Vital Aging Network minnesota

VAN FORUM NOTES

Renewable Energy: The Path to Energy Freedom and Independence for Minnesotans

Presenter: J. Drake Hamilton
Science Policy Director, Fresh Energy

September 12, 2006
Calvary Center Cooperative

Mary Kowalski, of the VAN Leadership Group and Environmental Force, welcomed participants and explained the purpose of Environmental Force and VAN Ventures. Mary introduced the forum topic by posing a question to the group:

What words or words come to mind when we say energy independence?

- Bicycles
- Stop depending on other nations and other venues for energy and develop our own – unsure how that will happen – fearful of that – just returned from Mississippi with gorgeous trees – we have such a beautiful environment and we aren't taking care of it
- Bicycles – hybrid cars
- Awareness
- Wind energy
- Windmills
- Hydro-thermal energy
- Waste can be disposed of
- Foot power
- Vitality as an elder
- Health impact
- Eye on energy much of life
- Elementary school children and starting there
- Green power
- Availability of wind energy
- Business as usual
- Scale and localism
- Public transportation
- Conserve / proactive
- Solar and wind power
- Sunlight and wind
- Waste not want not

- Recycling and conserving
- Relying on others
- Recycling
- Conservation and loss of conservation
- Native plant communities
- Recycling
- Moved downtown and no bags
- We don't have an energy policy and relying on automobiles
- Change
- Responsibility

J. Drake Hamilton, the Science Policy Director for Fresh Energy, formerly ME3: Minnesotans for and Energy-Efficient Economy, addressed the group. Fresh Energy is a non-profit advocacy organization that supports policies that improve the environment.

Hamilton thanked Environmental Force for bringing older adults to the forefront of environmental advocacy. She noted that she was surprised that none of the responses to the opening question mentioned "money." She explained that Fresh Energy exists to advocate for energy independence for Minnesota. What they are trying to accomplish, in moving towards energy independence, is to solve a money problem. To clarify the point, she pointed out that Minnesota has no:

- Coal mines
- Uranium
- Natural gas mines
- Oil mines

Indeed, there are no traditional energy industries in Minnesota, which means that most of the energy used to power Minnesota homes and businesses is generated by, and dependent on, imports from other states or countries.

In 2005, the energy bill in Minnesota was $25 billion for slightly more than five-million Minnesotans. The economic issue for citizen voters, parents and grandparents is how much of that money stays in our local economy and how much goes elsewhere in the country or the world? Is there a way to keep more of that money circulating within Minnesota's economy?

Hamilton spoke of how we are bombarded by prime-time radio and television ads from oil and coal companies that use the tagline "Coal…increasingly clean and affordable." Coal has become increasingly clean, due to federal regulations. Coal plants are cleaner than decades ago, but they are far from clean. There is still no regulation of mercury, carbon dioxide, and other contaminants that are released into the air when burning coal.

Hamilton pointed out that, as people are feeling less secure and feeling the threat of global warming, many politicians are catching on and starting to talk about energy independence. She challenged the audience to require their candidates to go beyond

reciting the convenient catch-phrase “energy independence, ” to press for details on how exactly the candidates propose to achieve this independence. Will they support state and federal standards?

Hamilton suggests that the path toward energy freedom includes a commitment to spend less and to spend it locally. She used electricity as an example. Approximately 75 percent of Minnesota’s electrical energy comes from burning coal. Yet with no coal mines, coal is not a growth industry for the state. So, money that is spent to keep the lights on in Minnesota is not staying here, it’s going to support industry elsewhere. After coal, approximately 20 percent of electrical energy is nuclear powered and 3 percent is generated from wind. The small balance is accounted for by hydropower, natural gas, garbage- and wood-burning.

With respect to meeting our future demand for electricity, Hamilton argued that the direction we, as a country, are taking is not good. The electrical companies are proposing to build additional coal-burning plants. Because these plants have an average life span of 50 years, building a new plant means making a 50-year commitment to burning coal. That means - unless methods are in place to trap it - 50 years of carbon dioxide emissions harming the atmosphere. Building new coal-burning plants means committing future generations to global warming.

Sadly, Hamilton continued, because it is a problem affecting the future, some older adults are content to pass the problem along to future generations to solve. Even economists have taken a position that the problem is too expensive to deal with today, holding out the hope that it will be less expensive in the future.

Regarding global warming, Hamilton emphasized that there is no disagreement about whether global warming is occurring. Moreover, there is no disagreement about the basic physics involved, or why the earth’s temperature is rising. It is caused by the release of certain gases into the atmosphere. However, the gases that are causing global warming result from natural phenomena as well as from human activity. Where people disagree is exactly how much of global warming is natural and how much is caused by human activity, specifically the burning of fossil fuels. The other disagreements center on whether we should do anything and, if so, what it is that we should do.

According to Hamilton, most scientists say that human activity is causing about 75 percent of the climate change. Yet, science and politics diverge on this issue. She noted that even though scientists are true skeptics, by nature and by training, the scientific community has voiced grave warnings about the dangers ahead resulting from global warming..

Hamilton shared the good news and the bad news outlined by Dr. Jim Hanson from NASA:

- Global warming is real and human activities are causing it by burning fossil fuels;
- We can avert the worst damages from global warming by changing our actions;

- By the year 2050, we need to have cut our global warming pollution by 60-80 percent. Essentially, we must make a transition away from fossil fuels; and
- If we choose not to do this, we will get a planet that we will not recognize, an unacceptable proposition.

According to Dr. Hanson, even if a miracle solution were found in 2049, it will be too late because it takes 30 to 100 years to break down greenhouse gases.

Clearly, our plan to meet our electricity needs by burning more coal is counter-intuitive to our desire to limit greenhouse gases, said Hamilton.

What do we need to do in the immediate future?

Hamilton believes that some of the $25 billion should be used to start to develop an answer. Coal is a good source of domestic energy and we have a 275-year supply. The trick, she says, is to burn coal without generating greenhouse gases.

The term "clean coal" is being used frequently, but Hamilton insists that there is no such thing as "clean" coal. She argues that the focus must be on developing ***zero- emissions*** coal. One method currently being tested by Xcel Energy in Colorado involves trapping the gas that forms when coal burns.

To illustrate other costs associated with an addiction to coal, Hamilton mentioned the negative impact of coal extraction on the physical landscape, citing the possible "decimation" of the mountains of West Virginia as an example.

Other things we can do:

- Conserve energy: turn the lights off when leaving a room; use more efficient light bulbs; drive hybrid cars with higher fuel economy; and
- Invest more in renewable energy sources: wind; solar; bio-fuels. Hamilton argues that this is economically essential for Minnesota because ***we don't have coal mines*** but there is enough wind to produce ten times the electrical power that we need.

Converting to renewable energy sources, Hamilton explained, will not happen at once. Fresh Energy and its allies advocate for a renewable electricity standard that will gradually allow Minnesota to diversify from coal to renewable energy sources. For example, by 2020, wind power could responsible for 20 percent of Minnesota's energy .

Twenty other states have implemented renewable standards. Hamilton stressed the non-partisan nature of the renewable energy initiative, which, she argues, is essentially an economic development issue. She pointed out that the model legislation, surprisingly, comes from Texas, where a bill was crafted by and passed by the Republican legislature and signed into law by then-governor Bush. It was so successful that the renewable standard was subsequently increased so that today there are 2,000 wind turbines

operating in Texas. This happened because it made economic sense. Hamilton maintains that Minnesota is lagging behind Texas and other states in this regard.

Explaining that she grew up in a family of Republican engineers with a personal responsibility ethic, Hamilton is a strong believer in taking responsibility. But, she questioned, how can one choose to be personally responsible on this issue, short of becoming an automotive engineer. Only automotive engineers can design for fuel efficiency, but citizens can make politicians and government insist on higher standards for fuel efficiency.

Hamilton presented two possibilities for taking responsibility:

1. Work toward a federal policy – the "citizens' climate policy" to
   - provide clear targets for emission reductions with enforceable deadlines;
   - the promotion of clean and efficient energy; and
   - immediate action

   Hamilton reminded the group of successful regulation-driven initiatives of the past, stating that "we didn't clean up the Mississippi river without regulations; we didn't recycle without regulations; we won WWII based on regulations and laws.

2. Promote education about global warming and the environment.

Telling the audience that Senator Norm Coleman (R-MN) is considering sponsoring global warming legislation, Hamilton encouraged those who agree with the need for such legislation to contact the senator to indicate their support and made form letters available for that purpose.

In closing, she emphasized the need for engagement of older adults on the global warming issue, noting how keenly aware politicians are of the extent to which this group votes.

Following Hamilton's presentation, Mary Kowalski and Bob Gubrud of Environmental Force, a VAN Venture, facilitated a discussion among three breakout groups. Five questions were posed to the groups. The discussion results are summarized below.

Question 1. What evidence do you see, read, or hear about that we must shift our reliance on fossil fuels to renewable energy?

- Melting permafrost, polar ice, glaciers
- Deforestation
- Habitat loss, poor air quality
- Gas prices, zero emissions
- Electric cars

Question 2. Hamilton reviewed the findings of a *Time* magazine study on who is concerned about global warming. It indicated older adults are the least concerned. What is your perception? What issues are older adults concerned about?

- Older adults may not be concerned because they have not been targeted as a resource
- Problems are too big – it's too late for older adults to make a difference
- Too hard to change habits, lifestyle – negative economic impact
- Long pay-back – e.g. solar panels
- Seniors are confused about the debates about global warming – what's fact and what's fiction

Question 3. How can older adults make a difference in addressing the issues of global warming and renewable energy? What information do they need?

- People want to know how they can make a difference to the environment beyond voting and sending a check
- People want to focus on the environment as a "common good" instead of as a political issue
- Local actions can be effective
- Seniors need to feel empowered
- Contact senior groups – churches, communities
- Start small – lead by example (recycling, reuse)
- Create new traditions – seniors learn, teach, do
- Educate, communicate, provide incentives, drive less, be role models
- Lobby government to set energy standards
- Get involved
- Promote a culture of conservation, intelligent consumption
- Understand the negative aspects of a culture of individualism

Question 4. Who are the key decision-makers that need to be influenced? What methods? Who will do it?

- Local decision-makers – senior communities, business owners (opportunities & economic benefits), neighborhoods (e.g. SW Minneapolis, Linden Hills)
- Federal, state, and local government
- Business leaders – money & power
- Need to educate the public with simple messages, public service ads
- Schools, universities

Question 5. How do you want future generations to describe your generation's environmental legacy?

- Stewards of the earth
- Thoughtful, loving, hopeful, committed, health promotion, self-sustaining, world community
- Overcame the painful obstacles