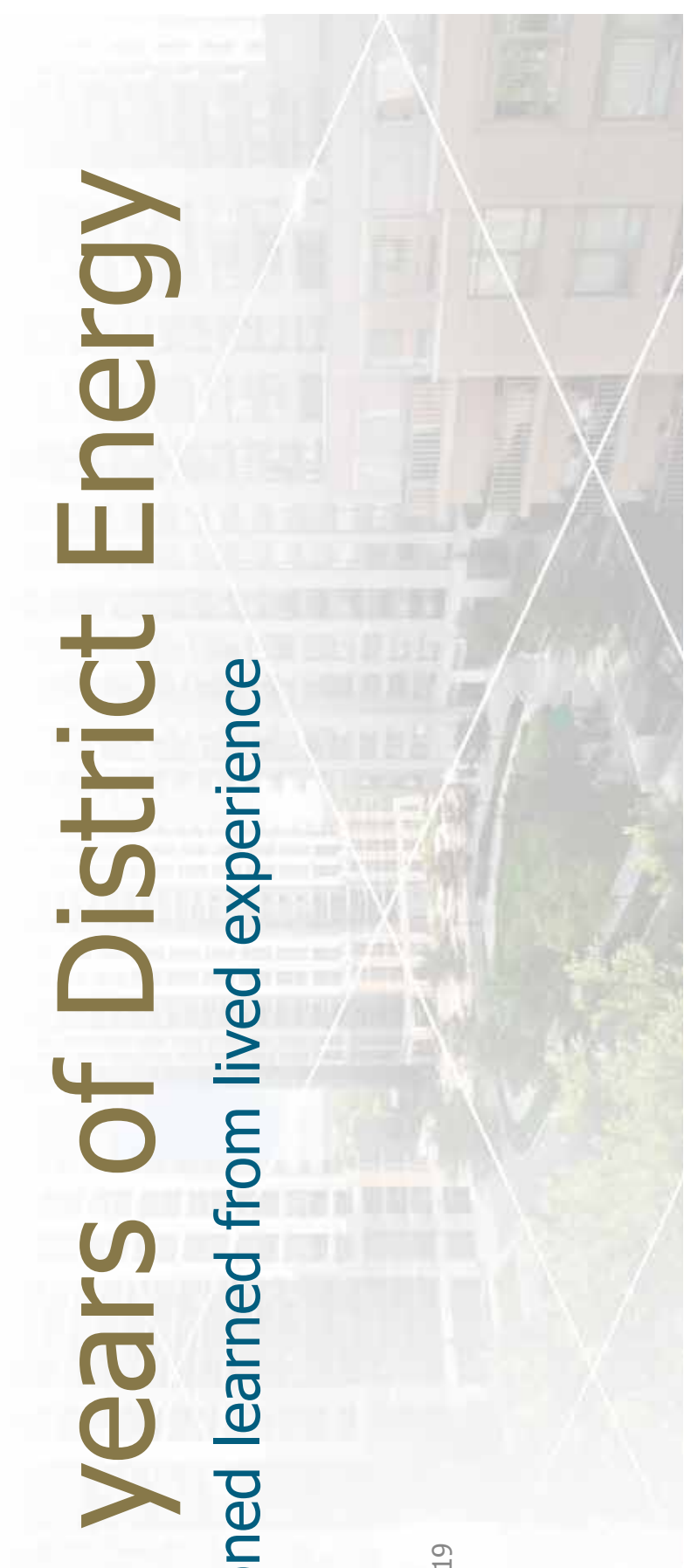




10 years of District Energy

Lessons learned from lived experience

October 2019



South East False Creek: The Plan

88.5 Acres

LEED Platinum ND

450 Units affordable housing

UNEP Award for Sustainability

Home of 2010 Olympic games



South East False Creek: The Reality



The Neighbourhood Energy Utility

Opened in 2009

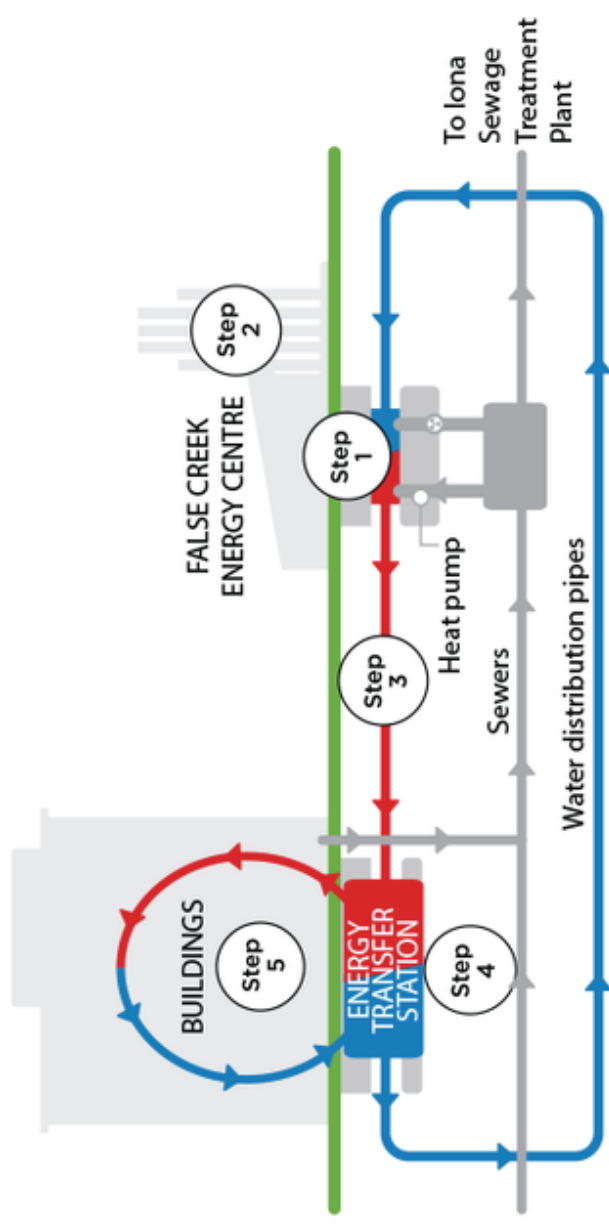
Cost 60 million

25 year capitalisation

Rates are benchmarked to electricity

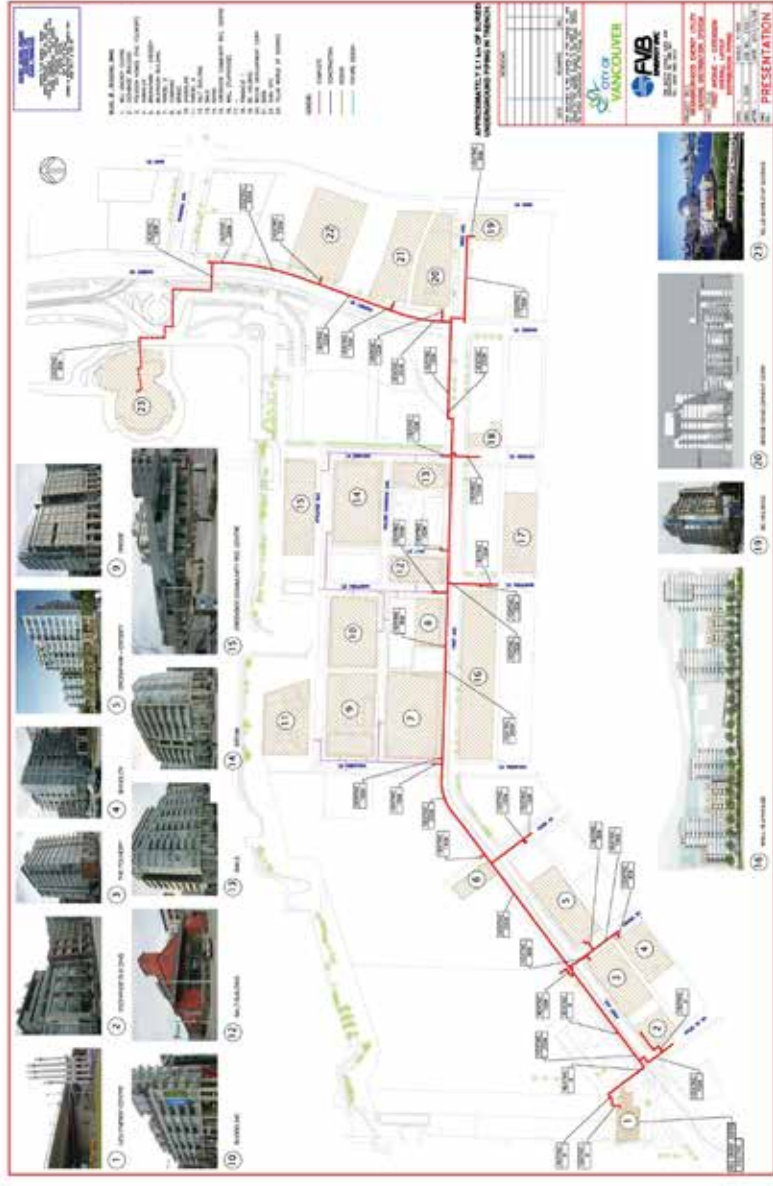
60% reduction in GHG's over conventional gas

Unique Sewage heat recovery system



How is it doing?

- Over 500 homes connected
- More than 5.2 million sqft connected
- 3,500 tonnes of GHG's saved a year
- Connected a nearby college campus and science centre
- Exploring ways to decarbonize further



Harbourside – North Vancouver, A New Beginning!

25 Acre Site

1.2 million sqft of mixed use residential and commercial

10 year build out

Required to connect to District Energy
(Lonsdale Energy Corporation)



First Phase Harbourside

- 100 units rental housing
- Near passive house levels of performance
- Raising the site by 1.5 meters
- Salmon Safe Waterfront
- Provision of DES Mini-plant



Who is Concert Properties?

- Union Owned
- Support the retirement income of 200,000 Canadians
- Canada's largest builder of new rental housing
- 3.2 billion in assets
- 138 buildings
- 18 million sqft.



2019 Sustainability Framework

- Strategy document
- Sets targets, and metrics
 - 15 Principles
 - 44 Actions
 - 32 Metrics
- Defines success



Carbon: We are an inspiring leader in the Canadian Real-estate industry in the reduction of carbon emissions from new and existing buildings.

- Adopting a target aligned with the Paris Climate Accord 80% reduction by 2050
- A long-term plan for carbon reductions in existing building portfolio, while also accounting for growth
- Committing to develop zero carbon buildings by 2026
- Review of embodied emissions on each project

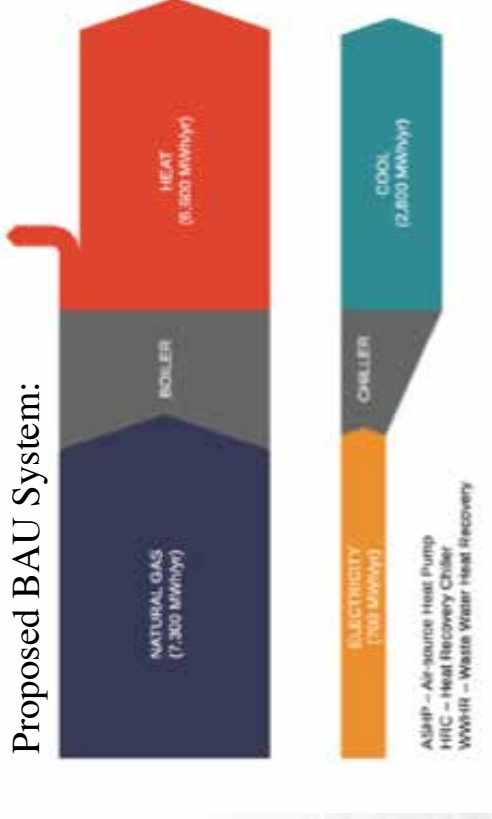
Planned Emissions Reductions



Connection to District Energy was not an advantage

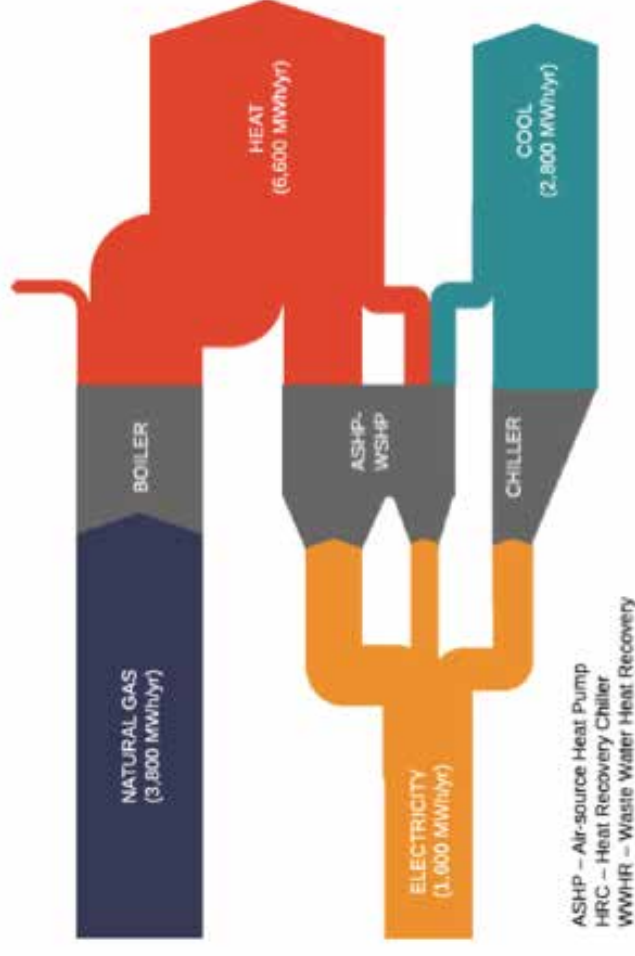
- System as proposed would not meet our Carbon targets
- Undertook an outside assessment of the DES business case

Proposed BAU System:



New Proposal

- 52% reduction in GHG emissions
- 18,000 tonnes saved over the lifespan of the equipment
- \$4,000,000 incremental cost
- \$216/tonne saved



Take-aways

- Addressing the climate crisis is hard
- DES investments can achieve better returns than building level interventions.
- DES investments are large and complex
- Keep your eye on the ball (GHG's)

