

What the project delivers

Every year, wastewater treatment plants produce millions of tonnes of sludge a wet, contaminated material that's expensive to get rid of and harmful to the environment. SLUDGE2VALUELIFE changes that equation entirely.

Using the patented TORWASH® technology, we convert sewage sludge directly on-site into solid biofuel, biogas, and treated water with no chemicals, no additives, and no need for external energy. The system runs on the biogas it produces itself.

The result? Less sludge going to incineration, lower costs for operators, and a measurable reduction in CO₂ emissions all from something that used to be considered waste.

Get in touch

For project information, collaboration, or media requests, contact us or scan the code.

contact@s2vl.torwash.com



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From sludge to value.

SLUDGE2VALUELIFE converts sewage sludge from wastewater treatment plants into solid biofuel, biogas, and clean water using the patented TORWASH® hydrothermal technology. Carbon-negative. Energy-positive. Ready to scale.

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Torwash® technology

Hydrothermal treatment

Sludge is heated under pressure in a continuous-flow reactor (5 t/hr). No chemicals, no additives just heat and pressure.

Dewatering & separation

The treated material separates naturally into solid biofuel pellets and a liquid fraction dramatically reducing volume.

Biogas recovery

The liquid fraction is anaerobically digested, producing biogas that powers the reactor itself making the system energy self-sustaining.

Biofuel to industry

The solid output CaCO₃-rich biofuel pellets goes directly to cement producers as a renewable fuel substitute.

Sludge2ValueLife Partners

Coordinated by TORWASH BV (Netherlands), with CA.RE. for Engineering (Italy) as consortium partner. Hosted at Industriewater Eerbeek. Supported by TNO, NWB Waterinnovatiefonds, Shift Invest, OostNL, and BOM.

Project impact

SLUDGE2VALUELIFE demonstrates that circular sludge treatment is technically feasible, economically viable, and ready to scale. Every tonne of sludge treated is one less tonne incinerated.

85%

By removing up to 85% of sludge volume on-site, TORWASH® dramatically reduces transport costs and the pressure on incineration facilities.

-2,170^t

By replacing coal combustion in cement kilns and eliminating sludge transport, the process delivers measurable, verifiable GHG emission reductions every year.

80%

80% of incoming sludge is converted into reusable products solid biofuel and bioga instead of being sent to costly and polluting incineration routes.

Why it matters

Europe generates around 10 million tonnes of dry sewage sludge every year. In the Netherlands alone, incineration costs up to €150 million annually and emits ~1 million tonnes of CO₂. Current disposal methods incineration, landfill, land spreading are costly, polluting, and increasingly restricted by EU regulation.

SLUDGE2VALUELIFE proves that sludge is not a problem to be managed, but a resource to be recovered. The TORWASH® process converts it on-site into solid biofuel for the cement industry, biogas to power the reactor itself, and clean water returned to the treatment plant.

The result is a carbon-negative, energy-positive system with a replicable business model designed to be deployed across water boards and industrial operators throughout Europe.

The technology is designed to be licensed and deployed across water boards and industrial operators throughout Europe.

Demonstration site: Industriewater Eerbeek, Netherlands · Oct 2025 – Mar 2028