

Energy Conservation Project

Texas Higher Education Coordinating Board
*Committee on
Affordability, Accountability and Planning*

March 21, 2018

Maroon is the **New Green** 
TAMIU



TEXAS A&M
INTERNATIONAL
UNIVERSITY

GO BEYOND >



TEXAS A&M
INTERNATIONAL
UNIVERSITY

Overview of Utility Cost Reduction

Energy service partner:

Schneider Electric Buildings of America



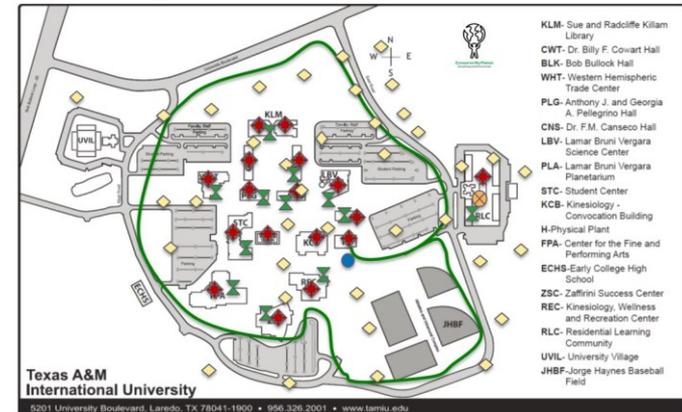
Energy conservation measures (ECMs) for
20 facilities on the TAMIU campus
(1,021,391 total combined square feet)

Schneider Electric guarantees savings
sufficient to cover all costs. This guarantee is
validated by a third-party engineering firm.

Installation of the ECMs will:

- Reduce electricity consumption by **4,080,836 kWh/yr**
- Reduce annual electricity demand by **10,071 kW**
- Reduce water purchases by **46,606 kgal/yr**

Phase I Improvement Map



GO BEYOND>



TEXAS A&M
INTERNATIONAL
UNIVERSITY

Project Benefits

- Scope of Work
 - Interior Lighting Retrofits
 - Exterior Lighting Retrofits
 - Metering Instrumentation and Controls Improvement
 - Recommissioning Low Flow Plumbing Systems
 - New Well and Storage Tank for Irrigation
 - New Residential Housing HVAC System
 - Variable Flow Chilled Water Distribution
 - Conserve My Planet Educational Program
- Longer payback period allows for inclusion of capital items that would normally be done without any sort of payback
- Budget-neutral approach with a longer term enables a more comprehensive solution
- Financing the needed improvements at low interest through utility savings that won't otherwise occur, and are guaranteed by Schneider Electric to occur each year for 20 years, is an attractive implementation option
- Enhanced reliability and quality of operations



GO BEYOND >



THE INTERNATIONAL

TEXAS A&M
INTERNATIONAL
UNIVERSITY

Financial

- **\$9,777,563 Implementation Cost**
- (\$9,056,000 in RFS bonds; \$721,563 in institutional funds)
- **14.9** year simple payback on energy conservation measures
- **20** year financing term includes: project engineering, installation, financing costs, and ongoing measurement & verification and third party support services
- Paid from guaranteed energy savings
- Bond payments and ongoing support services of approximately **\$608,705**
- The average annual electricity, natural gas, water savings and operational & maintenance savings from implementing the ECMs are at least **\$749,193**
- Anticipated AEP rebate of at least **\$120,000**
- Project will reduce higher utility consumption and expenses resulting from inefficiencies were the project not undertaken.
- Project was approved by The Texas A&M University System Board of Regents in November 2017



GO BEYOND>



TEXAS A&M
INTERNATIONAL
UNIVERSITY

Summary

- Achieves four major goals
 - Reduction of electric and water consumption
 - Replacement of capital budget items that are in poor condition, without added capital dollars
 - Improvement of learning environment conditions for students, faculty, and staff
 - Provision of educational experiences for students to gain practical, transferable skills for home and work environments
- Covers costs through realized utility savings guaranteed by Schneider Electric in a performance contract reviewed by:
 - The Texas A&M University System Office of General Counsel
 - Texas A&M International University's Vice President for Finance and Administration (CFO)
 - A registered, Texas Professional Engineer, unaffiliated with the project
- Seeking approval to move forward with the energy savings project



Maroon is the New Green 
TAMIU

GO BEYOND >