

Energy Committee minutes taken by: Chinloo Lama

Energy Committee	Present:	Chinloo Lama <input checked="" type="checkbox"/>
		Joel Lindsay <input type="checkbox"/>
		Kevin Lord <input checked="" type="checkbox"/>
		Martha Broad <input type="checkbox"/>
		Paula Berg <input type="checkbox"/>
		Michael Gorr <input checked="" type="checkbox"/>
		Laura Kischitz <input checked="" type="checkbox"/>
		William Darden <input type="checkbox"/>

Non-voting members: John Balco
Dennis Mahoney

The Energy Committee met at 7:30 p.m. at the Town Hall.

Minutes of (date): _____ were read and approved.

Discussion Topic: Presentation on Climate Change by Doug Plante to the group

The meeting was adjourned at 9:30 p.m.

Discussion:

Presentation to the Committee

The Bolton Energy Committee invited Doug Plante to present a version of the Al Gore Climate Change present tailored to Bolton. The Bolton Energy committee is interested in hosting a climate change presentation in town to the residents. Doug Plante is a video editor and media director who has had experience in science and technology education. He has been trained to give the climate change presentation to people all over the country and some internationally. (climate@treblecove.com)
TheClimateProject.org

Doug wanted to show his presentation as is and get our feedback as to how he could tailor it to Bolton residents. He began the presentation illustrating the concept of perspective and our perception of climate change with an interesting mirror metaphor. He asked us if we were looking at a mirror parallel to our face, should we step away or closer to see more of ourselves. People would normally say step away. But the correct answer is never... you will always see the same amount of yourself either case. So we need to overcome our misconception.

He proceeded to explain how the atmosphere acts as a greenhouse-like effect to keep the heat on earth and not bounce rays back to space. He showed an animation of global warming (a cartoon spoof). He talked a bit about the pros and cons of global warming.

Venus is at 464 degrees C and Mercury is actually at 179. CO2 is super high there and is like a runaway greenhouse effect example.

He showed some supporting data showed humans being the primary source of the excess heat on Earth. He showed comparative images of snow and glaciers on mountains and the effects of climate change on them. Scientist read Glacier layers just like other scientist who read tree rings. The bubbles within the glacier ice layers provide an accurate CO2 reading for the different time periods. It is scientific fact that the more carbon in air the higher the Global temp. Global temp differs about 5 degrees F. (Showed graph to show projection of C amount at 2050 – off the chart)

After talking about the world at large, Doug pointed out the potential effects to our region. Rising temperatures in New England will result in a summer heat index as warm as S. Carolina in 2099. If we achieve a low emissions level from now until 2099, the temperature around here will be similar to somewhere in Maryland. Local wildlife will most definitely be affected.

He talked a bit about Hurricane Katrina and how the increase in the number of hurricanes is due to the warmer waters. He also talked about the importance of planning ahead with climate change in mind. He used the example of the flood barriers in UK and Netherlands, and how decisions considering climate change are made before the disaster happens. For example the poor planning in New Orleans caused added costs. Before the disaster, there was a \$14B proposal to fix the levies. However, having ignored the fix, the resulting repair costs after the disaster reached \$200B.

There was a brief example of affected agricultural issues – increase in precipitation locally.

He talked about the potential of the polar ice caps lasting for only another 20-30 years. After that they will melt away completely during the summers. Trees rooted in the permafrost are falling down because areas that never saw thawing are now experiencing thawing. Carbon and methane (which is more effective at causing greenhouse effects in the atmosphere than Carbon) stored below ground under the frozen tundra will be able to escape into the atmosphere causing an exponential increase in the greenhouse effect.

Sea Ice will also undergo melting in the warmer climate and produce a feedback loop of warming - reduced ice coverage on the ocean will help increase heating rates of the water even more.

The temperature change globally will be roughly +5F, which means +1F at the equator and +12F at the poles. Shipping, agriculture, transportation, all will be affected.

An example of eco-niches affected by the small changes in climate: some caterpillars are spawning sooner and birds that prey on these caterpillars will have to hatch quicker and if they cannot keep up with their food supply, they will parish.

Invasive Species can take advantage of the climate change to spread. Temp differential between the day and night is shrinking. He showed some examples.

3 Causes of Climate Change

- 1) Population – chart shows exponential growth – strain on food demand and water – political effects.
- 2) Scientific and Technological Revolution – does not always come with wisdom to use correctly. The newly developing countries do not necessarily have good example countries to follow.
- 3) Our way of thinking

Solutions – Take Actions

- Shown a list of US states that are taking action on global warming.
- Shown a list of US cities supporting the Kyoto Protocol
- Tax Incentives for Fuel Efficient Vehicles
- Increase Funding for Public Transit
- Green Building Incentives: Reduce energy use at home. An example is to use CFL. There is actually very little mercury used in CFLs. There is actually more mercury from a can of tuna than in a CFL bulb.
- Establishing good habits rather than trying to check off a list.
- Solid waste reduction.
- Transportation improvement.

Doug warn of companies and institutions that are “Green-washing.” We need to know how to recognize it. Discourage this and speak up against it.

Who can take action

- 1) Political
- 2) Individual
- 3) Community

Some examples and ideas:

- Chicago Carbon Exchange – auditing agency – free market carbon trading community
- Green architecture. – Living Roofs, composting toilets, geo thermal, building materials are local or recyclable. (Trustees of Reservations-Leominster)
- Mass Renewable Energy Trust
- Mass State Sustainability Program
- Clean Air Cool Planet
- Good book resource – Low Carbon Diet. This book talks about how weight lost habits are similar to energy use.

At the conclusion of the presentation we reviewed what we thought would be appealing to our residents and hope that the presentation can be reduced to roughly 1 hour. We were

tasked to forward Doug our suggestions since the night was getting late. We were also told that we can use Doug as a network channel for spreading news.

Review

Last week's all-towns meeting

Suggestions for Doug

- Sea ice vs. shelf ice – need to explain better with the ice cubes.
- Perhaps more on local facts and case studies such as our birds wintering over in MA
- Need to segment presentation into smaller chunks easier to digest for audience. Perhaps into temp change, water level, precipitation.
- Need a good segway into individual local action. Emphasize this more for our community in suburban-rural MA.
- Keep the part about the cost of not preparing the levies properly.
- Stress green building – Library and Public Safety buildings. Use local successful examples like that one in Leominster.
- Check Bush slides for too much political implications – if so, remove please.

Action Items

Chinloo: email suggestions to Doug

Doug Plante: Fliers and printout to the group