



Project: Fortis Gas & School District #37  
Vancouver, British-Columbia



Johnson Controls Canada mandated Geo-Energie to design a retrofit heating plant program for eleven (11) schools and administrative buildings, part of Delta #37 School District, in British Columbia. This project was based on an ambitious energy saving objective put forth by Fortis Gas, to reduce the energetic footprint of School Districts across BC.

Geo-Energie was responsible for every mechanical, acoustical and structural engineering services, the supervision of the work and the commissioning. Targeted establishments are equipped with an average nominal heating power of 320 kW (90 tons). Given diversity of local geology, Geo-Energie custom-tailored his solutions for each building's locations and needs. In total, nine (9) buildings received a geothermal-based new heating system, while the other two received air-source heat pump/chiller solutions. Geothermal exchangers have been designed using either horizontal trenches, directional drilling, vertical deep or shallow boreholes.

In order to reduce even more some building's energetic consumption, existing standard gas boilers were replaced by condensing boilers offering up to 97% efficiency.

This project depicts the ambition and professionalism of Geo-Energie as a professional engineering service supplier. The firm provides its clients with great innovative and environmentally friendly integrated solutions related to mechanical or energy management, from Coast to Coast.

Globally, the project allows an energy saving of 66 000 gigajoules (18.5 millions kWh) annually.

