The university is embarking on an ambitious program to retrofit and upgrade existing facilities and their ventilation control systems. Using aircuity optimizes building ventilation for sustainable energy efficiency, safety, and operational performance through healthy demand control ventilation.

The technology continuously monitors critical indoor environmental quality factors and informs building ventilation control systems so appropriate levels of fresh air can be provided based on actual environmental conditions versus set programming. Aircuity’s systems will be implemented in university laboratories and other valuable occupancy areas, thereby making significant progress towards several university goals including: energy savings, reduced carbon footprint, lowering overall maintenance expenses, and optimizing building operations.

**An Aircuity OptiNet system continuously monitors critical indoor conditions, lowering ventilation when the air is clean and increasing fresh air when lab activities or building occupancy levels rise.**
Aircuity offers multiple benefits to the building staff, students, and local community as well as the global community including the following:

**ADDED VALUE**

**STAFF, STUDENTS, COMMUNITY**

Lack of activity in the monitored areas result in a reduction in ventilation, therefore energy usage and costs are reduced. The reduction of energy use from the implementation of this technology is a direct and tangible step towards the University of Alberta meeting its GHG reduction target of 17% below 2005 levels by 2020.

**ENVIRONMENTAL TARGETS**

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**SAFETY**

Traditional ventilation systems run on a set schedule whereas Aircuity systems are based on the continuous analysis of actual indoor conditions. Detections of contaminants, such as gases in the air, result in higher levels of ventilation and improvement of air quality for occupants.

**DEFERRED MAINTENANCE**

Aircuity controlled ventilation systems last longer than traditional systems and operate less frequently because they are utilized only when needed and often at lower speeds. The reduction in mechanical system use extends equipment life and the savings from these small changes can help to reduce overall maintenance cost expenditures.

**COMMUNITY**

University staff and students are engaged in continuous monitoring to further reduce usage and increase safety. Outside the university, data is made public to the greater postsecondary community through presentation and knowledge sharing.

By utilizing technical systems installed in controlled environments, a specialized workforce has been engaged and employed.

**LEARN MORE**

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