LEED the Way

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Project Goal
Our goal is to make the library more sustainable and energy efficient. We attempted to determine a cost effective and simple plan to get the Gordon Library LEED certified by using five criteria that are used for the certification. By making the library LEED certified we hope it becomes an example for the WPI and Worcester community.

Background
Gordon Library has been with WPI for 45 years and is an integral part of the WPI community. WPI values the LEED certification of new buildings on campus, but has left older buildings like the Gordon Library behind in terms of sustainability. This wastes precious resources, money and hurts the environment.

LEED is a set of environmental standards used to rate buildings on sustainability. LEED is run by the United States Green Building Council. The levels of certification are Certified, Silver, Gold and Platinum, from least sustainable to most.

Financing
- Green revolving fund:
  - Allocates a starting amount which will keep funding sustainable projects through the paybacks from other sustainable projects
  - Tax breaks
  - From US government in areas such as energy sustainability

Five LEED Criteria

Energy and Atmosphere
Credits in this section promote better building energy performance.

- Major Retrofit: Solar Panels
- Cost: $26,000 before grants
- Benefit: Powers entire library (31,700 KWh per year)

Sustainable Sites
This section involves using strategies that minimize environmental impact.

- Major Retrofit: Green Roof
- Cost: $15 per square foot
- Benefit: Reduce heat island effect, increase in insulation, 8% increase in solar efficiency

Water Efficiency
Credits for Water Efficiency are earned by smarter use of water inside and outside

- Major Retrofit: Waterless urinals,
- Cost: $650 per fixture
- Benefit: 100% Savings

Materials and Resources
This category involves topics such as sustainable purchases and solid waste management.

- Major Retrofit: Buying recycled paper
- Cost: Nearly the same as conventional paper

Indoor Environmental Quality
Topics in this section include indoor air quality management and green cleaning.

- Major Retrofit: Using sustainable cleaning cleaning
- Cost: Nearly the same as current cleaning costs

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References