

Subject: Facilities Backup Slides

Related Department(s): DES

FY 2027 Proposed Capital Budget

CIP Work Session

The following information is provided in response to a request made by Mr. Karantonis at the work session on June 23, 2026, regarding the following question:

Please provide the backup slides that were shared during the Facilities Work Session.

Attached please find the back-up slides presented during the Facilities CIP work session on June 23, 2026.

Facility Decarbonization Status Update

HVAC and Equipment Electrification Guiding Principles:

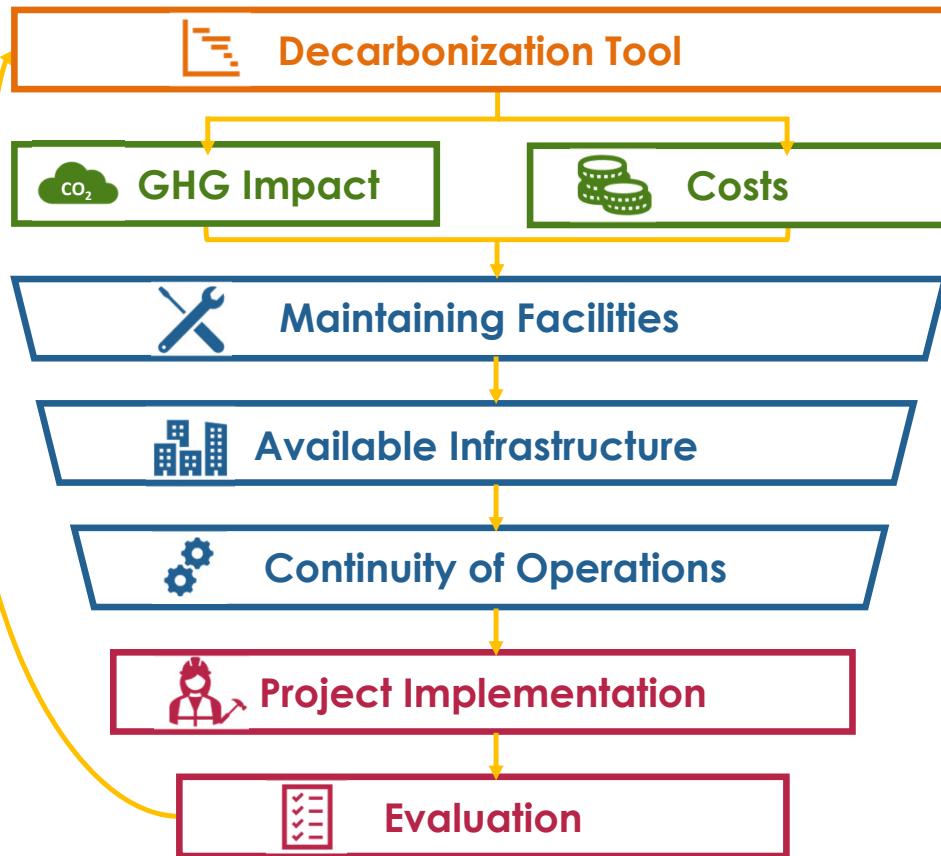
- Evaluating different system types; find the right system for the right application
- Implement at end of useful life and minimize facility disruption
- Costs to electrify have been embedded in project budget requests
- Post-installation Evaluation, Measurement, and Verification (EM&V)

Feasibility	
Design/Permitting	
Procurement	
Construction	
Decarb Tool Model	*

HVAC and Equipment Electrification Effort Report Card

Location	CY 23	CY 24			CY 25			CY26			CY27			Remarks
		FY24		FY25		FY26			FY27					
Cultural Affairs (3700 S. FMR)														- Electric-resistance boiler; extended construction timeline for LLTM; Additional time required for Dominion power coordination
*Madison Community Center														- Bundled energy improvements to include roof and window replacement, VRF system installation - Additional lower-level fitness improvements
WSS Engine Shop														- Conversion to electric resistance RTU
*Quincy II														- Conversion to heat pump w/ auxiliary electric resistance RTU; Preliminary data: reduced energy consumption, higher electricity costs
*Walter Reed Community Center														- Feasibility study performed on electric resistance boiler; High \$/GHG, decision advanced to replace like in-kind
Oakland Street Warehouse														- Conversion to electric resistance RTU
*Fire Station #2 (DHW)														- Conversion to electric hot water heater
*Quincy I														- Renovation and new programmatic use - Conversion variable refrigerant volume (VAV) system

Integrated Approach to Facility Electrification Planning



Facilities with Electrified HVAC Projects:

- Quincy 1 (+\$750k)
- Quincy 2 (+\$1.3M)
- Oakland Street Warehouse (+\$100k)
- Cultural Affairs (+\$1.7M, pilot)
- WSS Engine Shop (+\$410k)
- Madison Community Center (+\$1.2M, closed for 1 year)

Walter Reed Community Center Electrification Constraints:

- High incremental costs (estimated at \$2M)
- Increased operating costs (\$315k over 20 years)
- 125 MTCO₂e 20-year GHG reduction from current system v. 500 MTCO₂e for electric HVAC
- Anticipated impacts to continuity of operations (e.g., closing center activities)
- Remaining useful life of other building systems to support full facility energy performance upgrades (e.g., facility envelope, switchboards, electrical, distribution systems)

Walter Reed Community Center Boiler Analysis

Electrifying the boilers at Walter Reed would reduce emissions over time, but it would also require major electrical upgrades and up to \$2M more in costs.

Boiler Replacement Analysis

Evaluation Criteria	Electric-Resistance Boiler	High-Efficiency Gas Boiler
Up-front capital cost	\$2.46M	\$455K
Relative utility costs compared to current equipment over 20-Years	\$315K	(\$40K)
Total 20-year Cost Total	\$2.78M	\$415K
20-year Lifetime GHG Impact VCEA Compliance¹ (MTCO₂e) (% reduction from baseline)	(500) (-12%)	(125) (-3%)
20-year Lifetime GHG Impact IRP High Load Growth² (MTCO₂e) (% reduction from baseline)	(100) (-3%)	(125) (-3%)
Environmental ROI (\$/Lifetime GHG)	\$5,600 - \$27,800	\$3,320

Costs



Benefits



Notes

- 1- Assumes best case scenario (VCEA compliance) for grid decarbonization
- 2- Utilizes the Dominion IRP high load growth scenario for grid decarbonization
- Utility costs include near term impacts for electricity FY 27 25% increase, FY 28 20% increase, natural gas FY 27 and 28 10% increases with 1.5% annual increases for both thereafter