



OVAL VILLAGE DEU PRIVATE PUBLIC PARTNERSHIP A success story - What's next?

Presented By:

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Lulu Island Energy Company and City of Richmond

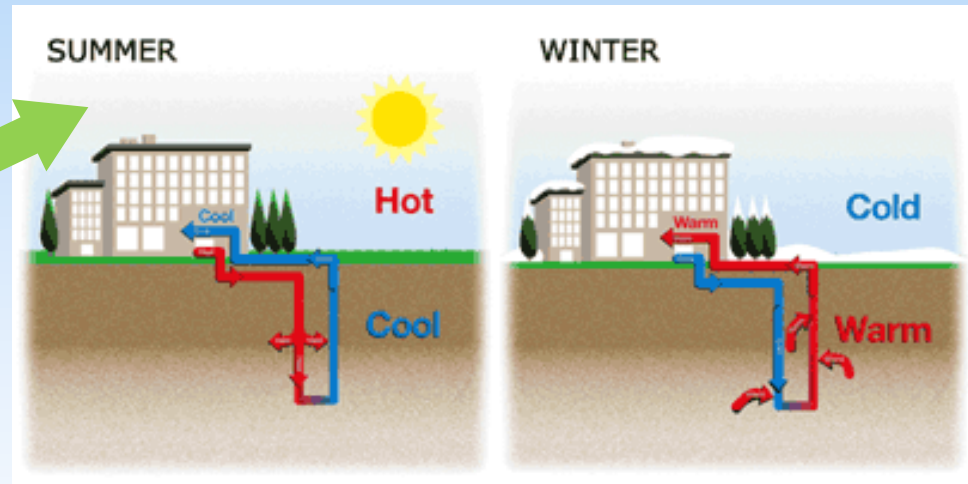
Welcome to the City of Richmond
British Columbia, Canada



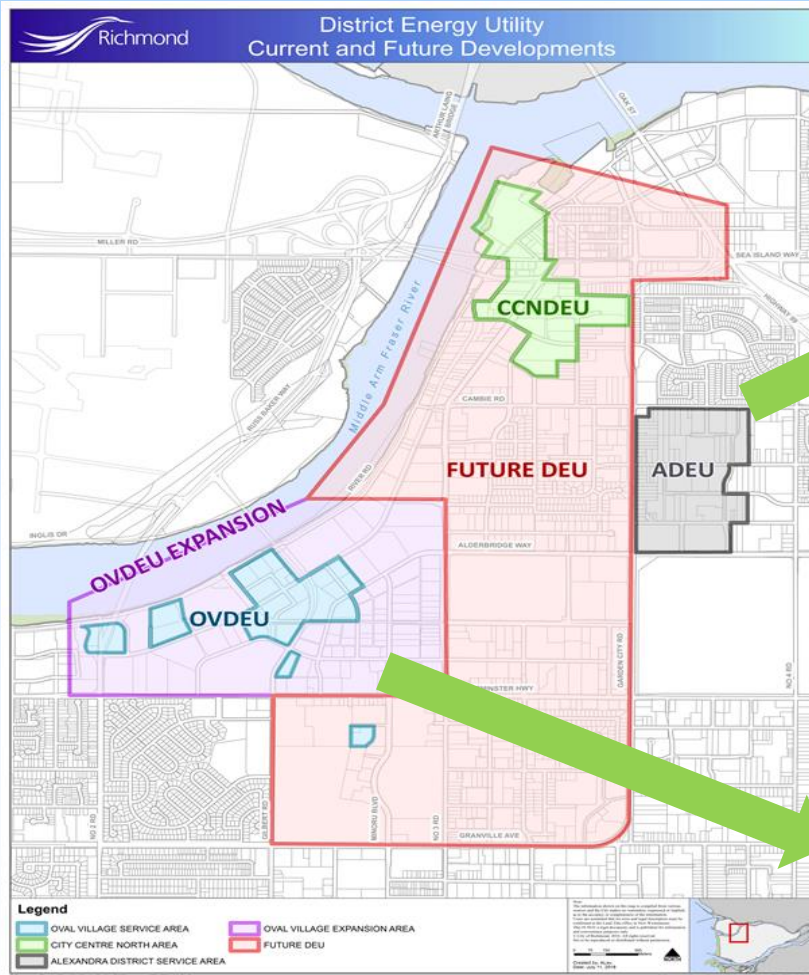
- Established in 2013
- Municipal corporation wholly owned by the City
- Manage district energy business on behalf of the City
- LIEC Board of Directors which reports to City Council
- <http://www.luluislandenergy.ca/>

District Energy in Richmond

1. Alexandra DEU - GeoExchange fields provides low-carbon energy



2. Oval Village DEU – Sewage Heat Recovery will provide low-carbon energy



Corix Utilities Inc.

- A Canadian owned community-focused provider of utility infrastructure services located in 20 states and 3 provinces
- Own and/or operate over 1,200 utility systems, with over 900 employees
- We design, build, install, finance, own, and operate energy, water, and wastewater utility infrastructure
- We currently operate 15 district energy systems (heating and cooling) that are delivered under various ownership models



Oval Village DEU, Richmond, BC

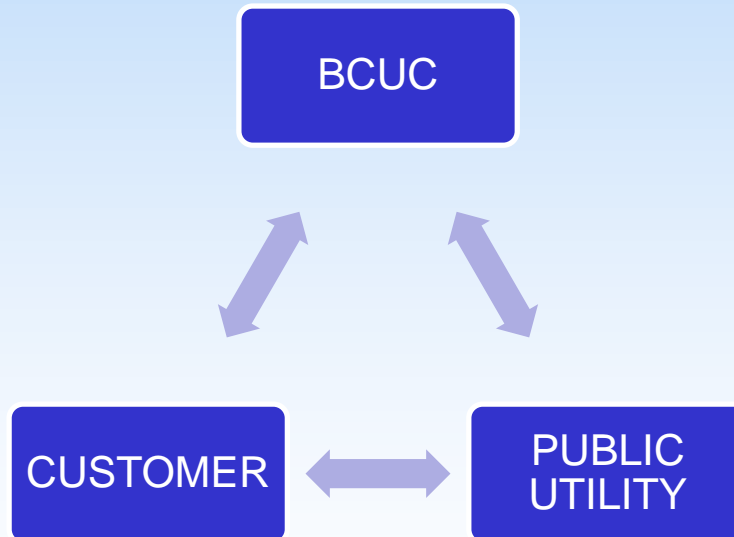


- RFP award in 2010; Feasibility and Due Diligence 2010-2014
- Agreements executed in 2014 – Concession based
- Over 600,000 m² of connected floor area
- Sewage Waste Heat Recovery with Natural Gas (24 MWt)
- Mandatory connection through municipal policy/bylaw

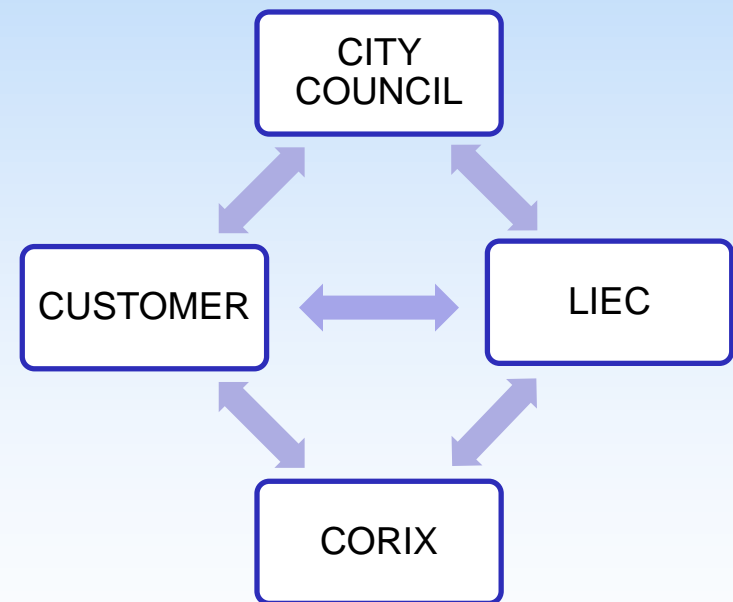


Utilities Regulation in Province of British Columbia

PRIVATELY OWNED UTILITY



MUNICIPAL OWNED UTILITY



Ownership / Governance Models Considerations

Flexibility, Participation and Risk Sharing

- **Development Forecasting**

- Implementation of DEU Bylaw
- Integration into Planning and Permitting processes

- **Capital Planning Process**

- Deployment of infrastructure “just in time”
- Use of interim plants

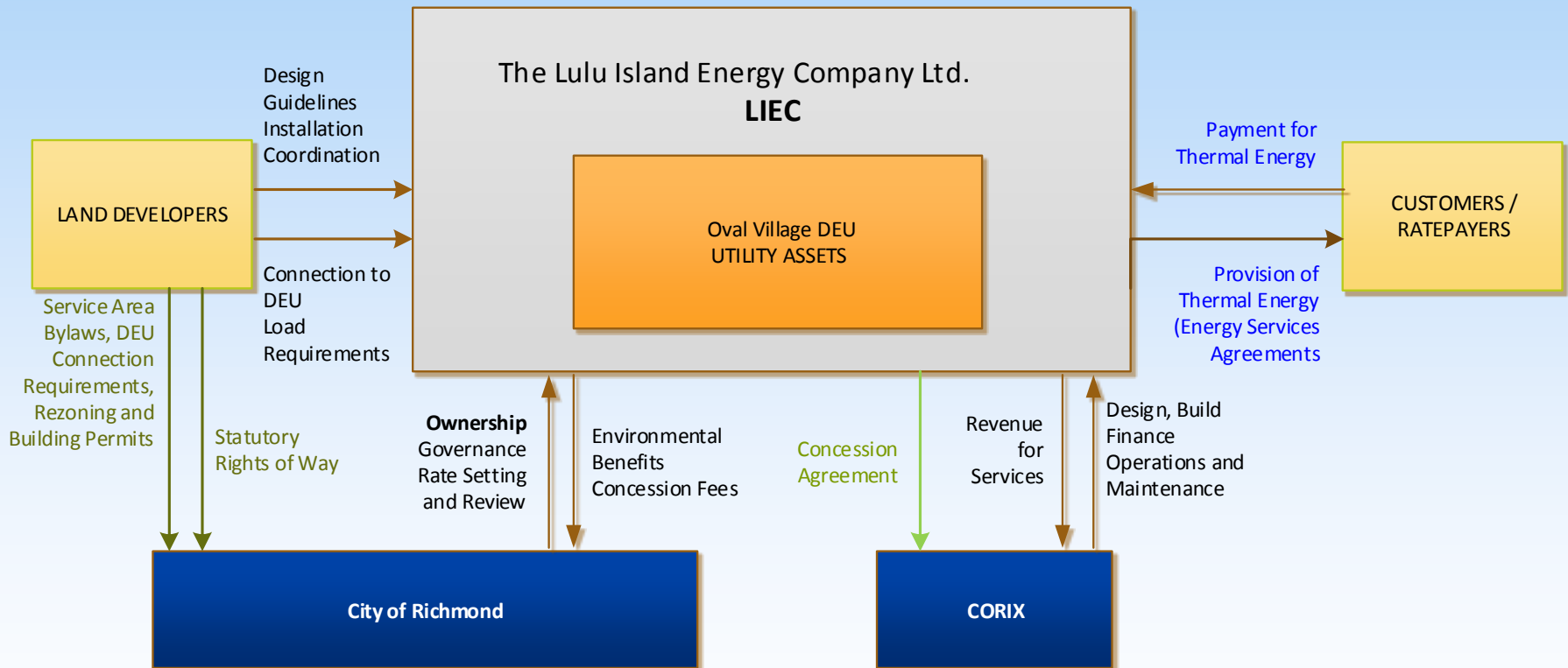
- **Rate Setting**

- Transparent process; use of Cost of Service
- Council Approval of Rates

District Energy and Municipal Land Development Policies

- **Official Community Plan**
- **Rezoning Considerations**
- **Permitting Process**
 - Development Permit
 - Building Permit
 - Occupancy Permit
- **Service Area Bylaw**

Oval Village DEU Business Model



Roles and Responsibilities

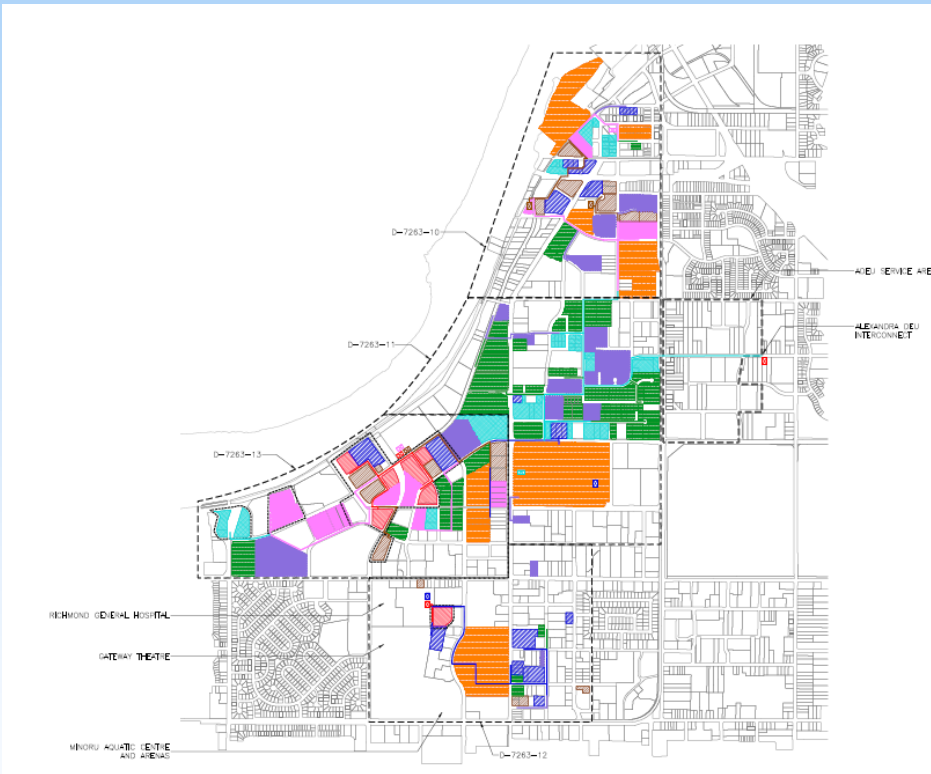
- **Corix Utilities**

- Design, Build, Finance, and Operate
- 30 Year Concession Right
- Cost of Service based rates

- **Lulu Island Energy Company**

- Owner
- Customer Service and Billing
- Final Rate Setting (City Council Regulated)

What's Next? City Centre DEU



- RFP award in 2017; Feasibility and Due Diligence 2018 (Ongoing)
- Agreements in negotiation – Concession based
- Over 5,700,000m² of incremental connected floor area to OVDEU
- Estimated peak demand of 154 MWt of Heating and 80 MW of Cooling
- Mandatory connection through municipal policy/bylaw



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THANK YOU