



SSAFE CASE STUDY REPORT

The Kendal at Hanover Energy Audit: Concept to Reality

Kendal: Kendal at Hanover

Location: Hanover, NH

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Summary:

In early 2021, a small group of Kendal at Hanover (KaH) residents, recognizing the energy audit as the vital first step on the road to carbon neutral building operations, began the long process of lobbying residents and administration to bring qualified green building experts to our campus.

Objective:

To hire an audit team that has the experience, knowledge, and sense of mission to identify opportunities that will significantly shrink our energy load, explore the possibilities of on-site solar, and set us on the road to net zero.

Project Description:

- The 65 acre property is 2.5 miles from downtown Hanover, New Hampshire and Dartmouth College, and borders the Connecticut River.
- The facility consists of 470,000 sf, housing 400 residents. There are 254 independent living units, plus assisted living and a health center with a clinic that is a branch of the Dartmouth Hitchcock Medical Center.
- There are 39 single story units.
- Non-profit
- ‘Resident driven’ community.
- Applicability: Each community has its own circumstances, but it is hoped that elements of this case study will be useful to others wishing to pursue an energy audit.

Methodology:

Making the case (resident driven):

- to the residents:
 - Spring 2021—established Greening Committee with bi-monthly meetings



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- Summer/fall 2021—set up a speaker program; brought outside experts to the community
- Summer/fall 2022—Greening Committee presentations to the Facilities Liaison Committee and the Residents Council
- to the board:
 - Summer 2021—sent wish list to Strategic Planning Committee with audit as top priority
 - Cultivated board connections; sought formal support

Funding & Involvement of Administration:

- Late spring 2022, achieved full board support for audit; board directed Facilities Department to pursue immediately; board established funding, not-to-exceed \$50,000, to hire audit team of independent 3rd party experts
- Late spring 2022—Greening Committee requested resident involvement in hiring process
- Summer 2022—Facilities / resident committee formed “Energy Audit Sprint Team” (EAST)—to produce and distribute to bidders Request for Proposals (RFP). Committee comprised of 3 staff plus Facilities’ energy consultant, and 3 residents
- EAST produced an RFP, resident-driven, calling for a “Deep Energy Retrofit”, based on the new SSAFE RFP, the latter was fortuitously completed just in time for use by KaH; this proved incredibly useful and served as a template for the KaH RFP. The latter was revised to fit the Kendal standard format, but the content was very similar.
- In addition to the EAST team, 2 resident committees proved key to the success of the project: The Facilities Liaison Committee, which provided a direct link to and fostered the engagement of the Facilities Director, and The Residents Council. Both committees included updates on audit progress at monthly meetings, open to all, and sponsored previously noted Greening Committee presentations to the entire community.

Key Challenges:

The 2-3-year project required continuing resolve by a dedicated core group with complementary skills. The value of a mutually supportive collection of residents cannot be overstated, enabling them to persevere over the drawn-out process.

Outcome (Results):

- The RFP was completed in the fall of 2022 and distributed to several firms.



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- 3 proposals were received and analyzed by EAST, and one, Resilient Buildings Group of Concord, NH, was clearly the best fit for KaH. A contract was awarded to RBG in December, 2022. The contract price was \$32,500.

Lessons Learned:

- Cultivate positive relationships with administration early on, especially Facilities Committee
- Don't jump in with requests to administration until all the ducks are lined up!
- Although all communities are different, be prepared for what might be a long and at times frustrating process; hopefully in 2023 and beyond, the need will be more obvious and the process shorter.

Next Steps or Follow Up:

The audit team began in earnest in February 2023 with a stakeholder meeting or “charrette”; a final report will be delivered in June/July 2023, and presented at an in-person event open to all residents, bookending the charrette.



2 Audit team members facilitating the stakeholders meeting, attended by over 100 residents.

