Case study

Fort McMurray Public School District

Fort McMurray, Alberta

Alberta Public School District improves learning environment while reducing energy costs

Fort McMurray Public School District No. 2833 is situated at the heart of Canada's fast-paced oil sands development region in northeastern Alberta. This urban-centered school district provides a quality educational experience for about 5,000 students living in Fort McMurray and the surrounding rural areas. The community has seen phenomenal growth over the last several years and is expected to increase at a 10 percent annual rate for the next five years, putting considerable pressure on the capital and operational needs of the district's educational facilities.

In 2004, Fort McMurray Public School District initiated a program to renew facilities, reduce operating costs, and revitalize the students' learning environment. The district asked Johnson Controls for assistance, leveraging a 30-year relationship in the provision of energy and environmental conservation services.

Challenges

- Reduce energy and operational expenses throughout the district.
- Improve the learning environment by increasing comfort levels within 10 school facilities.
- Undertake a building infrastructure renewal project on a limited budget.

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Johnson Controls solutions

- Replace boilers and rooftop multi-zone air conditioning units, as well as upgrade lighting and control systems.
- Install a Web-based interface to the Johnson Controls Metasys® building management system, allowing the facility staff to monitor comfort levels from a standard Internet browser.
- Apply the performance contracting financing method, which enables the project's energy and operational savings to fund the infrastructure improvements.

Results

- Improved temperature conditions, indoor air quality, and lighting levels have met the goal of providing an exceptional learning environment.
- Guaranteed energy and operational savings of nearly $3 million over the life of the 10-year contract.
- Contributed to a cleaner environment by reducing annual emissions of the following gases: carbon dioxide (1,172 tons), sulfur dioxide (1.4 tons) and nitrogen oxides (1.9 tons). This is equivalent to planting approximately 64 acres of trees every year.

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