LANDLORDBC THE KEY

ENERGY PERFORMANCE UPGRADES

Saving money and attracting tenants

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While many properties are not celebrating their 50th anniversary yet, many are older buildings that would benefit from appropriate energy performance upgrades. Upgrades aren't just better for the environment, they can help save money, attract and retain tenants, and make a property more attractive to prospective buyers.

Three options that often provide the best benefits to landlords and tenants are:

WINDOW UPGRADES

A simple infrared camera evaluation can show where heat is coming out of a building. If your property has older windows, especially aluminum framed, single glazed windows, chances are a lot of energy is escaping. Buildings often lose up to 25 per cent of their heated or cooled air through windows — that means losing 25 per cent of energy that's paid for!

Replacing windows is one of the most popular building upgrades for good reason. Replacing existing windows with improved thermal performance windows will:

- Save heating and cooling costs: By significantly reducing the loss of heated or cooled air, it will cost less to keep the interior space comfortable.
- Improve occupant comfort: Energy efficient, well-sealed windows will reduce cold drafts and hot spots. Low-e coatings will also limit solar heat gain effect in a unit, and another bonus is that new windows can substantially reduce the amount

of noise tenants can hear from outside. People are often very happy with how quiet their residence is after a window replacement, helping to attract and retain tenants.

• **Improve aesthetics:** New windows look great from the exterior and interior. They update and modernize a space, helping to attract and retain tenants. New exterior and interior trim can enhance the new look even more.

LED LIGHTS

Upgrading to LED light bulbs is perhaps one of the lowest cost ways to improve energy efficiency, while providing landlords and tenants with benefits. Payback periods for this upgrade are often very short. Some of the benefits that can be expected are:

- **Save money on energy costs:** Energy star rated LED light bulbs can cut energy electric use by 75 per cent. They require much less power to illuminate a space resulting in lower electricity costs.
- **Replace lights less often:** LED lights last longer, requiring replacement much less often than their traditional counterparts.

- **Improve safety:** LED bulbs do not generate heat, reducing risk of burns or transfer of heat to surrounding fixtures.
- **Improved aesthetics:** LED bulbs and fixtures come in a variety of shapes, styles and lighting options. Tenants can easily customize lighting in their space and have more options for the type of lighting.
- **Motion activated lights** in common spaces is also an option, a feature that is often highly valued by tenants, while also reducing building operation costs.

UPGRADE YOUR BOILER

If your boiler is already providing adequate central heating and hot water, the cost of installing a new one may seem unnecessary. However, there are many benefits to a new boiler.

- It will cost less to heat: Savings can be substantial. If you spread the cost of a new boiler over 10 years for example, the monthly energy cost savings could be higher than the payments for your new boiler, essentially paying for itself.
- You'll save money on maintenance repairs: Repairs are costly and annoying for everyone. A new boiler will be made with better, more efficient components and will be far less likely to require repairs as often. If it does, it will most likely be

covered by a warranty for 5 - 10 years, reducing unexpected costs and interruptions to service.

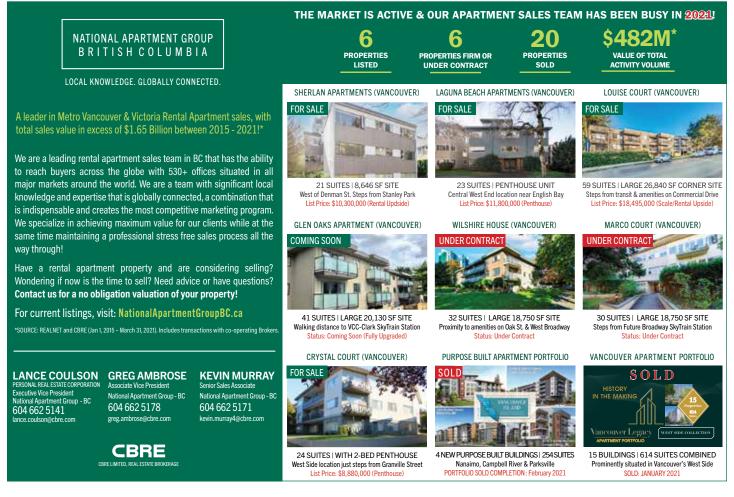
• Select on Demand Hot Water Systems: These systems can also offer convenience and substantial energy cost savings over traditional boilers.

All of these upgrades will make your property more attractive to tenants and prospective buyers should you want to sell your asset. If you want to consider upgrading the performance of your building, now is a good time to start learning more about what the best solution is for your specific property to provide a return on your investment.

Making small changes will also make a difference. For example, strategically replace appliances as they fail or reach the end of their service life with 'Energy Star' appliances (which are also eligible for incentives).

If you want to learn how your building is currently performing, there are several options to help establish this baseline which in turn can help inform life cycle planning and investment decisions.

• Infrared Camera Evaluation: Thermography measures surface temperature and shows where temperature variations occur on the exterior and interior of the building. The evaluation



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maps where warm and cool air is escaping, which trained professionals can evaluate to determine and explain what is happening. This is a low cost tool to see where energy is being lost and how to best retain that energy.

- Blower Door Testing: This testing helps to establish a baseline measurement of how many air change per hour (ACHs) occur within a building. Similar to the infrared camera evaluation, it measures air leakage which is an indicator of where hot and cool air is pooling or being lost.
- Building Energy Modelling (BEM): BEM is a versatile, multipurpose software tool for new and existing buildings. Of the several features and information BEM can provide, it can generate a 3D model of a building's thermal performance, taking into account building enclosure systems (exterior walls, windows, doors, roofs) in addition to building geometry, orientation on site, lighting systems, elevators, heating and cooling systems, etc. It can also factor in projected present or improved building air tightness. With a completed BEM, landlords can consider the effects and cost of a variety of energy conservation measures (ECMs) that best suit their building.

To help landlords establish performance baselines and make sustainable improvements to their properties, the B.C. government offers a number of incentives to offset costs. Resources include https://cleanbc.gov.bc.ca/ which has a stepby-step rebate guide.





Depending on the upgrades selected, and the impact of the upgrades, landlords may be able to also apply for different certifications. These designations can be appealing to tenants and prospective buyers. Examples of possible certifications are:

- BOMA Best
- LandlordBC Certified Rental Building
- LEED® Canada for Existing Building Operations & Maintenance.

Jason Guldin delivers a broad range of consulting services, including building science restoration, roof consulting, project management, contract and tender administration. Contact him at JGuldin@rjc.ca or 778.746.1131.

