LENDLEASE USES PORTFOLIO APPROACH TO SEE SAVINGS AT SCALE IN MILITARY HOUSING

SOLUTION OVERVIEW
In 2011, Lendlease committed to the Department of Energy’s Better Buildings Challenge for its privatized military housing portfolio, targeting a 20% reduction in Energy Use Intensity. Lendlease owns and manages 40,000 military homes at 19 installations in 12 states. Because the company’s military housing portfolio spans from Hawaii to North Carolina, each community location requires customized conservation strategies, techniques, and technology based on climate. The Lendlease Communities team created portfolio-wide strategies, methods, and best practices in support of the individual military housing installations across the country to ensure the best results in service of the company’s larger sustainability and reduction goals.

Lendlease launched its first global sustainability targets in 2014 to reduce energy, water, and waste 20% by 2020. To tackle the climate crisis head-on, Lendlease launched a new environmental target to be a 1.5°C aligned company, underpinned by two carbon targets – net-zero carbon by 2025 and absolute zero carbon by 2040.

CHALLENGE
Navigating customized conservation strategies, techniques, and technology based on the local climate across a portfolio of 40,000 military housing units.

SOLUTION
Utilizing sustainable design methods, technology and data analysis, and on-site team engagement across the portfolio to see savings at scale.

OUTCOME
Lendlease’s portfolio-wide strategy allowed site teams to scale up savings more effectively across the wide range of communities with varying needs, finding over $10 million in operating expense savings.

POLICIES
Lendlease set goals to reduce energy, water, and waste consumption throughout the portfolio by 20%, with a focus on cutting their environmental impact through reducing greenhouse gas emissions, using energy wisely, eliminating waste, and creating more clean water than they use.

For more information, visit https://betterbuildingssolutioncenter.energy.gov
In addition to internal goals, the Department of Defense (DoD) implemented large-scale energy conservation programming within military housing communities across the country, known as the Resident Energy Conservation Program (RECP). While the DoD suspended these incentive programs for further refinement and evaluation, they were instrumental in incentivizing residents to reduce consumption over time.

With that momentum, Lendlease identified other tools to reduce environmental impact across their large portfolio resulting in a three-point approach:

- Data-Driven Methodology
- On-Site Team Engagement
- Sustainable Design Practices

More details on this approach can be found in the next section.

**PROCESS**

Lendlease organized its approach to reducing EUI across its portfolio into the following areas:

- Data-Driven Methodology
- On-Site Team Engagement
- Sustainable Design Practices

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Sustainability Performance Tracking: Lendlease uses Footprint, an enterprise-wide system of record for sustainability performance which provides access to monthly consumption data, providing consistent and accurate data management. On-site teams and portfolio-wide sustainability personnel leverage Footprint to analyze monthly consumption data, allowing them to make adjustments and set realistic goals. Additional tools that have aided in the success of reducing energy use and increasing the sustainability of the portfolio include consistent performance data tracking, the use of alternative financing, and testing new technologies.

FINANCING
Lendlease Communities entered into a partnership with Ameresco, Inc. (Energy Solutions & Security LLC) to obtain alternative financing for upgrades to HVAC, controls, lighting, and water systems. This partnership also allowed them to develop new renewable energy systems to improve long-term energy efficiency and energy self-generation across the company’s military housing portfolio.

TECHNOLOGIES APPLIED
On-site utility managers reported monthly energy, water, and waste metrics to identify opportunities for improvements including new technologies. One example of this is a Building Energy Management System (BEMS) that Lendlease piloted to better understand resident energy use and efficiency behaviors. The BEMS has an app that residents can use to see their energy use and better understand it, which allows them to engage with Lendlease’s greater energy efficiency efforts.

MEASURING SUCCESS
Lendlease closely monitors and assesses the movement of EUI and kWh metrics for each site and adjusts their strategies and methods accordingly. Additionally, the company will now track portfolio-wide greenhouse gas emissions, considering both consumption and on-site solar generation, which helps monitor progress against 2025 net-zero and 2040 absolute zero-carbon targets. Lendlease’s sustainability progress is tracked in annual Global Sustainability Framework reports.

Monthly tracking across each military community dictates performance and drives planning for future projects. The data collected for each community allows Lendlease to analyze past trends to understand what programs can drive the best outcomes and uncover opportunities for reducing energy and carbon, such as utility rebates and incentives, and electrification of equipment.

OUTCOMES
Lendlease achieved their Better Buildings Challenge goal in 2015, 5 years ahead of their target date. The result of Lendlease’s portfolio-wide approach to sustainability equates to a reduction in energy operating costs in excess of $10 million between FY14 and FY20. In addition to progress toward the sustainability goals, the various approaches provided benefits to the military families who
call these communities “home,” from access to new technologies to improved indoor air quality and enhanced comfort.