



University System of Maryland Sustainability Summit

Leveraging Private Investment to Capitalize Energy Improvements

December 4, 2018



About Maryland Clean Energy Center

An instrumentality of the State created by the General Assembly in 2008.

MCEC is a not-for-profit entity with a mission to transform the energy economy in Maryland by promoting clean energy, energy innovation, economic development, and job creation.

Enabling Statute Directives:

- **Promote Economic Development and Jobs in the Clean Energy Industry Sector**
- **Promote the Deployment of Clean Energy Technology**
- **Serve as an Incubator for the Development of Clean Energy Industry**
- **Collect, Analyze and Disseminate Industry Data**
- **Provide Outreach & Technical Support to Further the Clean Energy Industry**

MCEC Project Finance Solutions

The Maryland Clean Energy Center was created to help find innovative ways to finance clean energy projects

- MCEC is able to issue tax-exempt debt to provide low cost capital for economically viable projects
- Off Balance Sheet / Off Credit Solutions
- 100% Financing for Projects with Energy Savings to Support Financed Project
- Relationships with Energy Services Companies (ESCOs) to help assess project potential
- MCEC is a quasi-governmental entity that can easily contract with other State governmental entities.
- MCEC can help aggregate projects if scale is needed or desired.
- Procurement Assistance
- Technical Assistance

Maryland Clean Energy Capital Program: MCEC



ENERGY PERFORMANCE CONTRACT Shared Energy Savings Agreement Transaction Structure

- Ability for clients to implement energy efficiency and renewable projects without using their cash-on-hand.
- The typical transaction will be 'self-funding' in that savings repay the obligations to MCEC.
- Because MCEC is the borrower, the indebtedness will generally not count against the Client's borrowing limitation or debt capacity.
- Projects owned by MCEC are not subject to tax in the State of Maryland.

Funded over \$40M

in Energy Efficiency improvements for:

- University of MD, College Park
- University of MD, Baltimore County
- University of MD, IBBR
- Coppin State University
- National Aquarium

Current Realities

Resource Constraints

- Capital Budget Constraints
- Operating Budget Reductions
- Staff Reductions



Aging Infrastructure

- Aging Equipment
- Equipment Failures
- Higher Energy and Repair Costs



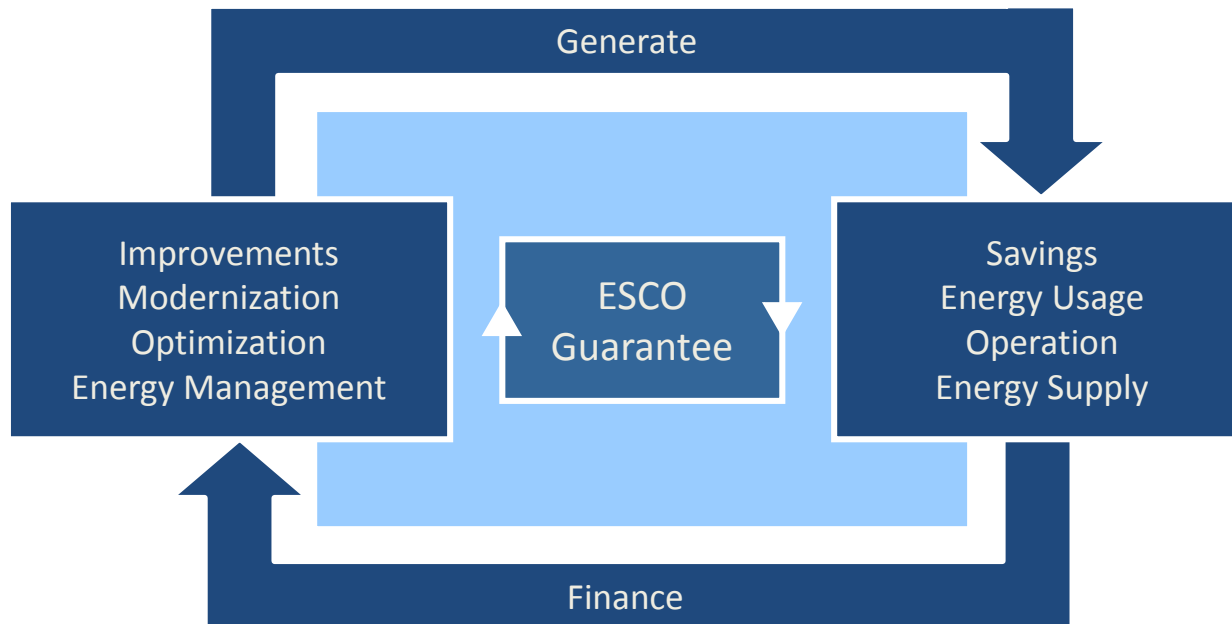
Sustainability Goals / Mandates

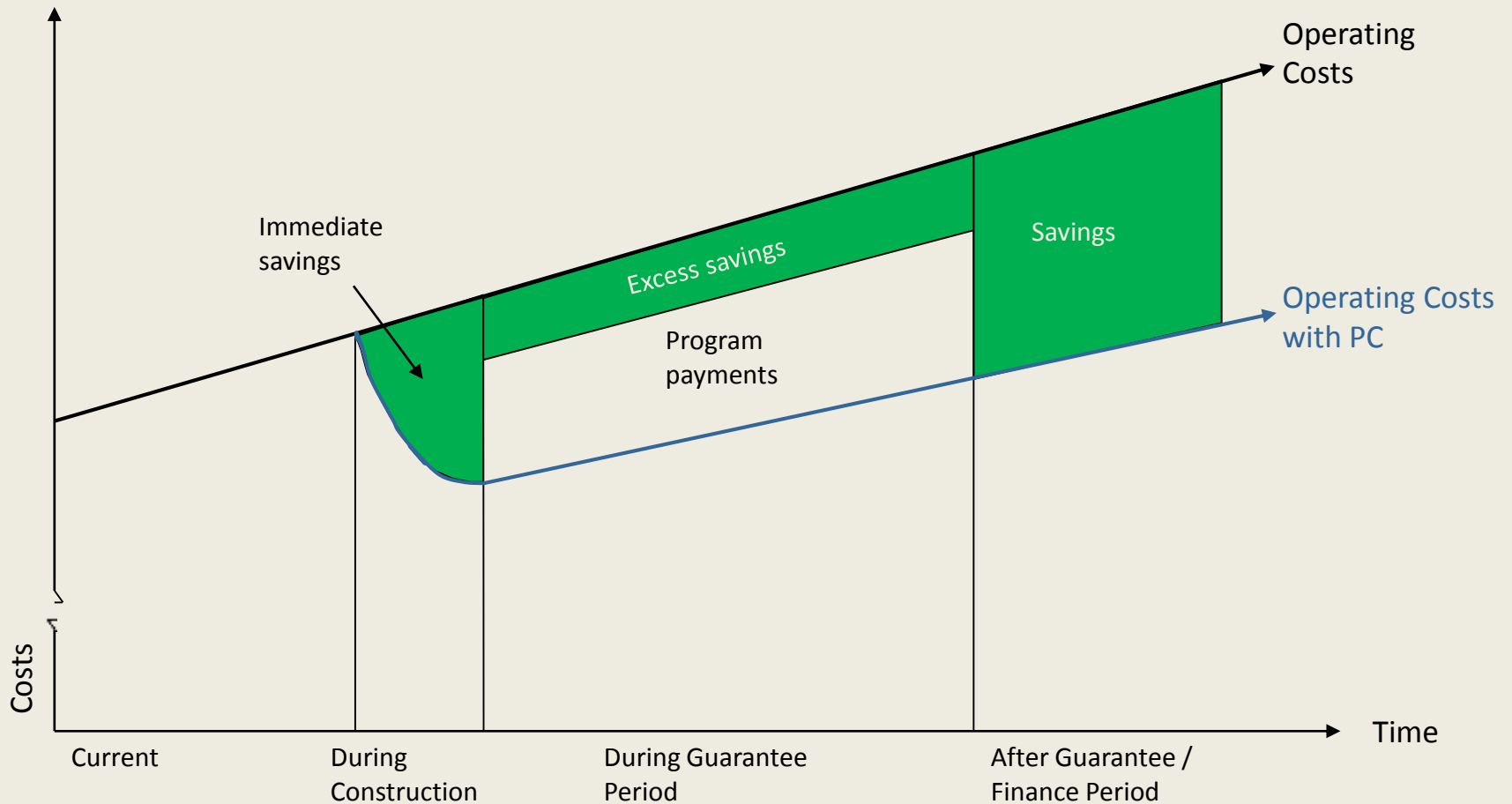
- Unfunded Mandates to Reduce Energy & CO₂
- LEED and Energy Star Certifications
- Green Expectations



Energy Performance Contracting / Energy Savings Agreement Transactions

- **Make facility & infrastructure improvements**
- **Reduce carbon footprint, energy use and operational expenses**
- **Energy savings are in guaranteed amount**
- **Energy savings are used to finance improvements**





MCAP CASE STUDY – University of Maryland, College Park

Challenge: How to best fund energy-saving capital improvements and optimize various University capital needs with existing funding alternatives.

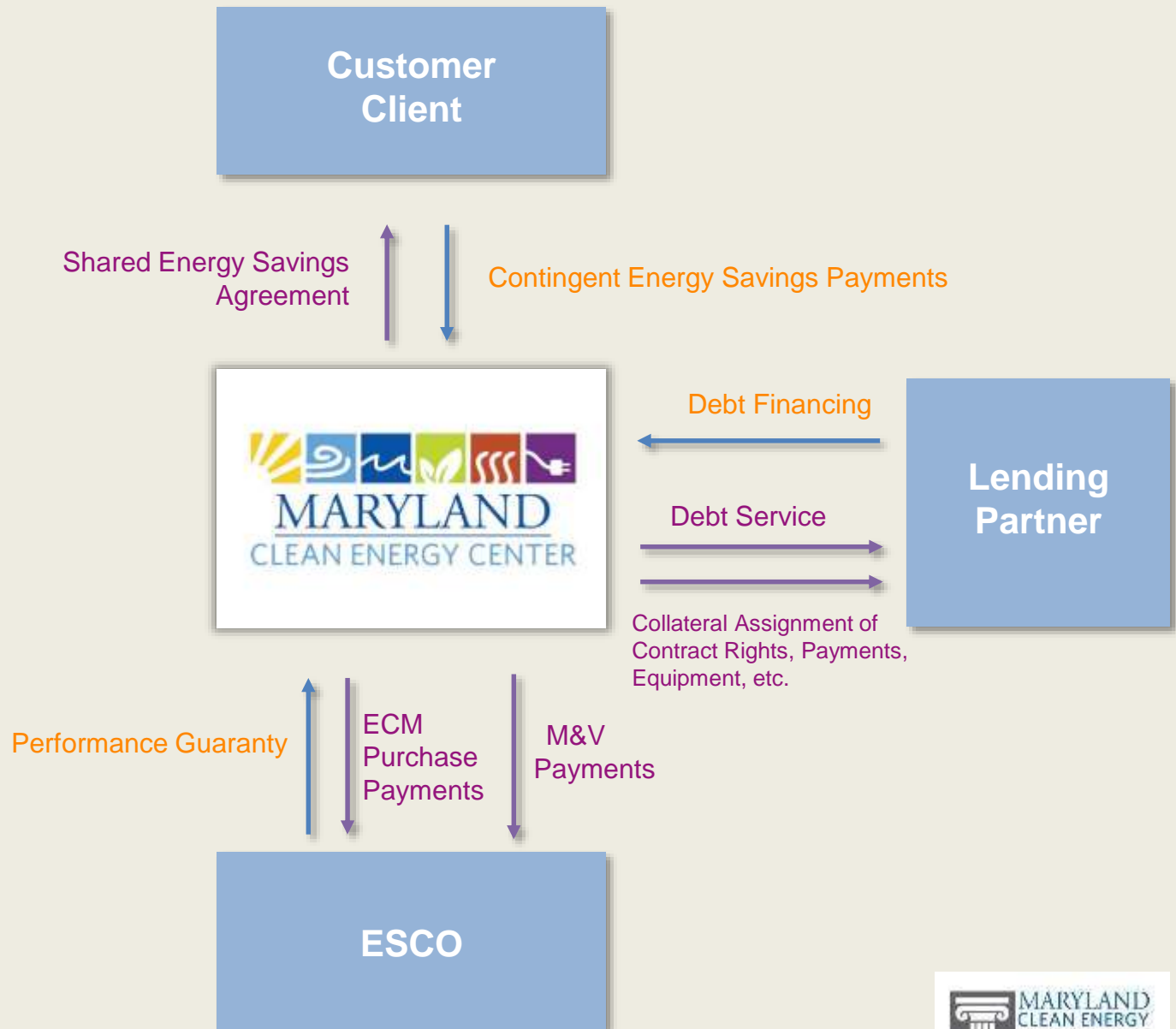
Solution: MCEC was able to use the MCAP Shared Energy Savings transaction model to facilitate third party ownership of the project by MCEC and attract cost effective tax-except capital supported by an EPC where the ESCO guarantees the energy, operation and maintenance savings. MCEC entered into a loan agreement with the Lender to provide capital for the project.

Scope-of-Project: HVAC upgrades, AHU replacement, Ventilation Controls upgrades, Chiller Plant optimization, Transformer replacements, Energy Recovery upgrades, Building Envelope improvements, Lighting and Controls upgrades, and Water Conservation upgrades.



Project Size:	\$21,500,773
Loan Amount	\$18,300,773
Avg. Annual Energy and O&M Savings:	\$1,760,000
Avg. Annual Debt Service	\$1,667,000
Financing Term/Loan Rate:	14.5-years, 2.60% / 3.00%
Lender:	BankUnited
ESCO (Energy Service Co.):	Constellation NewEnergy Inc.

Shared Energy Savings Agreement Transaction Structure



MCEC Project Finance Highlights

- MCEC's bond financing brings in private capital to finance the project
- The typical transaction will be 'self-funding' in that energy savings pay for the project cost and service agreement obligations
- The Shared Energy Savings Agreement can be structured as a services agreement and not as a lease or other debt obligation.
- The Customer obligation to pay can be contingent upon realizing energy savings. Thus, the Customer obligations under the agreement may be treated as an annual operating expense and not as a long-term capital obligation.
- Credit rating agencies typically view such obligations as "credit-positive" as they enhance client's facilities and reduce annual operating expenses.
- Because MCEC "owns" the Energy Conservation Measures, these assets have the potential to be considered off-balance sheet, based on your auditors interpretation of the transaction structure.

CONTACT INFORMATION

Wyatt A. Shiflett II

Director of Finance Programs
Maryland Clean Energy Center
wshiflett@mdcleanenergy.org

1212 West Street, Suite 200
Annapolis, Maryland 21401
443-949-8505
www.mdcleanenergy.org