Portfolio Decarbonization Planning

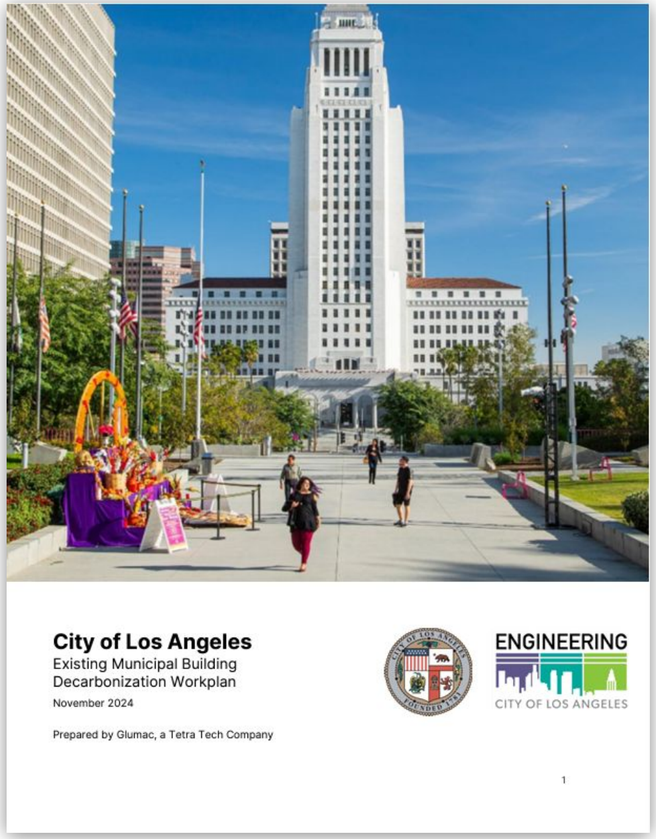
Los Angeles Existing Municipal Building Decarbonization Workplan Report and Year 1 Workbook Package

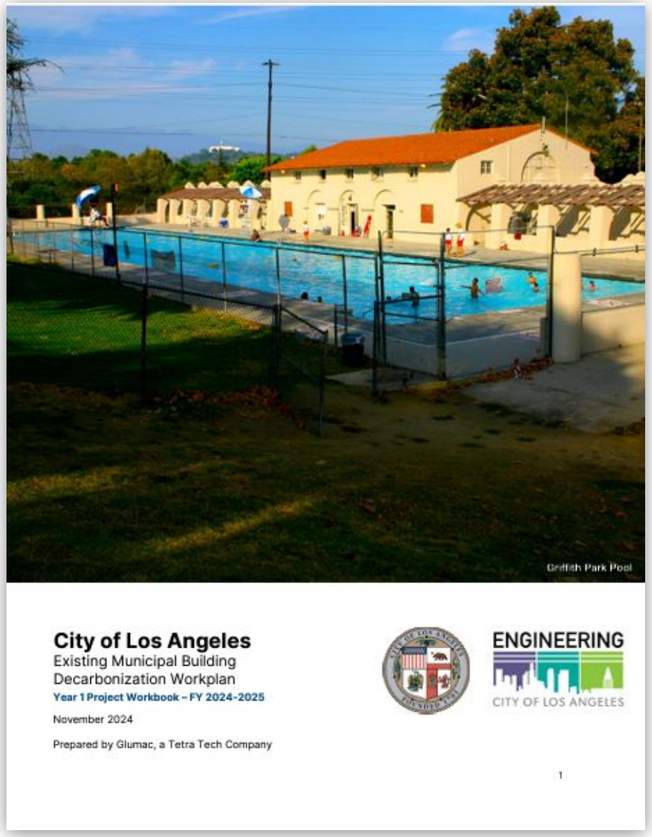
Presentation to the:
Municipal Facilities Committee

ENGINEERING
CITY OF LOS ANGELES

GLUMAC

September 2025





City of Los Angeles
Existing Municipal Building
Decarbonization Workplan
November 2024

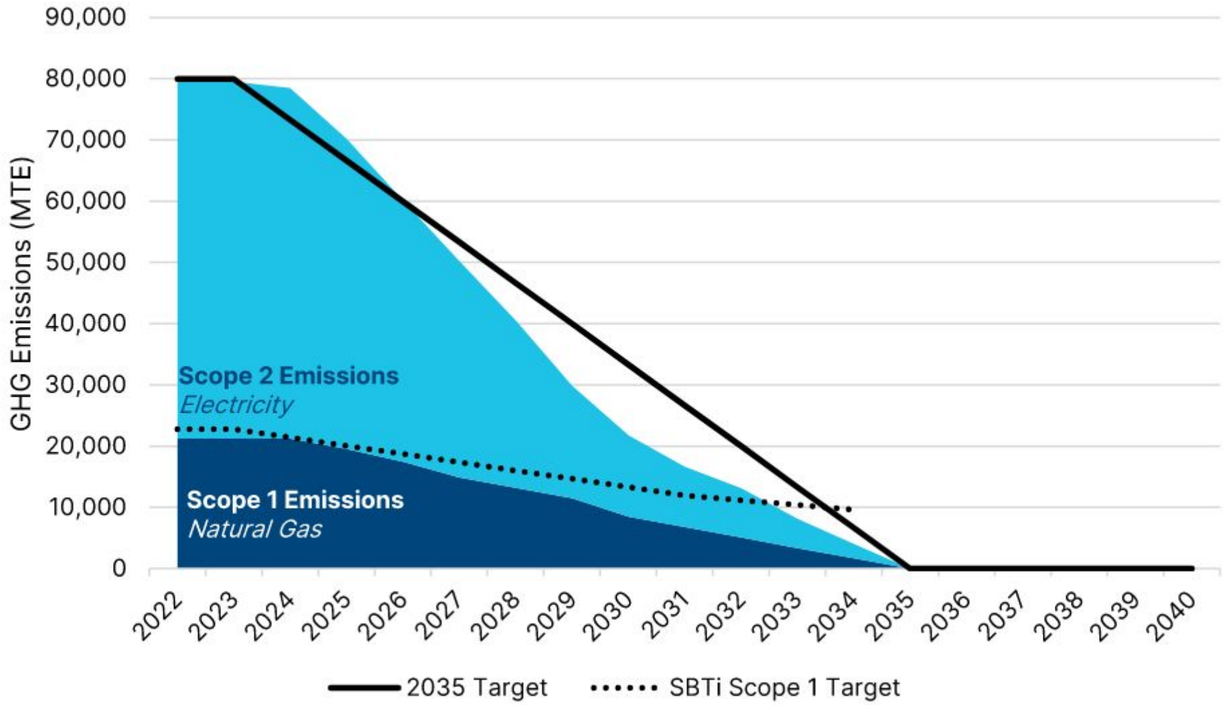
Prepared by Glumac, a Tetra Tech Company

ENGINEERING
CITY OF LOS ANGELES

1

Municipal Buildings GHG Emissions Forecasts

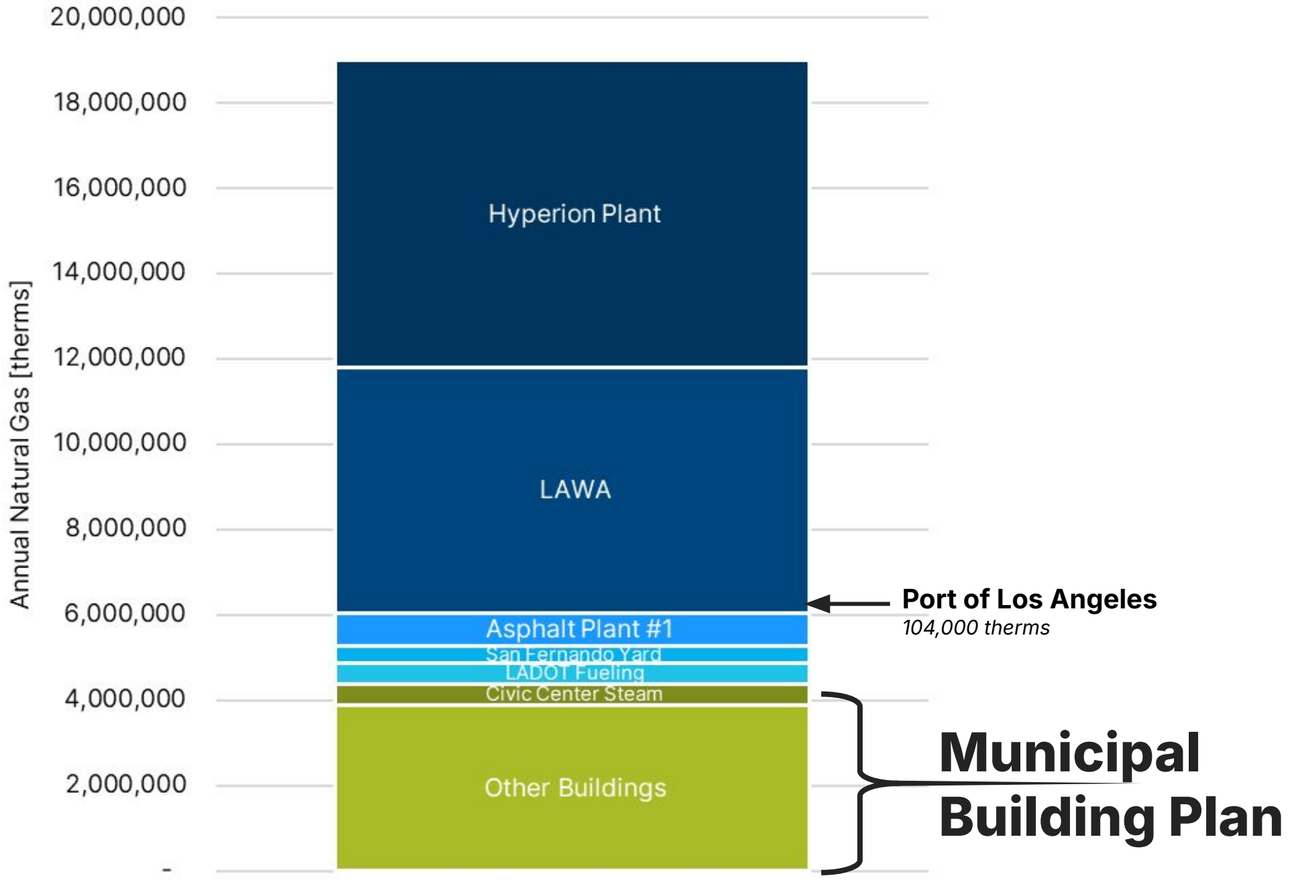
Pathway for the City of Los Angeles to decarbonize municipal building operations by 2035.



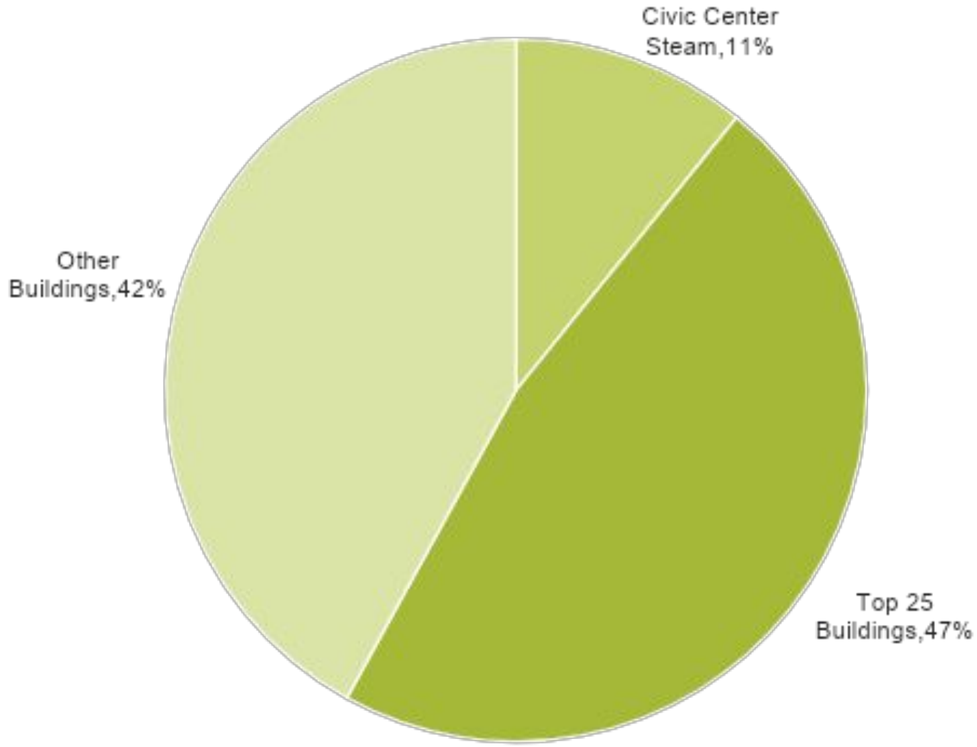
1. Emissions forecast is based on projects outlined in the Existing Building Decarbonization Workplan.
2. Municipal buildings includes all City owned facilities in non-proprietary departments. Excludes process operations including asphalt plants, wastewater treatment and CNG fueling.
3. Electricity emission factors based on LADWP's to provide 100% clean power by 2035 under LA1000. .

The Existing Building Decarbonization Workplan covers all non-proprietary buildings which use roughly 4 million therms of natural gas annually.

LASAN 2022 GHG Inventory



Municipal Existing Building Decarbonization Plan



The Municipal Building Decarbonization Workplan does not cover proprietary city departments including LAWA, POLA and LADWP. Natural gas for those departments are included above. Consumption for the Port of Los Angeles is ~100,000 Therms annually.

Municipal Existing Building Decarbonization Workplan Key Findings

1. **Los Angeles has a pathway to achieve carbon-neutral municipal building operations by 2035.**
   - Prioritize building electrification and cost-effective energy efficiency and solar projects.
   - Target buildings with the largest natural gas use – 25 sites account for 50% of annual use.
   - Establish science-based reduction targets, with interim reduction commitments.
2. **Achieving the 2035 commitment requires significantly scaling and accelerating implementation**
   - Requires electrifying 80 buildings annually starting in FY24-25, every year the City waits annual requirement increases by 10%.
   - Decarbonization workplan will require additional staff, resources and funding, and new project
   - delivery methods.
   - Workplan recommends establishing a dedicated BOE Building Decarbonization Program Team.
   - Success will still require significant coordinate and collaboration between multiple City departments.
3. **A financially sustainable program aligns with existing buildings needs and can leverage external source.**
   - Align decarbonization projects with deferred maintenance and infrastructure needs, avoid early
   - equipment retirement.
   - Pursue all available grants, leverage new financing mechanisms and consider building
   - decarbonization/resilience bond.
   - Implement Energy Savings Performance Contracts (ESPC) projects – CAO to determine financing approach.
4. **Municipal building decarbonization will provide important community benefits.**
   - Enhanced resilience of community cooling centers, emergency services and other critical operations.
   - Lead the way and spur investment in the private sector.
   - Create new local jobs in the green economy.

City of Los Angeles Building Portfolio

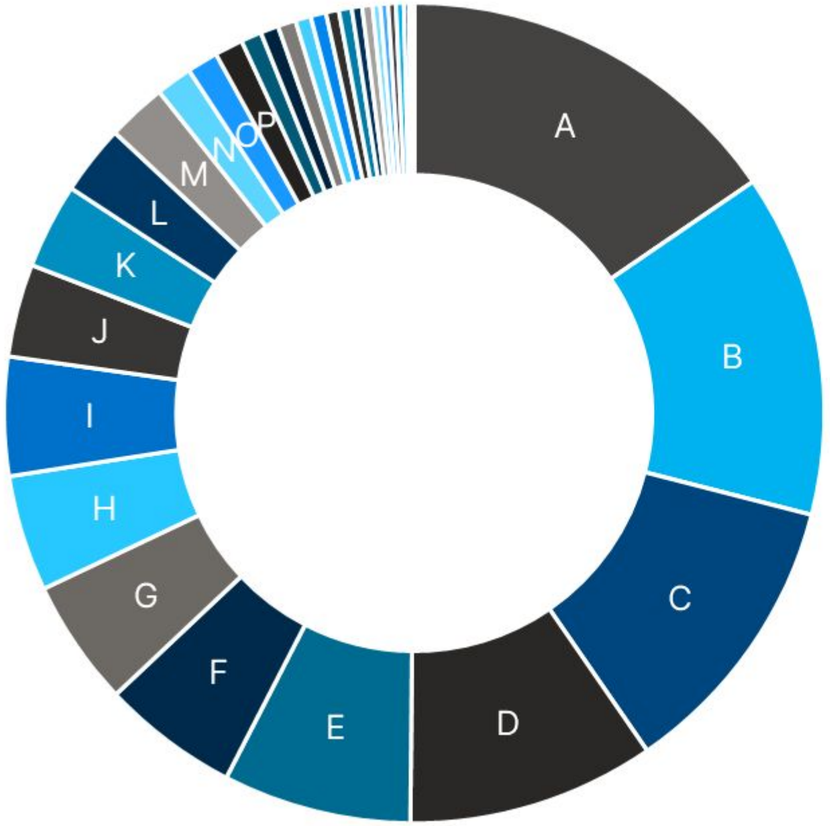
Key Takeaways

1. City operates a **diverse portfolio of existing buildings** providing various critical services.
2. Buildings account for **34% of municipal emissions** - 100,000 MTE in 2022.
3. Electrification is critical – LADWP to provide **100% clean power by 2035.**
4. **25 sites use 50% of natural gas** use for all municipal buildings.
5. Scope 1 emissions reduction targets in line with **science-based target**

980
Buildings

21M
Square Feet

$68M
Annual Utility Cost

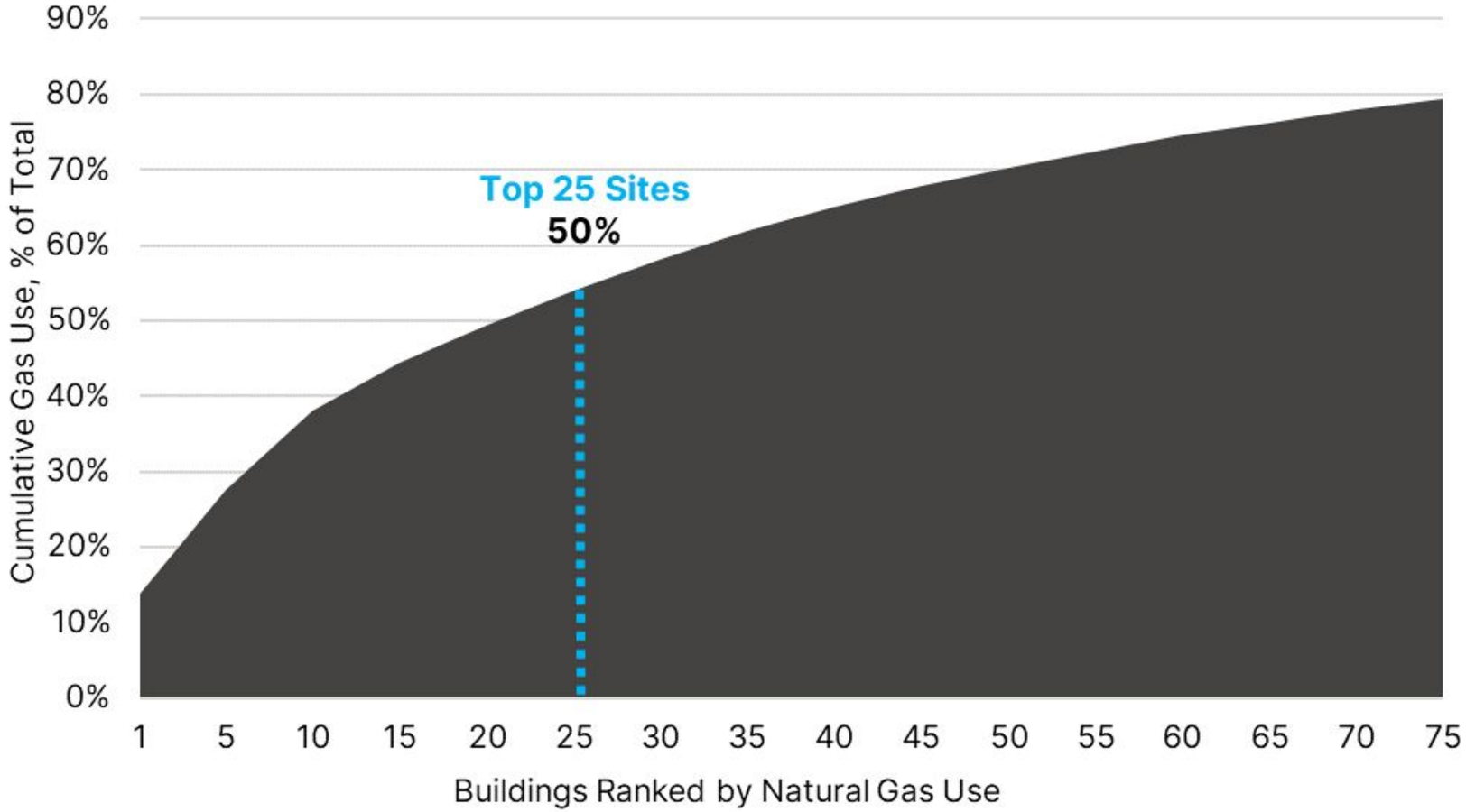


- A - RECREATION CENTER, 152
- B - MAINTENANCE, 133
- C - FIRE STATION, 112
- D - OFFICE, 96
- E - LIBRARY, 73
- F - AQUATIC CENTER, 53
- G - COMMUNITY CENTER, 49
- H - CHILD CARE CENTER, 45
- I - MUSEUM, 46
- J - PARKING, 36
- K - SENIOR CENTER, 33
- L - WAREHOUSE/STORAGE, 27
- M - POLICE STATION, 23
- N - ZOO EXHIBIT, 14
- O - THEATER, 12
- P - VACANT, 11
- Q - ANIMAL SHELTER, 8
- R - COMMUNICATION, 7
- S - POLICE OPERATIONS, 7
- T - ASSEMBLY, 6
- U - RESIDENTIAL, 6
- V - POLICE TRAINING, 5
- W - RESTROOM, 5
- X - COMMERCIAL, 4
- Y - LAB, 4
- Z - CAMP, 3
- AA - HORTICULTURE, 3
- BB - PLANT, 3
- CC - RESTAURANT, 3
- DD - AQUARIUM, 2
- EE - CHURCH, 1
- FF - DETENTION, 1

Existing Building Portfolio by Building Type

HIGHLIGHT

Los Angeles will prioritize decarbonizing the top 25 sites which account for over 50% of annual natural gas use from all municipal buildings.



Excludes sites with process gas use including Asphalt Plant #1 (776,083 therms), LADOT CNG Fueling (493,303 therms), San Fernando Street Maintenance (393,986 therms) and Southwestern District Steet Maintenance (187,957 therms).

HIGHLIGHT

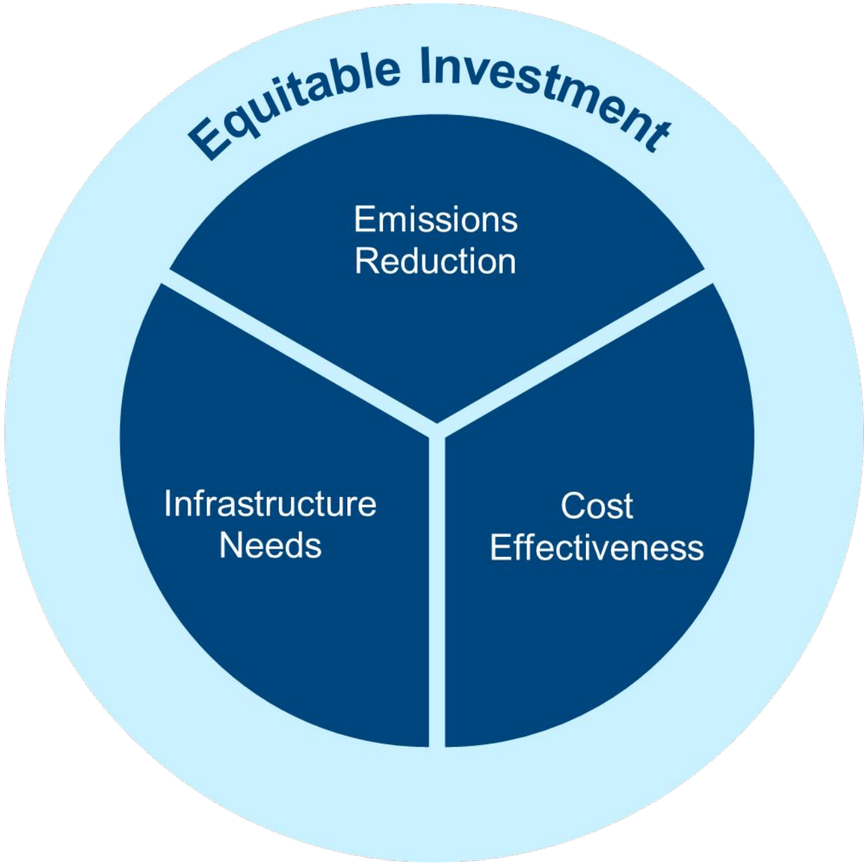
A.7. TOP 25 SITES BY NATURAL GAS

Table 28: City of Los Angeles - Top 25 Sites by Natural Gas Use

#	Site Name	Council District	Primary Department	Building Maintenance	Infrastructure Priority	Target Funding Year	ROM Cost (2023)[1]	Funding Requirements[2]	2022 Gas Usage (Therms)
1	CIVIC CENTER STEAM PLANT – PH. 1 (CITY HALL / METRO DETENTION CENTER)	14	GSD	GSD	High	FY 25-26	$30,000,000	$45,000,000	491,100
	CIVIC CENTER STEAM PLANT – PH. 2 (CITY HALL EAST / CITY HALL SOUTH)[3]	*14*	*GSD*	*GSD*	*High*	*FY 28-29*	*$35,000,000*	*$70,000,000*	
2	POLICE ADMINISTRATION BUILDING (PAB)	14	LAPD	GSD	Medium	FY 30-31	$12,873,965	$30,000,000	181,700
3	HYPERION TREATMENT PLANT BUILDINGS	11	LASAN	LASAN		FY 27-28	$9,000,000	$17,000,000	153,500
4	EXPO CENTER	09	RAP	RAP		FY 25-26	$8,686,894	$15,000,000	140,700
5	LOS ANGELES ZOO	04	ZOO	ZOO		FY 27-28	$5,000,000	$10,000,000	84,900
6	VAN NUYS SHERMAN OAKS PARK AND POOL	04	RAP	RAP	Low	FY 31-32	$1,933,930	$4,500,000	81,400
7	CENTRAL LIBRARY	14	LAPL	GSD	Low	FY 32-33	$31,737,276	$75,000,000	81,300
8	NORTH HOLLYWOOD FLEET SERVICE REPAIR FACILITY	02	GSD	GSD	High	FY 27-28	$3,200,000	$6,500,000	78,300
9	C ERWIN PIPER TECHNICAL CENTER (PIPER TECH)	14	GSD	GSD	High	FY 26-27	$49,000,000	$90,000,000	72,300
10	EAST VALLEY SOLID WASTE RESOURCES FACILITY	06	GSD	GSD	Low	FY 33-34	$4,500,000	$12,000,000	71,900
11	VAN NUYS COMMUNITY POLICE STATION	06	LAPD	GSD	High	FY 25-26	$4,500,000	$8,000,000	68,900
12	LOS ANGELES CONVENTION CENTER	09	LACC	Vendor	Medium	FY 29-30	$30,000,000	$65,000,000	63,900
13	7TH ST CONSOLIDATED FACILITY	14	GSD	GSD	High	FY 25-26	$5,700,000	$10,000,000	55,200
14	ECHO PARK DEEP POOL	14	RAP	RAP	Medium	FY 31-32	$4,567,341	$10,500,000	52,300
15	GLASSELL PARK AND POOL	15	RAP	RAP	Medium	FY 30-31	$1,511,816	$5,000,000	51,900
16	AHMANSON RECRUIT TRAINING CENTER (ARTC)	11	LAPD	GSD	High	FY 27-28	$13,713,439	$26,000,000	46,000
17	LINCOLN PARK AND POOL	14	RAP	RAP	Medium	FY 28-29	$4,605,644	$10,500,000	41,800
18	VAN NESS REC CENTER	18	RAP	RAP		FY 31-32	$2,038,950	$5,000,000	39,500
19	WEST VALLEY SOLID RESOURCES COLLECTION YARD	12	GSD	GSD		FY 31-32	$2,000,000	$5,000,000	38,600
20	YOSEMITE POOL AND REC CENTER	14	RAP	RAP	High	FY 26-27	$1,450,750	$3,000,000	38,500
21	CENTRAL REFUSE EQUIPMENT REPAIR YARD	14	GSD	GSD	High	FY 25-26	$2,000,000	$3,500,000	37,600
22	ROOSEVELT POOL	14	RAP	RAP	High	FY 24-25	$1,395,540	$2,000,000	37,000
23	ELYSIAN PARK POLICE ACADEMY (LAPD POLICE ACADEMY)	01	LAPD	GSD[4]		FY 31-32	$4,905,339	$11,500,000	36,800
24	WESTWOOD PARK AND POOL	05	RAP	RAP		FY 30-31	$12,173,784	$26,000,000	36,000
25	CAMP SEELY	04	RAP	RAP	High	FY 33-34	$2,000,000	$5,000,000	35,100
						Total	**$280,000,000**	**$565,000,000**	**2,165,886**

HIGHLIGHT

Prioritization framework will support decision making to develop impactful annual project portfolios.



Prioritization Criteria	Outcomes & Impact	Tactics
Emissions Reduction Prioritize projects with largest GHG emissions reduction potential.	*Carbon neutrality municipal building operations by 2035. Leading by example for the private sector.*	**A.** Electrify all buildings **B.** Complete LED lighting retrofits **C.** Pursue cost-effective energy and solar **D.** Procure 100% carbon free electricity
Infrastructure Needs Prioritize buildings with the greatest building infrastructure issues and deferred maintenance.	*Improved reliability of public services and emergency operations. Greater community resilience.*	**A.** Prioritize based on existing infrastructure **B.** Invest in cooling centers **C.** Create microgrids at and critical facilities
Cost Effectiveness Prioritize cost effective decarbonization projects, leverage external funding & financing, and reinvest savings.	*Reduced operational costs for municipal building utilities and maintenance.*	**A.** Pursue available incentives, rebates, credits **B.** Leverage alternative funding and financing **C.** Submit projects for federal and state grants
Equitable Investment Equitably invest across Los Angeles, prioritizing buildings serving disadvantaged communities.	*Investment in facilities that support disadvantaged communities. Economic support for local green jobs.*	**A.** Invest in disadvantaged communities – City's Equity Mapping and Justice 40 **B.** Program transparency

HIGHLIGHT

Proposed Process for Approval of Annual Workbook

City Council, Mayor's Office, BOE[29]

City establishes a preliminary annual budget for the Municipal Building Decarbonization Program.

August

BOE

BOE Municipal Building Decarbonization Program Manager reviews the 12-year workplan and establishes a preliminary building decarbonization and project list.

September

GSD + Departments

GSD, RAP, and other departments with building operations responsibility review preliminary annual plans and provide input and suggestions based on existing infrastructure and city needs.

October

BOE

BOE Municipal Building Decarbonization Program Manager revises the annual plan based on feedback and provides an equity review of proposed investments.

November

CAO

CAO provides funding and financial reviews to identify funding sources and other alternative financing opportunities.

December

BOE

BOE Municipal Building Decarbonization Program Manager finalizes annual decarbonization plan

February

MFC

MFC reviews the annual proposed building decarbonization plan and forwards recommended action to the City Council

March

City Council + Mayor's Office

MFC provides an annual municipal building decarbonization plan that is submitted for approval.

March

HIGHLIGHT

The Existing Building Decarbonization Workplan will leverage multiple project delivery methods to scale implementation efforts. All electrification project delivery methods assume equipment replacement at the end of their useful life.

1 Capital Improvement

Complex engineering projects that require planning and engineering design.

- Boilers
- Steam
- Pool Heating
- Large Water Heaters

Delivery Approach:
BOE led projects run through existing capital improvement projects processes.

2 End of Life Equipment (RAP-GSD)

Replacement of smaller natural gas equipment that has reached the end of life.

- Rooftop Units
- Small Water Heaters
- Gas Dryers
- Ovens & Ranges

Delivery Approach:
GSD/RAP led project with technical support from BOE. Vendor provides

3 Performance Contracts (ESPC)[1]

Full building upgrades at simpler facilities (fire station, library, rec center, etc).

- HVAC Systems
- Water Heaters
- LED Lighting

Delivery Approach:
ESPCs are design-building projects with guaranteed savings. BOE managed projects.

4 Portfolio Solar Procurement

Combine solar PV projects across multiple sites for more competitive pricing.

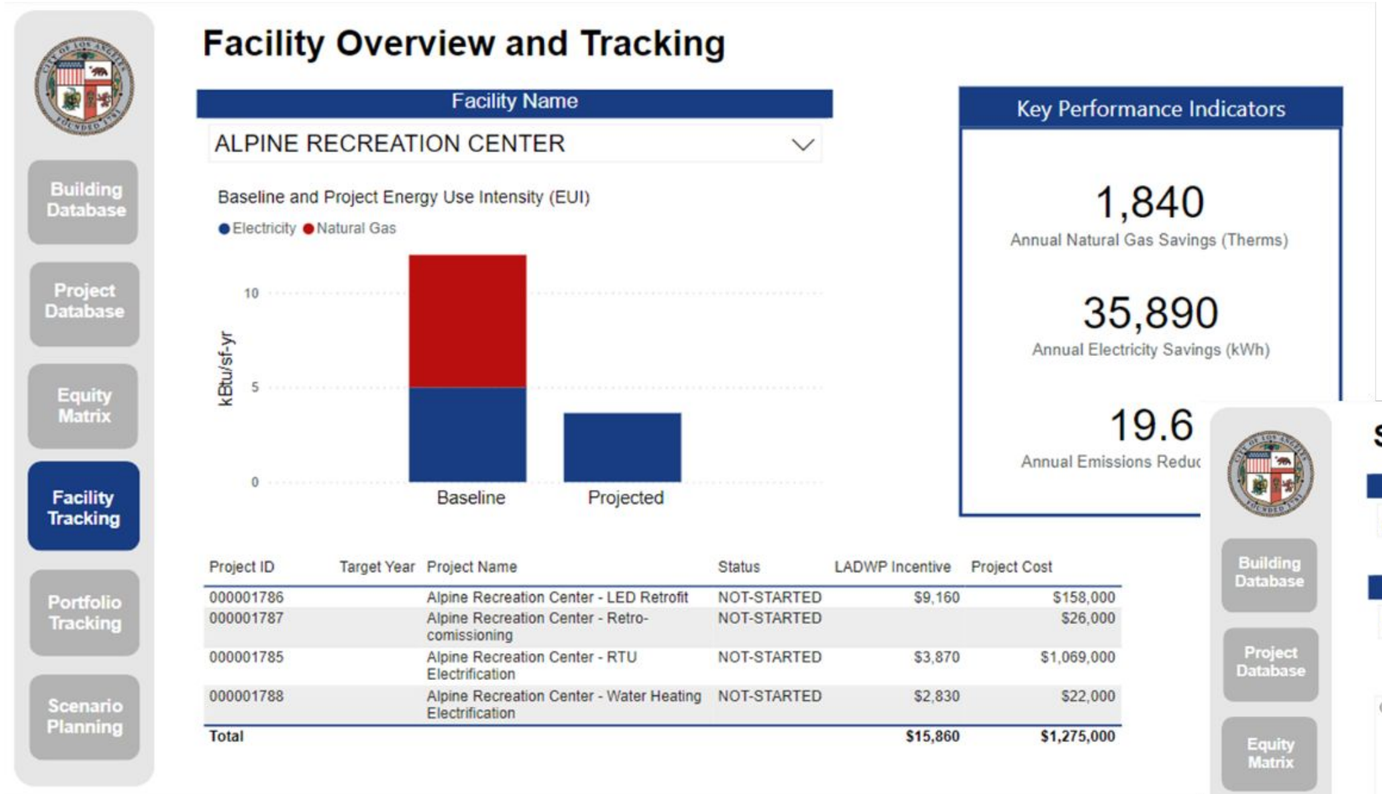
- Rooftop Solar
- Carport Solar

Delivery Approach:
Design-build project delivery leveraging existing on-call solar contractors list.

HIGHLIGHT

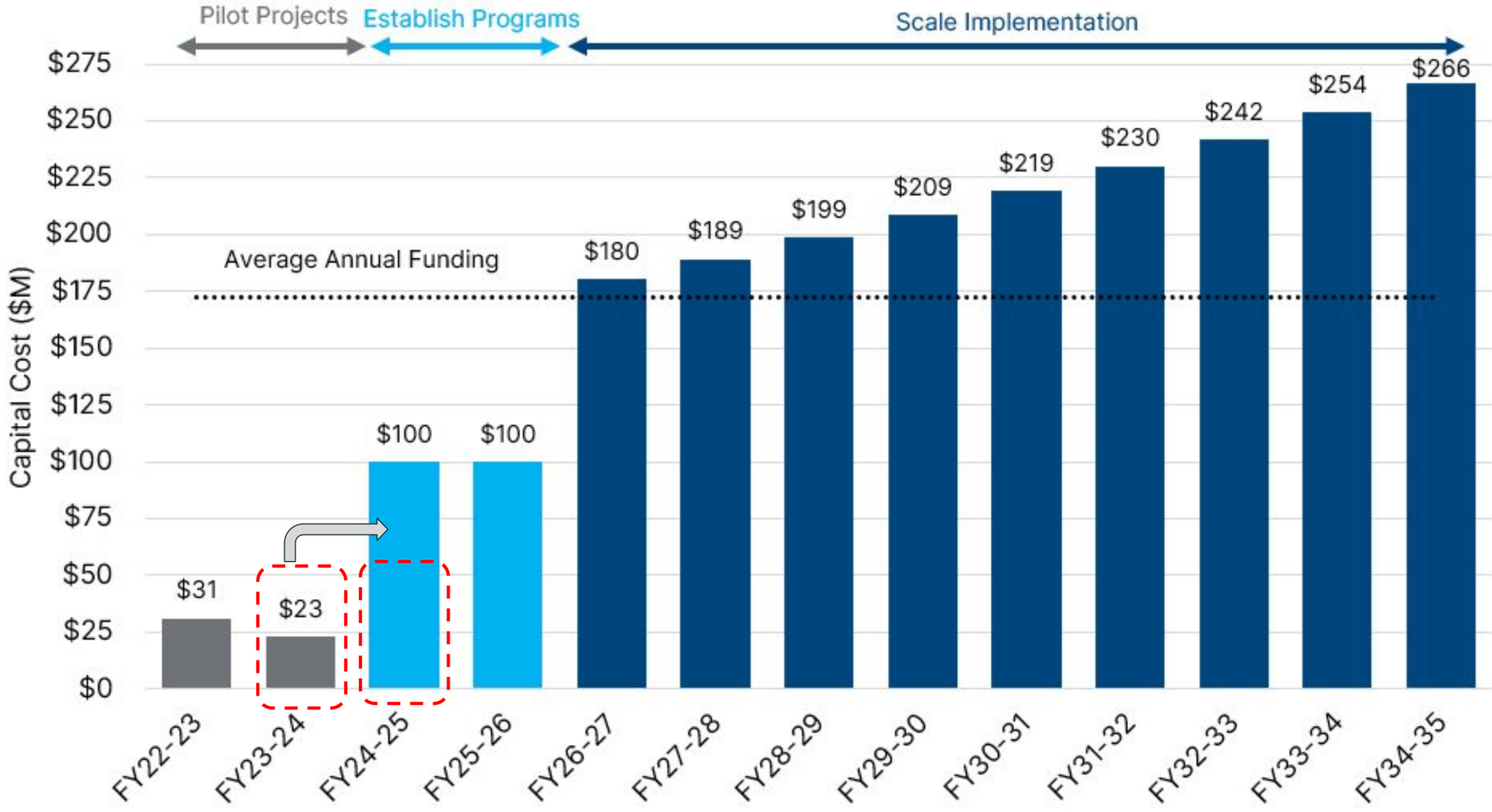
[1] Additional information provided for Energy Savings Performance Contracts (ESPC) later in presentation

Custom building decarbonization tracking tool will allow the City to monitor progress towards carbon neutrality.



HIGHLIGHT

Phased decarbonization program will provide a scalable implementation framework for the City to accelerate investments through 2035.



Building Decarbonization Workplan Estimated Annual Funding

$2.4B
Total Program Cost
Present Value $1.3B

$1.90B
* New Electrified Equipment

$275M
Energy Efficiency Upgrades

$150M
Renewable Energy & Storage

$1.35B
* Business as usual with New Gas Equipment

10-Year Existing Municipal Building Decarbonization Program Summary

980
Existing Municipal Buildings

21M
Total Gross Area Square Feet

32
Unique Building Types

$2.4B
Total Program Cost
Present Value **$1.3B**

$1.90B
* New Electrified Equipment

$275M
Energy Efficiency Upgrades

$1.35B
* Business as usual with New Gas Equipment

$150M
Renewable Energy & Storage

80,000
Emissions Savings (Metric Tons of CO2e)

4,000,000
Natural Gas Savings Therms

212,000
Electricity Savings Megawatt-hours

1,162
Overall Employment Gain

600
New Green Jobs

2
Fossil Fuel Jobs Lost

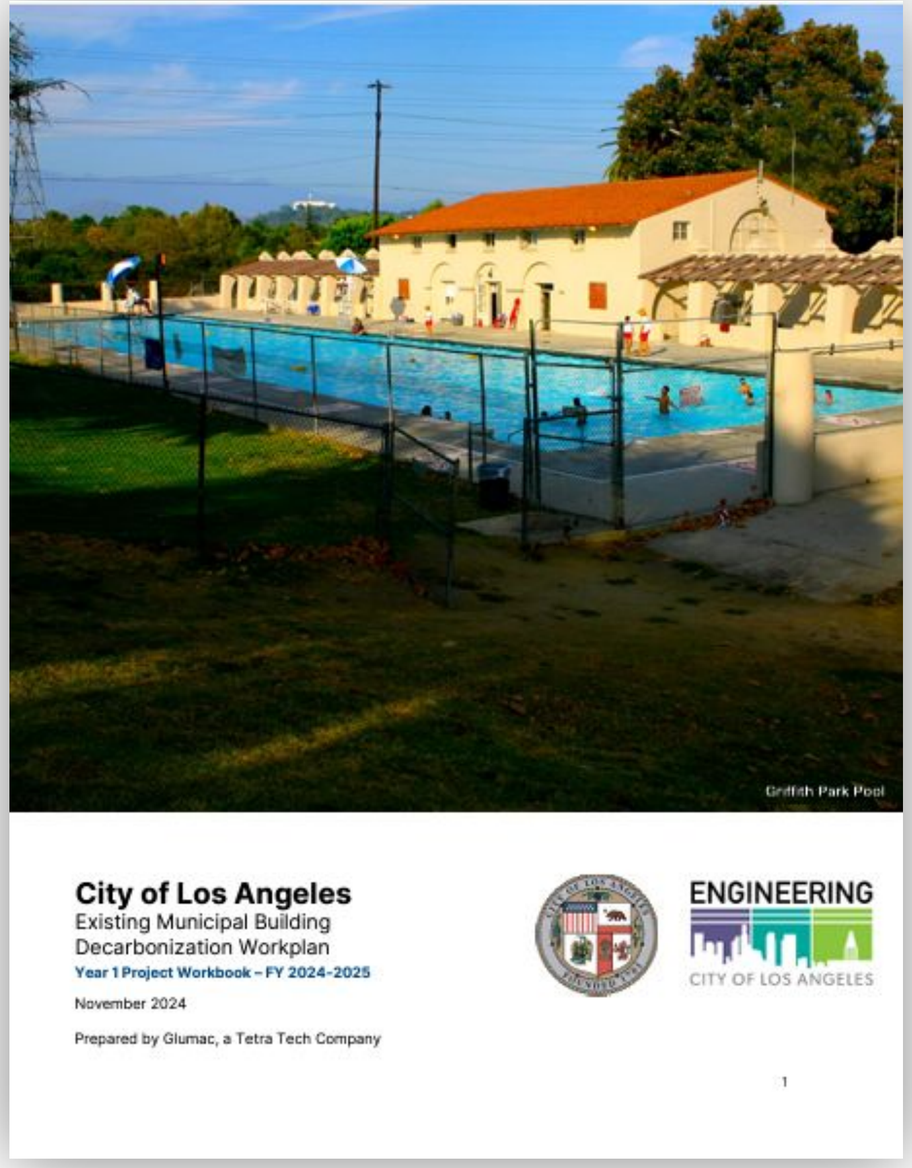
Building Portfolio

Investment Required

Emission Reduction

Jobs Impact

Year 1 Workbook Package Preliminary



Year 1 Workbook Package

Workbook also prioritizes projects to replace equipment at end of useful life.

1. **Capital Improvement:** 3 sites + city hall (planning)
2. **Equipment Replacement:** Pilot 7 sites
3. **Portfolio Design Build:** Pilot 36 sites
4. **Portfolio Solar PV:** Pilot 9 sites

Budget Breakdown

$61.1 M Total Year 1 City Project Budget over 1.5-4 yrs

$16.5 M Solar Construction Cost

$44.6 M Equipment Electrification Cost

$26.3 M Business as Usual New Natural Gas (non-electric) Equipment[3]

$18.3M Additional to Electrify [4]

Year 1 Workbook End-of-Life Recommended Projects

Facility	Council District	Building Area (SF)	City Budget ($)	Business as Usual[3] ($)	Annual Natural Gas Savings (Therm)
1. Capital Improvement Projects ($13.0M) (Scope: Electrification + LED Lighting upgrade; Duration: 2-3 years)					
Civic Center Steam Plant - Planning & Design*	14		$1,500,000	-	-
West Valley Police Station Pilot Phase 2	3	32,670	$5,500,000	$4,000,000	16,589
Griffith Park Pool	4	4,400	$3,000,000	$350,000	377
Roosevelt Pool*	14	4,418	$3,000,000	$350,000	37,032
2. RAP/GSD Equipment Replacement Projects ($4.15M) (Scope: Electrification; Project Duration 1-1.5 yrs)					
3x RAP Facilities	Multiple	34,000	$1,750,000	$1,400,000	4,424
4x GSD Facilities	Multiple	65,500	$2,400,000	$2,000,000	7,250
3. Portfolio Design-Build Energy Projects[1] ($24.5M) (Scope: Electrification + Potential LED Lighting; Project Duration: 4 yrs)					
11x Libraries	Multiple	96,000	$5,550,000	$4,150,000	6,628
7x Fire Stations	Multiple	80,700	$4,250,000	$3,200,000	22,269
11x Community/Office Buildings	Multiple	249,950	$8,150,000	$6,000,000	31,612
7x Rec Centers/Senior Centers	Multiple	92,540	$6,550,000	$4,800,000	7,940
Sub-total Electrification Budget			**$41,650,000**	**$26,250,000**	**134,121**
4. Solar Projects[2] ($16.5M) (Scope: Solar PV; Project Duration: 1-1.5 yrs)					
9x Solar Projects	Multiple		$16,500,000	-	-
Sub-total Solar Budget			**$16,500,000**		
PROGRAM CONTINGENCY 5%			**$2,900,000**	$1,300,000	-
TOTAL YEAR 1 WORKBOOK BUDGET			**$61,050,000**	**$27,550,000**	

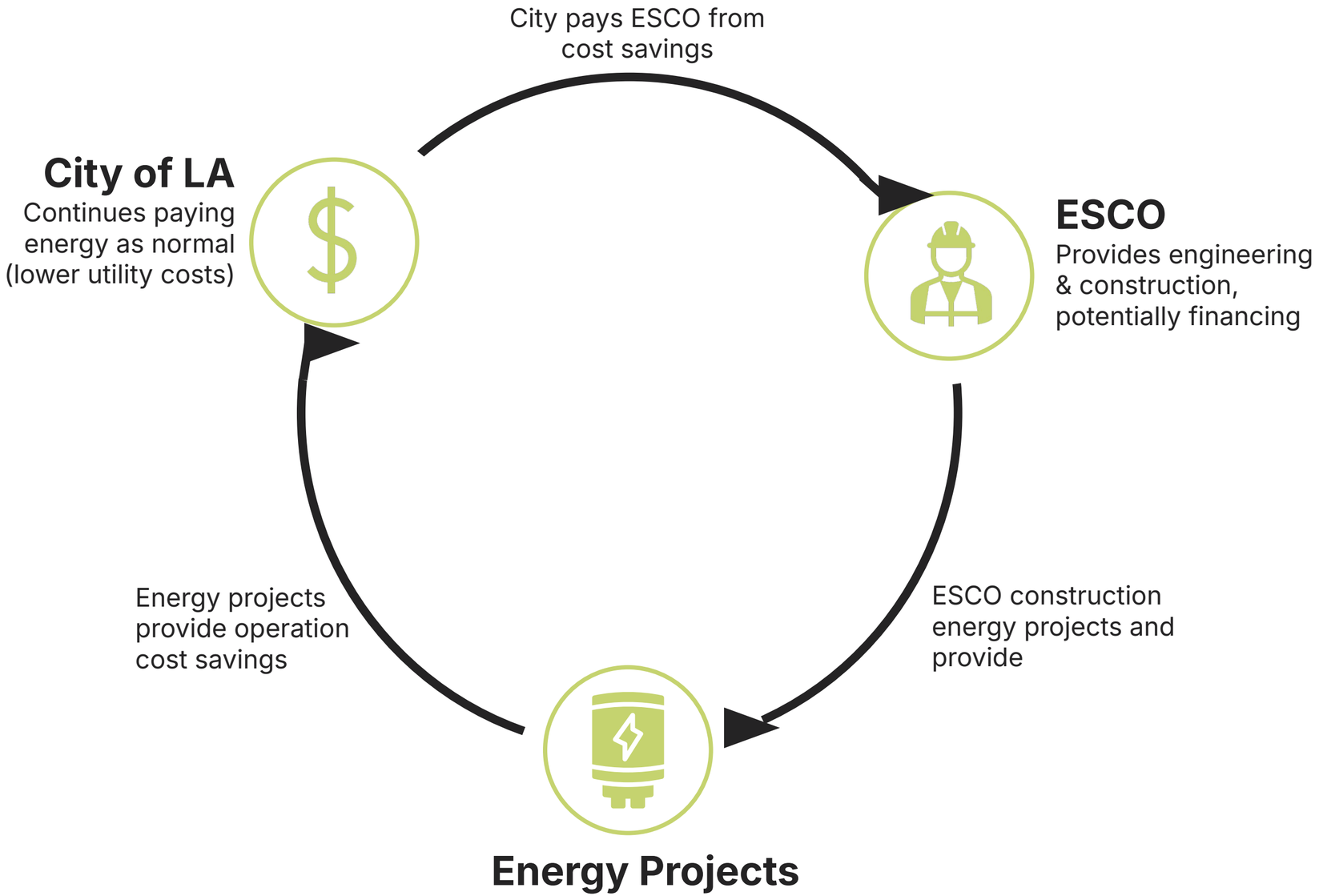
1. Portfolio Design-Build Energy Projects can be delivered through the Energy Savings Performance Contract (ESPC) delivery method or another internally managed project delivery method. ESPC can leverage private funding.
2. Solar PV project budget is the net cost assuming the City is able to meet the requirements of the ITC. ITC can provide up to 50%can be paid out after installation Solar projects can leverage private financing.
3. Cost for like-for-like replacements with new gas equipment.
4. Cost difference for building electrification.
5. $38M Max. Potential 3rd party investment

ESPC Summary

ESPC are a design-building project delivery method that are commonly leveraged by public agencies.

Advantages:

1. Quicker implementation than traditional delivery
2. Ability to scale building decarbonize efforts across a portfolio of buildings through a single contract
3. Comprehensive upgrades including multiple aspects such as lighting, HVAC, and envelope improvements.
4. Ability to finance projects through energy savings and reduce funding from City general fund.
5. ESCO assumes financial and performance risks if energy savings fall short of projections.



Year 1 Electrification Decarbonization Projects

LIBRARIES - 11
- NORTHRIDGE BRANCH LIBRARY (PILOT PH. II) (CD12)
- CAHUENGA BRANCH LIBRARY (CD13)
- LINCOLN HEIGHTS BRANCH LIBRARY (CD1)
- JEFFERSON - VASSIE D WRIGHT MEMORIAL BRANCH LIBRARY (CD10)
- FELIPE DE NEVE BRANCH LIBRARY (CD10)
- MALABAR BRANCH LIBRARY (CD14)
- ROBERT LOUIS STEVENSON BRANCH LIBRARY (CD14)
- WILSHIRE BRANCH LIBRARY (CD13)
- JOHN C FREMONT BRANCH LIBRARY (CD5)
- ANGELES MESA BRANCH LIBRARY (CD8)
- ASCOT BRANCH LIBRARY (CD9)

MUNICIPAL/OFFICE BUILDINGS - 14
- YUCCA COMMUNITY CENTER (CD13)
- WILMINGTON MUNICIPAL BUILDING (CD15)
- EAGLE ROCK CITY HALL (CD14)
- CD 9 FIELD OFFICE (OLD JUNIPERO SERRA LIBRARY) (CD9)
- BOYLE HEIGHTS NEIGHBORHOOD CITY HALL (CD14)
- SAN PEDRO MUNICIPAL BUILDING (CD15)
- VAN NUYS MUNICIPAL BUILDING (CD6)
- CANOGA-OWENSMOUTH COMMUNITY CENTER (CD3)
- SOLEDAD ENRICHMENT CENTER AND COUNCIL DISTRICT (CD14)
- WATTS MUNICIPAL BUILDING (CD15)
- WEST VALLEY MUNICIPAL BUILDING *(PILOT PH. II)* (CD3)
- **YOUTH ARTS CENTER- OLD PAC BELL BLDG**
- **BOYLE HEIGHTS YOUTH TECH (CD14)**
- **CIVIC CENTER STEAM PLANT- PLANNING & DESIGN** (CD14)

MAINTENANCE & OPERATIONS - 2
- **FLEET HEADQUARTERS**
- **STREET LIGHTING FIELD OPERATIONS**

FIRE STATIONS - 7
- FIRE STATION #79 (CD15)
- FIRE STATION #01 (CD1)
- FIRE STATION #21 (CD9)
- FIRE STATION #63 (CD11)
- FIRE STATION #37 (CD5)
- FIRE STATION #71 (CD5)
- FIRE STATION #38 (CD15)

Delivery Method (47)
- **Capital Improvement (4)**
- **GSD RAP End of Life (7)**
- Portfolio Design Build (36)

POLICE - 1
- **WEST VALLEY POLICE STATION *(PILOT PH. II)* (CD3)**

AQUATICS CENTERS - 2
- **GRIFFITH PARK POOL (CD4)**
- **ROOSEVELT POOL (CD14)**

RECREATION CENTERS - 10
- RITCHIE VALENS RECREATION CENTER *(PILOT PH. II)* (CD7)
- EVERGREEN RECREATION CENTER *(PILOT PH. II)* (CD14)
- LAKE VIEW TERRACE RECREATION CENTER (CD7)
- STONEHURST RECREATION CENTER (CD7)
- MONTECITO HEIGHTS RECREATION CENTER (CD1)
- VAN NUYS SHERMAN OAKS RECREATION CENTER (CD4)
- VAN NUYS SHERMAN OAKS SENIOR CENTER (CD4)
- **RAMONA RECREATION CENTER**
- **HUBERT HUMPHREY RECREATION CENTER**
- **SUNLAND SENIOR CITIZEN CENTER**

**Decarbonization and engineering planning will be provided for buildings connected to the Civic Center steam plant.*

Year 1 Building Solar Projects

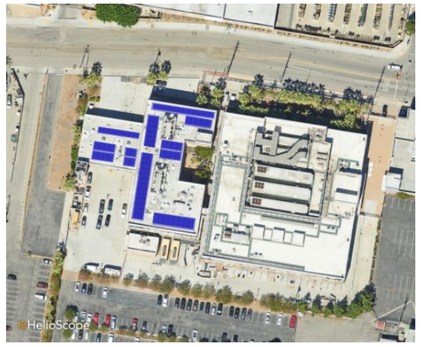
Site Name	Site Address	Building Type	LA Database Site Consumption (kWh)	System Size Modeled (kW DC)	Yearly Solar Generation (kWh)	Energy Use Offset
West Valley Library / Police Station / Municipal Building	19036 Vanowen St, Reseda, CA 91335	Multiple	1,791,989	804.7	1,400,500	78%
Emergency Operations Center / Fire Station #04	500 E Temple St, Los Angeles, CA 90012	Multiple	4,438,839	231.6	393,900	9%
Van Nuys Civic Center	6262 Van Nuys Blvd, Van Nuys, CA 91401	Office	2,265,284	224.4	395,500	17%
Topanga Community Police Station	21501 Schoenborn St, Canoga Park, CA 91304	Police	999,022	526.9	922,900	92%
7th St Facility	2310 E 7th St, Los Angeles, CA 90023	Warehouse	410,661	223.3	382,200	93%
Wilshire Community Police Station	4861 Venice Blvd., Los Angeles, CA 90019	Police	820,098	148.5	257,400	31%
Personnel Department	700 E Temple St, Los Angeles, CA 90012	Office	773,641	333.3	567,400	73%
Hollywood Community Police Station	1358 Wilcox Ave, Los Angeles, CA 90028	Police	742,386	141.9	249,000	34%
Balboa Sports Center	17017 Burbank Blvd, Encino, CA 91316	Recreation Center	365,880	114.4	202,000	55%
Total			**9,725,301**	**2,749.0**	**4,770,800**	**49%**

Portfolio Solar Procurement

- 2.75 MW of solar PV across nine locations
- Variety of building types
- Annual solar generation of 4.7 MWh (49% offset)
- $7.3M cumulative savings over 20 years

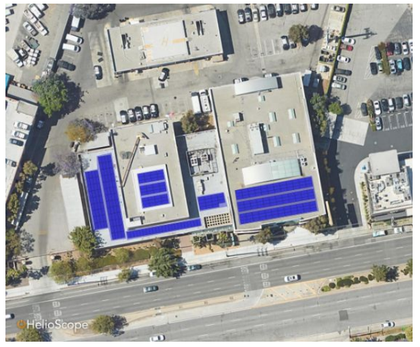
West Valley Library (CD 3)

West Valley Municipal Building (CD 3)



Fire Station #04 (CD 14)

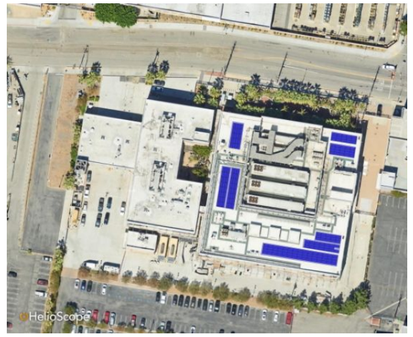
Topanga Police Station (CD3)



Wilshire Police Station (CD10)

Hollywood Wilcox Police Station (CD6)

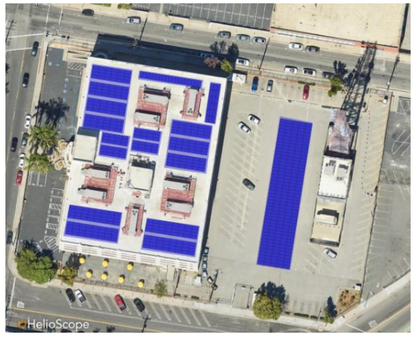
West Valley Police Station (CD 3)



Emergency Operations Center (CD14)

Van Nuys Civic Center (CD 6)

7th St Maintenance Facility (CD 14)

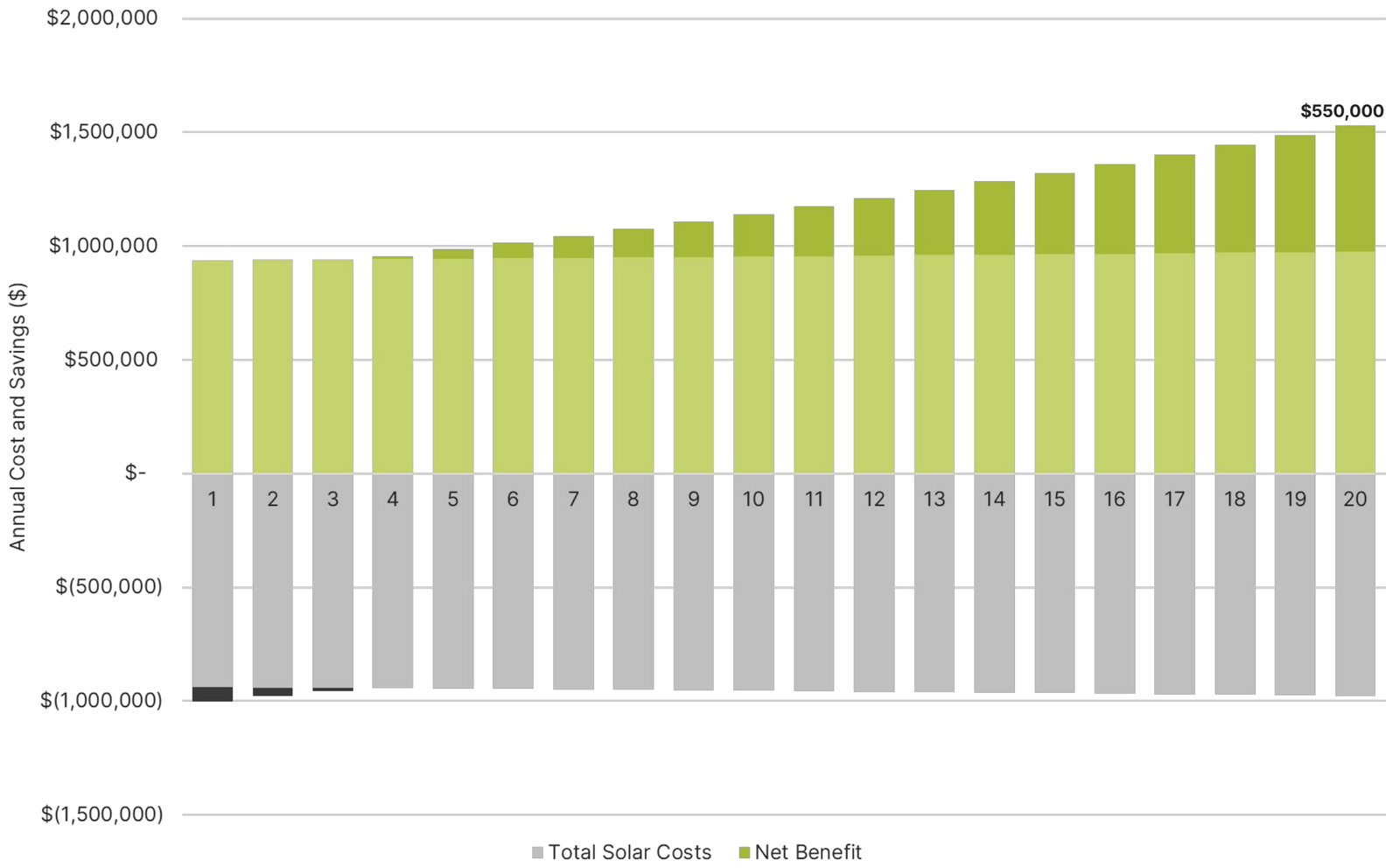


Personnel Department (CD14)

Balboa Sports Center (CD 6)

Year 1 Building Solar Projects Recommended

Cash Flow of Recommended Solar Projects with External Financing



$4.3M
20-Year
Cost Savings

Portfolio Solar Procurement

- 2.75 MW of solar PV across nine locations
- Variety of building types
- Annual solar generation of 4.7 MWh (49% offset)
- $4.3M cumulative savings over 20 years

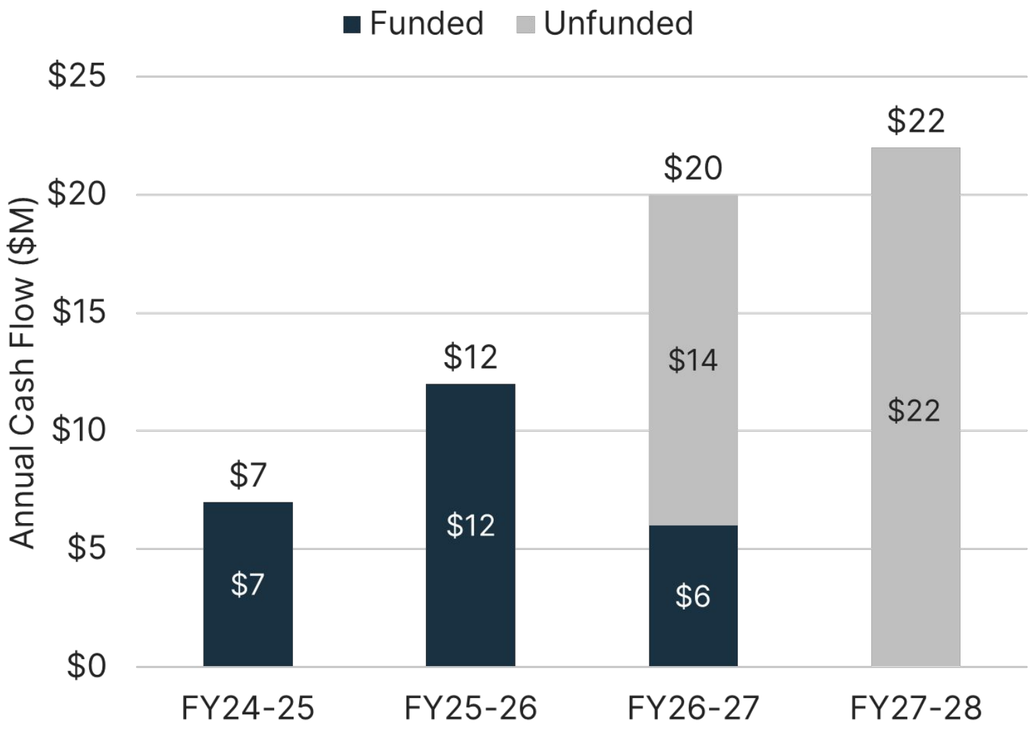
Financial Model Assumptions

- $6,000/kW system cost
- 30% Investment Tax Credit (ITC)
- 20-Year Financing Period at 4.5% Interest
- 3.5% utility escalation
- $18.5/kW maintenance with 3.5% escalation
- 0.5% Annual Solar Degradation

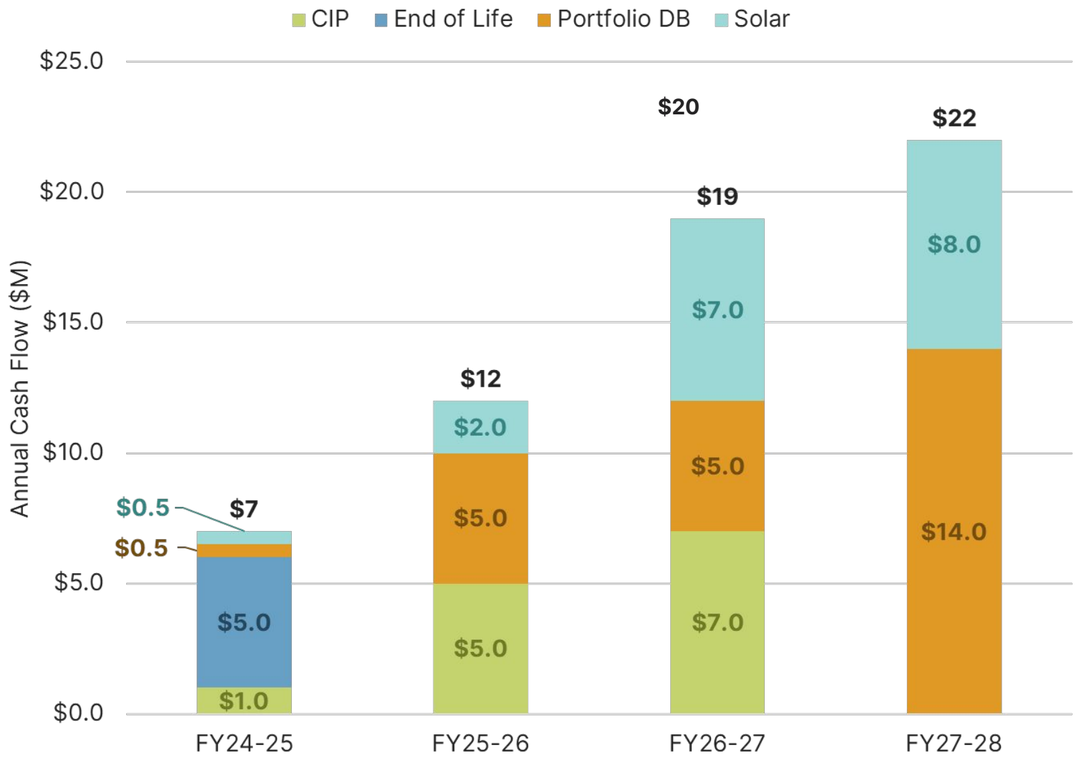
Total Available Funding- $25M

Previously allocated From Phase II Pilot Projects: $22.6M

Energy Conservation Block Grant (Pending final award): $2.4M



Year 1 Workbook Expenditure Plan



Expenditure Plan for Each Project Delivery Method

HIGHLIGHT

Year 1 Workbook Package Summary

Workbook prioritizes projects to electrify gas equipment at end of useful life that will require investment for continued operation and will pilot new portfolio scale project delivery methods.

- **Capital Improvement:** 3 sites + city hall (planning)
- **Equipment Replacement:** Pilot 11 sites
- **Portfolio Design Build:** Pilot 46 sites
- **Portfolio Solar PV:** Pilot 9 sites

Funds Available

$25M Total Fund Available

$22.6M From Pilot Project Phase II

$2.4M Energy Efficiency & Conservation Block Grant (EECBG)

Budget Breakdown

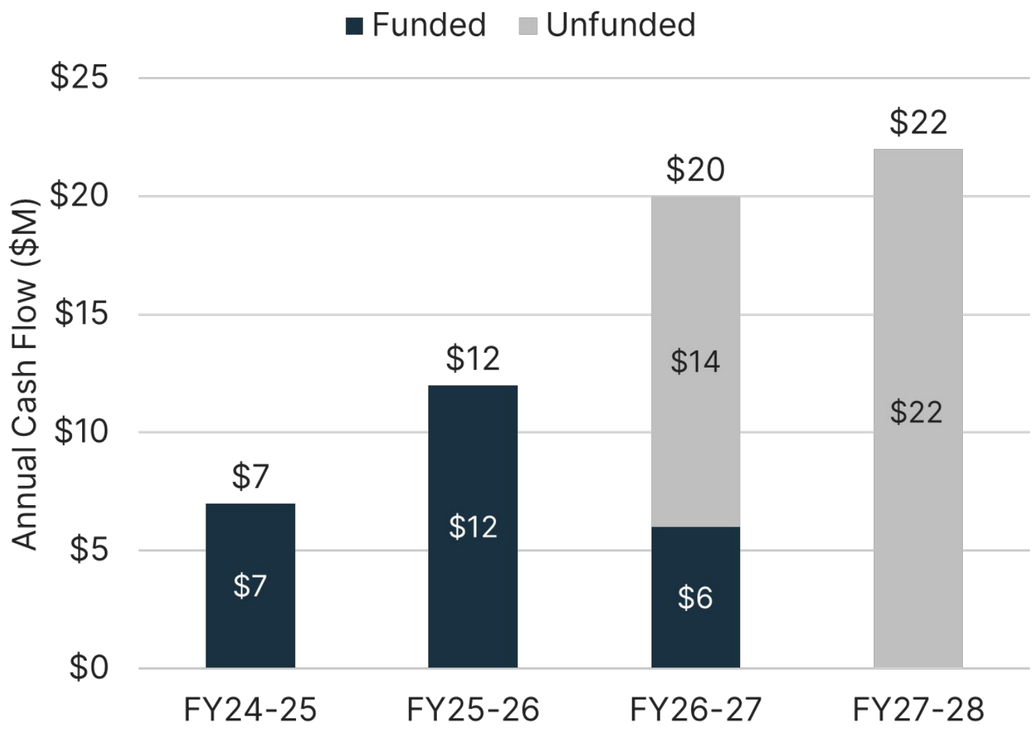
$61.1 M Total Year 1 City Project Budget over 1.5-4 yrs

$16.5 M Solar Construction Cost

$44.6 M Equipment Electrification Cost

$26.3 M Business as Usual New Natural Gas (non-electric) Equipment[3]

$18.3M Additional to Electrify [4]



Year 1 Workbook Expenditure Plan

Year-1 Workbook Package Program Summary

POTENTIAL SAVINGS AND REBATES

REBATES

$1-1.5M
Estimated LADWP Rebates
From Completed Year-1 Projects

$5M
Estimated IRA Direct Pay Rebates
From Completed Year-1 Projects

SAVINGS

$1.0M
Annual Utility Cost Savings
From Completed Year-1 Projects

3%
Portfolio Natural Gas Savings
From Year-1 project completion

Year 1 Workbook Detailed Cost Estimate

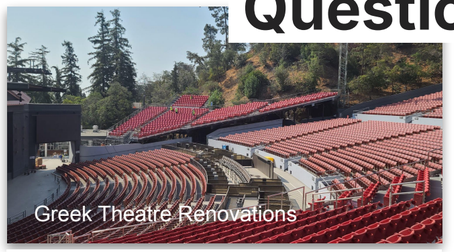
	Project Work Description	Unit Price/ Multiplier	Quantity/ Amount	Units/ Mult. Desc.	Land Acquisition	Design Services	Construction Costs	Construction Services	Total Line Cost
LAND ACQUISITION									
L1	Land Purchase Amount (Priced at 1.0 Acres)	$0	0	sf (Site)	$0	-	-	-	$0
L2	Relocation [1]	0.00%	$0	Land Acq.	$0	-	-	-	$0
	Subtotal Land Acquisition				**$0**				**$0**
DESIGN SERVICES									
D1	Design Services	12.00%	$37,220,000	Project Cost	-	$4,466,400	-	-	$4,466,400
D2	Program / Project Management [2]	2.00%	$37,220,000	Project Cost	-	$744,400	-	-	$744,400
D3	Design Support Services [3]	1.00%	$37,220,000	Project Cost	-	$372,200	-	-	$372,200
D4	Client & Other City Departments [4]	1.00%	$37,220,000	Project Cost	-	$372,200	-	-	$372,200
D5	Permits & Fees	4.00%	$37,220,000	Project Cost	-	$1,488,800	-	-	$1,488,800
	Subtotal Design Services					**$7,444,000**			**$7,444,000**
CONSTRUCTION COST									
C1	Capital Improvement Projects		$8,253,826	Project Cost	-	-	$8,253,826	-	$8,253,826
C2	RAP/GSD Equipment Replacement Projects		$2,634,875	Project Cost			$2,634,875		$2,634,875
C3	Portfolio Design-Build Energy Projects		$15,555,288	Project Cost			$15,555,288		$15,555,288
C4	Solar Projects		$10,476,010	Project Cost			$10,776,010		$10,776,010
	Subtotal Construction Cost			Project Cost			**$37,220,000**		**$37,220,000**
FIXED FURNITURE AND COMMUNICATIONS									
O1	Communications [5]	0.00%	$37,220,000	Const Cost	-	-	$0	-	$0
O2	Fixed Furniture	$0.00	0	sf Bldg Area	-	-	$0	-	$0
	Subtotal Fixed Furniture and Communications						**$0**		**$0**
INSPECTION/CONSTRUCTION SERVICES									
S1	Construction Inspection [6]	5.00%	$37,220,000	Project Cost	-	-	-	$1,861,000	$1,861,000
S2	Construction Management [7]	5.00%	$37,220,000	Project Cost	-	-	-	$1,861,000	$1,861,000
S3	Program / Project Management [2]	4.00%	$37,220,000	Project Cost	-	-	-	$1,488,800	$1,488,800
S4	Construction Support Services [3]	0.00%	$37,220,000	Project Cost	-	-	-	$0	$0
S5	Client & Other City Dept's [4]	2.00%	$37,220,000	Project Cost	-	-	-	$744,400	$744,400
S6	Phasing / Relocation Costs	0.00%	0	$/SF per month	-	-	-	$0	$0
	Subtotal Inspection/Construction Services							**$5,955,200**	$5,955,200
	SUBTOTAL				**$0**	**$7,444,000**	**$37,220,000**	**$5,955,200**	**$50,619,200**
CONTINGENCIES (Project Contingency, Art Allowance) [8 & 10]		6.00%			$0	$446,640	$2,233,200	$357,312	$3,037,152
	SUBTOTAL - October 2024 TOTAL COST				**$0**	**$7,890,640**	**$39,453,200**	**$6,312,512**	**$53,656,352**
ESCALATION									
E1	Number of Years of Escalation (from Cost Base)		1/1/2024	Cost Base	0	1	2	3	
E2	Annual Escalation Percentage				0.00%	3.00%	8.00%	3.00%	
E3	Total Compounded Escalation Percentage				0.00%	3.00%	16.64%	9.27%	
E4	**Total Escalation Amount**				**$0**	**$236,719**	**$6,565,012**	**$585,170**	**$7,386,902**
	PROJECTED TOTAL COST				**$0**	**$8,127,359**	**$46,018,212**	**$6,897,682**	**$61,043,254**

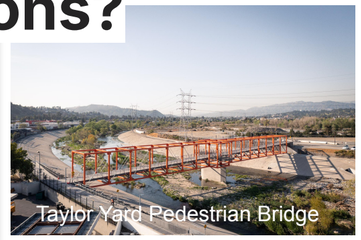
Rev Date: **11/7/2024**

Questions?

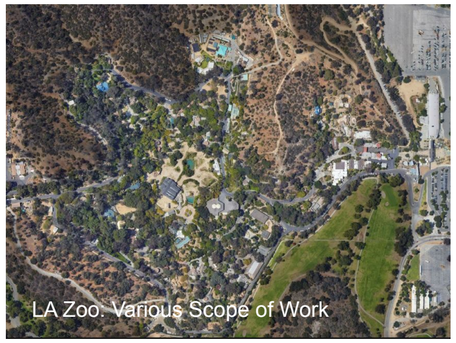

Vision Theatre


Obama Sports Complex-


Greek Theatre Renovations

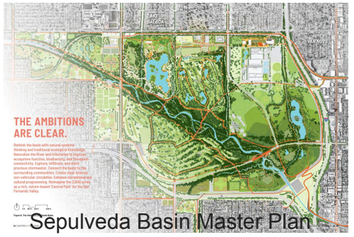

Taylor Yard Pedestrian Bridge


Slauson Connect Recreation Center-


LA Zoo: Various Scope of Work

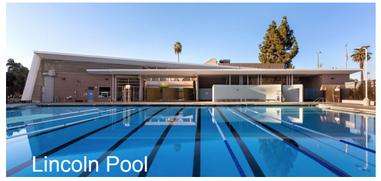

Hollywood Master Plan

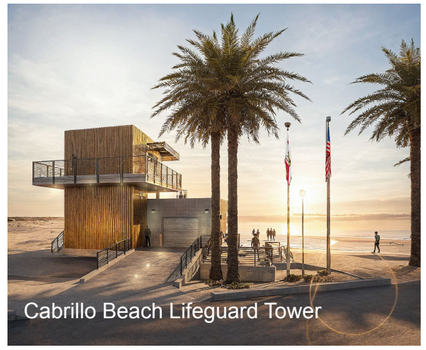

South Park Renovations



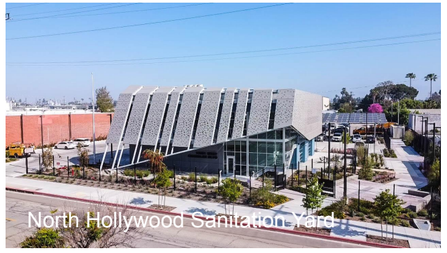
Sepulveda Basin Master Plan


Pacoima Neighborhood City


Lincoln Pool

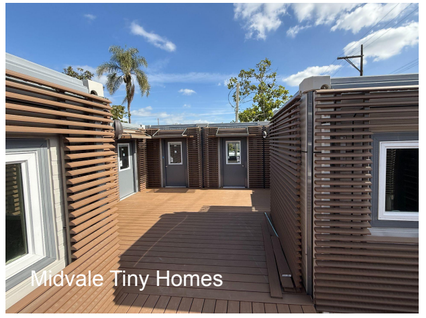

Cabrillo Beach Lifeguard Tower


Vineland Interim Housing


North Hollywood Sanitation Yard


LADOT Bus Maintenance Facility- LEED Platinum


Chandler Bridge Tiny Home Village


Midvale Tiny Homes


Las Palmas Senior Center Renovation & Decarbonization


Hollyhock House Restoration World Heritage Site


LAPD MTD Solar


Central Ave Constituent Service Center

Hollywood Sanitation Yard- Net-Zero LEED


Studio City Recreation Center- Net-Zero Energy & LEED Platinum

End of Slides