

Litchfield  
Town hall  
Building  
Committee

Litchfield Energy Task Force  
Presentation

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# Intro

- 3+ years, 8 regular members
  - Your service is Commendable
  - Your Passion to Serve Litchfield
  - We share that Passion
- Task Members
  - Brian Malarkey – Energy Efficiency Consultant
  - James Keithan – Electrical Engineer
  - Jeffrey Benson – Mechanical Engineer

# Guiding Ideals

- Set example as County Seat
  - Lead don't follow
- World Class Community
  - Desirable destination
- Do the Job Right
  - Be Proud of the result

# Building Use and Life

- Municipal Offices
  - Records
  - Communications
- Meeting Place
  - Boards
- Comfortable, Clean
  - Several decades, most Municipal buildings

# Citizen Comments

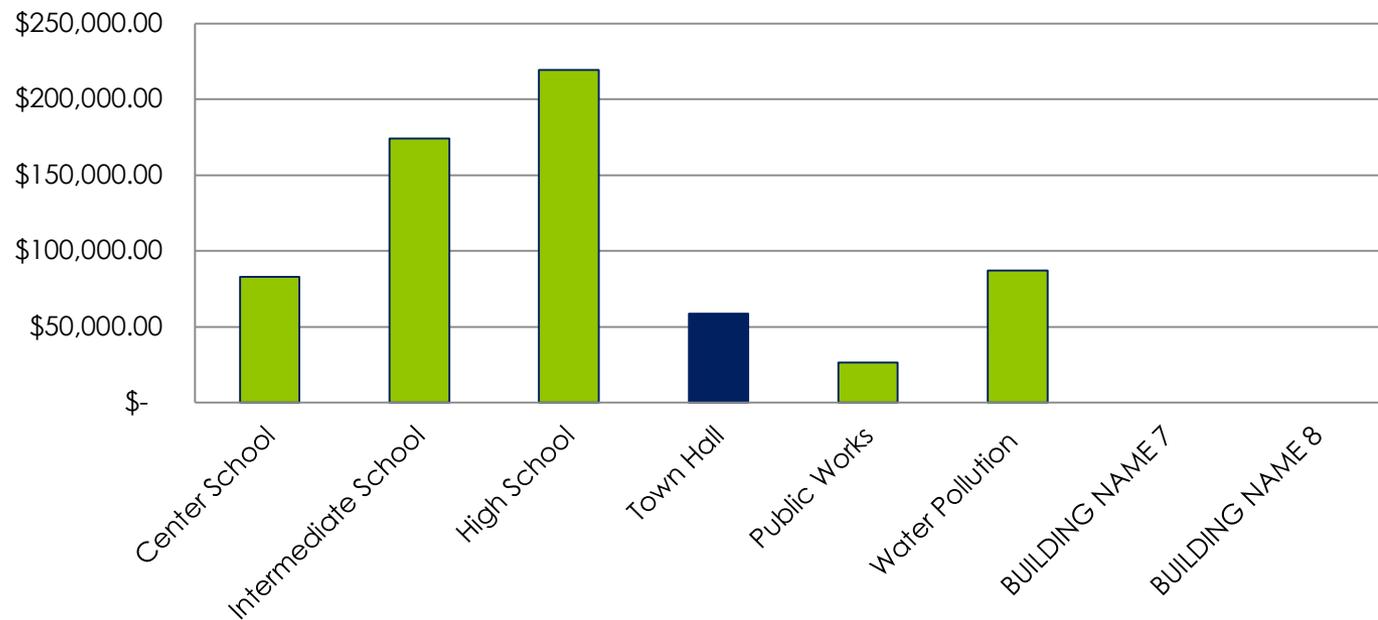
- From 2008 Hearing
  - < 1% attended, 0.5% had comment
- Our favorite;
  - “Will it be built with energy efficiency in mind?”
- Strongest case in our opinion,
  - Build with least long term cost



# Current Energy Costs

# Today's Energy Cost

## Building Energy Costs



# Energy Cost Profile

- One time costs - TBD
  - Construction – Furniture - Systems – HVAC
- Current Recurring Costs
  - Lighting ~ \$8,5000/year
  - Heating ~ \$50,000/year
- Assuming 20 year lifespan 4% inflation
  - \$1.8 million energy only
  - Conservative Lifetime savings **\$400,000**

# Real Life Example

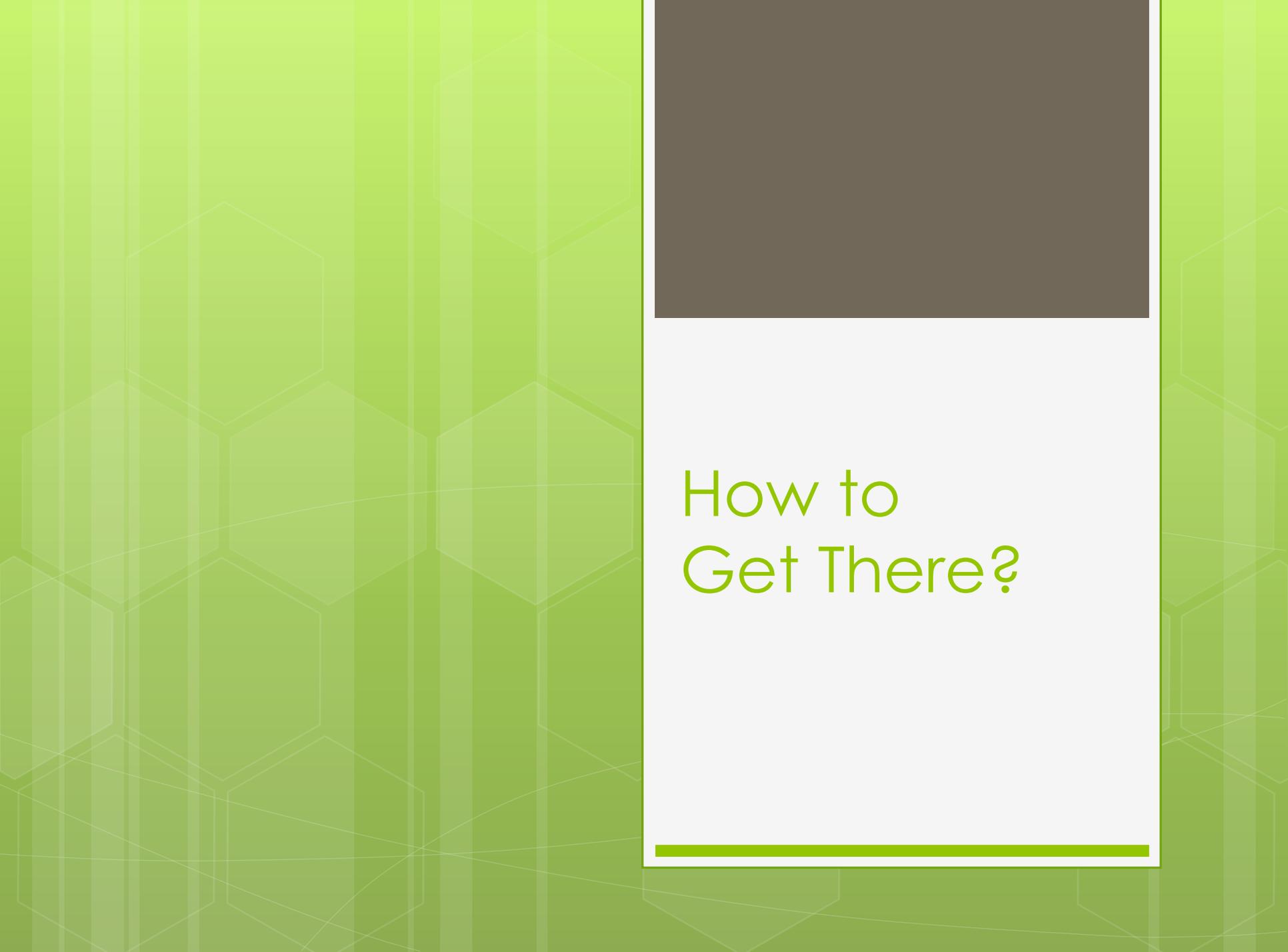
- Who Would buy a \$20 Light bulb?

Lamp Type	Illumination	Year	TRUE	Cost	Cost	Lifetim e	
Type	Method	Invented	Wattage	Purchase	Operate	Years	To Own for 20 yrs
Incadescent	Heated wire in a vacuum	1879	75	\$ 2.00	\$ 65.70	5	<b>\$ 1,322.00</b>
Compact Flourescent	Glowing Gas	1975	15	\$ 8.00	\$ 13.14	10	<b>\$ 278.80</b>
LED	Light Emitting Diode	1993	5	\$ 10.00	\$ 4.38	20	<b>\$ 185.20</b>

- Buildings work like this too

# Real Life ROI

- Return on Investment – Mechanical
  - Present Heating cost tied to fossil fuels
  - Cost increases 4 – 40% per year
- Modern solutions harvest energy
  - 300% efficient *or more*
  - Cost increased 2.9% Jan 2011 CL&P rate increase
- Without Incentives – ROI in 5 years
  - With incentives – 3 years, *with savings after*



How to  
Get There?

# Clean Construction Incentives

- Connecticut Energy Efficiency Fund
  - ▶ Several new construction incentives
  - Up to \$750,000.00

# Other Incentives

- Municipal Action Plan
  - Funded, dedicated help from CL&P
- IF:
  - We choose to conserve

# What is the Cost of Cheap?

- Increased Maintenance
- Increased Fuel
- More Closely a Victim of Inflation
- From existing Town Hall Data:
  - Constant Fuel cost Increase
  - As much as 40% . . . Or *more*

The slide features a green background with a pattern of overlapping hexagons. A white rectangular box is positioned on the right side, containing the text "Who has Done It?". Above the white box is a solid dark grey rectangle. A thick green horizontal line is located at the bottom of the white box.

Who has  
Done It?

# Success Stories

- Who has tried this?
  - Warren, CT
  - Half Moon, NY
  - City Council of Torrington approves LED lighting – May 3 2011
- What was the Outcome?
  - Savings, pride, community

# Next Steps

- Contact Connecticut Energy Efficiency Fund
- Determine what qualifies
- Apply for Incentives

# Conclusions

- Economy and Conservation Coexist
- Cost savings Goals focus long term
- It Makes Sense to -
  - Save in long term
  - Hedge against Inflation costs
  - Demonstrate our Values as a Town
- Anything less Burdens our Children
  - Higher maintenance costs cause cutbacks

# Contacts

- CL&P Energy Conscious Blueprint
  - Richard Asselin [richard.asselin@nu.com](mailto:richard.asselin@nu.com)
- Clean Communities Program
  - Diana McCarthy-Bercury [mccard@nu.com](mailto:mccard@nu.com)
- Connecticut Energy Finance Investment Authority
  - Bob Wall [bob.wall@ctcleanenergy.com](mailto:bob.wall@ctcleanenergy.com)