

152 Fanshawe Street

Higher NABERS Ratings Through After-Hours Automation

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CASE STUDY OBJECTIVE

This case study aims to demonstrate how the implementation of the 7NOX app helped the property at 152 Fanshawe Street improve its energy efficiency by reducing after-hours energy consumption and contributing to an improved NABERS rating of 5.5 stars. The study will explore the specific challenges faced by the property prior to the app's implementation and showcase the significant improvements achieved in energy savings and operational efficiency.

OVERVIEW

In 2021, 152 Fanshawe Street, a premium office building in the heart of Auckland, was acquired with the goal of transforming it into a more energy-efficient property and achieving a high NABERS rating. This initiative was part of a broader strategy to enhance the operational efficiency and sustainability of the property, aligning with contemporary environmental standards, tenant expectations, and future regulations. Upon acquisition, the building presented several challenges, including:



Inaccurate Billing

The separation of tenancy and landlord billing was not accurate, making it difficult to measure the base building load effectively.



Uncontrolled HVAC Systems

The HVAC system was not synced with tenant hours, leading to unnecessary energy consumption during after-hours periods.



Outdated Infrastructure

The existing infrastructure, including after-hours control systems, contributed to excessive energy use and inefficiencies.

Over the past two years, various sustainability measures were implemented to address these issues, with a particular focus on reducing energy consumption during after-hours and improving the accuracy of billing.



CHALLENGES

Inaccurate Billing

Before the implementation of the 7NOX app, the property faced significant challenges with its HVAC system, which was not aligned with tenant hours. The lack of controlled after-hours scheduling meant that the system would often run unnecessarily, leading to wasted energy and increased operational costs. The outdated after-hours control system, which relied on manual activation, further exacerbated the issue, as the system would remain operational overnight once initiated.



Uncontrolled HVAC Usage



Before the implementation of the 7NOX app, the property faced significant challenges with its HVAC system, which was not aligned with tenant hours. The lack of controlled after-hours scheduling meant that the system would often run unnecessarily, leading to wasted energy and increased operational costs. The outdated after-hours control system, which relied on manual activation, further exacerbated the issue, as the system would remain operational overnight once initiated.

Impact on NABERS Rating

These inefficiencies not only contributed to higher operational costs but also impeded the property's ability to achieve a high NABERS rating. The uncontrolled after-hours energy consumption and billing inaccuracies were significant barriers to improving the property's environmental performance and sustainability credentials.



IMPLEMENTATION

The implementation of the 7NOX app was a strategic move to address the uncontrolled after-hours energy usage and inaccurate billing that had previously plagued the property. The first step in this process was integrating the 7NOX app with the building's existing HVAC and billing systems. This integration was seamless, requiring minimal disruption to tenants and the building's operations.

The app was configured to interface directly with the Building Management System (BMS), allowing it to control the HVAC units according to the specific after-hours requests made by tenants. This ensured that the HVAC system only operated when needed, significantly reducing unnecessary energy consumption. Additionally, the integration allowed for precise tracking of each tenant's after-hours usage, which was crucial for accurate billing.

7NOX Features





Automated Scheduling

The app allowed tenants to book after-hours HVAC services in advance, ensuring that the system was only active during the specified times. This automation eliminated the issue of HVAC systems running unnecessarily and contributed to energy savings.



Precise Billing

One of the app's standout features was its ability to accurately track and bill tenants for their specific after-hours usage. This not only improved billing accuracy but also increased tenant accountability, as they were now directly responsible for their after-hours energy consumption.



User-Friendly Interface

The app was designed with ease of use in mind, featuring an intuitive interface that allowed tenants and facility managers to schedule HVAC services, view usage reports, and manage billing with just a few clicks.



Customizable Settings

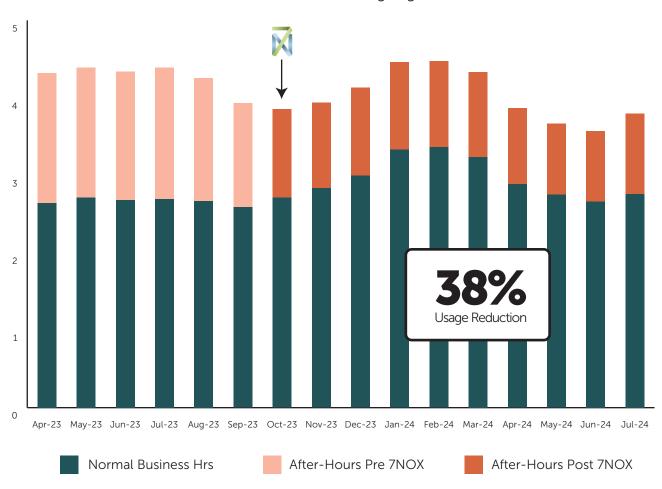
Facility managers were able to set parameters within the app, such as limiting the maximum number of hours the HVAC system could be run after hours, further enhancing control over energy usage.

RESULTS & IMPACT

The introduction of the 7NOX app led to immediate and measurable improvements in the property's energy efficiency. Within the first year of implementation, after-hours energy consumption dropped significantly, reflecting the app's effectiveness in controlling usage. The accurate billing feature not only resolved previous discrepancies but also helped build trust with tenants, who appreciated the transparency and fairness of the new system.

Average Monthly kWh Usage

(3 month rolling avg)



The graph above illustrates the significant impact that the 7NOX app had on after-hours HVAC usage over an 18-month period, from February 2023 to July 2024. The 7NOX after-hours solution was initialized in October 2023, and the results clearly demonstrate its effectiveness.

Before the implementation of 7NOX, after-hours HVAC usage (shown in light orange) was consistently high, with significant energy being consumed outside of regular business hours. This inefficiency not only led to unnecessary energy costs but also contributed to the building's carbon footprint. However, after the 7NOX app was put in place, a noticeable decline in after-hours energy usage began.

FACILITY BENEFITS

The 7NOX app was a critical tool in transforming the property's after-hours energy management, leading to significant energy savings, more accurate billing, and ultimately contributing to the building's improved NABERS rating.



Financial Savings

The reduction in after-hours HVAC usage translated directly into financial savings for the property. By curbing unnecessary energy consumption, the

property was able to lower its operational costs significantly. These savings were further amplified by the app's accurate billing feature.



Improved NABERS Rating

The substantial decrease in after-hours energy usage contributed to the property's improved NABERS rating, **which rose to 5.5 stars**. This achievement not only enhances the building's sustainability credentials but also makes it more attractive to high-value tenants who prioritize environmental responsibility.





Comparing the average of the first three months before the implementation of 7NOX to the last three months (May 2024 to July 2024), there was a remarkable **38% decrease**

in after-hours HVAC usage. This reduction is directly attributable to the precise scheduling and billing controls that 7NOX introduced.



Looking after the Environment

The 7NOX app significantly reduced after-hours energy use, cutting unnecessary consumption by 38%. This not only saved costs but also lowered the building's carbon footprint, aligning with global sustainability goals and reinforcing the property's commitment to environmental responsibility.



Enhanced Tenant Satisfaction

Tenants benefited from the increased transparency and control over their after-hours energy usage, which the 7NOX app facilitated. The ability to easily schedule HVAC services and see the associated costs helped build trust and satisfaction among tenants, leading to higher retention rates.

CONCLUSION

The implementation of the 7NOX app has proven to be a game-changer for [Property Name], delivering substantial energy savings, precise billing accuracy, and a significant reduction in after-hours HVAC usage. By addressing the inefficiencies that previously plagued the property, 7NOX has not only reduced operational costs but also played a pivotal role in elevating the building's NABERS rating to 5.5 stars.

These improvements have created a more sustainable and environmentally-friendly operation, aligning with the growing demand for green building practices in the commercial real estate sector. The enhanced control over energy usage also translated into higher tenant satisfaction, as they could better manage their after-hours needs while contributing to the building's overall energy efficiency.

Future Applications

The success of 7NOX at 152 Fanshawe St highlights its potential to be replicated in other commercial buildings seeking to improve their energy management practices. Facility managers, property owners, and systems integrators in Australia and New Zealand can take inspiration from this case study to explore how 7NOX can help them achieve similar results. Whether the goal is to improve a building's NABERS rating, reduce energy costs, or enhance tenant satisfaction, 7NOX provides a scalable and effective solution.



DISCOVER

THE BENEFITS OF 7NOX



If you are a facility manager, property owner, or systems integrator looking to enhance your building's energy efficiency and sustainability, the 7NOX app offers a proven solution. With its ability to automate after-hours HVAC scheduling, deliver accurate billing, and significantly reduce energy usage, 7NOX can help you achieve your sustainability goals and improve your property's NABERS rating.

Contact Us Today

To learn more about how 7NOX can transform your building's after-hours energy management and contribute to a more sustainable future, contact us today. Let us help you take the first step towards a greener, more efficient building.

Visit **7nox.com** or email **info@opsyssolutions.com** to schedule a demo.