



VFlowTech Raises US\$10M In Series A Funding To Expand Global Reach Of Vanadium-Based Renewable Energy Storage Solutions



 **February 7, 2023**

 **Highlights**

- *Round led by Real Tech Holdings, with investments from SEEDS Capital, Pappas Capital, Wavemaker Partners, Sing Fuels, İnci Holding and Carbon Zero Venture Capital*
- *Funds will be used to grow the company's international footprint, scale up system and manufacturing capacity and further product research and development*
- *Builds on VFlowTech's previous joint ventures in Africa and Southeast Asia with plans to enter the US, Japan, Türkiye, China and India*

SINGAPORE, 7 February 2023 – VFlowTech, the Singapore-based provider of vanadium-based redox flow batteries, has raised US\$10 million in a Series A funding round. Led by Japan-based venture capital (VC) firm Real Tech Holdings, the oversubscribed round was participated in by returning investors ranging from corporate investors including SEEDS Capital, Wavemaker Partners and Sing Fuels to personal investors like Michael Gryseels (Chairman of VFlowTech), as well as new international VC and strategic investors including İnci Holding (Türkiye), Pappas Capital (US) and Carbon Zero Venture Capital (Singapore).

VFlowTech will use the funds to set-up a 200MWh production line capacity and scale up the manufacturing of its 250 kWh modular vanadium-based long duration energy storage solutions. It will also use the funds to expand its market presence to Türkiye, the US, Japan, China and India with new partners. The company also plans to intensify research and development efforts to further improve its best-in-class technology, as well as increase system capacity and explore new markets with emerging demand for sustainable energy storage solutions.

To date, VFlowTech has commercially deployed 30 kWh and 100 kWh units for residential applications and has completed the production of its MWh system for large-scale microgrid applications. VFlowTech has a team of 60 people and is looking to use the funds to strengthen the management team in the next year.

"Advancements in renewable energy storage solutions will drive the acceleration of cleantech and help other industries come one step closer to meeting their sustainability goals. We are already seeing increased demand for our batteries in creating infrastructure for electric vehicle (EV) charging, peak shifting of renewables, grid services, gated communities, telecom towers, and for round-the-clock renewable energy integration. We are excited to bring our offerings into new and emerging markets where there is ample opportunity to help kickstart the energy transition," said **Dr Avishek Kumar, Co-founder and CEO of VFlowTech**.

Conventional energy storage technologies such as lithium-ion and lead acid batteries have limited functionality, are not environmentally-friendly and experience performance degradation over time. Meanwhile, standard vanadium redox flow batteries are costly, experience high parasitic losses, have poor round trip efficiency and are difficult to operate in tropical conditions. With its unique IPs and combined decades' worth of experience in renewable energy, VFlowTech aims to overcome these longstanding vulnerabilities through its modular vanadium redox flow-based energy storage solutions.

“We are excited to support VFlowTech in its mission to produce renewable energy storage solutions that are not only advanced and efficient, but also sustainable and accessible. This is a nascent but highly important industry that will lay the foundation for a greener future. We believe that VFlowTech has the potential to become a changemaker in this space, particularly with their expertise and unique IP,” said **Louis Christian Murayama, Director, Real Tech Holdings Singapore.**

VFlowTech’s vanadium redox flow batteries – called PowerCubes – feature a unique power stack design that enables a more compact design, a round-trip efficiency higher than the industry standard, reduced parasitic losses and effective operation in temperatures of over 55°C. This makes them one of the most economical and versatile renewable energy storage solutions in the market. Different PowerCubes can be deployed anywhere from residential settings to solar and wind farms.

Additionally, VFlowTech’s own smart energy management system enables the seamless management of dynamic energy supply and load demand, as well as efficiently stabilising the energy grid infrastructure. The intelligent solution features optimal charging profiles, smart pump and stack management as well as smart charging and discharging – making it future-ready to manage modern energy needs such as EV charging and hourly electricity tariffs.

“Grid-level energy storage is critical in the transition to sustainable energy and is among our chief focus areas. VFlowTech is accelerating the transition to renewable energy while offering a solution to the current bottleneck in efficiency with its technology. We are happy to invest in this innovation, which offers a long-lasting, efficient and safe solution to the rapidly increasing energy storage need. With the signing of our binding framework agreement, we will also have the opportunity to popularize this technology in the Turkish market. İnci Holding will continue to keep our finger on this pulse with our strategic investments, our clear and focused goals and our unending drive,” said **Zeki Şafak Ozan, CEO and Board Member, İnci Holding.**

VFlowTech’s market-leading renewable energy storage solutions have already been deployed to meet energy needs in various parts of the world through joint partnerships in [Africa\[1\]](#) and [Southeast Asia\[2\]](#), with two batteries set to be deployed in Singapore’s [Pulau Ubin\[3\]](#) this year. The company is also [researching the expansion of flow batteries for terminal usage\[4\]](#) and running a two-year trial[5] to explore scaling flow batteries using storage tank infrastructure.

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About VFlowTech

VFlowTech is a Singapore-based energy storage solutions provider manufacturing low-cost and efficient modular vanadium redox flow batteries. VFlowTech’s long-term vision is to drive the world towards energy equity where everyone can access clean energy at affordable pricing. With an energy storage solution that has an expected life span of 25 years, VFlowTech has one of the safest and most environmentally friendly battery technologies. VFlowTech was incubated in the CleanTech lab of Singapore’s Nanyang Technological University, and benefits from unique IP arising from many years of intensive research at

the university. VFlowTech batteries can store renewable energy over long-duration and are designed to address issues of performance degradation, thermal runaway, and product reliability on safety.

Website: www.vflowtech.com.

Press release: <https://www.dealstreetasia.com/stories/vflowtech-series-a-funding-328699>

[1] <https://vflowtech.com/2022/02/09/vflowtech-and-sing-fuels-set-up-joint-venture-to-drive-clean-energy-transition-in-africa/>

[2] <https://vflowtech.com/2022/07/20/banpu-innovation-ventures-partners-with-vflowtech-to-develop-advance-hybrid-energy-storage-solution/>

[3] <https://www.straitstimes.com/singapore/environment/start-ups-novel-energy-storage-system-to-power-parts-of-pulau-ubin>

[4] <https://vflowtech.com/2022/09/02/vflowtech-partners-advario-to-expand-flow-batteries-for-terminal-usage/>

[5] <https://www.straitstimes.com/singapore/environment/start-ups-novel-energy-storage-system-to-power-parts-of-pulau-ubin>

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