Believe it or Watt:
Energy Self-Generation at NapaSan

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The Basics

- Founded in 1945
- Serves 83,300 customers
- Average flow of 10 mgd
- 270 miles of sewer mains
- 27 miles of recycled water mains
- 38,000 service connections
Service Areas

• 21 mi² sewer service area
• 26 mi² recycled water service area
What We Do

Wastewater

Recycled Water

Biosolids
Did You Know?

Approximately 50% of the power needed to operate the facility is self-generated.
Biogas

- Capture methane from anaerobic digester
- Co-gen system installed with digester in 2001
  - 40% of operational needs
- FOG receiving station
  - Increased gas production by 38%
Solar Power

• 1 MW solar array
• Installed in 2016
• Brings energy generation on-site to 50%
Coming up next.....
Linear Generator

- Mainspring linear generator
- Run on biogas
- GHG emission reduction
- Operational in late 2023
- Brings self-generated energy to 70%
Floating Solar

- Partnering with Ciel et Terre
- 20 MW solar array
- Floats on wastewater ponds
- ~100 acres of pond surface
Questions?

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