



Raven SR Richmond, California Unit

Republic Service West Contra Costa Sanitary Landfill

Technology: S-Series Steam CO₂/Reforming Waste-To-Hydrogen

Expected launch date: Q1 2023

Size of the production facility: 1.5 acres (6,000 m²)

Waste processed:

- 70 wet tons per day of mixed green and food waste, 23,800 MT tons per year
- Avoided emissions from organics: 4,765.6 MT CO₂e annually
- Avoided emissions from landfill gas: 1,845.2 MT CO₂e annually

Hydrogen produced:

- 1,600 MT per year
- SAE J2719 compressed to 5,000 and 8,500 psig

Biocarbon produced: ~78 MT per year

Total Process Emissions before carbon capture: 9.132 kg/CO₂e per 1 kg/H₂

Net emissions before carbon capture: 5.08

Carbon Intensity Score: preliminary -20 at the spicket

Electricity needed per day: 25 kw per kilo H₂ (compression included)

Electricity/autonomous per day: 70%

H₂/Miles per passenger car:

- 97+ million miles
- Avoided emissions: 40,245,120 kg/CO₂e/year

H₂/Miles per class 8 truck

- 12+ million miles
- Avoided emissions: 20,085,840 kg/CO₂e/year

Total avoided emissions (Waste+Vehicle)

- 45,010,730 kgCO₂e/year

Project Partners:

- Hyzon Motors + Chevron
- Regional hydrogen fuel stations (confidential offtake agreements)



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