NEW YORK STATE | Buildings of Excellence
Award Winner

Variety Boys & Girls Club of Queens

PROJECT SPECIFICS:

- **Winner of NYSERDA's Buildings of Excellence Award – Round 3; Incentive awarded: $1M**
- **Owner: VBGCQ + Mega Group Development, LLC**
- **High-rise redevelopment with 232 affordable and supportive housing units in conjunction with the rebirth of a newly constructed landmark of 125,393 sqft. Boys & Girls Club space.**
- **21-12 30th Road, Long Island City NY**

KEY TERMS:

#New construction #NYSERDA BoE #LL97 #LEED #Fitwel #Water Saving #Building Simulation #Energy analysis #GHG emission reduction #ERM Analysis #Central heat pump water heating #Renewable energy, #VRF #Induction cooktop #Smart building controls #ERV #Carbon Footprint

"Landmark Community Partner Redefines Carbon-Neutral Future"

SUSTAINABILITY AND ENERGY EFFICIENCY TARGETS:

- **LEED-Homes v4 MFMR Gold rating**
- **Fitwel v2 New Construction Certification**
- **25% improvement in site energy compared against ASHRAE 90.1-2010**
- **46% improvement in water consumption**
- **Meet GHG limits up util 2034 and beyond**
- **LL97 analysis and compliance**
- **Passive survivability and Climate resiliency**
- **Offset 15% or 618,015 Kbtu/yr residential electrical demand by on-site renewable energy**
- **10 % reduction of embodied carbon footprint**
- **Solar renewable energy system on roof-top**

SUSTAINABILITY FEATURES

- HIGH DENSITY OF RESIDENTIAL UNITS
- ALL ELECTRIC SYSTEMS, INCLUDING COOKING AND COMMON KITCHEN AREAS
- ON-SITE RENEWABLE SYSTEM ON ROOFTOP, DESIGNED TO MAXIMIZE SOLAR POWER GENERATION
- BATTERY STORAGE IN BUILDING TO CAPTURE AND STORE RENEWABLE ENERGY DURING DAYLIGHT, USE ENERGY DURING PEAK DEMAND HOURS
- PARTICIPATE IN DEMAND-RESPONSE PROGAM TO REDUCE DEMAND ON UTILITY PROVIDER, RESULTING IN MONETARY BENEFITS
- OVERSIZED HOT WATER TANK TO STORE HOT WATER PRODUCED AT NON-PEAK TIME OF CONEDISON GRID
- EV CHARGING FOR FOUR PARKING SPACES
- STRONG TRANSIT-ORIENTED DEVELOPMENT WITH WALK SCORE OF 97
- MERV 13 FITLERS + UV FILTERS FOR COVID-LIKE PREPAREDNESS IN CLUB AND RESIDENTIAL AMENITY SPACES
- FITWEL CERTIFICATION TO ENSURE OPTIMAL INDOOR ENVIRONMENT THAT ADDRESSES PHYSICAL AND MENTAL WELL-BEING OF OCCUPANTS
- WATER MANAGEMENT STRATEGIES ENSURING DURABILITY OF CONSTRUCTION
- INTEGRATED PEST MANAGEMENT PLAN TO SUPPORT PEST CONTROL
- REDUCTION TO EMBODIED CARBON PURSUED BY MEANS OF SELECTION OF BUILDING MATERIALS WITH LOW CARBON FOOTPRINT
- GEOTHERMAL HEAT PUMP IN CLUB TO REDUCE USE OF REFRIGERANTS
- USE OF LOW GWP REFRIGERANTS IN VRF SYSTEMS & MECHANICAL SYSTEM DESIGN OPTIMIZATION FOCUSING ON EFFICIENT REFRIGERANT LAYOUT
- DESIGN FOR ACTIVE OCCUPANTS: VISUAL CUES, LIGHTING AND CONTRASTING MATERIAL SELECTIONS FOR STAIRCASES TO ENCOURAGE ACTIVE LIFESTYLE, SUPPORTED BY ENCOURAGING SIGNS IN ELEVATOR CALL AREAS
- ACTIVE OUTDOOR/INDOOR OPPORTUNITIES: GREEN TERRACES WITH SEATING AND LANDSCAPING THAT IS OPEN TO ALL, RECREATIONAL ROOMS IN THE RESIDENTIAL AND SPORTS OPPORTUNITIES IN THE CLUB FOR ACTIVE LIFESTYLE
- HEALTHY FOOD ALTERNATIVES IN CLUB AND ACCESS TO DRINKING WATER AT ALL COMMON AREAS

VARIETY BOYS & GIRLS CLUB OF QUEENS | MEGA | ETTINGER ENGINEERING ASSOCIATES | URBAN ARCHITECTURAL INITIATIVES, RA, PC

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