

DATE : JUNE 6, 2023  
TO : ALEXANDRIA ENVIRONMENTAL POLICY COMMISSION  
FROM : HOUSING ALEXANDRIA AND BUILD OUR FUTURE  
SUBJECT : REQUEST FOR SUPPORT OF AN APPLICATION TO THE BUILDINGS UP PRIZE

THE OPPORTUNITY

The U.S. Department of Energy Buildings Upgrade Prize ~ **BUILDINGS UP** is a capacity-building prize focused on reducing greenhouse gas emissions in existing buildings through energy efficiency and efficient electrification. **BUILDINGS UP** aims to build capacity to rapidly and equitably transform U.S. buildings. Teams will submit innovative concepts to leverage the billions of dollars available through the Bipartisan Infrastructure Law (BIL), the Inflation Reduction Act (IRA), utility rebate programs, and many other funding sources, capitalizing on this once-in-a-generation opportunity to equitably transform a wide variety of buildings across diverse geographies.

DOE Announcement ..... <https://www.energy.gov/eere/articles/us-department-energy-announces-buildings-upgrade-prize>  
BUILDINGS UP Homepage ..... <https://www.herox.com/BuildingsUP>

OUR PROPOSAL

DEEP ENERGY RETROFITS FOR UBIQUITOUS HOUSING TYPES

The intent of this initiative is to develop a comprehensive and replicable approach to electrification, energy efficiency, renewable energy and resilience retrofits for the entire affordable multifamily portfolio of HOUSING ALEXANDRIA.

PHASE 1 : FOCUS

- › LACY COURT ~ A 44 unit complex of 3 story garden apartments built in 1955 in historic Del Ray.
- › PARKSTONE ~ A 326 unit, 15 story high rise constructed in 1989 in the growing West End of Alexandria.

PHASE 1 : SCOPE

- › Evaluate the existing architecture, building systems, and financial timing constraints for each building.
- › Create base case energy models using existing envelope and systems, tuned to match existing energy consumption.
- › Generate data driven retrofit scenarios for each building and model their projected performance.
- › Expand capacity at HOUSING ALEXANDRIA to identify new resources and formulate retrofit financial strategies.
- › Develop iterative architecture / engineering concepts refined by cost estimates and informed by funding options.
- › Evaluate Cost vs. Performance to rank the options and establish a specific project scope for each building.
- › Produce design concepts underpinned by cost projections and funding sources, primed for execution.

PHASES 2 / 3 / 4 : REPLICATE + SCALE UP

- › Design, document, contract, and build the proposed retrofits to LACY COURT and PARKSTONE.
- › Prepare concept, cost, and funding plans to upgrade the balance of HOUSING ALEXANDRIA'S buildings.
- › Build capacity at HOUSING ALEXANDRIA in on- and off-site renewable energy procurement and sustainable operations.
- › Reach out to affordable housing developers and owners in the region to share methodology, data, and experience.
- › Collaborate with Passive House US to incorporate results into national retrofit performance standards.

THE TEAM

- › HOUSING ALEXANDRIA ..... COMMUNITY BASED ORGANIZATION ~ LEAD ..... [www.housingalexandria.org](http://www.housingalexandria.org)
- › BUILD OUR FUTURE ..... COMMUNITY BASED ORGANIZATION ~ SUPPORT ..... [www.buildourfuture.org](http://www.buildourfuture.org)
- › PEABODY / FINE ARCHITECTS ..... ARCHITECTURE ..... [www.greenhaus.org](http://www.greenhaus.org)
- › STAENGL ENGINEERING ..... ENGINEERING ..... [www.staenglengineering.com](http://www.staenglengineering.com)
- › WHITING - TURNER CONTRACTING ..... COST + CONSTRUCTABILITY ..... [www.whiting-turner.com](http://www.whiting-turner.com)

OUR REQUEST

Would the ENVIRONMENTAL POLICY COMMISSION compose a Letter of Support?

The competitiveness of our proposal would be enhanced by your expression of reinforcement for rejuvenation of these valuable existing buildings in order to enhance health, comfort and affordability for residents, improve environmental performance in this era of climate transformation, and strengthen equity in our community.

SUBMITTED BY

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- BUILD OUR FUTURE ..... Stephen Koenig ..... [swk@LKHArchitects.com](mailto:swk@LKHArchitects.com)