

# Hitachi Zosen Inova's (HZI's) Kompogas San Luis Obispo Facility Diverts 140,000 Tons of Waste

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ARIETTE ARMELLA, COURTESY OF HZI

**SAN LUIS OBISPO, CA** -- Kompogas SLO took stock of some major milestones at a 5th anniversary event, where parent company, global green tech leader Hitachi Zosen Inova (HZI), recognized its partners, including the SLO community, for helping to make the organics diversion initiative a resounding success.

To date the plant has diverted over 140,000 tons of organic waste with the help of locals, including residents, businesses and agriculture. From this waste, the facility has produced over 10 million M3 of biogas, and fed over 11 million kWh of electricity into the local grid, powering the equivalent of around 600 homes per year.

The facility has also produced over 30,000 tons of compost and 6,500,000 gallons of liquid fertilizer, making this a closed loop, circular economy initiative.

Managing Director of HZI Heath Jones put the success of the facility down to the quality of the operation - HZI built the Kompogas plant in SLO in 2018 as a finance, design, build, own, operate (FDBOO) model – as well as the co-operation and support of the local community, San Luis Obispo County Integrated Waste Management Authority, and local waste hauler Waste Connections.

"This is a small community but boy they sure are punching above their weight when it comes to diverting waste from landfill," Jones said. "I challenge much bigger, better resourced cities in California like Los Angeles, Sacramento and San Francisco, to take the lead from the trailblazers in SLO and play their part in being stewards of the environment in the way that this dedicated community have."

CalRecycle contributed \$4m to the Kompogas SLO project, making the facility part of California Climate Investments, and the California Energy Commission (CEC) also provided \$4m for development under the Electric Program Investment Charge (EPIC) Program.

At the event, Jones thanked the State of California for playing a supportive role in enabling Kompogas SLO to be built. "California's regulatory and legislative environment makes it easier to build organic waste diversion facilities like Kompogas, in support of the State's world-leading climate goals of diverting 75% of organics from landfills, net-zero carbon emissions and 100% clean electricity by 2045," Jones said.

"I also call on other states across America to be as supportive in providing not only the right kind of regulatory environment, but funding assistance as well, to enable this kind of progress in reducing emissions, diverting waste from landfill and turning it into a valuable resource - this is the kind of courageous, long-term thinking needed at a state level for facilities like Kompogas to become common place around the US."

Jones added that Kompogas SLO is an example of a waste to resource facility "done right", which has enabled the operation to be situated literally in SLO's backyard, with full support from the community who live alongside it.

"A pivotal aspect to the success of this facility and the entire project from start to finish, is that a highly experienced waste to energy company was enlisted to build and operate the plant. HZI has been around for over a hundred years, and our innovative and reliable solutions have been part of more than 1,600 reference projects worldwide. In

short, we know what we're doing, and we take a completely integrated approach to everything we do."

HZI's Kompogas system operates in a completely contained environment, so that emissions are captured and there are no issues with odor - something that is very important to maintaining good relations with the locals. SLO residents also enjoy twice annual organic compost giveaway days at Kompogas, where they get to see their efforts turned into a free resource.

"To date we have given away more than 800 tons of organic compost at our giveaway days," Jones said. "Local residents get a real thrill out of turning up to the plant with a trailer and loading it up with free compost that came from the organic waste they provided. It's a very tangible give back."

## **ABOUT HITACHI ZOSEN INOVA'S KOMPOGAS® TECHNOLOGY**

Kompogas® SLO is a reference to HZI's proprietary Anaerobic Digestion system at the core of the facility. The Kompogas facility is designed to process up to 36,500 short tons of source-separated organics and green waste as well as fats, oils, and greases from the county's residential collection program. After pre-treatment, the organic waste is fed into the plug-flow digester, where the thermophilic AD process ensures complete sanitation of the organic matter, while its gas potential is fully exploited. The resulting biogas is utilized in an on-site combined heat and power (CHP) unit to produce renewable energy in the form of electricity, that is exported to the local power grid.

The HZI KOM+Press separates the discharge into a solid and a liquid fraction. The solid digestate is aerated and, like the liquid digestate, produces a nutrient-rich compost and fertilizer for local agriculture. For odor control, all processing at the facility is enclosed within negative air pressure buildings. The subsequent biofilter assures natural and efficient cleaning of the collected waste air. Therefore, no emissions are released into the surrounding environment.