



A New Era of Sustainable Wastewater Treatment

Elemental Insights | January 2023



SUMMARY

More than 80% of the world's wastewater is discharged directly to the environment without being [treated](#). Untreated wastewater is a danger to human health, and adversely impacts animals and plants living in waterways.

Through a partnership funded and facilitated by Elemental Excelerator, [Transcend](#) and [Microvi](#) are changing the status quo by pairing the world's only fully automated wastewater treatment design software with a proprietary green-wastewater treatment technology that removes major contaminants in water. Through their collective, sustainability-first approach, the two companies are redefining what efficient wastewater treatment design and processes means for the historically slow-moving and risk-averse industry.

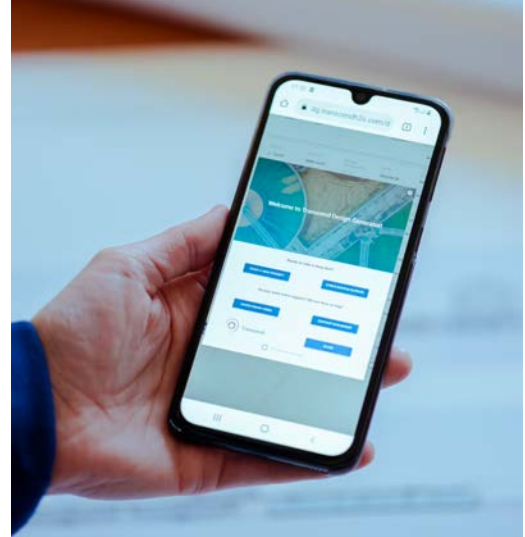


“The future is now — technologies like Microvi’s need to be assessed in treatment projects throughout the world. That’s where Transcend software comes in to help.”

[Adam Tank, Chief Customer Officer, Transcend](#)

OBJECTIVES

Transcend is transforming the way engineering firms, utilities and technology suppliers assess and design critical infrastructure. The company's cloud-based platform, the Transcend Design Generator (TDG), automatically generates detailed preliminary designs of water and wastewater treatment facilities and associated equipment. Implementing Transcend's software helps firms lower costs and increase revenue by bidding on more projects in less time, and also frees up more time for engineers to evaluate innovative technologies and sustainable design approaches. The Transcend Design Generator has designed more than 10,000 wastewater treatment plants around the globe to date.



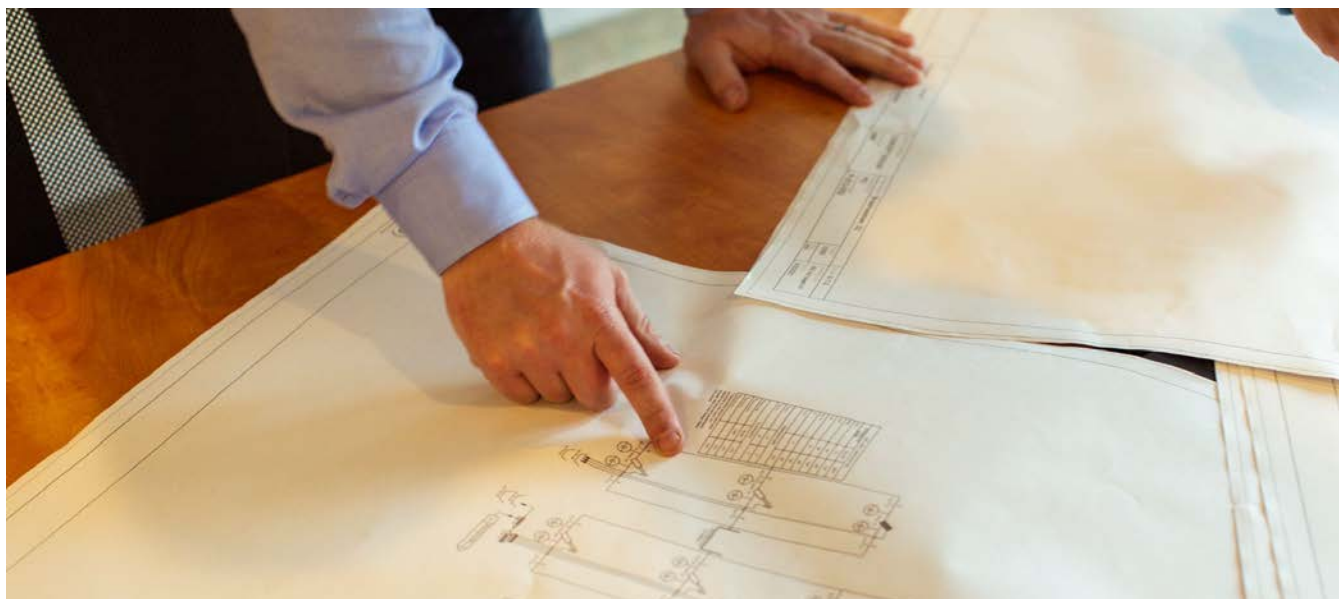
Microvi Biotech combines materials science and microbiology to remove major contaminants in water. The company's proprietary treatment technology results in a highly efficient, resilient, reliable, simple and cost-effective treatment system for a variety of water and wastewater pollutants without producing secondary waste, as found with many traditional biological and chemical systems. For more than a decade, Microvi has been working with utilities on water and wastewater treatment.

The Partnership

Having met as fellow members of Elemental's portfolio, Transcend and Microvi developed a partnership with funding and facilitation from Elemental. The partnership incorporated the Microvi solution into Transcend's software, with the goals to accelerate the growth of both companies, deliver more sustainable wastewater treatment options to utilities and improve the health of more communities around the world.

With Transcend's software, Microvi could significantly reduce the time and effort associated with preliminary design of its project proposals, and shift that time savings to more valuable work. This shift represents something that Microvi had been trying to do

for the last decade. In addition, the partnership enabled Microvi to tap into a larger, more diverse customer base of Transcend’s existing engineering clients.



By onboarding Microvi’s technology onto its platform, Transcend could offer its clients an innovative approach to removing hard-to-treat contaminants from wastewater. In addition, Transcend would have an opportunity to expand its global reach by tapping into Microvi’s utility network, advancing the company’s mission to enable more sustainable innovation in the wastewater industry.

OUTCOMES AND INSIGHTS

Where it used to take between 2.5 to 3 hours to generate a particular set of proposals, it now takes just 10 minutes.

The water industry is extremely conservative, and technologies like Microvi’s and Transcend’s often take decades to reach commercial success. But together, with Elemental providing the catalytic grant funding to initiate their collaboration, there’s a path to shifting the market. Using the collaboration with Microvi as a prime example of a successful engagement with a technology supplier, Transcend launched its [Preferred OEM program](#). This means innovative solutions like Microvi’s will be shown to all of Transcend’s enterprise clients when they are considering new technologies and equipment.

"I often had to work through the night to deliver something to a client — not anymore."

Ajay Nair, Global Director of Commercial and Technical Strategy, Microvi Biotech

Transcend

By incorporating Microvi's technology into Transcend's cloud platform, TDG, Transcend is able to:

- Add a specific wastewater treatment application to the platform, significantly expanding its capacity
- Expand global market reach through Microvi's utility customers
- Offer existing EPC clients Microvi's technology

Microvi

Similarly, by utilizing Transcend's cloud-platform TDG, Microvi will unlock vast business opportunities by:

- Significantly reducing (by a factor of 10) the time and effort associated with the preliminary design of Microvi's project proposals and shifting valuable engineering hours to application and product development. In this case, reducing Microvi's internal cost from dozens of hours per pursuit and reducing it to minutes.
- Minimizing the time and effort required, and maximizing ROI, for Microvi employees to execute a strategic initiative to automate preliminary engineering activities across the organization.

About Elemental Excelsator

Elemental Excelsator is a leading nonprofit investor focused on scaling climate solutions and social impact for all communities. Elemental fills two gaps that are fundamental to climate change: funding first-of-a-kind projects for climate technologies in real communities, and embedding equity and access into climate solutions.