

# Micro-hydropower technology enables cities and industries to harness renewable energy from water pipelines

*InPipe Energy White Paper describes cutting-edge technology that generates 60% more renewable energy from water pipelines.*

SAN FRANCISCO , CALIFORNIA, UNITED STATES, February 22, 2024



[/Einpresswire.com/](https://www.einpresswire.com/) -- Water utilities, industrial facilities, and other large water users spend up to 40 percent of their annual budget on energy, much of which is used to move water. However, by converting control valves into micro power generators, [InPipe Energy](#) has created a patented technology that generates baseload energy and simultaneously can save water and decarbonize aging infrastructure.

“

The release of the HydroXS White Paper marks a significant milestone in our journey to support organizations that pump water in their energy conservation efforts”

*Gregg Semler, president and CEO of InPipe Energy*

The product developed from years of innovation and expertise in water-energy solutions, InPipe Energy’s HydroXS empowers water users striving toward sustainability and cost-efficiency to capture pressure typically wasted in water pipelines and convert it into carbon-free electricity. To inform utilities and industry about this technological advancement, InPipe Energy has released its first technical white paper.

“The release of the HydroXS White Paper marks a

significant milestone in our journey to support organizations that pump water in their energy conservation efforts,” stated Gregg Semler, president and CEO of InPipe Energy. “A key challenge in implementing energy recovery with water pipelines is due to the variability of flowing water in the majority of water pipelines in the world. The white paper is our first technical description of how the HydroXS addresses this challenge with its variable speed operating system.”

American water utilities have already begun to reduce their carbon footprint and generate energy onsite by implementing the HydroXS in their potable water pipelines. In Mount Vernon, Washington, [Skagit Public Utility District](#) installed the HydroXS alongside the District’s pressure

relief valves in July 2021. Harnessing the immense pressures in the district's water pipeline, the HydroXS produces 104,000 kilowatt-hours annually, which will reduce energy costs and eliminate 728 tons of CO2 over its lifetime. The district is on track to see a less than three-year payback period on their investment.

"We're excited about this project ... because it allows us to recapture a lot of the energy that's already within our system and use that energy to offset operational costs. At the same time, it allows us to tap into a sustainable energy source for a lot of our energy needs," said George Sidhu, P.E., general manager at Skagit PUD.

The white paper further illuminates how the HydroXS system eclipses single-speed turbine energy generation by 60 percent with advanced variable-speed turbine technology, which predicts and adjusts its operations based on incoming pressure and water flow. The HydroXS White Paper also includes how water utilities, and the most energy intensive industries can seamlessly integrate the HydroXS with their existing water infrastructure to deliver immediate and long-term economic benefits.

To read the HydroXS White Paper and learn more about how InPipe Energy is redefining renewable energy, visit <https://inpipeenergy.com/resources/>.

\*\*\*

#### About InPipe Energy

InPipe Energy is on a mission to help the world practically and economically decarbonize by creating new clean energy resources from existing water pipeline infrastructure. Our flagship product, the HydroXS<sup>®</sup> combines micro-hydropower technology with controls that are easily integrated into existing or new infrastructure to harvest excess water pressure and convert it to clean, low-cost electricity. InPipe Energy provides a turnkey process to support water managers eager to be more efficient, sustainable and resilient. InPipe Energy works with utilities to secure funding to cover the cost of these projects. For more information or to receive your water system, energy generation, and carbon reduction assessment, visit [www.inpipeenergy.com](http://www.inpipeenergy.com).

###

Alexa Hess

BPR International

+ +1 740-624-2983

[email us here](#)

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[Twitter](#)

[Instagram](#)

[YouTube](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/690546572>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.