

City of Richmond receives award for geothermal project

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City of Richmond's ADEU energy centre

The City of Richmond released a statement to announce an award for its West Cambie geothermal energy project, as well as to provide an update on the project:

Richmond, BC –The City of Richmond's Alexandra District Energy Utility (ADEU) has earned the City a prestigious, highest-honour award for being an exemplary district energy system, providing high-level performance and advancing the goals of the entire district energy industry.

The International District Energy Association (IDEA) bestowed the System of the Year Award – the highest honour IDEA can confer on a district energy system – to Richmond for its ADEU. The award was announced on June 22, 2016 at the IDEA 107th Annual Conference and Trade Show in St. Paul, Minnesota, USA, and presented to Council at the July 25, 2016 Council meeting.

Richmond's Alexandra District Energy Utility is a ground source system that centralizes energy production for heating, cooling and domestic hot water. It services residential and commercial customers in the West Cambie neighbourhood. It was designed for expansion as the neighbourhood developed and demands required more supply. The Phase three expansion was completed in December 2015 and the system now provides energy to five residential buildings equalling almost 1,200 units and one institutional building. Phase four will expand the system to service a large commercial development in the neighbourhood and is expected to be complete in the fall 2016.



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Early on, the City of Richmond recognized the benefits of district energy systems, identifying these benefits as key strategic initiatives to reduce community greenhouse gas (GHG) emissions while also reducing long-term costs. Richmond adopted aggressive GHG reduction targets in 2010 that included a 10 per cent reduction in community-wide energy consumption and 33 per cent carbon emissions reductions from 2007 levels by 2020. The ADEU ground source energy system was one of the City's first major GHG emissions projects to achieve energy and GHG reduction targets associated with these goals.

The ADEU is currently reducing 800 tons of GHG emissions annually when compared to more conventional heating and cooling systems. This is equivalent to the removal of approximately 170 cars from the road each year.

The ADEU is Richmond's first sustainable district energy system; however, there are more. The Oval Village District Energy Utility (OVDEU) started operation in 2015 and provides space heating and domestic hot water heating to new high rise residential buildings in the Oval Village neighbourhood. At full build-out, OVDEU will connect more than 460,000 square metres (5 million square feet) of space to heat extracted from the Gilbert Road sewer. Simultaneously, the City is exploring other district energy opportunities through the Lulu Island Energy Company, a City wholly-owned corporation, incorporated for the purpose of managing district energy utilities in Richmond on the City's behalf.

Including this IDEA award, Richmond's ADEU has earned nine awards in the past three years. These range from local (Association of Professional Engineers BC, Community Energy Association, Public Works Association of BC) and national (Canadian Association of Consulting Engineers, Canadian Geo-Exchange Coalition) to international awards (Energy Globe Foundation, International District Energy Association Innovation Certificate of Achievement).