



## Existing condos: rising to modern standards

Wednesday, November 23, 2022  
By Duncan Rowe

Owners of existing condos are in a unique and challenging position as we progress toward 2030. New regulations from multiple levels of government are forcing condominium boards and property management companies to consider more than just a simple cost-benefit calculation when examining repair and retrofit options.

Many condos are getting older and facing decisions about upgrading major components, such as parking garages, windows, walls, and roofs. These components do not generally have quick paybacks, are considerable capital expenses, and can take multiple years to deliver.

In particular, many boards and property managers are looking to plan, prioritize, and combine larger retrofit projects efficiently in response to the realities of higher energy prices and an increased focus on making existing buildings [lower carbon](#) and more resilient. It is ironic that some older existing condos, even before a retrofit, may have a higher climate resilience than some newer all-glass towers.

All of the above is starting to force the existing building industry to undertake more extensive and holistic building retrofit projects. In addition to being costly, these projects are technically complex and require a clear understanding of the purpose of the work. With more industry attention on the above, there are a few approaches to note that are working well and that boards and management companies should consider when examining possible building retrofits.

### **What is the end goal?**

The most critical part of undertaking a large retrofit project is knowing the “why.” Boards and managers should write down what they want the project to achieve. Many condos want energy efficiency, but are they also looking to get closer to a net-zero carbon building? Does the building want to be more climate resilient? Or is the intent to make it less drafty to improve the comfort of the owners in their suites? All of these can be accommodated in a larger retrofit project; however, the end goal has to be clearly defined so that the board and managers can use this to determine if any changes or options that inevitably arise during design will serve to get the building closer to that goal.

### **Plan your work. Work your plan**

Many buildings and boards begin this journey by noting that the reserve fund anticipates, for example, a large window replacement, and they begin their pre-design due diligence. During pre-design, the board becomes aware that the window work could be combined with a wall rehabilitation or wall over-cladding. Not only is this a large technical change, but it is also not usually anticipated in the reserve fund and would likely not be possible.

In this case, the board and management should create a larger plan for the building, known as a “step-wise” retrofit. This approach defines the end state of the building, possibly a complete window replacement, and wall rehabilitation is done in a series of steps.

If correctly planned, each step can let the building realize some energy and performance benefits while allowing each step to incorporate future steps. This avoids duplicating work and creates a design where future tie-ins and integrations are more seamless. If there is no overall plan, it becomes difficult to coordinate between past projects and different trades to get the same vision. This planning will also allow the board to have a more flexible cost structure that may give flexibility with what is carried in the reserve fund.

### **Incremental costs from a new baseline**

A final aspect boards and managers should consider is the baseline used to compare different options. Many buildings use a “do nothing” baseline, but it’s not feasible for buildings not to do a repair. The only viable action is to complete a repair, and the options relate to how much work is accomplished. Because of this, payback options should be assessed against the “incremental” cost difference between options, rather than the total capital cost of the option itself.

For example, if looking at the payback between installing double-glazed or triple-glazed windows, any additional energy savings should be applied against the incremental cost between the

options rather than the total cost, as the building will be replaced with double-glazed as the baseline. This approach opens up new opportunities to examine some enhanced solutions without compromising on cost control.

Overall, as an industry, we need to adjust the focus onto larger retrofits to help buildings meet the changing expectations of condominium owners and industry partners. One of the best ways to do this is to help the board and managers understand the goals and plans that are possible before undertaking any major projects. This will help align expectations with all stakeholders and ensure that projects deliver what the boards and managers expect.

*[Duncan Rowe](#) is a principal at [RJC Engineers](#) and is based in [Toronto](#).*

**Tags:** [Climate Change](#), [Duncan Rowe](#), [Existing Buildings](#), [renovations](#), [Sustainability](#)