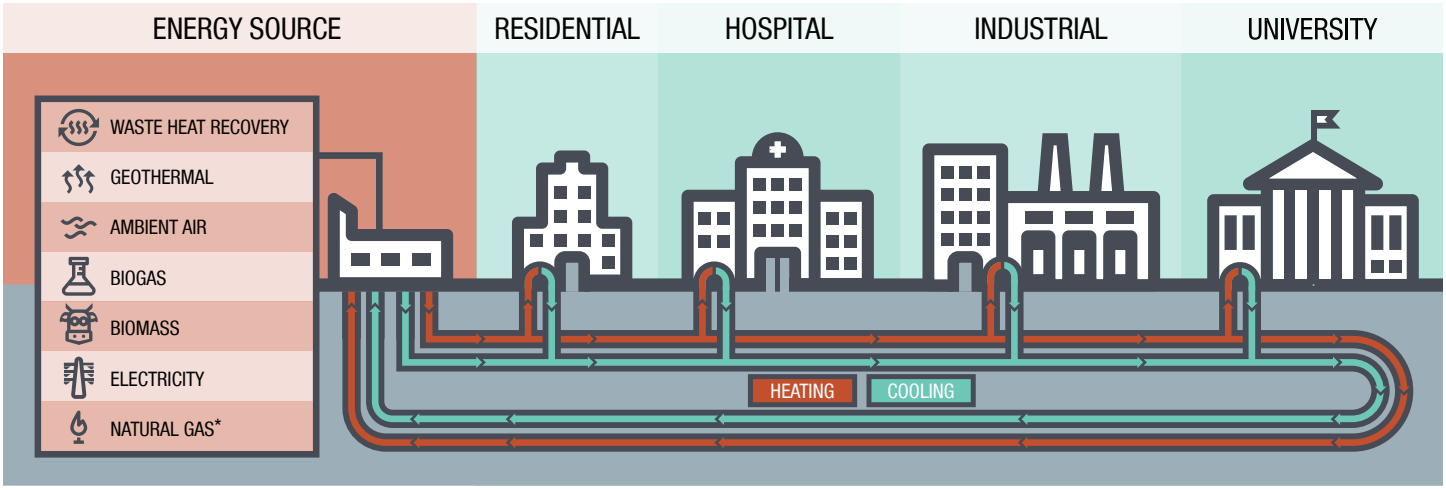
Thermal Energy Networks (TENs)

An innovative approach to heating and cooling at scale

Through **Thermal Energy Networks (TENs)**, Puget Sound Energy is addressing today's energy challenges with greater efficiency, lower emissions, and improved system performance.



* In WA State, a TEN may not rely on combustion to create thermal energy, except for emergency backup purposes

TENs are well suited for:

- Multi-building developments with high energy demand
- New construction or large-scale redevelopment projects
- Sites with around 1 million square feet of building space or sites with energy consumption over 500,000 therms annually
- Locations where two or more large buildings are close enough to share thermal infrastructure
- Sites with significant cooling needs or waste heat that can be integrated into the network

What PSE will achieve:

- Reduced operating costs through shared equipment and energy use
- Lower carbon emissions to support sustainability and compliance goals
- Improved system reliability and longer equipment life
- Decreased peak electricity demand when paired with energy storage
- Future-ready infrastructure that supports long-term energy strategies

TENs are district-scale energy systems that connect multiple buildings via a shared underground piping network. Unlike a central district heat system that produces energy at a single plant, a TEN distributes and reuses energy from multiple sources across the network. Instead of generating energy, they transfer it from sources such as waste heat from commercial or industrial facilities, geothermal wells, nearby water such as an aquifer, or ambient air. This shared approach increases efficiency, reduces energy waste, and lowers emissions by supplying space and water heating or cooling where it is needed.

Planning for the future

TENs provide organizations with a scalable solution to meet performance, compliance, and efficiency goals while enabling facilities to transition successfully toward a low-carbon energy future.

Puget Sound Energy is actively evaluating opportunities for deployment and integration, including project design, cost analysis, regulatory requirements, and system planning.

For more information, email **TENs@PSE.com**

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