

# District Energy System (Background)

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# District Energy System Overview

**Heart of system, 22.5 MW gas fired power plant (uses Co-Generation waste heat recovery)**  
(located at Emera / NSPI Building on Lower Water St.)



***Power plant is approximately the size of two shipping containers.  
Low/negligible emissions and ambient noise.***

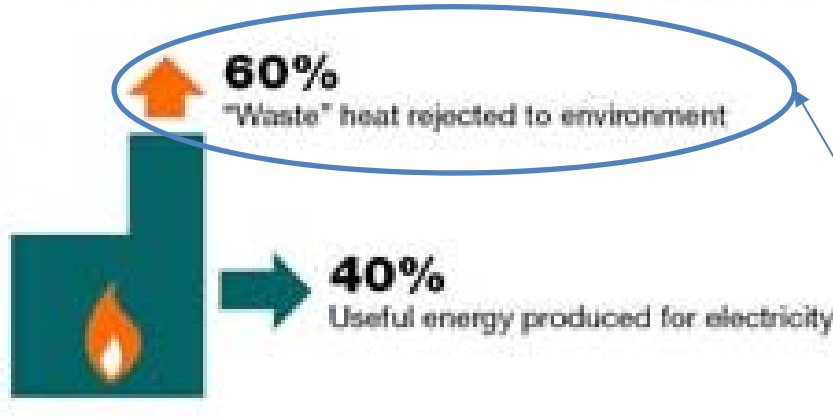
# A note about Co-Generation vs Power only Production An Energy-Efficiency Game Changer



## Energy-Efficiency Comparisons

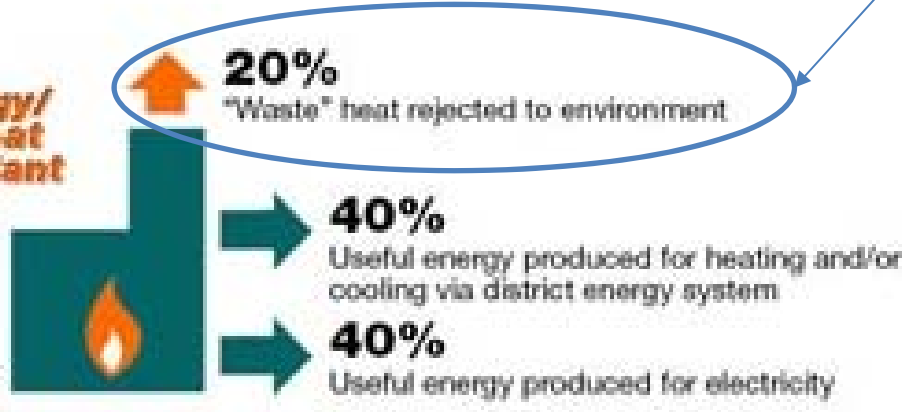
### Standard Power Plant

100%  
Fuel Input



### District Energy/ Combined Heat and Power Plant

100%  
Fuel Input



It is District Energy (thermal energy production and distribution) that sets the project apart from pure electricity generation

**System would run at 80%+ efficiency versus less than 40%**

# District Energy System Overview

**District Energy Pipes – moving waste heat and renewable energy to customers  
hot water and chilled water (Supply and return, 4 pipes – up to 20” in diameter each)**

Heat from waste heat of power generation

Chilled water supplied from ocean



**Initial District Energy pipes**

**Initial build – 2,100 m distribution  
– \$110 million capital**

**Full build – 4,100 m distribution  
– \$150 million capital**

# Stakeholder Relationships

