



# Energy Efficiency Project Financing

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October 19, 2021



# Investment Grade Audit (IGA) and Energy Services Performance (ESPC) Project

## Energy Efficiency Project approved by City Council

- ECM 1 – Lighting Upgrades
  - Interior LED Upgrades
  - Exterior LED Upgrades
  - Smart City Lighting Controls
  - Street Lighting Upgrades – Design Only
- ECM 2 – Renewable Energy and EV Charging
  - Photovoltaic (PV) Generation
  - Electric Vehicle (EV) Chargers
- ECM 3 – HVAC, Mechanical, and Controls Upgrades
  - Chiller Replacements
  - HVAC Controls Upgrades
  - Duct Sealing
  - SCADA Historian Replacement
  - Pool Pump VFDs
- ECM 4 – Plumbing & Irrigation Upgrades
  - Plumbing Upgrades



# NORESCO's Proposed Financial Proforma

## NORESCO's – Investment Grade Audit (IGA) Results

Year	Utility Savings	O&M + LS-1 Option E Savings	Expected Total Savings	Guaranteed Total Savings	Repayment of Lease	M&V Service	Total Cost	Net Cash Flow
1	\$483,298	\$81,399	\$564,697	\$541,678	\$486,609	\$27,137	\$513,746	\$27,932
2	\$494,747	\$83,887	\$578,634	\$555,070	\$524,937	\$0	\$524,937	\$30,133
3	\$506,476	\$86,453	\$592,929	\$568,806	\$537,928	\$0	\$537,928	\$30,878
4	\$518,490	\$89,097	\$607,587	\$582,892	\$551,249	\$0	\$551,249	\$31,643
5	\$530,798	\$91,824	\$622,622	\$597,341	\$564,914	\$0	\$564,914	\$32,427
6	\$543,406	\$94,635	\$638,041	\$612,159	\$578,928	\$0	\$578,928	\$33,232
7	\$556,323	\$97,533	\$653,856	\$627,359	\$593,302	\$0	\$593,302	\$34,057
8	\$569,557	\$100,522	\$670,079	\$642,952	\$608,049	\$0	\$608,049	\$34,903
9	\$583,114	\$103,602	\$686,716	\$658,943	\$623,172	\$0	\$623,172	\$35,771
10	\$597,005	\$106,779	\$703,784	\$675,350	\$638,688	\$0	\$638,688	\$36,662
11	\$611,237	\$110,053	\$721,290	\$692,178	\$654,602	\$0	\$654,602	\$37,576
12	\$625,819	\$113,430	\$739,249	\$709,442	\$670,929	\$0	\$670,929	\$38,513
13	\$640,760	\$116,910	\$757,670	\$727,152	\$687,677	\$0	\$687,677	\$39,474
14	\$656,070	\$120,500	\$776,570	\$745,322	\$704,862	\$0	\$704,862	\$40,461
15	\$671,757	\$124,200	\$795,957	\$763,962	\$722,490	\$0	\$722,490	\$41,472
16	\$687,833	\$128,016	\$815,849	\$783,089	\$740,578	\$0	\$740,578	\$42,511
17	\$704,305	\$131,950	\$836,255	\$802,710	\$759,134	\$0	\$759,134	\$43,576
18	\$721,186	\$136,006	\$857,192	\$822,843	\$778,174	\$0	\$778,174	\$44,669

Year	Utility Savings	O&M + LS-1 Option E Savings	Expected Total Savings	Guaranteed Total Savings	Repayment of Lease	M&V Service	Total Cost	Net Cash Flow
19	\$203,480		\$203,480		\$0	\$0	\$0	\$203,480
20	\$207,489		\$207,489		\$0	\$0	\$0	\$207,489
21	\$211,576		\$211,576		\$0	\$0	\$0	\$211,576
22	\$215,744		\$215,744		\$0	\$0	\$0	\$215,744
23	\$219,995		\$219,995		\$0	\$0	\$0	\$219,995
24	\$224,328		\$224,328		\$0	\$0	\$0	\$224,328
25	\$228,748		\$228,748		\$0	\$0	\$0	\$228,748
<b>Totals</b>	<b>\$12,213,541</b>	<b>\$1,916,796</b>	<b>\$14,130,337</b>	<b>\$12,109,248</b>	<b>\$11,426,222</b>	<b>\$27,137</b>	<b>\$11,453,359</b>	<b>\$2,167,249</b>

### Note:

- Estimated Total Savings of \$14.1M over 25 years
- Estimated Total Project Cost (Repayment of Lease + M&V Service) of \$11.5M
  - Does not include additional City staff administrative costs, City site preparatory costs, or project contingency costs.



# NORESCO's Proposed Project Costs and Expected Savings Summary

## NORESCO's – Investment Grade Audit (IGA) Results

ECM	ECM Opportunity	ECM Cost	Year 1 Guaranteed Utility Savings	Year 1 O&M and Option E Tariff Savings	Total Savings
1a,b	Interior and Exterior LED Upgrades	\$1,818,832	\$246,335	\$48,475	\$294,810
1d	Smart City Lighting Controls Pilot	\$94,015	\$0	\$0	\$0
1e	Street Light Upgrades, Design Phase	\$100,577	\$0	\$0	\$0
2a	PV Generation Systems	\$4,366,806	\$136,064	\$0	\$136,064
2b	Electric Vehicle Charging	\$643,045	\$10,985	\$0	\$10,985
3a	Chiller Replacements	\$1,114,626	\$24,390	\$32,924	\$57,314
3c	HVAC Controls Updates	\$50,184	\$21,932	\$0	\$21,932
3d	HVAC Duct Sealing	\$58,139	\$2,893	\$0	\$2,893
3e	SCADA Historian Upgrade	\$106,850	\$0	\$0	\$0
3f	Pool Pump VFDs	\$105,117	\$12,465	\$0	\$12,465
4a	Plumbing Upgrades, M&V Only	\$0	\$5,216	\$0	\$5,216
Totals		\$8,458,191	\$460,279	\$61,264	\$541,679



# Estimated Energy Efficiency Project Cost

Cost	NORESCO's Estimated Project Cost	Total Estimated Costs to be Financed	Variance
Energy Services Agreement (NORESCO): ECM 1-4	\$8,458,191	\$8,458,191	-
Measurement & Verification (M&V) costs	27,137	104,046	77,609 <sup>(1)</sup>
Allowance for Temporary AC and Generator at City Hall and Library (only if needed)	70,000	70,000	-
Consultant Fee (Allie Bridge Energy Solutions)	150,000	115,000	(35,000) <sup>(2)</sup>
City Staff (Project Management, etc.)	40,000	40,000	-
City Performed Preparatory Work	10,000	10,000	-
Project Contingencies	30,000	30,000	-
Financing Cost of Issuance	60,000	75,000	15,000 <sup>(3)</sup>
Capitalized Interest	-	\$227,763 <sup>(4)</sup>	\$227,763 <sup>(4)</sup>
Total	\$8,845,328	\$9,130,000	\$285,372

(1) NORESKO Costing included only Year 1 of M&V; Financing Cost includes M&V for total of 5 years

(2) Reflects updated estimate for Consultant Fee.

(3) Financing Cost of Issuance includes estimated cost for municipal advisory, bond counsel, and City Attorney costs

(4) Reflects estimated amount for capitalized interest

Note: Capitalized interest refers to interest that is funded from the Financing proceeds and is typically used to pay debt service during construction.



# Good Faith Estimates

## Energy Efficiency Financing Summary\*

Par Amount	\$9,130,000
True Interest Cost	2.6%
Issuance Costs	\$75,000
Net Proceeds Amount	\$8,827,237
Total Payments**	\$11,972,281

\* Reflects Good Faith Estimates; Preliminary, subject to change.

\*\* Total Payments includes estimated interest.



# Recommendations

It is recommended that the City Council approve and:

- Adopt the following resolution – RESOLUTION NO. 2021-XX – RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FULLERTON, CALIFORNIA, AUTHORIZING THE SELECTION OF A LENDER; AUTHORIZING THE PREPARATION, NEGOTIATION, EXECUTION AND DELIVERY OF AN EQUIPMENT LEASE AGREEMENT TO FINANCE CERTAIN ENERGY EFFICIENCY EQUIPMENT AND IMPROVEMENTS; AND AUTHORIZING CERTAIN ACTIONS IN CONNECTION THEREWITH
- Authorize necessary appropriation and budget adjustments for debt service payments and project costs.