

DE.MEM ADVANCES MEMBRANE TECHNOLOGY PRODUCT OFFERING

13 November 2024: Australian headquartered, international water technology company De.mem Ltd (ASX:DEM) (“De.mem” or “the Company”) is pleased to announce its new and expanded product range, including standardized membrane filtration systems for deployment in residential, municipal and industrial water treatment applications.

KEY HIGHLIGHTS

- Release of new range of small, standardized Ultrafiltration membrane systems.
- First revenues received in Singapore.
- Potential new international distribution partnerships in Malaysia, Indonesia and India.

New Standardized Ultrafiltration Membrane Systems

De.mem is pleased to announce the release of its new range of small, standardized Ultrafiltration membrane systems.

The unique elements of the new Ultrafiltration (UF) systems are:

- Standardized design and production.
- Designed for residential, municipal and smaller industrial applications.
- All components are fully NSF (National Sanitation Foundation, USA) certified.
- Deploying De.mem’s NSF certified Graphene Oxide (GO) enhanced Ultrafiltration membrane as their key component.
- Robust and easy to use.
- Accelerated volume treatment rates, of up to 1m³ (1,000 liters) of water per hour.
- Compact design thanks to high throughput of membrane technology deployed.

De.mem’s GO enhanced membrane cartridges have received American National Sanitation Foundation (NSF). For further details, please refer to ASX releases dated 15 April 2024 and 9 May 2024.

De.mem has designed the entire systems to provide the highest product quality, with NSF certified components only, as illustrated below.

IMAGE 1: De.mem compact Ultrafiltration membrane system for deployment under the kitchen sink



IMAGE 2: De.mem compact Ultrafiltration system for larger volumes of up to 1,000l/hr



Proprietary technology

De.mem originally presented its GO enhanced membrane technology on 7 September 2021 (see ASX release “*De.mem Presents Next Generation Membrane Technology*”).

The Company’s new GO enhanced technology was developed internally by its research and development team in Singapore. The GO enhanced membrane delivers:

- With variations depending on the application, the new membrane is delivering on average 20% higher water flux (ie. volume of clean water produced) compared to standard polymer ultrafiltration membranes.
- Superior rejection of contaminants such as bacteria, viruses and small solids.

Due to its high flux and resulting smaller cartridge size, the Company’s GO technology is well suited for integration into compact domestic or mobile / portable water treatment systems. Given the membrane’s high throughput, the size of the membrane cartridge can be reduced significantly, while maintaining the same treatment capacity.

During 2022, De.mem initiated the process with the American National Sanitation Foundation (“NSF”) to obtain certification for use of the new GO membrane technology for potable water treatment applications. The process was successfully concluded in May 2024 (see ASX release dated 9 May 2024).

First revenues received

First sales revenues have already been received in Asian markets with the product sold to Wassertec, De.mem’s partner company for residential filtration applications in Singapore. The product has already been installed by Wassertec at a large entertainment complex in Singapore.

While the revenues from the initial sale are not material to the overall revenues of De.mem group, this marks a material milestone and provides validation for the quality of De.mem’s technology and product offering.

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Targeting new growth markets

De.mem primarily targets Asian markets with this new product offering. The products are to be sold through distribution partnerships and/or direct sales efforts.

De.mem's distribution partnership model is low-cost, with the Company assuming zero additional overheads through engagement of third-party distributors.

Beyond the sales efforts in Singapore, De.mem is in initial discussions with potential distribution partners for Malaysia, Indonesia and India.

Asian domestic water filtration – a substantial market opportunity

The global domestic water filtration market was estimated to be USD 8.6 billion in 2018 and expected to grow by 15.9% per annum to approximately USD 24.1 billion by 2025 (Source: Grand View Research, Home Water Filtration Market Unit Market Size, 9 July 2019).

The Asia-Pacific region accounts for the largest global share in the overall market for domestic water filters.

Domestic water filtration systems are growing faster than the overall water treatment industry.

Management Commentary

De.mem Chief Executive Officer Andreas Kroell said:

“With our Graphene Oxide enhanced Ultrafiltration membranes, we are able to produce very compact membrane filtration systems, which is an important aspect for domestic water filtration products.

With the new sales initiative around our standardized, small-scale filtration products, we are further developing our product portfolio. Besides the additional revenue potential, this also provides for important validation of our membrane technology and manufacturing capabilities from an industry perspective.”

The significance of this release is to provide an update about the Company's product and technology development efforts, the expansion of its product range, the achievement of first revenues with the new product and the sales strategy with regards to promoting the new product into Asian markets.

This release was authorized by the Company's CEO, Andreas Kroell, on behalf of the Board.

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De.mem Limited (ASX:DEM) is an Australian headquartered, international decentralized water and wastewater treatment business that designs, builds, owns and operates turnkey water and wastewater treatment systems for some of the world's largest companies in the mining, electronics, chemical, oil & gas, and food & beverage industries. Its systems also provide municipalities, residential developments and hotels/resorts across the Asia Pacific with a reliable supply of clean drinking water. De.mem offers a "one-stop-shop" of equipment, services, chemicals and consumables to its clients, for the ongoing operations of their water and wastewater treatment plants.

De.mem's technology to treat water and wastewater is among the most advanced globally. The Company commercialises an array of innovative proprietary hollow-fibre membrane technologies. De.mem has been partnering with Nanyang Technological University (NTU) in Singapore, a world leader in membrane and water research.

To learn more, please visit: www.demembranes.com

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of De.mem Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.