

# GoAt Sustainability:

## Advocation for LED Lights in Stratton Hall

Lily Jones, Sheldon Gentling, Brandon Lui, Parker Goodrum



### Current problem

-Stratton Hall is one of the oldest buildings on campus

-Last renovated in 1960s

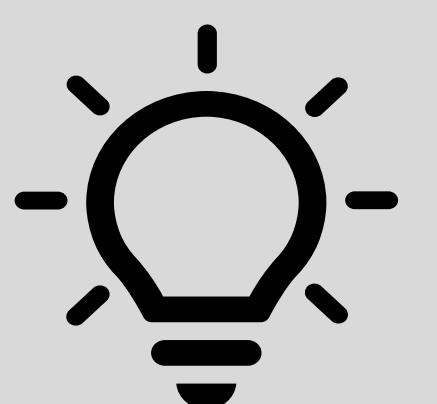
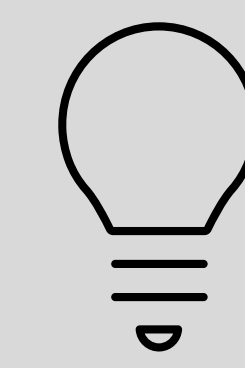
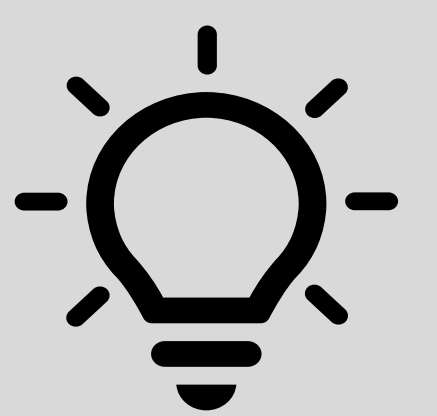
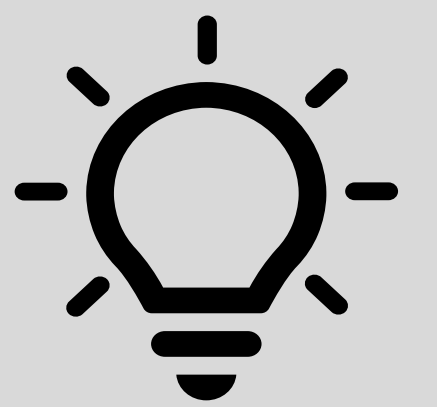
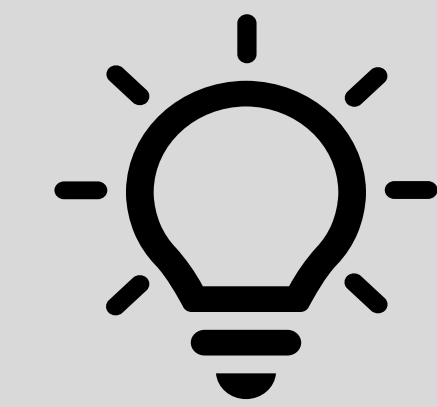
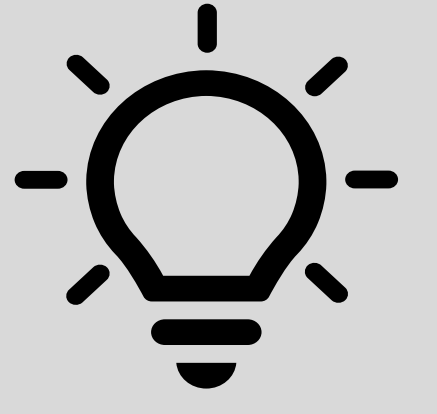
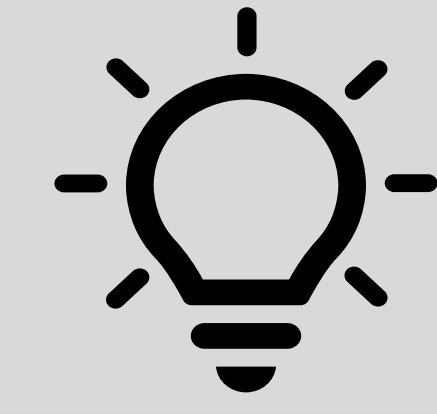
-Current lights are fluorescent & greater than 5 years old

### Goal

Improve the sustainability of Stratton Hall, by advocating the renovation of the building.

### Why LEDs

LED      Fluorescent



LEDs on average use around 50 % less energy than fluorescents.

WPI can save  
\$1242.98 per year if  
LEDs are implemented

(assuming all lights are on 8 hours a day)

### Solution

Create an Energy-benefit analysis of switching to LED lights in Stratton Hall

### Conclusion

Stratton Hall can save roughly 5.768 kW H if LED lightbulbs are implemented.

### Data Collection

(Current energy consumption based on the observed number of lights in Stratton)

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(Future energy consumption with LEDs)

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Energy that can be saved

\*Calculations are done by assuming there are 412 individual light bulbs, the fluorescent uses 32 kW, LED uses 18kW using the 7.38cents/KWh

### Sources



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