges.
		11.3	Train auto technicians on conversion to alternative fuel vehicles, and also on electric vehicles.
12	Explore (or expand) Iowa's energy exports.	12.1	Explore opportunities to include a premium on alternative energy in Iowa
		12.2	Protect ability to consider export opportunities when looking at the needs of a project
		12.3	Establish a baseline by developing a study on the export potential.
		12.4	Review other states policy for low carbon to identify new markets for renewable energy and/or renewable energy credits.
13	Develop policies and programs that support Iowa's independence.	13.1	
14	Streamline the regulatory timeline process related to infrastructure while maintaining public input in the process.	14.1	
15	Continue plans for intercity rail connections in the Midwest	15.1	
16	Promote efficient transportation to reduce the energy use.	16.1	Public transportation.
17	Increase the number of alternative fuel vehicles in circulation	17.1	Increase the number of charging infrastructure for electric vehicles.
		17.2	Increase investment in infrastructure

NUMBER	OBJECTIVE	NUMBER	STRATEGIES
18	Increase the number of public and private partnerships for alternative fuel vehicles and EV charging stations.	18.1	
19	Increase the broader adoption of RNG by increasing development and end uses for RNG	19.1	
20	Position Iowa as a leader in energy education and research.	20.1	
21	Investigate the role of autonomous vehicles and energy efficiency.	21.1	
22	Ensure the safe transport of energy.	22.1	Educate on the needs for contingency planning and what needs to be done in case of an emergency.
		22.2	Increasing investments into rails and rail crossing to prevent issues.
		22.3	Determine standards for high voltage lines related to set backs.
		22.4	Support interactive mapping for tracking transportation of fuel.
		22.5	Educate first responders on electric vehicles.
		22.6	Ensure flow of fuels during emergency situations.
		22.7	Define what is an "emergency situation" based on hours of service.
23	Ensure energy affordability by long term economic planning		
24	Objective needed for liquid propane (look for worksheets to address)		
25	Decrease the carbon intensity of Iowa's energy		
26	Objective needed to address energy security		
27	Objective needed to address energy storage		