

Reduction in carbon foot print through improvement in efficiency of HVAC units while providing better environmental conditions.
9
\$74,990.00

Project results will be communicated to the USF community. It will be a great learning opportunity for the USF students, since it is a technology that has not been previously applied at USF. iBar technology keeps the cooling coil clean. It improves indoor air quality for the building occupants as it reduces VOCs, odors, destroys bacteria and virus, and provides better filtration. Indoor air quality is important because students spend several hours studying indoors. In new construction, reduced first cost since less outside air meant smaller outside air units and smaller ducts and reduced cost due to smaller outside air units requiring less electrical load. Additional benefit is expected from Innovation Credits in next STARS (sustainability Tracking, Assessment and Rating System) report. iBar technology also helps in controlling static electricity.

The installation of iBar technology is expected to reduce carbon foot print by 46 eMT through reduction of 60,462 kWh of electricity, and 661therms of natural gas, resulting in annual savings of \$51,670.

60,462 kWh
 \$6,650.82
 0.10
 0.00

Facilities Management has agreed to maintain the iBars, thus ensuring sustainability of the project and no further cost to SGEF.

The project is expected to start with filing of space impact form followed by official bidding process to obtain bids that provide the best in terms of performance and cost. This will be followed by the installation of iBars.

	\$5,000.00	\$0.00	
	\$30,540.00	\$0.00	
	\$0.00	\$0.00	
	\$7,000.00	\$0.00	
	\$10,000.00	\$0.00	
	\$12,450.00	\$0.00	

The project cost for 10 air handling is based on actual pilot project experience for two air handling units. I have budget for engineering design to be \$7,000 and student cost to be \$5,000. Other estimate includes permitting to be \$350 and testing and balance to be \$12,100. To reduce project cost, Facilities Management plans to use in-house resources for construction/installation of the iBar units.

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Proposed Starting Date: As soon as funds are made available.

Annual cost Savings: \$51,670

Return of investment %: The overall project is expected to have simple payback of 1.3 years, which translates to ROI of 76.9%.

Annual Green House Gas Reduction: This carbon foot print reduction is equivalent to, CO₂ emissions from various sources like 45,342 pounds of coal not burned, or 4,781 gallons of gasoline not consumed, or Greenhouse gas emissions from 8,399 miles