



Integrated Resource Recovery at Metro Vancouver

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Metro Vancouver

IRR at Metro Vancouver

- Aligned with Metro Vancouver's Sustainability Framework
 - Protect and enhance the natural environment
 - Provide for ongoing prosperity
 - Build community capacity and social cohesion
- Aligned with Provincial goals
 - Reduce carbon footprint
 - Increase biofuel use
 - Reduce water use



Sustainable Region Initiative Targets

- Net energy contributor by 2015
- Reduce Greenhouse Gas Emissions
 - 15% by 2015
 - 33% by 2020
- Seek alternate forms of energy
- Increase energy from liquid waste
- Reduce per capita peak water demand
- Divert 70% of solid waste by 2015

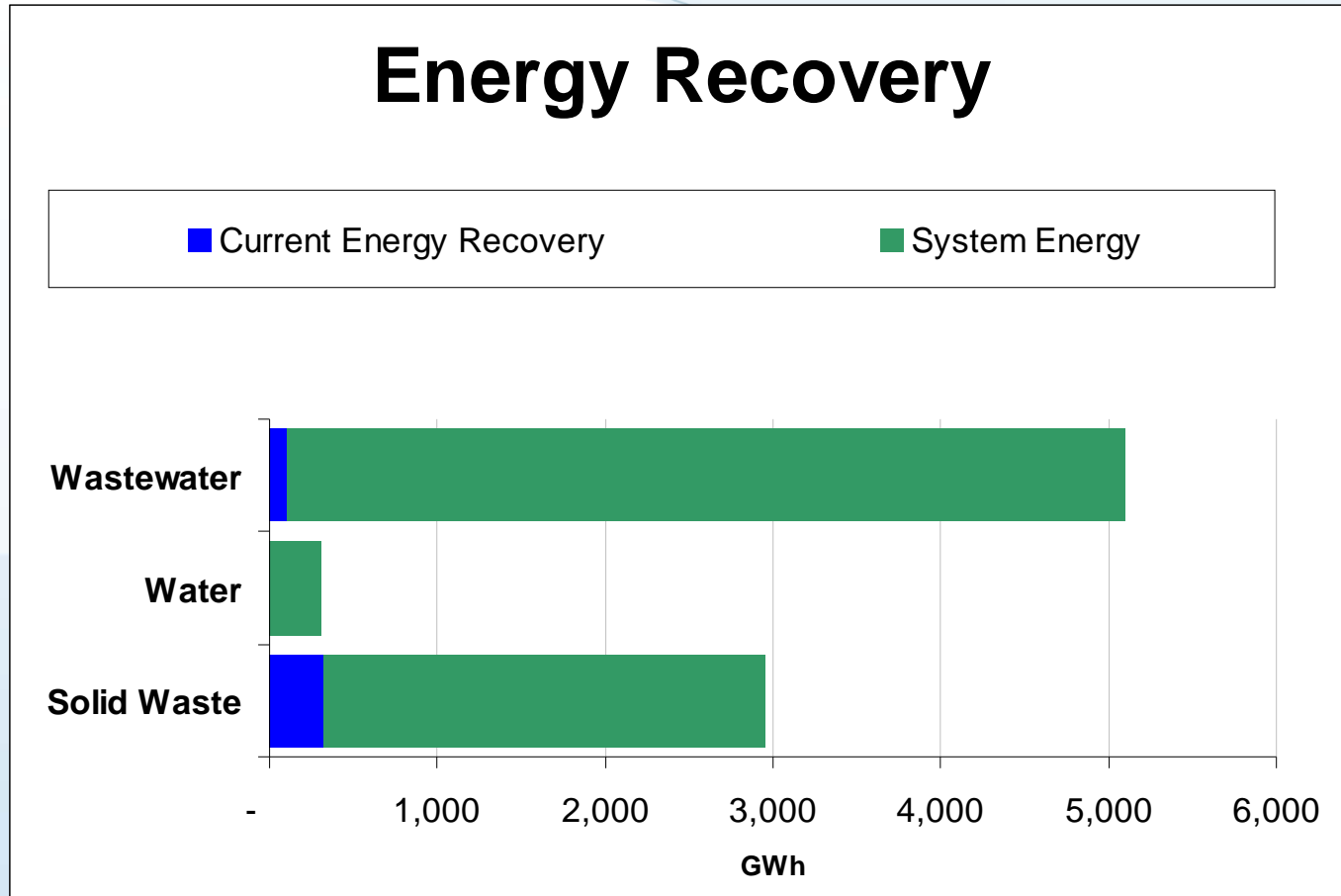
SUSTAINABILITY
Principles

TARGETS AND
Priorities

SUSTAINABILITY IN
Action



Energy Recovery Opportunity



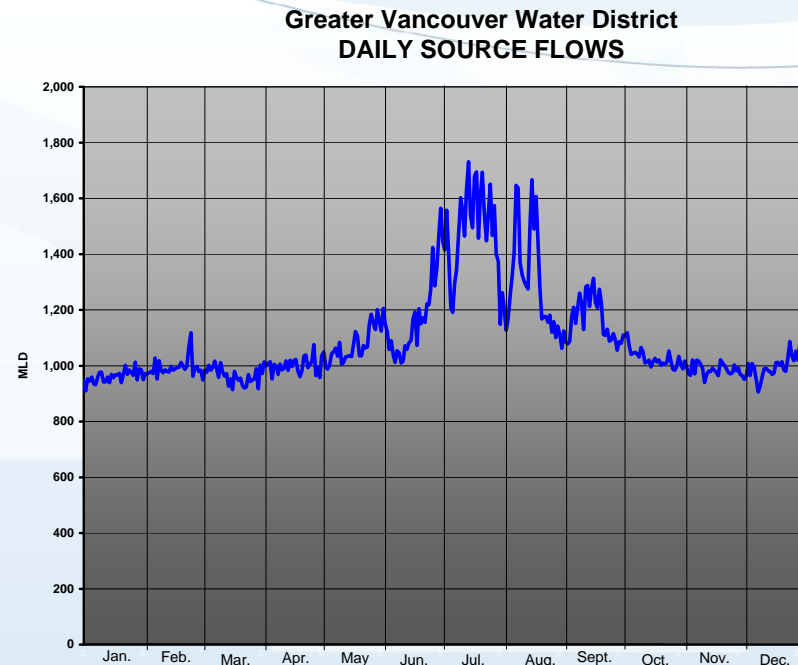
Energy in Wastewater Systems

- Biosolids
- Heat from sewers and outfalls
- Biogas
 - Co-generation of electricity and heat
 - Fuel



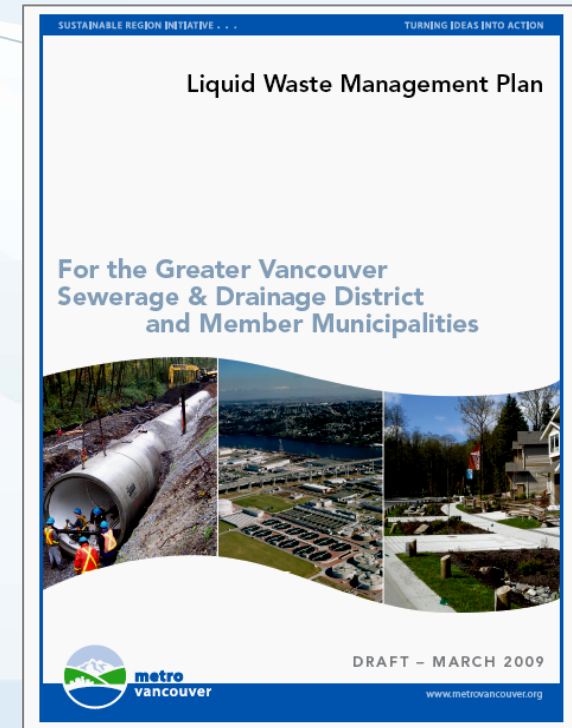
Water System Savings Opportunity

- Water system sized to deliver peak seasonal demand
- Reduce demand to:
 - Defer costly upgrades
 - Defer need for a new source
- IRR can contribute to demand reduction



IRR in Metro Vancouver's Utility Plans

- Liquid and Solid Waste as Resources
- Goals, strategies, actions to recover green energy, nutrients, and water
- Assess each sewerage area using an Integrated Resource Recovery business case model by 2012
- Identify and follow through on viable opportunities



North Shore IRR Study

- Conceptual study
 - Resource Opportunities
 - Conceptual Plans
 - Business Case
 - Policy & Planning Implications
e.g. Regulatory Issues - Utility Scale,
Neighborhood Scale, Individual Site
- Identify IRR opportunities on the North Shore
- Provide insight into the potential benefits of IRR

