



SUSTAINABLE ENERGY FUND

How it works and what you need to know

Clemson Energy Goals

2020

Reduce energy consumption 20% relative to the fiscal year of 2000

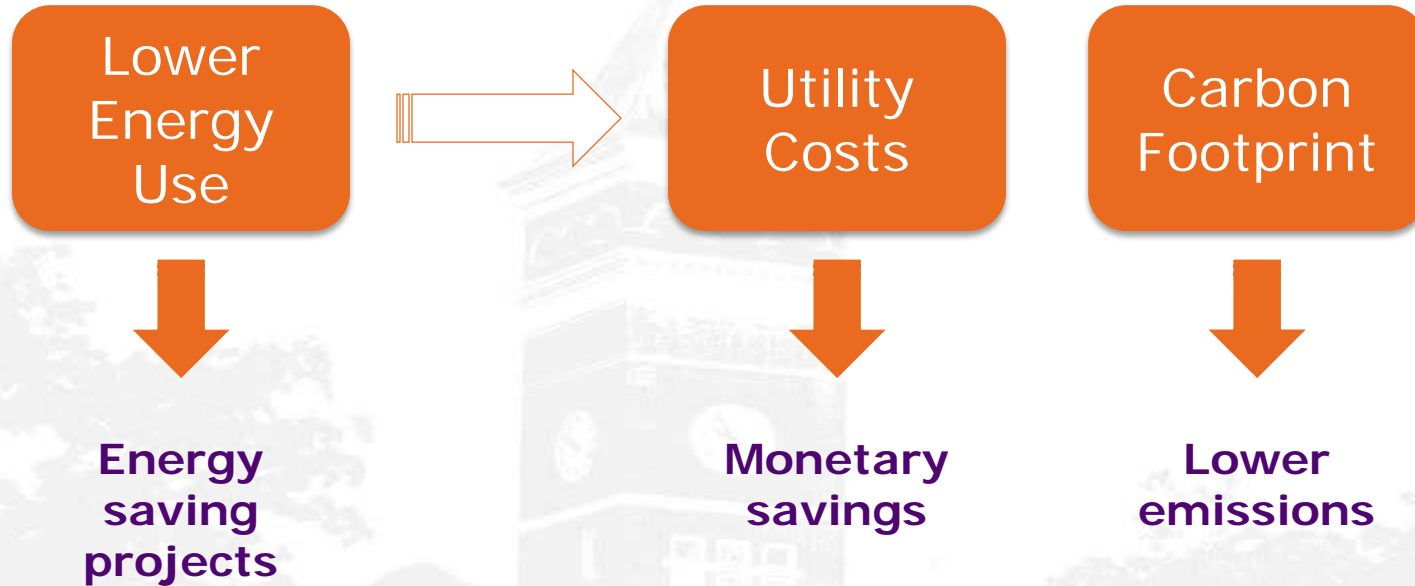
2025

10% increase of energy from renewable energy sources

How?

Promote sustainable energy projects
Encourage behavioral changes (turning off lights, computers, etc.)
Clemson Sustainable Energy Fund (SEF)

Energy Efficiency Benefits



Energy Efficiency Challenges

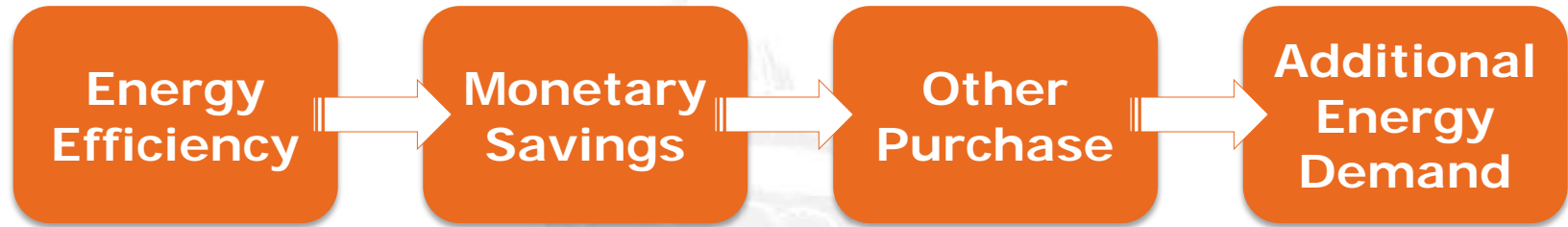
Challenges

- High capital cost
- Organizational boundaries
- Energy savings “lost”
- Rebound Effect

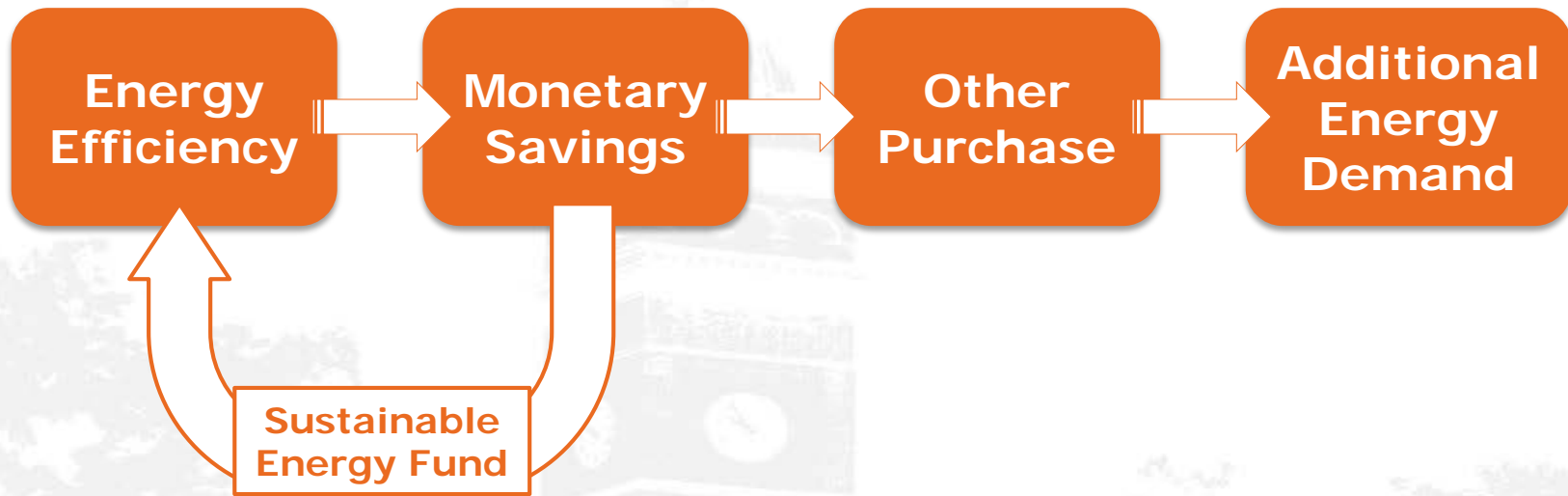
Clemson SEF provides

- Funding mechanism
- Energy efficiency centralization
- Tracking and publicity
- Avoid the rebound

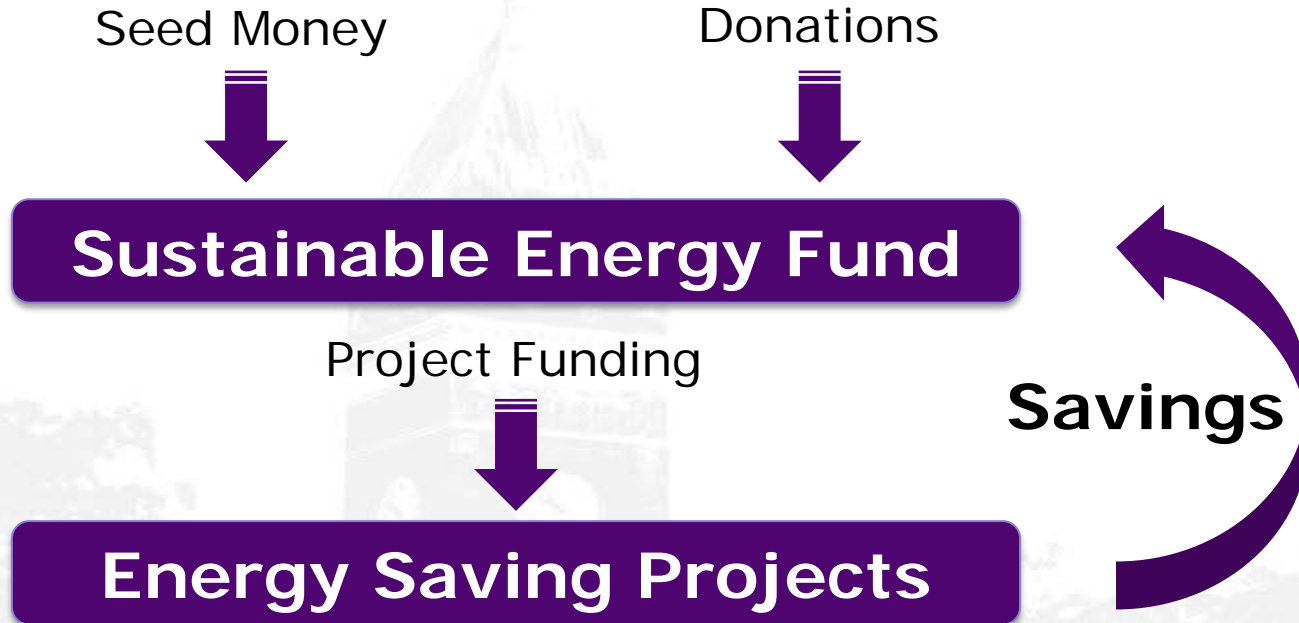
Rebound Effect



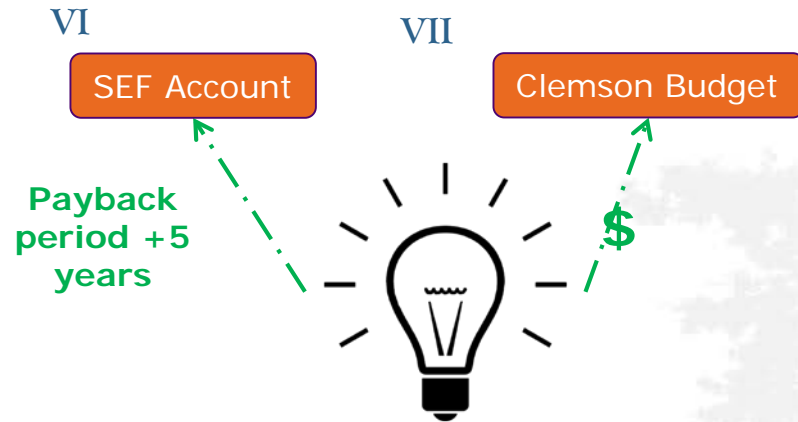
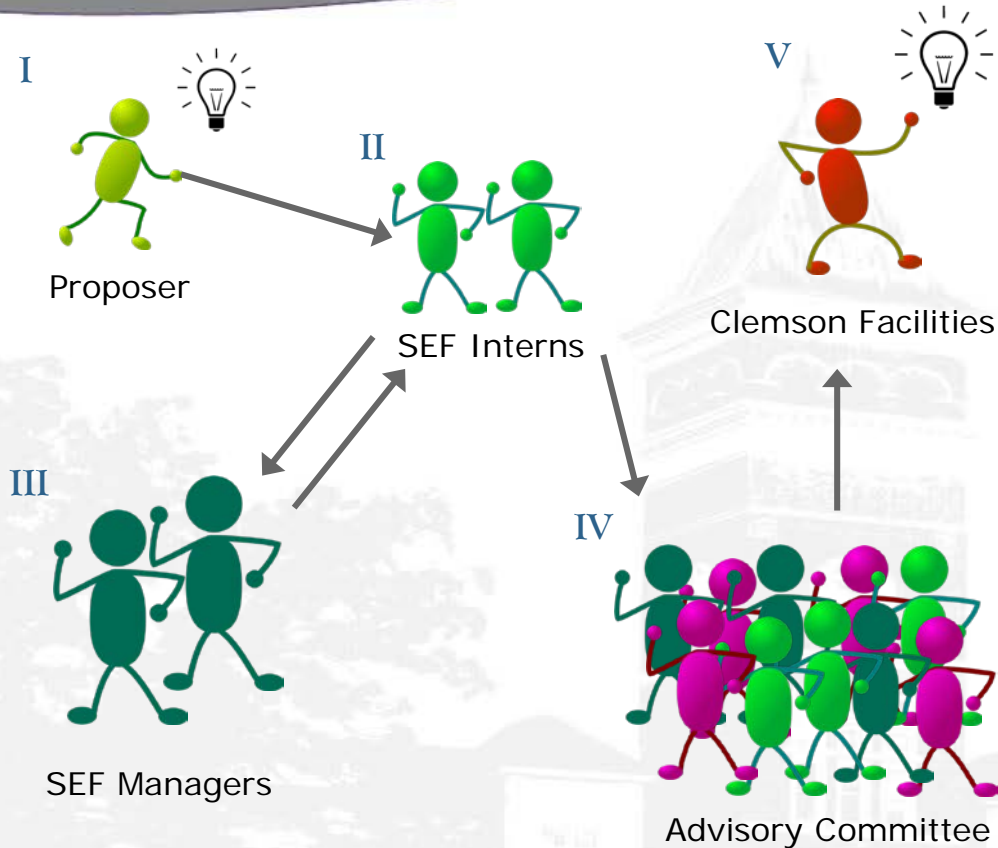
Rebound Effect



How it Works



How it Works



Phases

- I. Project Proposal
- II. Initial Project Review
- III. Detailed Project Analysis
- IV. Final Project Review
- V. Project Implementation
- VI. Project Active Period
- VII. Project Hand-off

Goals of Clemson SEF

- ❑ Encourage collaboration of all stakeholders within sustainable and energy improvement innovation
- ❑ Help live up to the 20% energy reduction by 2020 goal
- ❑ Instill a general stance towards sustainability throughout Clemson's main campus

Across the Nation



Arizona State University

Funds: \$3 million

Example Project: Chilled Water Plant Optimization.



Georgia Tech

Funds: \$6 million

Example Project: Global Learning Center HVAC Retrofit



HARVARD
UNIVERSITY

Sustainability

Harvard University

Funds: \$12 million

Example Project: Solar panels on Center for the Study of World Religions to produce 25% of building's energy use.



FURMAN UNIVERSITY

Furman University

Funds: \$43,000

Example Project: Geothermal Heat Pumps Retrofit.

More at:

www.aashe.org and www.greenbillion.org



What You Can Do

Go to <http://www.clemson.edu/facilities/utilities/sef> and fill out the Project Proposal Form.



Sustainable Energy Fund - Project Proposal Application
Please Submit via email

Applicant Information	
Name	
Phone	
Email	
Department	
Student, Staff, Faculty	

Project Details			
Location or Building			
Room Number		Floor Number	
Estimated Cost Range (Circle Best Fit)*	LOW ≤ \$10,000	MEDIUM < \$100,000	HIGH ≥ \$100,000
Application Continues onto Next Page			

* Example of Cost Range Projects:
 Low: Water Bottle Refill Station
 Medium: LED Parking Lot Lights in R1
 High: Wind Turbine



Project Description

In your own words, describe the proposed project in the space below
(Please include the following in your description)

- Motivation for proposed project
- Green benefits (water conservation, CO₂ emission reduction, etc.)
- Difference between current and proposed technology
- Materials needed for proposed project
- Estimate of total number of units that would need to be replaced
- Include links and pictures to similar projects, product specification sheets, or relevant websites