Dublin San Ramon Services District
Water, wastewater, recycled water

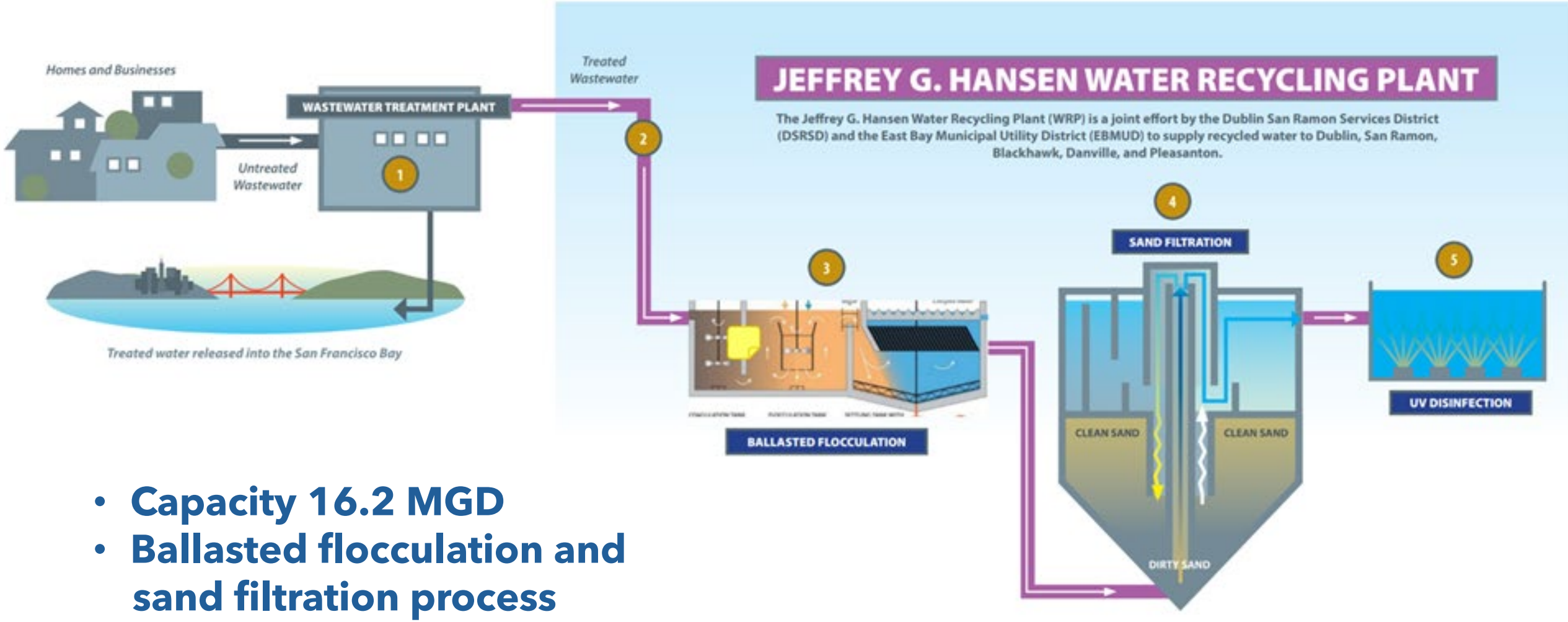
DERWA Energy Evaluation

DERWA Board of Directors
April 28, 2025

Dan Gill, Operations Director

DERWA Energy Evaluation

1. Recycled water treatment plant
2. Recycled water distribution system
3. Potential energy project partnerships



- **Capacity 16.2 MGD**
- **Ballasted flocculation and sand filtration process**
- **UV Disinfection**
- **16.6 mile "backbone"**

DERWA Distribution System

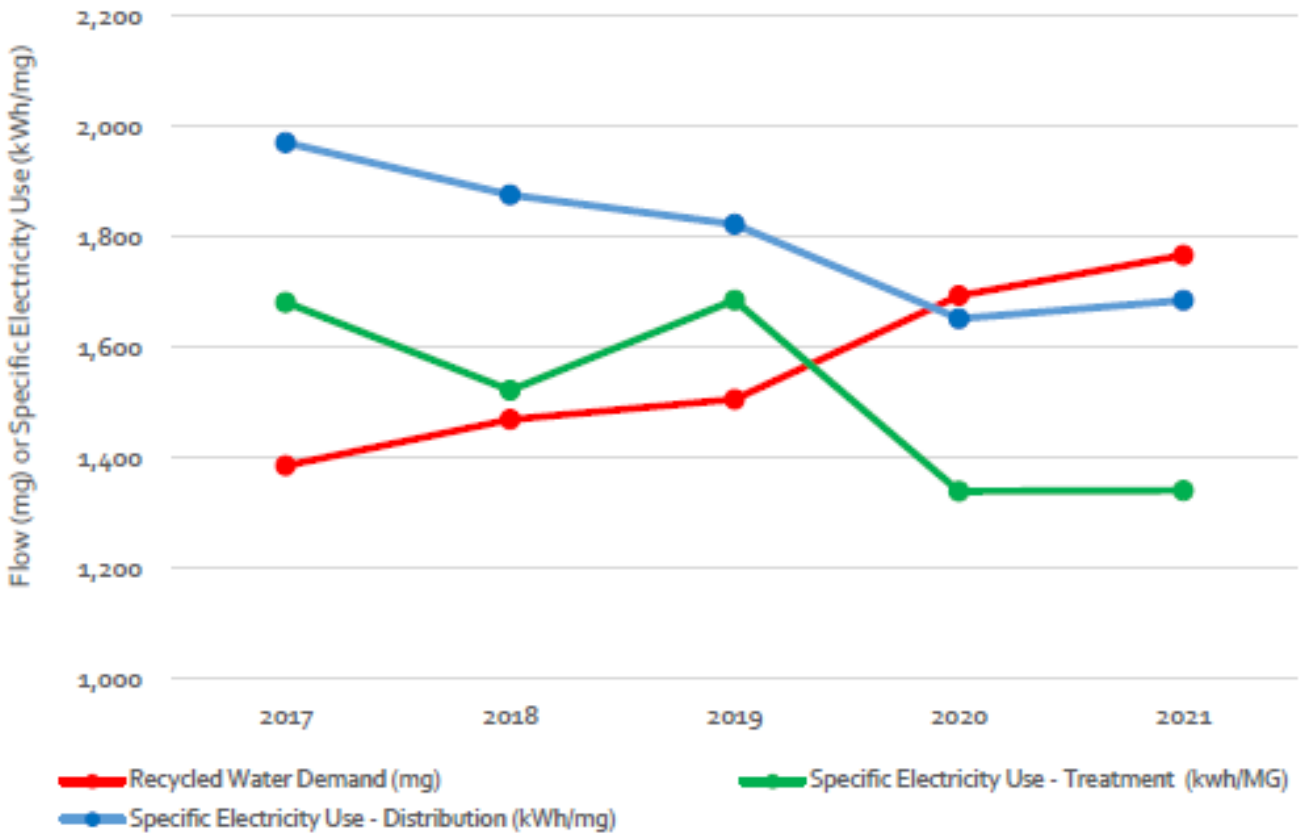
- 2 Distribution Tanks
  - R100 4.5 MG
  - R200 4.5 MG
- 3 Pumping Plants
  - PSR1
  - PSR200A
  - PSR200B

DERWA Recycled Water Treatment Plant

	Before Improvements (2016)	After Improvements (2021)
Annual Electricity Use	1,266,777 kWh	1,521,982 kWh
Annual Volume Treated	1,168 MG	1,880 MG
	1,085 kWh/MG	**810 kWh/MG**

Energy Efficiency Report

- Energy usage per MG decreased over a five-year period resulting in 15 percent **less** distribution energy use.



Distribution System Pump Efficiency

PSR 1

- No recommendations

R200A

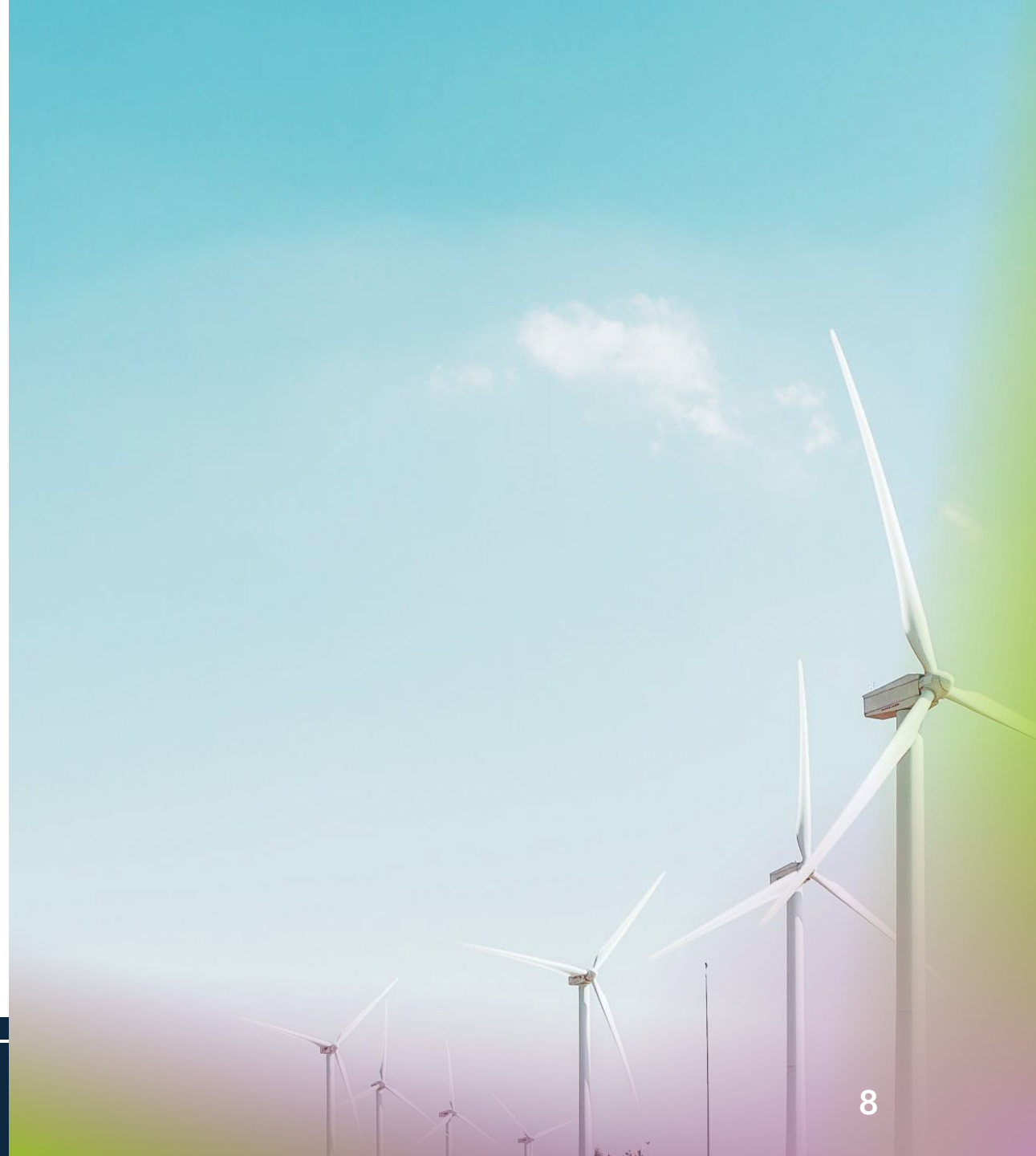
- Pump 2 operates inefficiently

R200B

- Pumps operate at near max speed

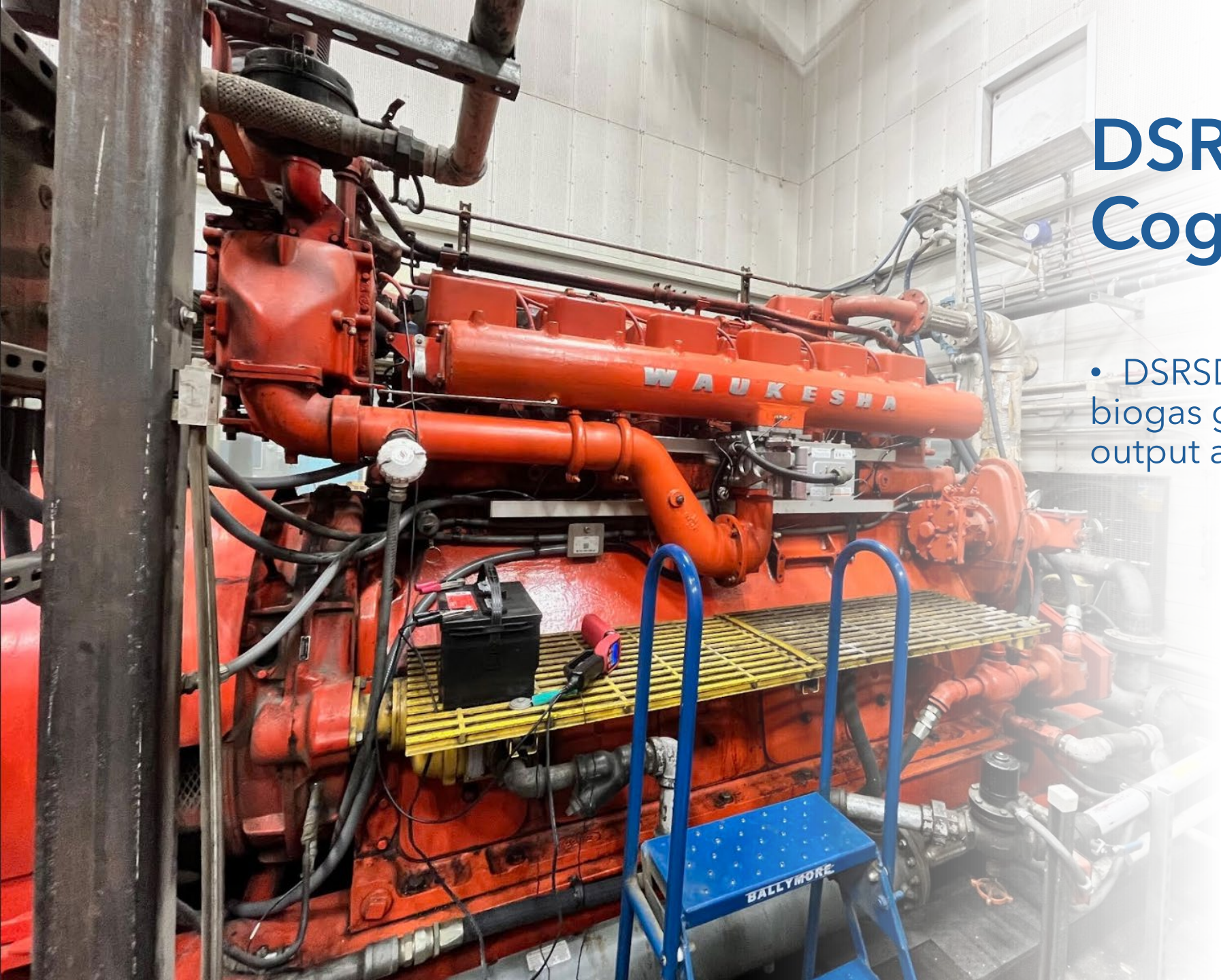
Potential Partnerships on Energy Projects

- Purchase of renewable energy produced by others
- Cost sharing for new renewable energy production
- Use of land owned by others for Photovoltaic (PV) installations



Purchase Renewable Energy Produced by Others

- Community Choice Aggregate – Ava Community Energy



DSRSD - Cogeneration

- DSRSD facilities will utilize all biogas generated power output as currently sized.

Land Leasing for Solar Arrays

- DERWA owned and constructed PV facilities on DSRSD or EBMUD land
- Modeled Amador Reservoir site (EBMUD)
- Renewable Energy Self-Generation Credit Transfer RES-BCT no longer viable

Summary

- Recycled Water Treatment Plant is operating at peak efficiency
- Recycled Water Distribution System: R200A and R200B require future maintenance (planned)
- DERWA switch from PGE to Ava Community Energy (complete)
- Contributing to DSRSD's cogeneration upgrade project is not feasible
- Land leasing for solar is not feasible due to RES-BCT program unavailability

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