

# demem

PROSPECTUS

ACN 614 756 642

For an offer of up to 18,750,000 Shares at an issue price of \$0.20 per Share to raise up to \$3,750,000 (Public Offer).

Oversubscriptions of up to a further 3,750,000 Shares at an issue price of \$0.20 per Share to raise up to a further \$750,000 may be accepted.

The Public Offer is subject to the Conditions set out in Section 2.4.

The Prospectus also contains the Secondary Offers.

## IMPORTANT INFORMATION

This is an important document that should be read in its entirety. If you do not understand it you should consult your professional advisers without delay. **The Securities offered by this Prospectus should be considered highly speculative.**

This is a Replacement Prospectus dated 16 February 2017. It replaces a prospectus dated 31 January 2017 relating to the Securities of De.Mem Limited (ACN 614 756 642).

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# CORPORATE DIRECTORY

## DIRECTORS

**Mr Cosimo Trimiglozzi**  
Non-Executive Chairman

**Mr Andreas Kroell**  
Chief Executive Officer & Director

**Mr Bernd Dautel**  
Non-Executive Director

**Mr Stuart Carmichael**  
Non-Executive Director

**Mr Michael Edwards**  
Non-Executive Director

## COMPANY SECRETARY

Mr Brett Tucker

## PROPOSED ASX CODE

DEM

## CORPORATE ADVISOR

Ventnor Capital Pty Ltd  
16 Ord Street  
West Perth, WA, 6005

## SOLICITORS

Steinepreis Paganin  
Level 4, The Read Buildings  
16 Milligan Street  
Perth, WA 6000

## INVESTIGATING ACCOUNTANT

RSM Corporate Australia Pty Ltd  
8 St Georges Terrace  
Perth, WA 6000

## INDEPENDENT TECHNICAL EXPERT

Wave Six Pty Ltd  
4/134 Labouchere Road,  
Como WA 6152

## REGISTERED OFFICE

Ground Floor, 16 Ord Street  
West Perth, WA, 6872  
Australia

Telephone: + 61 8 9482 0500  
Facsimile: +61 8 9482 0505

## BUSINESS OFFICE

421 Tagore Industrial Avenue #02-22,  
Tagore 8, Singapore 787805  
Singapore

Tel: +65 6235 3141

Email: [info@demem.com.sg](mailto:info@demem.com.sg)  
Website: [www.demembranes.com](http://www.demembranes.com)

## SHARE REGISTRY\*

Link Market Services Limited  
Central Park, Level 4, 152 St Georges Tce  
Perth, WA, 6000

Telephone: +61 8 9211 6670  
Facsimile: +61 2 9287 0303

## LEAD MANAGER

Alto Capital  
Ground Level, 16 Ord Street  
West Perth, WA 6005  
ACN 130 462 592) (AFSL 279099)

## AUDITOR

RSM Australia Partners  
8 St Georges Terrace  
Perth, WA 6000



\* This entity is included for information purposes only. It has not been involved in the preparation of this Prospectus.

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# IMPORTANT NOTICE

This Prospectus is dated 16 February 2017 and was lodged with the ASIC on that date. This Prospectus replaces the prospectus dated 31 January 2017 relating to the securities of De.Mem Limited (**Original Prospectus**). The ASIC and its officers take no responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates.

No Securities may be issued on the basis of this Prospectus later than 13 months after the date of the **Original Prospectus**.

No person is authorised to give information or to make any representation in connection with this Prospectus, which is not contained in the Prospectus. Any information or representation not so contained may not be relied on as having been authorised by the Company in connection with this Prospectus.

It is important that you read this Prospectus in its entirety and seek professional advice where necessary. The Securities the subject of this Prospectus should be considered highly speculative.

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## 2.1 REPLACEMENT PROSPECTUS

The differences between this Prospectus and the Original Prospectus are:

- (a) provision of an updated Investigating Accountant's Report;
- (b) provision of an updated Technology Report;
- (c) additional disclosure in respect of the planned commercialisation of the hollow fiber nanofiltration membrane;
- (d) clarification in respect of the expiry dates of patents licensed by De.mem; and
- (e) additional disclosure in respect of the waste water treatment industry, the barriers to entry of the industry, and risks associated with the industry.

## 2.2 INVESTMENT ADVICE

This Prospectus does not provide investment advice and has been prepared without taking account of your financial objectives, financial situation or particular needs (including financial or taxation issues). You should seek professional investment advice before subscribing for Shares under this Prospectus.

## 2.3 ADDITIONAL OFFERS

This Prospectus also includes:

- (f) a private offer of 65,000,000 Shares for nil cash consideration to the holders of securities in De.mem Private Limited, a company incorporated in Singapore (UEN No. 201307015R) (**DMS** or **De.mem**) or their nominee(s) in consideration for the acquisition of 100% of the issued capital of DMS (**Consideration Offer**); and
- (g) a private offer of up to 3,800,000 Options for an issue price of \$0.0001 per Option to Ventnor Capital Pty Ltd (**Ventnor**) and Alto Capital Pty Ltd (**Alto Capital**) or their nominee(s) (**Advisor Options**) in consideration for the provision of corporate advisory services and lead manager services respectively (**Advisor Offer**),

(together, the **Secondary Offers**).

## 2.4 CONDITIONAL OFFERS

The Public Offer and the Consideration Offer are conditional on:

- (a) ASX conditional approval to admit the Shares to Official Quotation; and
- (b) the Company receiving valid applications for at least \$3,750,000 worth of Shares under the Public Offer,

(together, the **Conditions**).

The Offers under this Prospectus are effectively inter-conditional on the successful completion of the Acquisition.

## 2.5 WEB SITE - ELECTRONIC PROSPECTUS

A copy of this Prospectus can be downloaded from the website of the Company at [www.demembranes.com](http://www.demembranes.com). If you are accessing the electronic version of this Prospectus for the purpose of making an investment in the Company, you must be an Australian resident and must only access this Prospectus from within Australia.

There is no facility for the Offers to be accepted electronically or by applying online. Securities will not be issued under the electronic version of the Prospectus. The Corporations Act prohibits any person passing onto another person an Application Form unless it is attached to a hard copy of this Prospectus or it accompanies the complete and unaltered version of this Prospectus. You may obtain a hard copy of this Prospectus free of charge by contacting the Company.

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

## 2.6 WEBSITE

No document or information included on our website is incorporated by reference into this Prospectus.

## 2.7 FORWARD-LOOKING STATEMENTS

This Prospectus contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Prospectus, are expected to take place.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors and our management.

Although the Company believes that the expectations reflected in the forward looking statements included in this Prospectus are reasonable, none of the Company, its Directors, proposed Directors or officers, or any person named in this Prospectus, can give, or gives, any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Prospectus will actually occur or that the assumptions on which those statements are based will prove to be correct or exhaustive beyond the date of its making. Investors are cautioned not to place undue reliance on these forward-looking statements.

Except to the extent required by law, the Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus.

These forward looking statements are subject to various risk factors that could cause our actual results to differ materially from the results expressed or anticipated in these statements. These risk factors are set out in Section 11 of this Prospectus.

## 2.8 PHOTOGRAPHS AND DIAGRAMS

Photographs used in this Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown endorses the Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this prospectus are illustrative only and may not be drawn to scale.

## 2.9 OFFERS IN OVERSEAS JURISDICTIONS

### *Singapore*

This document and any other materials relating to the Shares have not been, and will not be, lodged or registered as a prospectus in Singapore with the Monetary Authority of Singapore. Accordingly, this document and any other document or materials in connection with the offer or sale, or invitation for subscription or purchase, of Shares, may not be issued, circulated or distributed, nor may the Shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore except pursuant to and in accordance with exemptions in Subdivision (4) Division 1, Part XIII of the Securities and Futures Act, Chapter 289 of Singapore (SFA), or as otherwise pursuant to, and in accordance with the conditions of any other applicable provisions of the SFA.

This document has been given to you on the basis that you are (i) an existing holder of Shares, (ii) an "institutional investor" (as defined in the SFA) or (iii) a "relevant person" (as defined in section 275(2) of the SFA). In the event that you are not an investor falling within any of the categories set out above, please return this document immediately. You may not forward or circulate this document to any other person in Singapore.

Any offer is not made to you with a view to the Shares being subsequently offered for sale to any other party. There are on-sale restrictions in Singapore that may be applicable to investors who acquire Shares. As such, investors are advised to acquaint themselves with the SFA provisions relating to resale restrictions in Singapore and comply accordingly.

If you (or any person for whom you are acquiring the Shares) are in Singapore, you (and any such person):

- (a) are an "institutional investor" or a "relevant person" (as such terms are defined in the Securities and Futures Act of Singapore ("SFA"));
- (b) will acquire the new shares in accordance with applicable provisions of the SFA; and
- (c) acknowledge that the offer of the Shares is subject to the restrictions (including selling restrictions) set out in the SFA.



### Germany

The information in this document has been prepared on the basis that all offers of Shares will be made pursuant to an exemption under the Directive 2003/71/EC (**Prospectus Directive**), as amended and implemented in Germany, from the requirement to produce a prospectus for offers of securities.

An offer to the public of Shares has not been made, and may not be made, in Germany except pursuant to one of the following exemptions under the Prospectus Directive as implemented in Germany:

- (a) to any legal entity that is authorized or regulated to operate in the financial markets or whose main business is to invest in financial instruments;
- (b) to any legal entity that satisfies two of the following three criteria: (i) balance sheet total of at least €20,000,000; (ii) annual net turnover of at least €40,000,000 and (iii) own funds of at least €2,000,000 (as shown on its last annual unconsolidated or consolidated financial statements);
- (c) to any person or entity who has requested to be treated as a professional client in accordance with the EU Markets in Financial Instruments Directive (Directive 2004/39/EC, "MiFID"); or
- (d) to any person or entity who is recognised as an eligible counterparty in accordance with Article 24 of the MiFID.

If you (or any person for whom you are acquiring the Shares) are in Germany, you (and any such person) are a "qualified investor" within the meaning of the Prospectus Directive (Directive 2003/71/EC) as amended and implemented in Germany.

### Switzerland

The Shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (**SIX**) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the Shares may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the Shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of Shares will not be supervised by, the Swiss Financial Market Supervisory Authority (FINMA).

This document is personal to the recipient only and not for general circulation in Switzerland.

## 2.10 DEFINED TERMS

Unless the contrary intention appears or the context otherwise requires, words and phrases contained in this Prospectus have the same meaning and interpretation as given in the Corporations Act and capitalised terms have the meaning given in the Glossary in Section 18.

## 2.11 TIME

All references to time in this Prospectus are references to Australian Western Standard Time.

## 2.12 ENQUIRIES

If you are in any doubt as to how to deal with any of the matters raised in this Prospectus, you should consult your broker or legal, financial or other professional adviser without delay. Should you have any questions about the Offers or how to accept the Offers, please call the Company Secretary, Brett Tucker on +61 8 9482 0500.

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# INDICATIVE TIMETABLE





<b>Lodgement of Original Prospectus with the ASIC</b>	31 January 2017
<b>Lodgement of Prospectus with the ASIC</b>	16 February 2017
<b>Opening Date of the Offers</b>	16 February 2017
<b>Closing Date of the Offers</b>	2 March 2017
<b>Completion of the Acquisition</b>	8 March 2017
<b>Issue of Securities under the Offers and despatch of holding statements</b>	8 March 2017
<b>Expected date for quotation on ASX</b>	21 March 2017

\*The above dates are indicative only and may change without notice. The Company reserves the right to extend the Closing Date or close the Offers early without notice.

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# CHAIRMAN'S LETTER



DEAR INVESTOR,

**ON BEHALF OF THE BOARD IT IS MY PLEASURE TO INVITE YOU TO PARTICIPATE IN THE PUBLIC OFFER BY THE COMPANY AS PART OF THE PROCESS TO LIST ON ASX.**

Water pollution is one of the most serious environmental challenges facing emerging and developing economies across the globe. As a consequence, many governments have adopted strict regulations with respect to water and waste water treatment, discharge and recycling. This has led to the emergence of a fast growing industry which is addressing residential and industrial water and waste water treatment challenges worldwide.

De.mem, which was established in 2013, is a specialized provider focused on commercializing innovative products and technologies for decentralized water and waste water treatment – in the Board's opinion, a fast growing segment of the global water treatment industry.

Over the last few years the company has built strong competences in building and operating waste water treatment systems, addressing the complex challenges in different industrial settings, ranging from industries focussed on electronics, to food and beverage, and to oil processing.

De.mem uses various licensed proprietary technologies in its water treatment systems which allow it to increase efficiency and drive down operating costs.

De.mem's flagship technology, a novel low pressure hollow fiber nanofiltration membrane, allows for the generation of high quality water at a comparable low pressure which leads to significantly lower operating costs. The hollow fiber nanofiltration membrane technology is currently in the development phase, with De.mem intending to commence a pilot manufacturing line in the first quarter of 2017. The membrane was originally developed at Singapore's Nanyang Technological University (NTU), one of the leading institutions in water research worldwide. This technology has a number of unique features which make it ideal for a range of applications and has the potential to displace the use of combined ultrafiltration and reverse osmosis systems in various water and water treatment applications. This, combined with energy cost savings from lower operating pressures, can provide cost savings for end users in both capital and operational expenditures.

De.mem's revenues are generated based upon

entry into long term contracts, under which the Company designs and manufactures water and waste water treatment systems, retaining the legal ownership in the systems. Under these agreements, it is paid by the customer through a recurring, mostly monthly, fee. De.mem also designs, manufactures and sells water and waste water treatment systems and equipment to its customers.

De.mem is currently in discussions in relation to a number of contracts with industrial customers from the Asia Pacific region and Europe. We strongly believe that our licensed proprietary technologies combined with our know how in building and operating cost effective water treatment systems will enable the company to expand our reach to new industries and geographies at a comparable low cost.

The Company is supported by an experienced Board of Directors. The Board and management team are led by Andreas Kroell, Chief Executive Officer and Director, and supported by a strong executive team who have significant industry experience.

The Company is seeking to raise up to \$4,500,000 under the Public Offer. The funds raised will be used to support the continued growth and expansion of the Company, continue technology research and development as well as the planned geographic expansion into Australia, and an intended entry into the markets in China and other regions during the third quarter of 2017, in addition to providing general working capital.

An investment in the Company involves a number of risks which are addressed in both Sections 5 and 12.

This Prospectus contains important information regarding the Company and I encourage you to read it in its entirety.

I look forward to welcoming you as a Shareholder.

Yours sincerely

**Cosimo Trimigliozzi**  
Chairman

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# INVESTMENT OVERVIEW

This Section is a summary only and is not intended to provide full information for investors intending to apply for Shares offered pursuant to this Prospectus. This Prospectus should be read and considered in its entirety.



ITEM	SUMMARY	FURTHER INFORMATION
A. COMPANY		
Who is the issuer of this Prospectus?	De.mem Limited (ACN 614 756 642) (proposed ASX code: DEM).	
Who is the Company?	<p>The Company was incorporated on 12 September 2016 as a holding company to complete the acquisition of 100% of the issued capital of DMS (<b>Acquisition</b>). On 20 October 2016, the Company, DMS and two major shareholders of DMS, New Asia Investments Pte Ltd and NA Singapore Early Stage Venture Fund I Pte Ltd (<b>Major Shareholders</b>) entered into an implementation agreement to complete the Acquisition (<b>Implementation Agreement</b>).</p> <p>DMS was incorporated for the primary purpose of designing, building and operating systems and technology for de-centralised water treatment sector in the Asia Pacific region.</p> <p>DMS's de-centralised water treatment systems are used to provide potable water or to treat waste water so that it can be recycled or discharged in compliance with government standards. DMS is currently providing water treatment systems to customers in both the industrial and municipal/residential sectors in Singapore and Vietnam, and intends to enter the Australian market after the Company's admission to the Official List. The company is targeting entry to the Chinese market during the third quarter of 2017.</p> <p>DMS's core target market is the industrial market where customers include factories, corporations, multinationals and industrial parks. The electronics, specialty chemicals, food and beverage, oil and gas and mining sectors have been identified as key target market segments, given the highly complex waste water that is produced as part of the manufacturing or refining processes in these industries. DMS also serves municipal, private and residential customers who have a requirement for de-centralized water treatment systems. DMS offers a range of systems and solutions from the delivery of standardised small scale systems and containers up to the construction of municipal water treatment plants.</p> <p>DMS's equipment and products are currently available for sale directly to customers or through a build, own, operate (<b>BOO</b>) model. Further information on the Company's proposed revenue model on completion of the Acquisition (<b>Completion</b>) is included in Section 7 of the Prospectus.</p> <p>DMS's product offering is backed by a range of licensed proprietary products and technologies including control and monitoring systems and innovative membranes originally developed by NTU. Further information on DMS's technology interests are included in Section 7 of the Prospectus.</p>	Sections 7 and 8

ITEM	SUMMARY	FURTHER INFORMATION
<b>How will the Acquisition be implemented?</b>	The Acquisition will be implemented in accordance with the terms of the Implementation Agreement, as summarised in Section 15.1.	Section 15.1
<b>How were the terms of the Acquisition agreed?</b>	<p>The Acquisition was negotiated on an arm's length basis, and the Company is satisfied that the terms of the Implementation Agreement are the best terms that the Company was able to negotiate with DMS.</p> <p>The historical position of DMS does not provide a sufficient basis, nor is it possible or appropriate to apply formal valuation methodologies (e.g. discounted cash flow) to the Acquisition consideration.</p> <p>In determining whether the consideration for the Acquisition was appropriate, and accordingly whether the Company should make the Acquisition, the Company considered the following qualitative factors:</p> <ul style="list-style-type: none"> <li>(a) the market and business for waste water products is growing (see Section 7 for further information on the market and business growth);</li> <li>(b) DMS's intellectual property interests are licenced from the NTUitive, which protects its intellectual property by a number of patents. This gives the Board comfort on the status of the technology and the intellectual property interests of DMS (see Sections 15.2 and 15.3); and</li> <li>(c) DMS has a credible technical and management team (see Section 13 for details of management profiles).</li> </ul> <p>The Board is of the view that proceeding with the Acquisition is in the best interests of the Company for the reasons set out above.</p>	
<b>What are the key business objectives of the Company?</b>	<p>The Company's main objectives on completion of the Public Offer and the Acquisition are to:</p> <ul style="list-style-type: none"> <li>(a) fund a research and development program of the nano-filtration membrane;</li> <li>(b) fund the investment into new BOO water treatment plants;</li> <li>(c) provide general working capital;</li> <li>(d) pay the expenses of the Offers; and</li> <li>(e) enable admission to the official list of the ASX (<b>Official List</b>) to provide the Company with improved access to capital markets.</li> </ul>	



ITEM	SUMMARY	FURTHER INFORMATION
<b>B. BUSINESS MODEL</b>		
<b>What are the key business strategies of the Company?</b>	<p>Upon Completion of the Acquisition, completion of the Offers and the admission to quotation of the Shares on the ASX, the Company will proceed with the business and expansion strategy.</p> <p>The Company's expansion strategy is based on the following elements:</p> <p>(a) <b>Customer adoption</b></p> <p>Continue to pursue industrial customers operating in the electronics, specialty chemicals, food and beverage, oil and gas and mining sectors;</p> <p>(b) <b>Product development</b></p> <p>i. Nanofiltration membrane – De.mem has exclusively licensed a low cost, high water quality treatment solution originally developed at NTU that can be applied to both the residential and industrial sectors;</p> <p>ii. De.live – a remote monitoring and control system for water treatment systems and plants;</p> <p>(c) <b>Geographical expansion</b></p> <p>Expand the business into Australia after the Company's admission to the Official List and into the Chinese market during the third quarter of 2017 using funds raised under the Public Offer.</p> <p>The Directors consider that the Public Offer will provide the Company with the capital to execute its commercialisation strategy.</p> <p>Further information on the Company's business model is included in Section 7.9 of the Prospectus. Investors should note, given the Company's limited operating history, limited revenue, and the fact that it is currently loss making, the ability to achieve its objectives is high risk.</p>	Sections 7.9 and 7.10
<b>How will the Company generate income?</b>	<p>De.mem derives revenues from the sales of products, solutions and services to customers that require water and/or waste water treatment.</p> <p>Revenues are generated based on two different types of business models:</p> <p>(a) <b>BOO agreements:</b> Long term contracts, under which the Company designs and manufactures water and waste water treatment systems. Once complete, De.mem rents the systems out and operates them on behalf of its customers at the customer's site. The Company retains the legal ownership in the systems. It is paid by the customer through a recurring, mostly monthly, fee.</p>	Sections 7.9, 7.11 and 7.12

ITEM	SUMMARY	FURTHER INFORMATION
How will the Company generate income?	<p>(b) <b>System and equipment sales:</b> De.mem designs, manufactures and sells water and waste water treatment systems and equipment to its customers.</p> <p>As detailed in Section 7.11, De.mem currently manufactures its water and waste water treatment systems and equipment. Given the Company's existing revenue models, the Company is not dependent on the successful commercialisation of the hollow fiber nanofiltration membrane technology. If the Company is not successful in commercialising this technology it will continue to pursue the design, manufacture and maintenance of industrial waste water treatment plants.</p> <p>De.mem's licensed hollow fiber nanofiltration membrane technology is currently in the development phase, with De.mem intending to commence a pilot manufacturing line in the first quarter of 2017. The Company believes that the successful commercialisation of the nanofiltration membrane can have a significant positive impact on the Company's business. If the technology is successfully validated, it can strengthen the position of the Company as a provider of water treatment systems. Refer to Section 7.12 for further details.</p>	Sections 7.1, 7.9, 7.11 and 7.12
What stage of commercialisation is De.mem's licensed hollow fiber nanofiltration membrane technology at?	<p>As set out in Section 7.12, De.mem's licensed hollow fiber nanofiltration membrane technology is currently in the development phase with De.mem intending to commence a pilot manufacturing line in the first quarter of 2017.</p> <p>Once the pilot line is operational, the Company intends to undertake in-field validation for those applications that have been tested in the laboratory at De.mem and NTU as at the date of this Prospectus, including the treatment of different types of industrial waste waters and palm oil mill effluent, but also other types of industrial waste water that have not been tested in the laboratory before. The in-field validation aims to provide further operating data that is required for the optimisation of operations and deployment of the membranes at a larger, commercial scale and is expected to be completed in 2017.</p> <p>The hollow fiber nanofiltration membrane has been fully developed and the Company does not expect the design composition to change materially during the validation testing phase. In the event that any changes are made as a result of the in-field validation, these changes are expected to relate to the operating parameters of the implementation of the hollow fiber nanofiltration membrane.</p>	

ITEM	SUMMARY	FURTHER INFORMATION
What stage of commercialisation is De.mem's licensed hollow fiber nanofiltration membrane technology at?	After completion of the in-field validation, the Company intends to scale up manufacture of the new hollow fiber nanofiltration membranes. To accommodate the additional storage capacity and manufacturing equipment the Company intends to source a larger factory. Subject to the performance of the Company, this is expected to take place in 2018.	
What are De.mem's competitive strengths?	<p>De.mem's competitive strengths include:</p> <ul style="list-style-type: none"> <li>(a) <b>Established customer base:</b> De.mem has an established revenue generating business with approximately S\$1,300,000 in cumulative revenues to 30 June 2016 recorded since the establishment of De.mem in 2013;</li> <li>(b) <b>Proprietary technology:</b> De.mem has licensed a range of technologies from Singapore's NTU;</li> <li>(c) <b>Scalable business model:</b> De.mem intends to scale its business model along its existing customers and markets, within the key industries covered as well as into new industries and markets, such as initially Australia and an intended entry into the Chinese market during the third quarter of 2017; and</li> <li>(d) <b>Continued investment in technology development:</b> De.mem intends to invest in further development efforts to improve and expand the range of licensed proprietary technologies. The Company also intends to in-license further new technologies developed at NTU or other institutions.</li> </ul>	Section 7.15
What are the key dependencies of the Company's business model?	<p>The key factors that the Company will depend on to meet its objectives on Completion are:</p> <ul style="list-style-type: none"> <li>(a) the successful completion of the Public Offer;</li> <li>(b) the ability to protect the Company's intellectual property;</li> <li>(c) the successful development and commercialisation of the low pressure nanofiltration technology; and</li> <li>(d) retaining key personnel of De.mem.</li> </ul>	Section 7.14
<b>C. KEY INVESTMENT HIGHLIGHTS</b>		
What are the key investment highlights?	<p>The Directors are of the view that an investment in the Company provides the following non-exclusive list of key highlights:</p> <ul style="list-style-type: none"> <li>(a) DMS has licensed a range of technologies from Singapore's NTU, one of the world's leading universities in water research.</li> <li>(b) The Company intends to scale its business model along its existing customers and markets, within the key industries covered as well as into new industries and markets, such as initially the Australian market after the Company's admission to the Official List and an intended entry into the Chinese market during the third quarter of 2017.</li> <li>(c) The Company intends to undertake further development efforts to improve and expand the range of licensed proprietary technologies.</li> </ul>	Section 7

ITEM	SUMMARY	FURTHER INFORMATION
<b>What are the key investment highlights?</b>	<p>(d) DMS makes use of advanced technologies and components such as licensed proprietary monitoring systems and membranes.</p> <p>(e) DMS is able to offer solutions to customers under a build, own, operate model.</p> <p>(f) DMS's product offering covers key aspects of the value chain, including proprietary products, process know-how, implementation / systems integration and operations know-how.</p>	Section 7
<b>D. KEY BUSINESS RISKS</b>		
<b>What are the key risks of an investment in the Company?</b>	<p>The business, assets and operations of the Company after Completion are subject to certain risk factors that have the potential to influence the operating and financial performance of the Company in the future. These risks can impact on the value of an investment in the securities of the Company.</p> <p>The Board aims to manage these risks by carefully planning its activities and implementing risk control measures. Some of the risks are, however, highly unpredictable and the extent to which they can be effectively managed is limited.</p> <p>Based on the information available, a summary of the key risk factors affecting the business of the Company are as follows:</p> <p>(a) <b>Limited history</b></p> <p>The Company is essentially a start-up company with limited trading history. No assurance can be given that the Company will achieve commercial viability through its water treatment products and technology.</p> <p>(b) <b>Sales risk</b></p> <p>While the Company already has secured a number of initial contracts and customer relationships, its ability to sell its products at a larger scale still needs to be proven.</p> <p>(c) <b>Product quality risks</b></p> <p>The products and technology supplied by the Company may not be functional, may be faulty, or not meet customers' expectations. This may lead to requirements for the Company to repair or improve its products after sale and/or installation, which may diminish operating margins or lead to losses.</p> <p>(d) <b>Manufacturing risks</b></p> <p>Given the short manufacturing experience in comparison to other market competitors, the Company's products may be subject to product quality risks.</p> <p>(e) <b>Supplier risk</b></p> <p>The Company sources certain key components for its systems from third party suppliers. The delivery of such components may be delayed, or a specific supplier may not be able to deliver at all, which may lead to a longer sales cycle or may force the Company to shift to another supplier.</p>	Section 12

ITEM	SUMMARY	FURTHER INFORMATION
	<p>(f) <b>Key personnel risk</b></p> <p>The Company depends on certain key personnel and the departure of any of them may lead to disruptions of customer relationships or delays in the manufacturing and product development efforts.</p> <p>(g) <b>Development risks</b></p> <p>The Company's new licensed proprietary nanofiltration membrane technology is still at an early stage of development and validation. While the Company is not presently aware of any potential problems that may result from the in-field validation testing process and is unlikely to, until such time as the in-field validation testing has been completed, this process is subject to uncertainties and there may be delays, or the project may be unsuccessful as a whole. The technology still requires substantial work to be able to be used at a commercial scale.</p> <p>(h) <b>New product technology risk</b></p> <p>The Company may be reliant upon certain technologies and upon the successful commercialisation of these technologies. There is a risk that as marketable technologies continue to develop in the water industry there may be certain product developments that supersede, and render obsolete, the products and services of the Company.</p> <p>(i) <b>Intellectual property risks</b></p> <p>The success of the Company's new licensed proprietary nanofiltration membrane technology depends largely on the ability of the Company to protect the underlying know-how, while not infringing the proprietary rights of others. There is no assurance that others will not be able to copy the technology.</p> <p>The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company. For further information on these key risks and additional risks faced by the Company, please refer to Section 12.</p>	

## E. DIRECTORS AND KEY MANAGEMENT PERSONNEL

### Who are the Directors and key management?

The Directors are as follows:

Section 13

- (a) Cosimo Trimiglozzi – Non-Executive Chairman;
- (b) Andreas Kroell – Chief Executive Officer and Director;
- (c) Bernd Dautel – Non-Executive Director;
- (d) Stuart Carmichael – Non-Executive Director; and
- (e) Michael Edwards – Non-Executive Director.

Information about the experience, background and independence of each Director and each member of key management are set out in Section 13.1. Details of the personal interests of each of the Directors are set out in Section 13.2.

ITEM	SUMMARY	FURTHER INFORMATION												
F. SUBSTANTIAL SHAREHOLDERS														
Who will be the substantial shareholders of the Company upon completion of the Offers?	<p>As set out in Section 8.2, the Major Shareholders will become substantial shareholders as a result of receiving Consideration Shares as Vendors under the Consideration Offer.</p> <p>In addition to their Consideration Shares, NA Singapore Early-Stage Venture Fund I Pte Ltd has advised the Company that it intends to subscribe for up to 1,000,000 Shares under the Public Offer, which will result in an increase in shareholding from 45.40% on completion of the Acquisition, to 46.50% on completion of the Offers (these percentages assume minimum subscription), as set out below:</p> <table><thead><tr><th>SHAREHOLDER</th><th>SHARES</th><th>% (UNDILUTED)</th><th>% (FULLY DILUTED)</th></tr></thead><tbody><tr><td>NA Singapore Early-Stage Venture Fund I Pte Ltd</td><td>42,795,168</td><td>46.49</td><td>44.67</td></tr><tr><td>New Asia Investments Pte Ltd</td><td>11,921,611</td><td>12.95</td><td>11.91</td></tr></tbody></table> <p>On completion of the Offers, the Major Shareholders will have a maximum combined relevant interest in 54,716,779 Shares, with a maximum percentage of 59.44%, assuming minimum subscription under the Public Offer. As a result of their shareholding, the Major Shareholders are considered to be related parties of the Company.</p> <p>Further details in relation to the Major Shareholders and their maximum shareholding interests on completion of the Offers are set out in Section 8.2.</p>	SHAREHOLDER	SHARES	% (UNDILUTED)	% (FULLY DILUTED)	NA Singapore Early-Stage Venture Fund I Pte Ltd	42,795,168	46.49	44.67	New Asia Investments Pte Ltd	11,921,611	12.95	11.91	Section 8.2
SHAREHOLDER	SHARES	% (UNDILUTED)	% (FULLY DILUTED)											
NA Singapore Early-Stage Venture Fund I Pte Ltd	42,795,168	46.49	44.67											
New Asia Investments Pte Ltd	11,921,611	12.95	11.91											
G. FINANCIAL INFORMATION														
How have the Company and De.mem Group performed over the past 12 months?	The audited statements of financial position for the Company and De.mem Group for the six months ended 30 June 2016 and the years ended 31 December 2015 and 31 December 2014 are set out in the Investigating Accountant's Report in Section 10.	Section 10												
What is the financial outlook for the Company?	The reviewed pro-forma statement of financial position for the Company as at 30 June 2016 (which assumes completion of the Acquisition occurs) is set out in the Investigating Accountant's Report in Section 10.	Section 10												
How will the Company fund the activities?	The funding for the Company's short to medium term activities will be generated from a combination of the money raised under the Public Offer, the existing cash reserves and the commercialisation strategy. The Board believes that these funds will provide the Company with sufficient working capital at anticipated expenditure levels to achieve its objectives set out in this Prospectus.	Section 6.10												



ITEM	SUMMARY	FURTHER INFORMATION
<b>Has the Company included forecast financial information in respect of its business?</b>	<p>Given the current status of the Company's operations the Directors do not consider it appropriate to forecast future earnings.</p> <p>Any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection on a reasonable basis.</p>	Section 10
<b>H. OFFERS</b>		
<b>What is being offered and who is entitled to participate?</b>	<p>The Public Offer is an offer of up to 18,750,000 Shares at an issue price of \$0.20 per Share to raise up to \$3,750,000. Oversubscriptions of up to a further 3,750,000 Shares at an issue price of \$0.20 per Share to raise up to a further \$750,000 may be accepted.</p> <p>The Public Offer is open to retail investors and sophisticated investors in Australia and New Zealand, and sophisticated investors in Singapore, Germany and Switzerland.</p>	Section 6.1
<b>What is the purpose of the Public Offer?</b>	<p>The purpose of the Public Offer is to position the Company to seek to achieve the objectives set out in Section 6.10 and to facilitate an application by the Company for admission to the Official List. On completion of the minimum raising of \$3,750,000 under the Public Offer, the Board believes the Company will have sufficient working capital to achieve these objectives.</p> <p>The Company intends to apply funds raised from the Public Offer, together with existing cash reserves following admission of the Company to the Official List in the manner set out in the table in Section 6.10.</p>	Sections 6.1 and 6.10.
<b>Is the Public Offer underwritten?</b>	The Public Offer is not underwritten.	Section 6.9
<b>Who is the manager to the Public Offer?</b>	<p>The manager to the Public Offer is Alto Capital.</p> <p>Further details of the appointment of Alto Capital as lead manager is set out in Section 15.9.</p>	Section 15.9
<b>What is being offered under the Secondary Offers and what are the purposes of the Secondary Offers?</b>	<p>This Prospectus also contains an offer of:</p> <ul style="list-style-type: none"> <li>(a) 65,000,000 Shares to the Vendors (or their nominee(s)); and</li> <li>(b) up to 3,800,000 Options to Ventnor and Alto Capital (or their respective nominee(s)).</li> </ul> <p>The purposes of the Secondary Offers are to remove the need for an additional disclosure document to be issued upon the sale of any Securities that are issued under the Secondary Offers.</p> <p>The Secondary Offers are made to the Vendors, Ventnor and Alto Capital (or their respective nominee(s)). You should not complete an Application Form in relation to a Secondary Offer unless specifically directed to do so by the Company.</p>	Section 6.2

ITEM	SUMMARY	FURTHER INFORMATION
<b>What will the Company's capital structure look like after completion of the Offers and the Acquisition?</b>	The Company's capital structure upon completion of the Offers and the Acquisition is set out in Section 8.1.	Section 8.1
<b>Will I be guaranteed a minimum allocation under the Public Offer?</b>	No, the Company is not in a position to guarantee a minimum application of Shares under the Public Offer.	Section 6.7
<b>What are the key terms of the Securities offered under this Prospectus?</b>	<p>A summary of the material rights and liabilities attaching to the Shares offered under the Public Offer and the Consideration Offer are set out in Section 16.2.</p> <p>The terms and conditions of the Options offered under the Advisor Offer are set out in Section 16.3.</p>	Sections 16.2 and 16.3
<b>Will any Securities be subject to escrow?</b>	<p>Subject to the Company complying with Chapters 1 and 2 of the ASX Listing Rules and completing the Offers, certain Securities on issue may be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation.</p> <p>During the period in which these Securities are prohibited from being transferred, trading in Shares may be less liquid which may impact on the ability of a Shareholder to dispose of his or her Shares in a timely manner.</p> <p>The Company will announce to ASX full details (quantity and duration) of the Securities required to be held in escrow prior to the Shares commencing trading on ASX.</p>	Section 8.3
<b>Will the Shares be quoted?</b>	The Company will make an application to ASX for quotation of all Shares to be issued under the Public Offer no later than seven (7) days after the date of this Prospectus.	Section 6.5
<b>What are the key dates of the Offers?</b>	The key dates of the Offers are set out in the indicative timetable in Section 3.	Section 3
<b>What is the minimum investment size under the Public Offer?</b>	Applications under the Public Offer must be for a minimum of \$2,000 worth of Shares (10,000 Shares) and thereafter, in multiples of \$200 worth of Shares (1,000 Shares).	Section 6.4
<b>Are there any conditions to the Offers?</b>	<p>The Public Offer and the Consideration Offer are conditional on:</p> <ul style="list-style-type: none"> <li>(a) the Company receiving valid application for at least \$3,750,000 pursuant to the Public Offer; and</li> <li>(b) ASX conditional approval to admit the Shares to Official Quotation.</li> </ul>	Section 2.4

ITEM	SUMMARY	FURTHER INFORMATION
<b>I. USE OF PROCEEDS</b>		
<b>How will the proceeds of the Public Offer be used?</b>	<p>Together with existing cash reserves of the Company, the Public Offer proceeds will be used for:</p> <ul style="list-style-type: none"> <li>(a) the development and execution of BOO contracts;</li> <li>(b) nanofiltration membrane development;</li> <li>(c) geographic expansion, in particular into Australia upon the Company's admission to the Official List and an intended entry into the Chinese market during the third quarter of 2017; and</li> <li>(d) contribution to the working capital of the Company.</li> </ul>	Section 6.10
<b>J. ADDITIONAL INFORMATION</b>		
<b>Is there any brokerage, commission or stamp duty payable by applicants?</b>	No brokerage, commission or duty is payable by Applicants on the acquisition of Securities under the Offers.	
<b>What are the tax implications of investing in Shares?</b>	<p>Shares may be subject to Australian tax on dividends and possibly capital gains tax on a future disposal of Shares issued under this Prospectus.</p> <p>The tax consequences of any investment in Shares will depend upon an investor's particular circumstances. Applicants should obtain their own tax advice prior to deciding whether to subscribe for Shares offered under this Prospectus.</p>	Section 8.5
<b>Where can I find more information?</b>	<ul style="list-style-type: none"> <li>• By speaking to your sharebroker, solicitor, accountant or other independent professional adviser.</li> <li>• By contacting the Company Secretary on +618 9482 0500.</li> </ul>	

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# DETAILS OF THE OFFERS



## 6.1 THE PUBLIC OFFER

Pursuant to this Prospectus, the Company invites applications for up to 18,750,000 Shares at an issue price of \$0.20 per Share to raise up to \$3,750,000.

The Company may accept oversubscriptions of up to a further \$750,000 through the issue of up to a further 3,750,000 Shares at an issue price of \$0.20 per Share under the Public Offer. The maximum amount which may be raised under this Prospectus is \$4,500,000.

The Shares offered under the Public Offer will rank equally with the existing Shares on issue.

The purpose of the Public Offer is to facilitate an application by the Company for admission of the Company to the Official List. The funds raised from the Public Offer will be used in the manner set out in Section 6.10.

## 6.2 SECONDARY OFFERS

This Prospectus also includes an offer of:

- (a) 65,000,000 Shares to be issued to the Vendors pursuant to the Acquisition under the Consideration Offer; and
- (b) 3,800,000 Options to be issued to Ventnor and Alto Capital (or their respective nominee(s)) under the Advisor Offer. The Options will be equally distributed between Ventnor and Alto Capital.

The terms of the Shares offered under the Consideration Offer are summarised in Section 16.2. The Shares offered under the Consideration Offer will rank equally with the existing Shares on issue.

The terms of the Options to be offered under the Advisor Offer are summarised in Section 16.3. The Shares to be issued upon exercise of the Options will rank equally with the existing Shares on issue.

Each of the Secondary Offers is personal to the Vendors, Ventnor and Alto Capital (or their respective nominee(s)), as the case may be, and an Application Form in respect of the Consideration Offer and/or the Advisor Offer will be issued to the Vendors, Ventnor and Alto Capital as applicable together with a copy of this Prospectus.

As such, Securities offered under those Secondary Offers will be allocated and issued to those parties (or their respective nominees) only. Subject to satisfaction of the Conditions, allocations under the Secondary Offers are guaranteed.

The Securities issued under the Secondary Offers may be subject to escrow under the ASX Listing Rules. Please refer to Section 8.3 for a summary of the likely escrow position.

## 6.3 MINIMUM SUBSCRIPTION

If the minimum subscription to the Public Offer of \$3,750,000 has not been raised within three months after the date of the Original Prospectus, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

## 6.4 APPLICATIONS

Applications for Shares under the Public Offer must be made using the Application Form.

Applications for Shares must be for a minimum of 10,000 Shares and thereafter in multiples of 1,000 Shares and payment for the Shares must be made in full at the issue price of \$0.20 per Share.

Completed Application Forms and accompanying cheques, made payable to "**De.mem Limited**" and crossed "Not Negotiable", must be mailed or delivered to the address set out on the Application Form by no later than the Closing Date.

The Company reserves the right to close the Public Offer early.

## 6.5 ASX LISTING

Application for Official Quotation by ASX of the Shares offered pursuant to this Prospectus was made within seven (7) days after the date of the Original Prospectus.

If the Shares are not admitted to Official Quotation by ASX before the expiration of 3 months after the date of issue of the Original Prospectus, or such period as varied by the ASIC, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

The fact that ASX may grant Official Quotation to the Shares is not to be taken in any way as an indication of the merits of the Company or the Shares now offered for subscription.

The Company will not apply for Official Quotation by ASX of the Options offered pursuant to this Prospectus. Application for Official Quotation of the Shares to be issued on exercise of the Options will be made in accordance with the ASX Listing Rules.

## 6.6 ISSUE

Subject to the minimum subscription to the Public Offer being reached and ASX granting conditional approval for the Company to be admitted to the Official List, issue of the Securities offered by this Prospectus will take place as soon as practicable after the Closing Date.

Pending the issue of the Shares or payment of refunds pursuant to this Prospectus, all application monies will be held by the Company in trust for the Applicants in a separate bank account as required by the Corporations Act. The Company, however, will be entitled to retain all interest that accrues on the bank account and each Applicant waives the right to claim interest.

The Directors will determine the recipients of the issued Shares under the Public Offer in their sole discretion. The Directors reserve the right to reject any application or to allocate any applicant fewer Shares than the number applied for. Where the number of Shares issued is less than the number applied for, or where no issue is made, surplus application monies will be refunded without any interest to the Applicant as soon as practicable after the Closing Date.

## 6.7 APPLICANTS OUTSIDE AUSTRALIA

This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus. The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

No action has been taken to register or qualify the Securities or otherwise permit a public offering of the Shares the subject of this Prospectus in any jurisdiction outside Australia. As detailed in Section 2.9, the Shares may be issued to certain types of investors in Singapore, Switzerland and/or Germany. Applicants who are resident in countries other than Australia should consult their professional advisers as to whether any governmental or other consents are required or whether any other formalities need to be considered and followed.

If you are outside Australia it is your responsibility to obtain all necessary approvals for the issue of the Shares pursuant to this Prospectus. The return of a completed Application Form will be taken by the Company to constitute a representation and warranty by you that all relevant approvals have been obtained.

## 6.8 OVERSUBSCRIPTIONS

The Company may accept oversubscriptions of up to a further \$750,000 through the issue of up to a further 3,750,000 Shares at an issue price of \$0.20 per Share under the Public Offer. The maximum amount which may be raised under this Prospectus is \$4,500,000.

## 6.9 NOT UNDERWRITTEN

The Public Offer is not underwritten.



## 6.10 USE OF FUNDS

The Company intends to apply funds raised from the Public Offer, together with existing cash reserves, over the first two years following admission of the Company to the Official List as follows:

FUNDS AVAILABLE	MINIMUM SUBSCRIPTION (\$) (\$3,750,000)	PERCENTAGE OF FUNDS (%)	FULL SUBSCRIPTION (\$) (\$4,500,000)	PERCENTAGE OF FUNDS (%)
Existing cash reserves <sup>1</sup>	600,000	12.63%	600,000	10.90%
Cash reserves of DMS <sup>2</sup>	400,000	8.42%	400,000	7.28%
Funds raised from the Public Offer	3,750,000	78.95%	4,500,000	81.82%
<b>Total</b>	<b>4,750,000</b>	<b>100.00%</b>	<b>5,500,000</b>	<b>100.00%</b>
<b>Allocation of funds</b>				
Expenses of the Offers <sup>3</sup>	500,000	10.53%	550,000	10.00%
BOO contracts	1,715,000	36.10%	1,845,000	33.55%
Nanofiltration membrane manufacture <sup>4</sup>	950,000	20.00%	1,355,000	24.64%
Other product development and patent expenses	145,000	3.05%	180,000	3.27%
Geographic expansion	790,000	16.63%	850,000	15.45%
Sales and marketing expenses	350,000	7.37%	350,000	6.36%
Working capital	300,000	6.32%	370,000	6.73%
<b>Total</b>	<b>4,750,000</b>	<b>100.00%</b>	<b>5,500,000</b>	<b>100.00%</b>

1 Refer to the Investigating Accountant's Report set out in Section 10 of this Prospectus for further details.

2 The cash reserves of De.mem Pte Ltd are to be acquired by the Company following completion of the Consideration Offer. These funds are held in Singapore dollars and are converted to Australian dollars at an assumed exchange rate of 1.05 SGD:1 AUD.

3 Refer to Section 16.9 of this Prospectus for further details.

4 This includes funds to be spend on the pilot manufacturing line, as set out in Section 7.12.

In the event the Company raises more than the minimum subscription of \$3,750,000, the additional funds raised will be allocated pro rata to the expenditure items listed in the table above. On completion of the Public Offer, the Board believes the Company will have sufficient working capital to achieve these objectives.

The above table is a statement of current intentions as of the date of this Prospectus. As with any budget, intervening events including commercial success or failure and new circumstances have the potential to affect the manner in which the funds are ultimately applied. The Board reserves the right to alter the way funds are applied on this basis.

## 6.11 COMMISSIONS PAYABLE

The Company reserves the right to pay a commission of 6% (exclusive of goods and services tax) of amounts subscribed through any licensed securities dealers or Australian financial services licensee, including parties associated with Directors on identical terms, in respect of any valid applications lodged and accepted by the Company and bearing the stamp of the licensed securities dealer or Australian financial services licensee. Payments will be subject to the receipt of a proper tax invoice from the licensed securities dealer or Australian financial services licensee.

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# BUSINESS AND TECHNOLOGY OVERVIEW

De.mem specializes in the application of membranes and membrane-based technologies in de-centralized waste water treatment. Membranes provide a physical barrier to water contaminants as, while clean water can permeate the membranes, contaminants are retained and therefore removed from the treated water stream. Membranes are a widely applicable technology in water treatment.



## 7.1 BACKGROUND

De.mem specializes in the application of membranes and membrane-based technologies in de-centralized waste water treatment. Membranes provide a physical barrier to water contaminants as, while clean water can permeate the membranes, contaminants are retained and therefore removed from the treated water stream. Membranes are a widely applicable technology in water treatment.

De.mem designs, builds, owns and operates membrane-based, de-centralized water and waste water treatment systems with a focus on the Asia Pacific region.

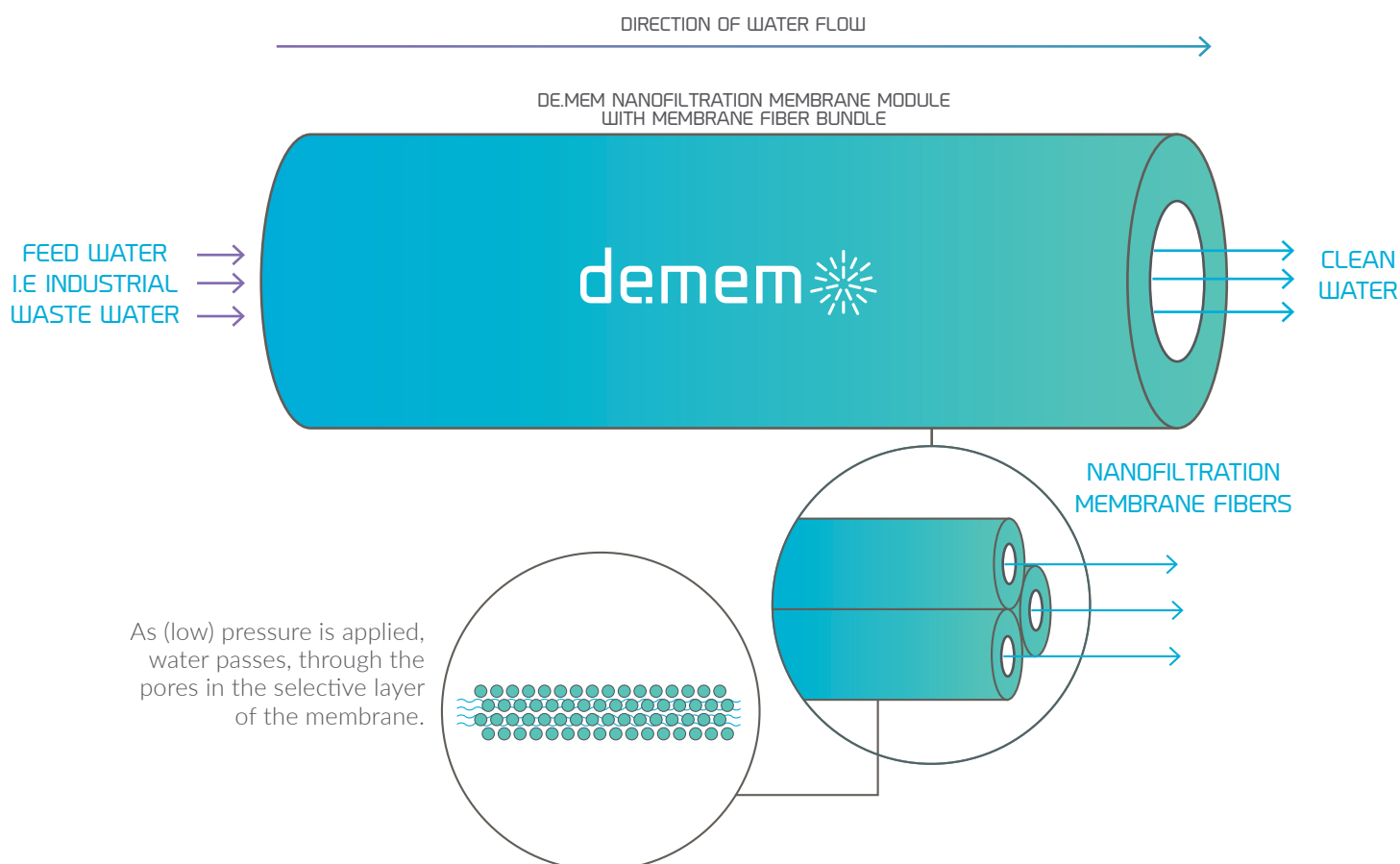
De.mem was incorporated in 2013 and is headquartered in Singapore. The group structure of De.mem is set out below in Section 7.2.

De.mem has commercialized a range of licensed proprietary products and technologies developed for de-centralized water treatment applications. It is through these technologies that De.mem is able to substantially reduce its clients' operating expenditures or capital expenditures for water or waste water treatment compared to some other common water treatment technologies.

As detailed in Section 7.11, De.mem currently manufactures its water and waste water treatment systems and equipment. Given the Company's existing activities, the Company is not dependent on the successful commercialisation of the hollow fiber nanofiltration membrane technology. If the Company is not successful in commercialising the hollow fiber nanofiltration technology it will continue to pursue the design, manufacture and maintenance of industrial waste water treatment plants.

De.mem's licensed hollow fiber nanofiltration membrane technology is currently in the development phase, with De.mem intending to commence a pilot manufacturing line in the first quarter of 2017. The Company believes that the successful commercialisation of the nanofiltration membrane can have a significant positive impact on the Company's business. If successfully validated, it can strengthen the position of the Company as a provider of water treatment systems. Refer to Section 7.12 for further details.

De.mem's licensed proprietary technologies, products and solutions help to convert different types of feed water into output water of the desired quality. A simplified process which treats water using De.mem's hollow fiber membranes is shown below:



De.mem's licensed proprietary technologies, which are licensed from Singapore's NTU, include a novel sensor technology for the monitoring of membrane fouling and integrity. De.mem can make use of this technology as part of its monitoring and controlling solutions. Furthermore, De.mem has exclusively licensed an innovative low-pressure hollow fiber nanofiltration membrane from NTU, which is intended to be used for different sectors and applications and is currently in the manufacturing scale up. A summary of the exclusive licence agreement entered into by DMS and Nanyang Technological University – Ntuitive Pte Ltd (a wholly owned subsidiary of NTU) (**Ntuitive**) (**Exclusive Licence Agreement**) is set out in Section 15.3.

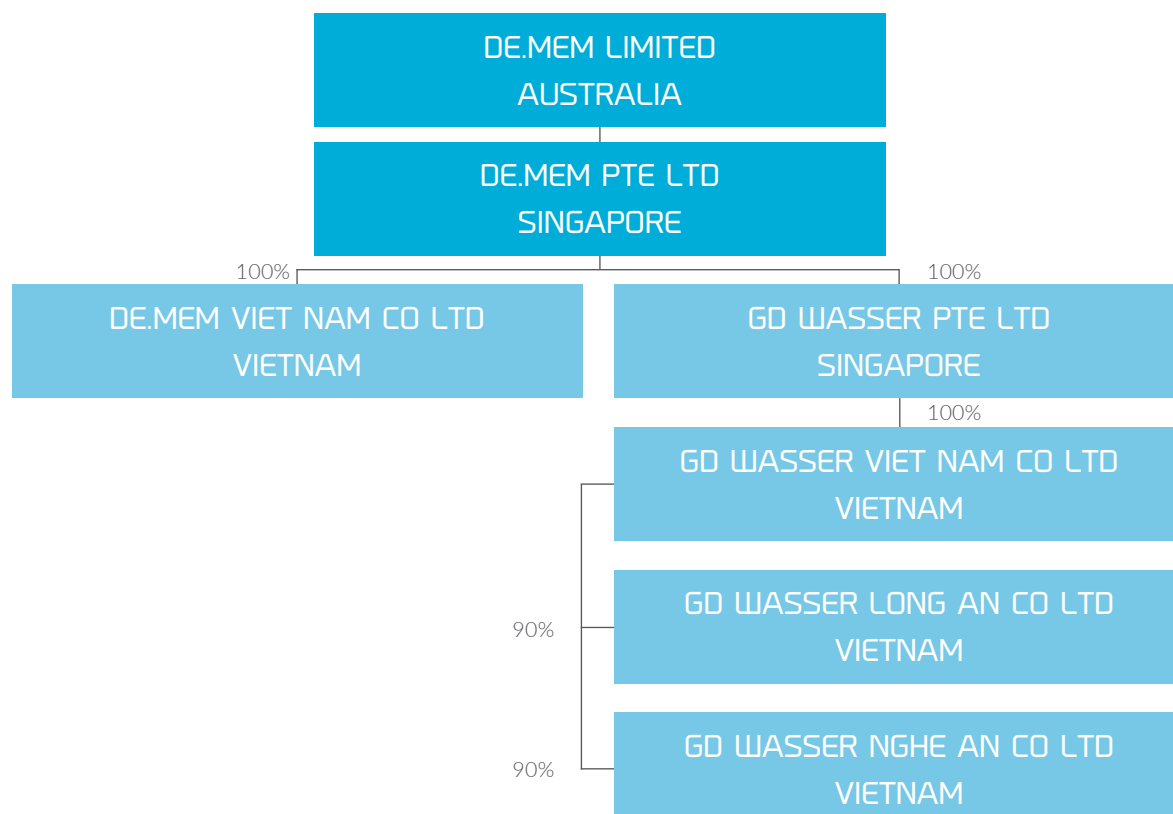
De.mem presents its product offering within two business segments:

- (a) **Industrial:** In the industrial segment, De.mem provides systems and solutions to its customers mainly for applications in industrial waste water treatment. With the licensed proprietary technologies being a key part of its solutions, De.mem designs and engineers its water and waste water treatment systems exactly according to the customers' specific water/ waste water characteristics and requirements. Depending on the customer's requirements, De.mem can offer to run the systems on the clients' behalf, based on a long term contract under a BOO model.
- (b) **Municipal and residential:** In the municipal and residential segment, De.mem offers its products and solutions to municipalities or residential developers and other related companies.

## 7.2 GROUP STRUCTURE

De.mem Limited is a public company registered in Australia on 12 September 2016. Other than in its capacity as the ultimate holding company for De.mem Pte Ltd, Singapore and De.mem Viet Nam Co Ltd on completion of the Acquisition, it is currently not involved in any business activities and does not have any material assets.

The corporate structure of the Company on Completion will be as follows:



De.mem Pte Ltd, Singapore is a company registered in Singapore on 17 March 2013. De.mem Pte Ltd owns 100% of the shares in De.mem Viet Nam Co Ltd, Vietnam, and GD Wasser Pte Ltd, Singapore.

De.mem Viet Nam Co Ltd, Vietnam, is a company registered in Ho Chi Minh City, Vietnam, on 26 August 2014, which serves as the operating company of the De.mem Group for the Vietnamese market.

GD Wasser Pte Ltd, Singapore, is a holding company registered in Singapore on 7 March 2013. It owns 100% of the shares in GD Wasser Viet Nam Co Ltd, Vietnam, which was registered in Ho Chi Minh City on 26 April 2014 and serves as a holding company for water treatment plants and related assets in Vietnam. GD Wasser Viet Nam Co Ltd, Vietnam, makes it possible for the De.mem Group to potentially enter into new BOO agreements in Vietnam.

GD Wasser Vietnam Co Ltd, Vietnam, owns 90% of the shares in both GD Wasser Nghe An Co Ltd, Vietnam, and GD Wasser Long An Co Ltd, Vietnam. GD Wasser Nghe An Co Ltd, Vietnam, owns equipment for water treatment, buildings, tanks and the rights to sell water to municipal clients near the city of Vinh, Nghe An Province, Vietnam, until at least November 2023.

The Company provided working capital to DMS through an intercompany loan arrangement (**Intercompany Loan Agreement**). Please refer to Section 15.6 for a summary of the Intercompany Loan Agreement.

It is anticipated that all revenues and profits generated from the existing operations of DMS will be retained within this entity.

The Company does not foresee any risks with this revenue structure.

### 7.3 KEY MILESTONES OF DE.MEM

The De.mem Group commenced its commercial operations during 2013 and recorded its first commercial revenues in 2014. De.mem completed its first project in Vietnam in 2014 and, since then, has successfully completed more than 10 projects in Singapore and Vietnam. The individual plants have a capacity of up to 2,000 m<sup>3</sup> treated water per day.

A brief description of the key milestones De.mem has achieved since incorporation is set out below:

## KEY MILESTONES AND PROGRESS TO DATE

Company started business	Established subsidiary in HCMC, Vietnam  Completed first project in Vietnam (municipal plant, up to 4,000m <sup>3</sup> per day)	Further projects in Vietnam completed i.e. with residential developer (500m <sup>3</sup> plant per day)	Completed milestone project with Hanoi University of Agriculture  First system delivered to industrial customer in Singapore	Signed BOO agreement with industrial customers in Singapore.  Set up of in-house system manufacturing	In-licensed break-through nanofiltration (NF) technology from NTU
H1 2014	H2 2014	H1 2015	H2 2015	H1 2016	H2 2016

## 7.4 COMMERCIAL VALIDATION

De.mem's new nanofiltration membrane has been validated for different applications, including the treatment of industrial waste water from different industries such as food and beverage, oil and gas, and electronics as well as from palm oil processing. It is currently in the manufacturing scale up phase. The Company intends to use the new nanofiltration technology at a larger scale in its water treatment plants and projects from the second quarter of 2017 onwards.

The De.mem Group has already completed numerous projects since 2014 including the design, manufacturing and sale of water treatment systems and plants for customers from industrial and municipal & residential sectors, as well as the provision of services to customers under long-term BOO agreements. A sample of projects undertaken by De.mem include the following:

- The design, manufacturing, installation and commissioning of an ultrafiltration (**UF**) water treatment plant for the Hanoi University of Agriculture, Vietnam.
- The design, manufacturing, installation, commissioning and operations of a 2,000 m<sup>3</sup> per day UF water treatment plant located near the city of Vinh, Nghe An province, Vietnam, which is owned by the De.mem Group and earns revenues under a BOO agreement. The plant is designed so its capacity can be expanded easily to up to 4,000 m<sup>3</sup> per day.
- The design, manufacturing, installation and commissioning of an ultrafiltration – reverse osmosis (**UF-RO**) water treatment plant in Duc Hoa, Long An province, Vietnam.
- The supply of ultra-clean (de-ionized) water to a car wash firm in Singapore using a UF-RO system under a long term BOO agreement.
- The provision of waste water treatment services to the Singapore factory of a multinational corporation from the electronics industry.
- The delivery of a system for industrial waste water treatment to the Singapore factory of a multinational corporation from the oil & gas industry.
- The operations of a containerized waste water treatment system on behalf of the Singapore factory of a multinational corporation, Givaudan.

De.mem has built a substantial pipeline of projects and is currently in discussions with prospective clients in Singapore, Vietnam and Germany in both the industrial and municipal & residential sectors.

## 7.5 PRODUCT OFFERING

De.mem offers a range of products for water and waste water treatment for customers from the industrial and municipal & residential segments. The Company designs, builds, owns and operates water and waste water treatment systems for and on behalf of such customers, in which it is applying modern membrane technologies.

De.mem's licensed proprietary technologies include a monitoring and operating platform for water treatment plants which is branded as "de.live". The de.live product is based on patented sensor technologies which are licensed from NTUitive. Refer to Section 15.3 for a summary of the Non-Exclusive Licence Agreement.

De.mem's licensed flagship technology is a novel low pressure hollow fiber nanofiltration membrane. This new membrane can be applied to projects both on the industrial and municipal & residential sectors. It can treat industrial waste water at reduced capital and operating expenditures compared to the current market standard, which is reverse osmosis (**RO**) technology. The technology has been validated for different applications, including different types of waste water, for example from factories in the food & beverage and oil & gas industries, or on palm oil mill effluent. The lower operating pressure required for nanofiltration leads to the energy and cost savings compared to RO treatment.

De.mem integrates the components outlined in the paragraphs above into complete and turn-key water and waste treatment systems. Other components such as, for example, UF and RO membranes as well as pumps and valves, which are more standardized and readily available on the market, are purchased by De.mem from a range of existing suppliers, where and if required for a certain project. If requested by the client, the systems can be packaged in a standard industrial container.



INDUSTRIAL WASTE WATER TREATMENT SYSTEM BY DE.MEM



De.mem's systems can deal with specific industry problems including water with heavy metals, high oil content, volatile organic compounds, high biological oxygen demand/ chemical oxygen demand or high temperature. Furthermore, De.mem provides systems that can fulfil the customers' requirements, that is, provide clean water which meets regulatory or discharge limits, or, generate water that can be recycled for manufacturing or other uses. Due to De.mem's specific know-how and proprietary sensors and monitoring products, the systems can be deployed reliably in de-centralized or remote locations.

De.mem also offers a range of more standardized products, which can be used in municipal & residential projects. Those more standardized products include containerized water treatment systems or De.mem's "de.pure" product line, a family of systems for small-scale water treatment.

While De.mem designs, builds and supplies equipment, De.mem also offers to its clients to work under a BOO model. Under this model, De.mem designs and builds a water or waste water treatment plant for a customer, retains the ownership in the plant and operates the plant on behalf of the customer at the desired location. This BOO offer can eliminate the need for larger upfront capital expenditure for the customer and provides them with an "all-in" solution, as any maintenance of the plant is included in the agreement. The minimum fixed term in a BOO agreement is generally two years, which provides De.mem with cash flows that can be reliably forecast over the respective fixed term.

## 7.6 TECHNOLOGY

De.mem has licensed a number of innovative technologies with applications in water and waste water treatment from NTUitive, which were developed at NTU.

Those technologies are as follows:

- (a) **Membrane integrity sensor:** A novel sensor technology for the monitoring of membrane fouling and integrity (**Membrane Integrity Sensor**). De.mem can make use of this technology as part of its monitoring and controlling solutions.
- (b) **Acoustic sensor technology:** This technology uses acoustic waves to determine the fouling status of membranes. This technology is currently under evaluation by De.mem. It could be used as part of De.mem's monitoring and controlling solutions.

- (c) **Low pressure hollow fiber nanofiltration membrane:** Based on years of research, NTU has developed a new low pressure hollow fiber nanofiltration membrane technology. The membrane is made from a polymer material based on a proprietary materials formulation.

The Membrane Integrity Sensor is an innovative sensor system, which can detect the integrity of filtration membranes or the presence of fouling materials within a fluid by using a small-area membrane as a particle sensor. De.mem can apply this technology within its monitoring and operating solutions for its water treatment systems, which De.mem has branded as its "de.live" product. Another key element to de.live is a custom-made structured query language database, which De.mem uses to collect, store and analyse data. Based on such technologies, De.mem is able to remotely monitor its water treatment plants from any desired location.



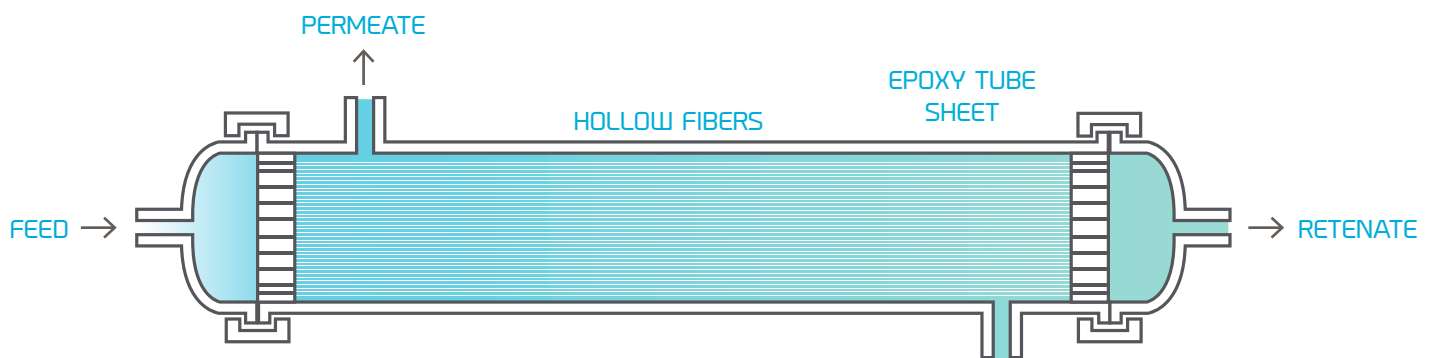
MEMBRANE INTEGRITY SENSOR (IN DEMO SET-UP)

The acoustic sensor technology which the company is testing under an evaluation license from NTU may be used for characterizing the biofouling status of membranes, and to determine when and how the membrane maintenance and cleaning is performed. This could be applicable to commercially available membrane modules. Subject to successful evaluation, De.mem could use this novel sensor technology as part of its de.live product. The evaluation licence is not considered to be a material contract at this stage.

De.mem's low pressure hollow fiber nanofiltration membrane is a membrane technology which enables nanofiltration at a comparably low pressure of two bars. The membrane is made from positively charged PEI (polyethyleneimine), a polymer material, using a simple and scalable manufacturing process based on chemical cross-linking. A loose substrate structure allows for high water permeability. The hollow fiber architecture gives the membrane certain advantages compared to RO, such as the ability to easily clean it through simple "backflush" routines during operations, which is not possible with a RO membrane that typically comes in a flat sheet configuration.



HOLLOW FIBER NANOFILTRATION MEMBRANE



HOLLOW FIBRE MEMBRANE MODULE

Nanofiltration is a physical separation method which eliminates particles of a certain size range (down to 0.5 nanometers) from a fluid stream.

	< ST Microscope		< Scanning Electron Microscope		< Optical Microscope		< Naked Eye	
	Ionic Range		Molecular Range		Macro Molecular Range		Micro Particle Range	
Micrometers (μ)	0.001		0.01		0.1		1.0	
	10.0		100.0		1000.0			
RELATIVE SIZE OF COMMON MATERIALS	Aqueous Salts		Albumin Protein		Yeast Cells			
			Carbon Black		Paint Pigment			
			Endotoxin/Pyrogen		Bacteria		Beach Sand	
	Sugar		VIRUS					
	Metal Ion		Tobacco Smoke		Milled Flour		Granular Activated Carbon	
	Synthetic Dye		Latex/Emulsion					
	Pesticide		Colloidal Silica		Blue Indigo Dye		Pollen	
	Herbicide		Asbestos		Red Blood Cells		Human Hair	
			Gelatin		Coal Dust			
					Crypto-sporidium		Giardia Cyst	
MEMBRANE SELECTION	Reverse Osmosis		Ultrafiltration				Particle Filtration	
	Nanofiltration				Microfiltration			

FILTRATION SPECTRUM AND USE OF NANOFILTRATION

In a typical water or waste water treatment process, amongst other treatment steps, a UF membrane filters out small particles before a RO membrane is used. During the RO process step, water is pushed through an extremely fine membrane at high pressure to separate water molecules from any remaining contaminants, which are tiny – about a thousand times smaller than the width of a human hair. This high water pressure, typically 10 bars and above, means that the water pumps consume a lot of energy.

De.mem's low pressure hollow fiber nanofiltration membrane technology allows customers to replace both UF and RO in one single process step for certain applications. It also requires only two bars of water pressure, to filter out the same type of contaminants as a combined UF and RO process. This lower operating pressure can lead to significant energy savings and cost compared to a RO process.

The technology has been validated by both NTU and De.mem for certain water types, including different types of industrial waste water and surface (river) water. Based on this, De.mem believes there are several potential applications for the technology in both the industrial as well as the municipal & residential segments.

De.mem intends to start a pilot manufacturing line for the new membrane in Singapore in the first quarter of 2017. This will allow De.mem to manufacture modules of standard industrial size, which are intended to be applied immediately in the field to help De.mem to further optimize the product and manufacturing process, that is, in terms of stability and cost, and to pick the initial areas for larger scale commercialization.

## CURRENT STATE OF THE ART

- Negatively charged membrane surface
- Tight pores and dense structure limits water permeation
- Flat sheet configuration
- High operating pressure required
- Complicated fabrication process with solvents required



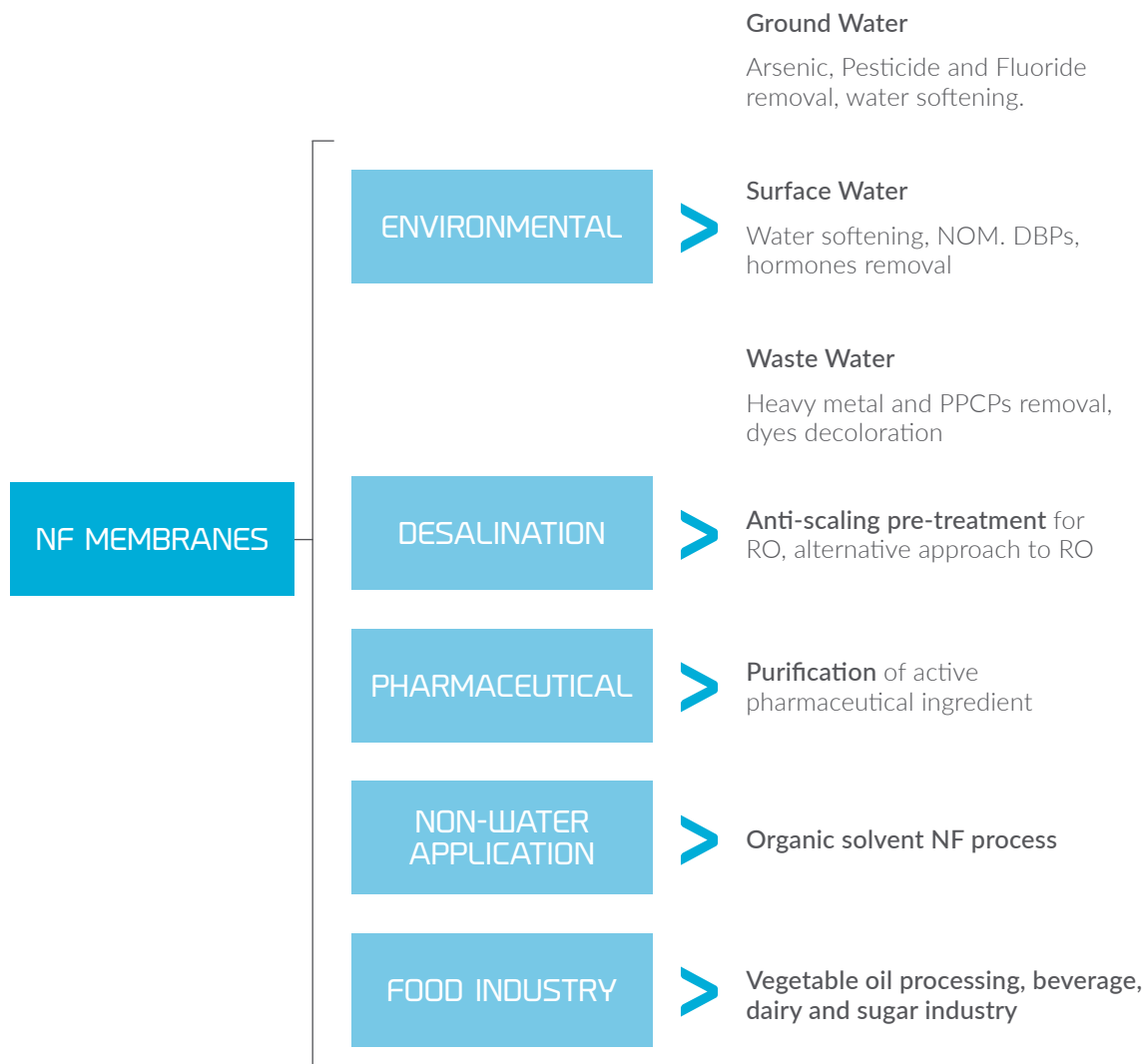
## DE.MEM TECHNOLOGY

- Positively charged surface - allows for rejection of divalent ions
- Loose substrate structure increases water permeation
- Hollow fiber configuration
- Low operation pressure (similar UF)
- Simple and environmentally friendly fabrication

SUMMARY: DE.MEM'S NANOFILTRATION TECHNOLOGY VS. CURRENT "STATE OF THE ART"

## 7.7 APPLICATION RANGE AND MARKETS

Nanofiltration can be applied in different areas, as summarized below:



However, the overall market size of nanofiltration membranes is still relatively low when compared to the market size of UF and RO membranes.

The technology can be relevant for many of De.mem's target markets, that is for projects to treat waste water from factories in the food & beverage and oil & gas industry, palm oil mills, or the treatment of surface water for municipal applications.

NOM - NATURAL ORGANIC MATTER

DBP - DISINFECTION BY PRODUCTS

PPCP - PHARMACEUTICALS AND PERSONAL CARE PRODUCTS

## 7.8 CASE STUDY: APPLICATION OF DE.MEM'S NANOFILTRATION MEMBRANE ON PALM OIL MILL EFFLUENT

Both De.mem and NTU have tested the novel nanofiltration membrane on different types of industrial waste water. This includes the performance of lab tests on water samples obtained from a palm oil mill.

Palm oil mill effluent is a type of waste water which is generally difficult to treat. Typically, it comprises of a high solids, oil and grease and a high organic content. Furthermore, it has a thick brownish colour. Currently, a treatment method called "ponding" is the most common way to treat palm oil mill effluent in Malaysia. In a series of ponds, each pond has a specific purpose, for example, sedimentation, de-oiling, acidification, anaerobic or aerobic treatment. This biological process is generally inefficient as it takes a long time (between 80 to 120 days) and there is a lack of operational control.

Laboratory test results support the potential use of the De.mem nanofiltration membrane for the treatment of certain types of palm oil mill effluent. The membrane was tested on water samples taken from a palm oil mill, both stand-alone and in combination with simple pre-treatment steps such as microfiltration. The results indicate a strong reduction of crucial parameters, such as the TOC (Total Organic Carbon), and a substantial improvement of the waste water's strong brownish colour.

Those outcomes could be achieved with the use of De.mem's nanofiltration membrane as major treatment process – replacing the potential application of combined UF and RO water treatment processes.



DEMONSTRATION OF DE.MEM NANOFILTRATION MEMBRANE ON PALM OIL MILL EFFLUENT IN LAB SETTING

The treatment of palm oil mill effluent can be one of the applications of the new membrane once larger production capabilities have been established. With more than 600 palm oil mills in Indonesia<sup>1</sup> alone, this represents a key growth market for De.mem.

## 7.9 BUSINESS MODEL

De.mem derives revenues from the sales of products, solutions and services to customers that require water and/or waste water treatment.

In particular, revenues are generated based on two different types of business models:

- BOO agreements:** Long term contracts, under which De.mem designs and manufactures water and waste water treatment systems. Once complete, De.mem rents the systems out and operates them on behalf of its customers at the customer's site. De.mem retains the legal ownership in the systems. It is paid by the customer through a recurring, usually monthly, fee.
- System and equipment sales:** De.mem designs, manufactures and sells water and waste water treatment systems and equipment to its customers. De.mem is paid either a one-off fee by the customer, or for larger orders, receives the price for the equipment over several instalments according to the progress of the order.

Customers for both business models are primarily factories, small and medium sized enterprises and multinational corporations for applications in industrial waste water treatment, and small to medium sized municipalities with up to approximately 100,000 inhabitants in the area of municipal water supply.

De.mem supplies a wide range of systems and solutions, which implies that the price range varies widely. BOO agreements can be in the range from \$500 up to approximately \$30,000 income per month. Depending on the size and capacity, the price range for the equipment can vary between approximately \$10,000 for the smallest, and reach up to approximately \$500,000 for the largest and most advanced systems offered. De.mem also participates in tender offers for the supply of larger industrial or municipal water or waste water treatment plants, which can have a value of several million dollars.

To be able to implement the BOO agreements, De.mem incurs upfront costs for the system components and manufacturing.

<sup>1</sup> INPALME, International Palm Oil Exhibition, Indonesia / PT Hutan Gaya Indonesia (Organizer)

Part of the use of funds of the Public Offer is dedicated for such funding needs. In the medium term, De.mem intends to use bank funding to satisfy these funding requirements.

For the system and equipment sales, De.mem typically requires significant advance payments, which cover all or most of the working capital needs. For larger projects, payment is typically made in instalments according to the manufacturing progress.

The Company's main objectives on completion of the Public Offer are to:

- (a) fund a research and development program of the nano-filtration membrane;
- (b) fund the investment into new BOO water treatment plants;
- (c) provide general working capital;
- (d) pay the costs of the Offers; and
- (e) list on the ASX, which provides the Company with improved access to capital markets.

The Company considers that its growth strategy in Section 7.10 and its key strengths in Section 7.16 are integral to its ability to generate income and ultimately achieve growth for shareholders.

## 7.10 GROWTH STRATEGY

De.mem has already secured, initiated and/or executed a number of reference projects in Singapore with customers from the electronics, oil & gas and food & beverage industries, as well as with a number of private, municipal and industrial customers in Vietnam.

The expansion plan is based on those initial references which De.mem has secured, and targets key industries in which De.mem sees the strongest need and market potential for advanced waste water treatment. Those include the above mentioned sectors in which De.mem already operates, such as electronics, oil & gas and food & beverage. Going forward, De.mem also intends to expand its product offering into other industrial sectors such as the mining sector.



DE.MEM MANUFACTURING AT TAGORE 8 SINGAPORE

Based on this core strategy, the Company intends to grow its customer base and revenues as follows:

- (a) Along the existing customer base, with the objective to win new projects/installations at other sites of an existing customer, such as additional factories of the same multinational corporation in other locations.
- (b) Targeting new customers within the key industries, in which initial references have been secured and for which the technical capabilities have been proven.
- (c) Targeting customers (both existing and new) from new countries, with an initial focus on Australia after the Company's admission to the Official List and, an intended entry into the Chinese market during the third quarter of 2017.
- (d) Targeting new customers from new industries and industry segments, such as mining and power generation.

With respect to the geographical expansion listed under paragraph (c) above, De.mem intends to open representative offices in Australia and China within a period of 12 months from the Closing Date of the Offers. Through the representative offices, De.mem intends to market its products and build partnerships with local agents and representatives that shall market De.mem's products under a commission or joint venture structure. The Company will also provide the required customer support from these local offices. To protect its technical know-how, however, De.mem intends to keep its manufacturing centralized at the existing facility in Singapore (refer to Section 7.11). De.mem is also currently pursuing a number of project and customer leads in Europe.

The expansion strategy outlined above shall be backed and amplified by De.mem's technology and product development efforts, which aim to improve the performance of the Company's products and/or lead to cost savings for its customers. This shall add to De.mem's brand and standing in the market. In relation to the low pressure hollow fiber nanofiltration membrane technology, De.mem does not intend to market this new membrane as a component to other system suppliers, but shall initially retain it "in-house" for use in the Company's BOO projects and systems.

## 7.11 MANUFACTURING

De.mem has an existing manufacturing facility in Singapore at 421 Tagore Industrial Avenue, #02-22, Tagore 8, Singapore 787805. At this factory, the company manufactures its water and waste water treatment systems and equipment.

With the commercial scale up, De.mem intends to keep the manufacturing capability in a centralized facility, to protect its know-how and technology.

The system maintenance and customer support will be provided from the local representative offices.

## 7.12 TECHNOLOGY AND PRODUCT DEVELOPMENT AND SCALE UP PLAN

As set out in Section 6.10, De.mem intends to invest part of the proceeds from the Public Offer into the set up of a pilot manufacturing line for its low pressure hollow fibre nanofiltration membrane. The pilot manufacturing line shall be located in Singapore, either within the current manufacturing plant for the Company's systems and equipment or at a separate location nearby. It is expected that the pilot manufacturing line will be operational during the first quarter of 2017. On 20 October 2016, De.mem entered into an equipment sale agreement with Foshan Chinese Academy of Science Membrane Technology Co. Ltd, Guangdong, China (FCA), for the purchase of equipment to be used by De.mem for this membrane production. A summary of the Equipment Sale Agreement is set out in Section 15.4.

The manufacturing of the membrane is based on standard processes and equipment for the so-called "spinning" of membrane fibres. The membrane is made out of polymer materials. The exact formulation and materials used remains a strictly protected trade secret of De.mem.

The pilot manufacturing line will allow De.mem to produce membrane fibres for use in standard four inch- or eight inch- membrane modules, which can be used in De.mem's industrial or municipal & residential projects.

Once the pilot line is operational, the Company intends to undertake in-field validation for those applications that have been tested in the laboratory at De.mem and NTU as at the date of this Prospectus, including the treatment of different types of industrial waste waters and palm oil mill effluent, but also other types of industrial waste water that have not been tested in the laboratory before.

The hollow fiber nanofiltration membrane has been fully developed and the Company does not expect the design composition to change materially during the validation testing phase. In the event that any changes are made as a result of the in-field validation, these changes are expected to relate to the operating parameters of the implementation of the hollow fiber nanofiltration membrane. The in-field validation aims to provide further operating data that is required for the optimisation of operations and deployment of the membranes at a larger, commercial scale and is expected to be completed in 2017.

While the Company is not presently aware of any potential problems that may result from the in-field validation testing process and is unlikely to, until such time as the in-field valuation testing has been completed, this process is subject to uncertainties and there may be delays, or the project may be unsuccessful as a whole.

After completion of the in-field validation, the Company intends to scale up manufacture of the new hollow fiber nanofiltration membranes. To accommodate the additional storage capacity and manufacturing equipment the Company intends to source a larger factory. Subject to the performance of the Company, this is expected to take place in 2018.

## 7.13 INTELLECTUAL PROPERTY

### *Non-Exclusive Licence*

De.mem holds a non-exclusive license from NTUitive over three patents and one patent application as set out in the table below that cover the key aspects of the Membrane Integrity Sensor technology (**Non-Exclusive Licence Agreement**). The patents and application listed below relate to technology currently used by De.mem in the water treatment plants which have already been deployed and do not relate to the new hollow fiber nanofiltration technology. As such, the Company does not consider the non-exclusive nature of the agreement to be a risk.



The patents and applications held by NTUitive and licensed by De.mem are set out in the table below:

TITLE	COUNTRY	GRANT NO.	FILING DATE	GRANT DATE
Detection Apparatus and Method Utilizing Membranes and Ratio of Transmembrane Pressures	Singapore	147235	10.05.07	28.11.08
Detection Apparatus and Method Utilizing Membranes and Ratio of Transmembrane Pressures	U.S.A	8,135,547 B2	10.05.07	13.03.12
A Membrane Sensor and Method of Detecting Fouling In A Fluid	Singapore	189 548	1.11.11	3.11.15
A Membrane Sensor and Method of Detecting Fouling In A Fluid (Application)	U.S.A	13/882,783	01.05.13	

Each of the patents listed above has an expiry date 20 years from the filing date listed above. As such, the Company considers that this time frame provides the Company with sufficient time to continue its business operations.

#### **Exclusive Licence**

In addition, De.mem holds an exclusive, worldwide license from NTUitive for details on fabrication, characteristics and performance relating to the low pressure hollow fibre nanofiltration membrane technology.

A summary of the Exclusive Licence Agreement is set out in Section 15.3.

#### **Evaluation Licence**

Furthermore, the Company holds an evaluation license from NTUitive covering a patent which has been granted in both Singapore and the US, which relates to a novel acoustic sensor technology for the measurement of membrane fouling. Under the evaluation license, which is dated 1 November 2016, De.mem has the right to evaluate the technology over a period of one year from execution for nil consideration. De.mem shall be responsible for all costs involved in this evaluation. The terms for a commercial license are subject to negotiation with NTU upon successful evaluation.

The evaluation licence is not considered to be a material contract at this stage.

## **7.14 KEY DEPENDENCIES**

The key factors that the Company will depend on to meet its objectives are:

- (a) the successful completion of the Public Offer;
- (b) the ability to protect the Company's intellectual property;
- (c) successful development and commercialisation of the low pressure nanofiltration technology and membrane integrity sensor;
- (d) retaining key personnel of De.mem; and
- (e) the relationship to NTU and the continued support of the institution in the technology transfer relating to the licenses held by De.mem.

## 7.15 COMPETITIVE STRENGTHS

(a) **Established customer base**

De.mem has an established revenue generating business with approximately S\$1,300,000 in cumulative revenues recorded since the establishment of De.mem in 2013.

(b) **Proprietary technology**

De.mem has licensed a range of technologies from Singapore's NTU, one of the world's leading universities in water research.

(c) **Scalable business model**

De.mem intends to scale its business model along its existing customers and markets, within the key industries covered as well as into new industries and markets, such as initially Australia after the Company's admission to the Official List and an intended entry into the Chinese market during the third quarter of 2017.

(d) **Continued investment in technology development**

De.mem intends to invest in further development efforts to improve and expand the range of licensed proprietary technologies. The Company also intends to in-license further new technologies developed at NTU or other institutions.

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08<sup>18</sup>

# COMPANY OVERVIEW



## 8.1 CAPITAL STRUCTURE

The capital structure of the Company following completion of the Offers is summarised below:

### Shares<sup>1</sup>

	NUMBER (MINIMUM SUBSCRIPTION)	NUMBER (MAXIMUM SUBSCRIPTION)
Shares currently on issue <sup>2</sup>	7,307,692	7,307,692
Shares to be issued pursuant to the Consideration Offer <sup>3</sup>	65,000,000	65,000,000
Shares to be issued pursuant to the Public Offer	18,750,000	22,500,000
Shares to be issued to Alto Capital <sup>4</sup>	1,000,000	1,000,000
<b>Total Shares on completion of the Offers</b>	<b>92,057,692</b>	<b>95,807,692</b>

### Options<sup>4</sup>

	NUMBER
Options currently on issue	4,250,000
Options to be issued pursuant to the Advisor Offer <sup>5</sup>	3,800,000
<b>Total Options on completion of the Offers<sup>6</sup></b>	<b>8,050,000</b>

1 The rights attaching to the Shares are summarised in Section 16.2 of this Prospectus.

2 The Shares currently on issue were issued on 21 November 2016 at an issue price of \$0.13 each to investors to fund the costs associated with the Offers and to provide working capital. These Shares were issued at a discount to the issue price of the Shares offered pursuant to the Public Offer to reflect the increased risk associated with an investment in the Company at the time of issue of these Shares.

3 65,000,000 Shares to be issued to the Vendors as consideration for the Acquisition pursuant to the Consideration Offer and the terms of the Implementation Agreement, as summarised in Section 15.1 of this Prospectus.

4 Refer to Section 15.9 of the Prospectus for a summary of the Alto Capital Mandate.

5 Each Option will be unquoted and is exercisable at \$0.30 each on or before three years from the date of issue.

6 The Company intends to issue Options under its employee option plan (ESOP) in the future to provide a cost effective incentive to key employees, management and, subject to Shareholder approval, Directors. A summary of the ESOP is set out at Section 16.5 of this Prospectus.

## 8.2 SUBSTANTIAL SHAREHOLDERS

Those Shareholders holding 5% or more of the Shares on issue both as at the date of this Prospectus and on completion of the Offers (assuming minimum subscription) are set out in the respective tables below.

### *As at the date of the Prospectus (prior to completion of the Acquisition)*

SHAREHOLDER	SHARES	OPTIONS	% (UNDILUTED)	% (FULLY DILUTED)
Gleneagle Asset Management <Alium Alpha Fund>	2,307,692	-	31.6	19.97
Theodore Bernhard Blank	461,538	-	6.32	3.99
Andreas Hendrik De Wit	961,538	-	13.16	8.32
Helmut Menhart	500,000	-	6.84	4.33
Delia Chua	384,615	-	5.26	3.33
Cosimo Trimiglozzi	384,616	-	5.26	3.33
Enzo Trimiglozzi	384,615	-	5.26	3.33

### *On completion of the Offers (assuming minimum subscription and no existing substantial Shareholder subscribes and receives additional Shares pursuant to the Public Offer)*

SHAREHOLDER	SHARES	OPTIONS	% (UNDILUTED)	% (FULLY DILUTED)
NA Singapore Early-Stage Venture Fund I Pte Ltd <sup>1,2&amp;3</sup>	42,795,168 <sup>3</sup>	-	46.49	44.67
New Asia Investments Pte Ltd <sup>1&amp;4</sup>	11,921,611	-	12.95	11.91

1. On completion of the Offers, the Major Shareholders will have a maximum combined relevant interest in 54,716,779 Shares and a maximum percentage of 59.44%, assuming minimum subscription under the Public Offer. As a result of their shareholdings, the Major Shareholders are considered to be related parties of the Company.

2. NA Singapore Early-Stage Venture Fund I Pte Ltd is a separate venture capital fund under the management of New Asia Investments. This fund has invested in young technology start-ups headquartered in Singapore. New Asia Investments Pte Ltd has invested into this fund jointly with the Singapore government through the National Research Foundation, an organization which spearheads the research and development related activities as well as early stage commercialization activities of the Singapore government. Mr Dautel is a director of NA Singapore Early-Stage Venture Fund I Pte Ltd.

3. NA Singapore Early-Stage Venture Fund I Pte Ltd has advised the Company that it intends to subscribe for up to 1,000,000 Shares under the Public Offer. In addition to the 42,795,168 Consideration Shares it will receive as a result of the Acquisition, NA Singapore Early-Stage Venture Fund I Pte Ltd's maximum shareholding in the Company will therefore be 42,795,168 upon completion of the Offers, with a maximum percentage holding of 46.50%.

4. New Asia Investments Pte Ltd is a Singapore based venture capital fund which was established in 2012. Since its incorporation, it has invested in a number of technology companies from the clean technology, water, medical and industrial sectors. New Asia Investments Pte Ltd's shareholders include a number of high net worth individuals which are based in Asia and/or which have a strong background in doing business in Asia and entrepreneurship. Mr Dautel is a director of New Asia Investments Pte Ltd.

The Company will announce to the ASX details of its top 20 Shareholders (following completion of the Offers) prior to the Shares commencing trading on ASX.

## 8.3 RESTRICTED SECURITIES

Subject to the Company being admitted to the Official List, certain Securities on issue prior to the Public Offer and Securities to be issued under the Consideration Offer will be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation. During the period in which these Securities are prohibited from being transferred, trading in Shares may be less liquid

which may impact on the ability of a Shareholder to dispose of his or her Shares in a timely manner.

All of the Options to be issued are likely to be escrowed for 24 months from the date of Official Quotation.

The Company will announce to the ASX full details (quantity and duration) of the Shares and Options required to be held in escrow prior to the Shares commencing trading on ASX.

## 8.4 FINANCIAL INFORMATION

The Company was only recently incorporated on 12 September 2016 and has no operating history and limited historical financial performance.

As a result, the Company is not in a position to disclose any key financial ratios other than its balance sheet which is included in the Investigating Accountant's Report set out in Section 10 of this Prospectus.

Refer to the Investigating Accountant's Report for the historical financial performance of DMS.

## 8.5 TAXATION

The acquisition and disposal of Shares will have tax consequences, which will differ depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.

To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for Shares under this Prospectus.

## 8.6 DIVIDEND POLICY

We anticipate that significant expenditure will be incurred in the evaluation and development of the Company's projects. These activities, together with the possible acquisition of interests in other projects, are expected to dominate the two year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and operating results and financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking credits attaching to dividends can be given by the Company.

## 8.7 DIRECTORS

The Directors are:

- Mr Andreas Kroell  
Chief Executive Officer and Director;
- Mr Cosimo Trimigliozi  
Non-Executive Chairman;

- Mr Bernd Dautel  
Non-Executive Director;
- Mr Stuart Carmichael  
Non-Executive Director; and
- Mr Michael Edwards  
Non-Executive Director.

Information about the experience, background, independence and interests of each Director is set out in Sections 13.1 and 13.2.

## 8.8 CORPORATE GOVERNANCE

To the extent applicable, in light of the Company's size and nature, the Company has adopted The Corporate Governance Principles and Recommendations (3rd Edition) as published by ASX Corporate Governance Council (**Recommendations**).

The Company's main corporate governance policies and practices as at the date of this Prospectus are outlined in Section 14.1 of this Prospectus and the Company's compliance and departures from the Recommendations are set out in Section 14.2 of this Prospectus.

In addition, the Company's full Corporate Governance Plan is available from the Company's website [www.demembranes.com](http://www.demembranes.com).

## 8.9 AGREEMENTS WITH DIRECTORS OR RELATED PARTIES

The Company's policy in respect of related party arrangements is:

- a Director with a material personal interest in a matter is required to give notice to the other Directors before such a matter is considered by the Board; and
- for the Board to consider such a matter, the Director who has a material personal interest is not present while the matter is being considered at the meeting and does not vote on the matter.

Mr Andreas Kroell, a Director, is also a director and shareholder of DMS and will receive Consideration Shares on completion of the Consideration Offer pursuant to the Implementation Agreement. Further details of Mr Kroell's shareholding in the Company on Completion is provided at Section 13.2 of the Prospectus.

Mr Stuart Carmichael, a Director, is also a director and shareholder of Ventnor, the compliance manager to the Company. Ventnor will receive the fees and securities outlined in Section 13.2 of the Prospectus in relation to the Offers.

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# INDUSTRY OVERVIEW

De.mem designs, builds, owns and operates membrane-based, de-centralized water and waste water treatment systems with a focus on the Asia Pacific region.

The Company presents its product offering in two industry segments:

- (a) the industrial segment, where De.mem provides systems and solutions to its customers mainly for applications in industrial waste water treatment; and
- (b) the municipal & residential segment, where De.mem offers a range of membrane-based water treatment systems to customers such as municipalities, real estate developers, hotels, resorts or other private customers.





## 9.2 OVERVIEW OF THE GLOBAL WATER MARKET

The global water & waste water solutions and service market is a large market with estimated annual capital expenditure of 180 billion USD in 2012<sup>1</sup>. The water & waste water treatment equipment market, De.mem's key target area, is an important segment of this with an estimated total global market size of 34.6 billion USD in 2010<sup>1</sup>.

Membrane based technologies are emerging as they have become more affordable, efficient and effective over recent years. The use of microfiltration (MF), UF, Nanofiltration (NF) and RO processes is spreading<sup>2</sup>.

## 9.3 TRENDS AND KEY DRIVERS

A number of trends and key drivers relevant to the waste water and water treatment industry have been identified, including the following:

- (a) **Trend towards de-centralised units:** The market structure, including factors such as geography, requires de-centralized solutions, in particular for the Asia Pacific region with many areas lacking from infrastructure connection to the urban centres.
- (b) **Membrane-based solutions emerging:** One of the most significant enhancements in the water industry is the advancement in membrane technologies<sup>3</sup>.
- (c) **Recycling of wastewater:** Recycling of waste water has become a key focus in countries with high water scarcity, such as Israel and Singapore.
- (d) **Water essential for agriculture:** Agriculture is currently the largest user of water, accounting for about 70% of global water withdrawals. However, this share is projected to decline from 70% to 65% as the proportion of withdrawals from industrial activity is expected to grow. This rising demand in industrial water use is driven by growing energy needs in emerging economies like China. [Source: GWI report]

- (e) **Industrial waste water as a key segment:** Industrial water is recognized as a key growth segment in the water market – in general, doing better than the municipal market<sup>4</sup>. Water plays an integral part in the production process of certain industries, such as energy, including the power generation, refining and cooling.
- (f) **Pollution and climate change:** The water challenges faced by many developing nations are compounded by the poor management of resources. Pollution is a major concern in many emerging countries due to the lack of adequate wastewater treatment facilities. According to the UN, roughly 90% of all wastewater in developing countries is discharged untreated, directly into the sea or rivers. Rapid urbanization in developing economies has also contributed to pollution, as the growth in the urban population has outpaced the development of sanitation facilities. [Source: GWI report]

## 9.4 COMPETITIVE LANDSCAPE

De.mem endeavours to cover all aspects of the value chain and to provide end users with a cost effective, full service solution to manage their waste water production capacity.

Key competitors include:

- (a) **Product and equipment specialist firms:** These firms operate manufacturing facilities for individual components of water treatment systems, such as membranes or membrane modules or pumps.
- (b) **Systems Integration firms:** Such companies take the individual components and assemble them into turn-key water treatment systems. System integrators need to have a good understanding of processes and system design and engineering.
- (c) **Operations and maintenance firms:** Firms in that area focus on operating water treatment plants for its customers.
- (d) **Distribution firms:** These companies maintain and run the distribution network such as the pipelines, and take care of customer invoicing.

<sup>1</sup> Frost & Sullivan, Sustainable Water Treatment Technologies in the 2020 Global Water Market, May 2012

<sup>2</sup> Deloitte, Water Tight 2.0, The top trends in the total water sector, 2015

<sup>3</sup> Deloitte, Water Tight 2.0, The Top Trends in the Water Sector, page 19

<sup>4</sup> Global Water Intelligence (GWI), Market Profile: Global Trends in Water Spending, June 2015

Within each segment, there are both large multinationals and local small and medium enterprises. Those include for example companies like General Electric (GE), USA, which supplies a range of equipment for membrane-based water treatment including RO membranes and modules, CH2M Hill, USA, a leading project management company, or Veolia Environnement S.A., France, a large multinational operator of water treatment plants (amongst other activities within the group).

De.mem positions itself uniquely within the value chain, as it combines aspects of different segments of the value chain. While the company acts as a process designer and system integrator, it makes use of licensed proprietary technologies. Furthermore, the company also operates water and waste water treatment plants, which provides it with access to operating data from the plants and the opportunity to validate its technologies in-house. The combination of these factors can enable De.mem to strengthen its market position within a competitive environment.

## 9.5 BARRIERS TO ENTRY

A number of barriers to entry relevant to the global wastewater industry have been identified, including the following:

- (a) **Access to specialist technology:** De.mem has a unique relationship to NTU, which has licensed several of its technologies to the company. NTU has been recognized as one of the leading universities worldwide in water research<sup>5</sup>.
- (b) **Access to capital:** Substantial capital is required to develop technologies such as De.mem's low pressure nanofiltration membrane, which are required in the decentralised water treatment sector.
- (c) **First-mover advantage:** De.mem is one of the first companies with a specialized product supply particularly for de-centralized water treatment.
- (d) **Market risk:** The markets for ultrafiltration and reverse osmosis treatment technologies are large and well established which can make the commercialisation of new waste water treatment technologies difficult, including De.mem's low pressure nanofiltration membrane and any future technology developments.

<sup>5</sup> Lux Research

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# FINANCIAL INFORMATION AND INVESTIGATING ACCOUNTANT'S REPORT



**RSM Corporate Australia Pty Ltd**

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14 February 2017

The Directors  
De.mem Limited  
Ground Floor, 16 Ord Street  
West Perth, WA, 6872

Dear Directors

## INVESTIGATING ACCOUNTANT'S REPORT

### **Independent Limited Assurance Report ("Report") on De.mem Limited Historical and Pro Forma Historical Financial Information**

#### **Introduction**

We have been engaged by De.mem Limited ("De.mem" or the "Company") to report on the historical financial information of De.mem for the six months ended 30 June 2016 and years ended 31 December 2015 and 31 December 2014 and pro forma financial information of the Company as at 30 June 2016 for inclusion in the prospectus ("Prospectus") of De.mem dated on or about 14 February 2017 in connection with De.mem's proposed initial public offering and listing on the Australian Securities Exchange ("ASX"), pursuant to which the Company is offering 18,750,000 ordinary De.mem shares at an issue price of \$0.20 per share to raise \$3.75 million before costs (the "Offer"). Oversubscriptions of up to 3,750,000 additional shares may be accepted (to raise an additional \$0.75 million before costs).

Expressions and terms defined in the Prospectus have the same meaning in this Report.

The future prospects of the Company, other than the preparation of a Pro Forma Historical Financial Information, assuming completion of the transactions summarised in Note 1 of the Appendix of this Report, are not addressed in this Report. This Report also does not address the rights attaching to the shares to be issued pursuant to this Prospectus, nor the risks associated with an investment in shares in the Company.

#### **Background**

De.mem was incorporated on 12 September 2016 in order to facilitate the initial public offering of De.mem Pte Ltd, a Singapore company established in 2013 which designs, builds, owns and operates membrane-based, de-centralized water and waste water treatment systems with a focus on the Asia Pacific region. De.mem Pte Ltd is headquartered in Singapore and has a wholly owned subsidiary in Ho Chi Minh City, Vietnam.

#### **THE POWER OF BEING UNDERSTOOD** **AUDIT | TAX | CONSULTING**

RSM Corporate Australia Pty Ltd is beneficially owned by the Directors of RSM Australia Pty Ltd. RSM Australia Pty Ltd is a member of the RSM network and trades as RSM. RSM is the trading name used by the members of the RSM network. Each member of the RSM network is an independent accounting and consulting firm which practices in its own right. The RSM network is not itself a separate legal entity in any jurisdiction.

RSM Corporate Australia Pty Ltd ABN 82 050 508 024 Australian Financial Services Licence No. 255847

The Company's product offering is backed by a range of proprietary products and technologies developed for decentralised water treatment applications, aimed to reduce clients' operating or capital expenditure for water or waste water treatment.

The Company is seeking to raise funds in order to fund a research and development program of a nano-filtration membrane, contract execution, geographic expansion and fund the investment into new build, own and operate ("BOO") water treatment plants.

## Scope

### Historical financial information

You have requested RSM Corporate Australia Pty Ltd ("RSM") to review the following historical financial information of the Company included in the Prospectus at the Appendix to this Report:

- The notionally consolidated statements of financial performance of the Company and its controlled entities for the six months ended 30 June 2016 and the years ended 31 December 2015 and 31 December 2014;
- The notionally consolidated statements of cash flows of the Company and its controlled entities for the six months ended 30 June 2016 and the years ended 31 December 2015 and 31 December 2014; and
- The notionally consolidated statement of financial position of the Company and its controlled entities as at 30 June 2016.

(together the "Historical Financial Information" attached at Appendix A for reference).

The Historical Financial Information has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principles of the International Financial Reporting Standards and the Company's adopted accounting policies.

The Historical Financial Information for the six months ended 30 June 2016 and the financial years ended 31 December 2015 and 31 December 2014 represents that of the controlled entity, De.mem Pte Ltd, which is to be acquired by the Company pursuant to the Consideration Offer included in the Prospectus, with De.mem Pte Ltd to be a wholly owned subsidiary of the Company on completion of the Consideration Offer.

The Historical Financial Information has been extracted from the financial statements of De.mem Pte Ltd for the six months ended 30 June 2016 and the years ended 31 December 2015 and 31 December 2014, which were audited by RSM Chio Lim LLP in accordance with International Auditing Standards. The audit reports issued for the six months ended 30 June 2016 and years ended 31 December 2015 and 31 December 2014 were unqualified opinions.

The Historical Financial Information is presented in the Prospectus in an abbreviated form, insofar as it does not include all of the presentation and disclosures required by International Financial Reporting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the *Corporations Act 2001*.

### Pro forma historical financial information

You have requested RSM to review the pro forma historical consolidated statement of financial position as at 30 June 2016, referred to as "the Pro Forma Historical Financial Information".

The Pro Forma Historical Financial Information has been derived from the Historical Financial Information of the Company after adjusting for the effects of the subsequent events and pro forma adjustments described in Note 1 of the Appendix to this Report. The stated basis of preparation is the recognition and measurement principles of the International Financial Reporting Standards applied to the Historical Financial Information and the events or transactions to which the subsequent events and pro forma adjustments relate, as described in Note 1 of the Appendix to this Report, as if those events or transactions had occurred as at the date of the Historical Financial Information. Due to its nature, the Pro Forma Historical Financial Information does not represent the Company's actual or prospective financial position or statement of financial performance.

## Directors' responsibility

The Directors of the Company are responsible for the preparation of the Historical Financial Information and Pro Forma Historical Financial Information, including the selection and determination of pro forma adjustments made to the Historical Financial Information and included in the Pro Forma Historical Financial Information. This includes responsibility for such internal controls as the Directors determine are necessary to enable the preparation of Historical Financial Information and Pro Forma Historical Financial Information that are free from material misstatement, whether due to fraud or error.

## Our responsibility

Our responsibility is to express a limited assurance conclusion on the Historical Financial Information and Pro Forma Historical Financial Information based on the procedures performed and the evidence we have obtained. We have conducted our engagement in accordance with the Standard on Assurance Engagement ASAE 3450 *Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*.

A review consists of making such enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. Our procedures included:

- A consistency check of the application of the stated basis of preparation, to the Historical and Pro Forma Historical Financial Information;
- A review of the Company's and its auditors' work papers, accounting records and other documents;
- Enquiry of directors, management personnel and advisors;
- Consideration of subsequent events and pro forma adjustments described in Note 1 of the Appendix to this Report; and
- Performance of analytical procedures applied to the Pro Forma Historical Financial Information.

A review is substantially less in scope than an audit conducted in accordance with International Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

## Conclusions

### Historical Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Historical Financial Information, as described in the Appendix to this Report, and comprising:

- The notionally consolidated statements of financial performance of the Company and its controlled entities for the six months ended 30 June 2016 and the years ended 31 December 2015 and 31 December 2014;
- The notionally consolidated statements of cash flows of the Company and its controlled entities for the six months ended 30 June 2016 and the years ended 31 December 2015 and 31 December 2014; and
- The notionally consolidated statement of financial position as at 30 June 2016 of the Company and its controlled entities,

are not presented fairly, in all material respects, in accordance with the stated basis of preparation, as described in Note 2 of the Appendix to this Report.

The Company did not trade in the period from incorporation to 30 June 2016 and as such no financial performance was recorded.



### **Pro Forma Historical Financial Information**

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Pro Forma Historical Financial Information, as described in the Appendix to this Report, and comprising the consolidated statements of financial position as at 30 June 2016 of the Company and its controlled entities are not presented fairly in all material respects, in accordance with the stated basis of preparation, as described in Note 1 of the Appendix of this Report.

### **Restriction on Use**

Without modifying our conclusions, we draw attention to the purpose of the financial information, being for inclusion in the Prospectus. As a result, the financial information may not be suitable for use for another purpose.

### **Responsibility**

RSM has consented to the inclusion of this assurance report in the Prospectus in the form and context in which it is included. RSM has not authorised the issue of the Prospectus. Accordingly, RSM makes no representation regarding, and takes no responsibility for, any other documents or material in, or omissions from, the Prospectus.

### **Disclosure of Interest**

RSM does not have any pecuniary interest that could reasonably be regarded as being capable of affecting its ability to give an unbiased conclusion in this matter. RSM will receive a professional fee for the preparation of this Report.

Yours faithfully

A handwritten signature in black ink that reads 'Andrew Gilmore'.

A J GILMOUR  
Director

## Appendix A – Historical and Pro Forma Financial Information

### DE.MEM LIMITED STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEARS ENDED 31 DECEMBER 2014, 31 DECEMBER 2015 AND THE SIX MONTHS ENDED 30 JUNE 2016

	6 months ended 30-Jun-16 Audited S\$	Year ended 31-Dec-15 Audited S\$	Year ended 31-Dec-14 Audited S\$
<b>Revenue</b>	170,394	749,386	400,614
Cost of sales	(128,890)	(918,044)	(110,231)
<b>Gross profit / (loss)</b>	41,504	(168,658)	290,383
Other gains	48,450	17,940	11,360
Administrative expenses	(616,505)	(734,139)	(389,936)
Other losses	(515,382)	(13,558)	(148,699)
<b>Loss before income tax expense from continuing operations</b>	(1,041,933)	(898,415)	(236,892)
Income tax expense	-	-	-
<b>Loss from continuing operations, net of tax</b>	(1,041,933)	(898,415)	(236,892)
<b>Other comprehensive (loss) / income</b>			
Exchange differences on translating foreign operations, net of tax	(14,137)	1,932	9,198
<b>Total comprehensive loss</b>	(1,056,070)	(896,483)	(227,694)

Investors should note that past results are not a guarantee of future performance.

## Appendix A – Historical and Pro Forma Financial Information

### DE.MEM LIMITED STATEMENT OF CASH FLOWS FOR THE YEARS ENDED 31 DECEMBER 2014, 31 DECEMBER 2015 AND THE SIX MONTHS ENDED 30 JUNE 2016

	6 months ended 30-Jun-16 Audited S\$	Year ended 31-Dec-15 Audited S\$	Year ended 31-Dec-14 Audited S\$
<b>Cash flows from operating activities</b>			
Loss before tax	(1,041,933)	(898,415)	(236,892)
Adjustments for:			
Interest income	(313)	-	(29)
Goodwill written off	259,976	-	87,731
Loss on disposal of plant and equipment	92,213	-	-
Depreciation of plant and equipment	78,507	18,713	-
Net effect of exchange rate changes in consolidating foreign operations	11,386	1,894	9,198
Operating cash flows before changes in working capital	(600,164)	(877,808)	(139,992)
Inventories	(64,161)	55,331	(60,219)
Trade and other receivables, current	321,238	(375,233)	(61,782)
Other assets	6,686	117,178	(205,693)
Trade and other payables, current	(209,421)	301,633	65,606
Other liabilities, current	(5,062)	5,062	-
Net cash flows used, in operating activities	(550,884)	(773,837)	(402,080)
<b>Cash flows from investing activities</b>			
Acquisition of subsidiaries (net of cash acquired)	(216,859)	-	(40,289)
Purchase of plant and equipment	(100,559)	(98,322)	-
Net movements in amount due from related parties	91,850	5,231	58,100
Interest received	313	-	29
Net cash used in investing activities	(225,255)	(93,091)	17,840
<b>Cash flows from financing activities</b>			
Issue of shares	150	1,460,000	250,847
Net movements in amount due to related parties/directors	3,173	(90,212)	17,565
Other liabilities, non-current	300,000	-	-
Net cash flows from financing activities	303,323	1,369,788	268,412
<b>Net (decrease) increase in cash and cash equivalents</b>	(472,816)	502,860	(115,828)
Cash and cash equivalents, statement of cash flows, beginning balance	505,869	3,009	118,837
<b>Cash and cash equivalents, statement of cash flows, ending balance</b>	<b>33,053</b>	<b>505,869</b>	<b>3,009</b>

Investors should note that past results are not a guarantee of future performance.

## Appendix A – Historical and Pro Forma Financial Information

### DE.MEM LIMITED CONSOLIDATED PRO FORMA STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2016

	Note	De.mem Audited 30-Jun-16 \$	Subsequent events Unaudited 30-Jun-16 \$	Pro forma adjustments Unaudited 30-Jun-16 \$	Pro forma Unaudited 30-Jun-16 \$
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	3	32,952	950,000	3,250,000	4,232,952
Trade and other receivables		413,352	-	-	413,352
Inventories		84,450	-	-	84,450
Other assets		160,108	-	-	160,108
<b>Total current assets</b>		<u>690,862</u>	<u>950,000</u>	<u>3,250,000</u>	<u>4,890,862</u>
<b>Non-current assets</b>					
Property, plant & equipment		683,931	-	-	683,931
Other assets		12,568	-	-	12,568
<b>Total non-current assets</b>		<u>696,499</u>	<u>-</u>	<u>-</u>	<u>696,499</u>
<b>Total assets</b>		<u>1,387,361</u>	<u>950,000</u>	<u>3,250,000</u>	<u>5,587,361</u>
<b>Liabilities</b>					
<b>Current liabilities</b>					
Trade and other payables		518,319	-	-	518,319
<b>Total current liabilities</b>		<u>518,319</u>	<u>-</u>	<u>-</u>	<u>518,319</u>
<b>Non-current liabilities</b>					
Other liabilities		299,088	-	-	299,088
<b>Total non-current liabilities</b>		<u>299,088</u>	<u>-</u>	<u>-</u>	<u>299,088</u>
<b>Total liabilities</b>		<u>817,407</u>	<u>-</u>	<u>-</u>	<u>817,407</u>
<b>Net assets</b>		<u>569,954</u>	<u>950,000</u>	<u>3,250,000</u>	<u>4,769,954</u>
<b>Equity</b>					
Issued capital	5	3,092,760	950,000	2,927,000	6,969,760
Reserves	6	(2,998)	361,250	323,000	681,252
Accumulated losses	7	(2,526,192)	(361,250)	-	(2,887,442)
<b>Equity attributable to owners of the parent</b>		<u>563,570</u>	<u>950,000</u>	<u>3,250,000</u>	<u>4,763,570</u>
Non-controlling interest		6,384	-	-	6,384
<b>Total equity</b>		<u>569,954</u>	<u>950,000</u>	<u>3,250,000</u>	<u>4,769,954</u>

The unaudited consolidated pro forma statement of financial position represents the notionally consolidated audited statement of financial position of the Company as at 30 June 2016 adjusted for the pro forma transactions outlined in Note 1 of this Appendix. It should be read in conjunction with the notes to the historical and pro forma financial information.

## **Appendix A – Historical and Pro Forma Financial Information**

### **1. Introduction**

The financial information set out in this Appendix consists of the notionally consolidated statement of financial position as at 30 June 2016 and the notionally consolidated statement of financial performance for the years ended 31 December 2015 and 31 December 2014 and the six months ended 30 June 2016 (“Historical Financial Information”) together with a pro forma consolidated statement of financial position as at 30 June 2016, reflecting the Directors’ pro forma adjustments (“Pro Forma Historical Financial Information”).

The Pro Forma Historical Financial Information has been compiled by adjusting the consolidated statements of financial position of the Company for the impact of the following subsequent events and pro forma adjustments.

#### **Adjustments adopted in compiling the Pro Forma Historical Financial Information**

The Pro Forma Historical Financial Information has been prepared by adjusting the Historical Financial Information to reflect the financial effects of the following subsequent events which have occurred in the period since 30 June 2016 and the date of this Report:

- (i) The issue of 4,250,000 options to directors and management, exercisable at \$0.30 each with a 3-year expiry (“Management Options”);
- (ii) The issue of 7,307,692 ordinary De.mem shares at \$0.13 each to raise \$950,000, on 7 November 2016;

and the following pro forma transactions which are yet to occur, but are proposed to occur immediately before or following completion of the Offer:

- (iii) A restructure of the Company being completed whereby the Company acquires De.mem Pte Ltd via a common control transaction through the issue of 65,000,000 ordinary shares in the Company to existing De.mem Pte Ltd shareholders in accordance with the Consideration Offer;
- (iv) The issue of 18,7500,000 ordinary De.mem shares at \$0.20 each to raise \$3,750,000 before costs pursuant to the Offer;
- (v) The payment of cash costs related to the Offer estimated to be \$500,000; and
- (vi) The issue of 1,000,000 shares to Alto Capital and 3,800,000 options to advisors and brokers (“Advisor Options”) in relation to the Offer. The Advisor Options are exercisable at \$0.30 each with a 3-year expiry;

The Pro Forma Historical Financial Information has been presented in abbreviated form and does not contain all the disclosures usually provided in an Annual Report prepared in accordance with the *Corporations Act 2001*.

## Appendix A – Historical and Pro Forma Financial Information

### 2. Statement of significant accounting policies

#### (a) Basis of preparation

The Historical Financial Information has been prepared in accordance with the recognition and measurement requirements of the International Financial Reporting Standards (“IFRS”), adopted by the International Accounting Standards Board and the Corporations Act 2001.

The Company was incorporated on 12 September 2016 and has not undertaken any trading activities up until it acquires De.mem Pte Ltd, which is to be acquired by the Company pursuant to the Consideration Offer included in the Prospectus, with De.mem Pte Ltd to be a wholly owned subsidiary of the Company on completion of the Consideration Offer.

The financial information presented in the Prospectus has been notionally consolidated for the six months ended 30 June 2016 and the financial years ended 31 December 2015 and 31 December 2014 to reflect the Company's acquisition of De.mem Pte Ltd that occurred post 30 June 2016 (together, De.mem Pte Ltd and De.mem are referred to as the “De.mem Group”). The acquisition of De.mem Pte Ltd has not resulted in a substantive change to the operations of the De.mem Group or its assets and liabilities and accordingly the presentation of the notionally consolidated financial information reflects the historical financial performance and financial position of the De.mem Group.

This acquisition of De.mem Pte Ltd is considered a common control transaction with the Company being considered the accounting acquirer and the transaction accounted for at book value rather than fair value. In adopting this approach the Directors note that there is an alternate view that it could be accounted for as a business combination. If this view is taken, the net assets of the group would have been uplifted to fair value, with consequential impacts on the Income Statement and Statement of Financial Position. The Directors anticipate that the excess of fair value compared to the book value of net assets would primarily be allocated to intangible assets and would be subject to future amortisation expenses or impairment testing.

The significant accounting policies that have been adopted in the preparation and presentation of the historical and the Pro forma Historical Financial Information are:

#### (b) Basis of measurement

The historical and pro forma financial information has been prepared on the historical cost basis except for financial instruments classified at *fair value through profit or loss*, which are measured at fair value.

#### (c) Functional and presentation currency

These historical and pro forma financial information has been presented in Australian dollars which is the Group's functional currency. The historical and pro forma financial information of De.mem Pte Ltd have been translated from Singapore dollars to Australian dollars in accordance with international financial reporting standards.

#### (d) Principles of consolidation

The historical and pro forma financial information incorporates the assets, liabilities and results of entities controlled by the Company at the end of the pro forma reporting period. A controlled entity is any entity over which the Company has the ability and right to govern the financial and operating policies so as to obtain benefits from the entity's activities. Control will generally exist when the parent owns, directly or indirectly through subsidiaries, more than half of the voting power of an entity. In assessing the power to govern, the existence and effect of holdings of actual and potential voting rights are also considered.

Where controlled entities have entered or left the consolidated entity during the year, the financial performance of those entities is included only for the period of the year that they were controlled.

In preparing the consolidated financial statements, all intragroup balances and transactions between entities in the consolidated entity have been eliminated in full on consolidation. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with those adopted by the parent entity.

## **Appendix A – Historical and Pro Forma Financial Information**

### **(e) Use of estimates and judgements**

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected.

### **(f) Going concern**

The historical and pro forma financial information has been prepared on a going concern basis, which contemplates continuity of normal business activities and the realisation of assets and discharge of liabilities in the normal course of business.

### **(g) Revenue recognition**

The revenue amount is the fair value of the consideration received or receivable from the gross inflow of economic benefits during the reporting period arising from the course of the activities of the entity and it is shown net of any related sales taxes and rebates. Revenue from the sale of goods is recognised when significant risks and rewards of ownership are transferred to the buyer, there is neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold, and the amount of revenue and the costs incurred or to be incurred in respect of the transaction can be measured reliably. Revenue from rendering of services that are not significant transactions is recognised as the services are provided or when the significant acts have been completed. Interest income is recognised using the effective interest method.

### **(h) Translation of financial statements of other entities**

Each entity in the group determines the appropriate functional currency as it reflects the primary economic environment in which the relevant reporting entity operates. In translating the financial statements of such an entity for incorporation in the consolidated financial statements in the presentation currency the assets and liabilities denominated in other currencies are translated at end of the reporting period rates of exchange and the income and expense items for each statement presenting profit or loss and other comprehensive income are translated at average rates of exchange for the reporting period. The resulting translation adjustments (if any) are recognised in other comprehensive income and accumulated in a separate component of equity until the disposal of that relevant reporting entity

### **(i) Cash and cash equivalents**

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

### **(j) Trade and other receivables**

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any provision for impairment. Trade receivables are generally due for settlement within 30 days.

Collectability of trade receivables is reviewed on an ongoing basis. Debts which are known to be uncollectable are written off by reducing the carrying amount directly. A provision for impairment of trade receivables is raised when there is objective evidence that the company will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation and default or delinquency in payments (more than 60 days overdue) are considered indicators that the trade receivable may be impaired. The amount of the impairment allowance is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

Other receivables are recognised at amortised cost, less any provision for impairment



## Appendix A – Historical and Pro Forma Financial Information

### (k) Trade and other payables

These amounts represent liabilities for goods and services provided to the Company prior to the end of the financial year and which are unpaid. Due to their short-term nature they are measured at amortised cost and are not discounted. The amounts are unsecured and are usually paid within 30 days of recognition.

### (l) Plant and equipment

Depreciation is provided on a straight-line method to allocate the gross carrying amounts of the assets less their residual values over their estimated useful lives of each part of an item of these assets. The annual rates of depreciation are as follows:

Plant and equipment	- 10% to 33%.
Renovation	- 50%

An asset is depreciated when it is available for use until it is derecognised even if during that period the item is idle. Fully depreciated assets still in use are retained in the financial statements.

Plant and equipment are carried at cost on initial recognition and after initial recognition at cost less any accumulated depreciation and any accumulated impairment losses. The gain or loss arising from the derecognition of an item of plant and equipment is measured as the difference between the net disposal proceeds, if any, and the carrying amount of the item and is recognised in profit or loss. The residual value and the useful life of an asset is reviewed at least at each end of the reporting period and, if expectations differ significantly from previous estimates, the changes are accounted for as a change in an accounting estimate, and the depreciation charge for the current and future periods are adjusted.

Cost also includes acquisition cost, borrowing cost capitalised and any cost directly attributable to bringing the asset or component to the location and condition necessary for it to be capable of operating in the manner intended by management. Subsequent costs are recognised as an asset only when it is probable that future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably. All other repairs and maintenance are charged to profit or loss when they are incurred.

### (m) Share-based payment transactions

The Company provides benefits to employees and other parties in the form of share based payments, whereby the employees and parties provide services in exchange for shares and other securities in the Company. The cost of the equity settled share based payment transactions is determined by reference to the fair value of the equity instruments granted.

The fair value of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance/ and or service conditions are fulfilled ("vesting period").

The cumulative expense recognised for equity-settled transactions at each reporting date until vesting date reflects:

- (i) The grant date fair value;
- (ii) The extent to which the vesting period has expired; and
- (iii) The number of equity instruments that, in the opinion of the Directors of the Company, will ultimately vest.

This opinion is formed based on the best available information at reporting date. No adjustment is made for the likelihood of market performance conditions being met as the effect of these conditions is included in the determination of fair value at grant date.

No expense is recognised for equity instruments that do not ultimately vest, except for equity instruments where vesting is conditional upon a market condition.

## **Appendix A – Historical and Pro Forma Financial Information**

### **(n) Income tax**

The income taxes are accounted using the liability method that requires the recognition of taxes payable or refundable for the current period and deferred tax liabilities and assets for the future tax consequence of events that have been recognised in the financial statements or tax returns. The measurements of current and deferred tax liabilities and assets are based on provisions of the enacted or substantially enacted tax laws; the effects of future changes in tax laws or rates are not anticipated. Tax expense (tax income) is the aggregate amount included in the determination of profit or loss for the reporting period in respect of current tax and deferred tax. Current and deferred income taxes are recognised as income or as an expense in profit or loss unless the tax relates to items that are recognised in the same or a different period outside profit or loss. For such items recognised outside profit or loss the current tax and deferred tax are recognised (a) in other comprehensive income if the tax is related to an item recognised in other comprehensive income and (b) directly in equity if the tax is related to an item recognised directly in equity. Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same income tax authority. The carrying amount of deferred tax assets is reviewed at each end of the reporting period and is reduced, if necessary, by the amount of any tax benefits that, based on available evidence, are not expected to be realised. A deferred tax amount is recognised for all temporary differences, unless the deferred tax amount arises from the initial recognition of an asset or liability in a transaction which (i) is not a business combination; and (ii) at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss). A deferred tax liability or asset is recognised for all taxable temporary differences associated with investments in subsidiaries except where the reporting entity is able to control the timing of the reversal of the taxable temporary difference and it is probable that the taxable temporary difference will not reverse in the foreseeable future or for deductible temporary differences, they will not reverse in the foreseeable future and they cannot be utilised against taxable profits.

### **(o) Goods and services tax**

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the tax authority is included in other receivables or other payables in the statement of financial position.

Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the tax authority.

## Appendix A – Historical and Pro Forma Financial Information

### 3. Cash and cash equivalents

	Note	Audited 30-Jun-16 \$	Unaudited Pro-forma 30-Jun-16 \$
Cash and cash equivalents		32,952	4,232,952
De.mem cash and cash equivalents as at 30 June 2016			32,952
<i>Subsequent events are summarised as follows:</i>			
Seed capital raising through the issue of 7,307,692 shares issued at \$0.13 per share	1(ii)		950,000
<i>Adjustments arising in the preparation of the pro forma statement of financial position are summarised as follows:</i>			
Proceeds from the Public Offer pursuant to the Prospectus	1(iv)		3,750,000
Capital raising costs	1(v)		(500,000)
			3,250,000
Pro-forma cash and cash equivalents			4,232,952

The Prospectus has provision for subscriptions of between 18,750,000 and 22,500,000 shares to raise between \$3.75 million and \$4.5 million (before costs) wherein the pro forma statement of financial position assumes the minimum \$3.75 million is raised. Should the maximum \$4.5 million be raised, the share issue cash costs would increase to \$550,000 and the cash at bank balance would increase by \$700,000 to \$4,932,952.

### 4. Issued capital

	Note	Number of shares	\$
De.mem issued share capital as at 30 June 2016		-	3,092,760
<i>Subsequent events are summarised as follows:</i>			
Seed capital raising through the issue of 7,307,692 shares issued at \$0.13 per share	1(ii)	7,307,692	950,000
<i>Adjustments arising in the preparation of the pro forma statement of financial position are summarised as follows:</i>			
Shares to be issued to shareholders of De.mem Pte Ltd pursuant to the Vendor Offer	1(iii)	65,000,000	-
Fully paid ordinary shares issued at \$0.20 pursuant to this Prospectus	1(iv)	18,750,000	3,750,000
Shares issued to Alto Capital	1(vi)	1,000,000	200,000
Cash costs associated with the share issue pursuant to this Prospectus	1(v)	-	(500,000)
Cost of shares issued to Alto Capital	1(vi)	-	(200,000)
Cost of options issued to in relation to the Vendor Offer	1(vi)	-	(323,000)
		92,057,692	3,877,000
Pro-forma issued share capital		92,057,692	6,969,760

## Appendix A – Historical and Pro Forma Financial Information

### 4. Issued capital (cont.)

The Prospectus has provision for subscriptions of between 18,750,000 and 22,500,000 shares to raise between \$3.75 million and \$4.5 million (before costs) wherein the pro forma statement of financial position assumes the minimum \$3.75 million is raised. Should the maximum \$4.5 million be raised, the share issue cash costs would increase to \$550,000 and the issued capital would increase by \$700,000 to \$7,669,760.

#### (a) Restructure

The Company was not incorporated until after 30 June 2016, however, pursuant to the Prospectus, the Restructure will be treated as a common control transaction, and the pro forma opening share capital balance has been shown as a continuation of the issued share capital of De.mem Pte Ltd as at 30 June 2016 whilst the number of shares on issue is the number of shares on issue in the Company after completion of the Restructure.

### 5. Reserves

	Note	Audited 30-Jun-16 \$	Unaudited Pro-forma 30-Jun-16 \$
Reserves		(2,998)	681,252
De.Mem reserves as at 30 June 2016			(2,998)
<i>Subsequent events are summarised as follows:</i>			
Cost of Management Options issued	1(i)		361,250
<i>Adjustments arising in the preparation of the pro forma statement of financial position are summarised as follows:</i>			
Advisor Options issued to in relation to the Offer	1(vi)		323,000
Pro-forma reserves			681,252

#### (a) Options and Broker Options

On 21 November 2016, the Company issued 4,250,000 Management Options at a fair value of \$0.36 million.

Pursuant to the Offer, the Company will issue 3,800,000 Advisor Options in relation to the Offer. The pro forma fair value of the Advisor Options is \$0.32 million.

All options have been valued using a standard binomial pricing model based on the fair value of a Company share at the grant date, assuming minimum subscription of the Offer using the following assumptions:

Assumptions	Management Options	Advisor Options
Stock price	\$ 0.20	\$ 0.20
Exercise price	\$ 0.30	\$ 0.30
Expiry period	3 years	3 years
Expected future volatility	80%	80%
Risk free rate	1.86%	1.94%
Dividend yield	0%	0%

The terms and conditions for the Advisor Options are set out in sections 15.9 of the Prospectus.

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# TECHNOLOGY REPORT



# Technology Opinion Report

February 2017

Prepared by



Wave Six Pty Ltd

ACN: 160 498 233

Contact: [neil@wave-six.com](mailto:neil@wave-six.com)



The Directors  
De.Mem Pte Ltd

14<sup>th</sup> February 2017

Dear Sirs

**Independent Technical Report on De.Mem Nanofiltration technology**

You have instructed Wave Six Pty Ltd to undertake a review of the technology and market conditions for the technology of De.Mem Pte Ltd of Singapore for the purpose of undertaking a listing on the Australian Stock Exchange in Early 2017. De.Mem Pte Ltd is a water and wastewater services company that is in the process of commercialising nanofiltration technology licensed from Nanyang Technological University Singapore.

De.Mem has instructed Wave Six to prepare this report for the purpose of inclusion as an independent expert report (IER) for inclusion in the Prospectus for raising capital for further development of and commercialisation of the Nanofiltration technology as well as ongoing operations of the company including the working capital to deploy water and wastewater facilities on behalf of clients.



Neil Prentice  
Director  
Wave Six Pty Ltd

## Executive Summary

De.Mem Pte Ltd (“De.Mem” or “the Company”) is a company whose business is focussed on the development, deployment and operation of technology and facilities for water and wastewater treatment. De.Mem has recently executed a license with Nanyang Technological University (“NTU”) Singapore to commercialise a novel Nanofiltration technology aimed at the industrial wastewater treatment market.

This technology has a range of unique feature which make it ideal for a range of applications and has the potential to displace the use of combined Ultrafiltration and Reverse Osmosis systems in water and wastewater treatment applications. While Nanofiltration technology is not suitable for the desalination of water for potable water use, it has applications in water softening and treatment of surface water as well as in the treatment of industrial effluent streams.

The De.Mem technology’s unique features allow it to perform its role at much lower operating pressures than competing products and it can provide cost savings for the end user for both capital and operational expenditure. The De.Mem technology’s features are a unique combination in the market and while similar characteristics have been investigated in an academic environment, there are no commercially available competitors which replicate all of the De.Mem technology’s key features.

The original developer of the NF technology, NTU’s Singapore membrane Technology Centre (“SMTC”) under Nanyang Environment and Water Research Institute (“NEWRI”) has an extensive track record in the development of water and water treatment technologies. The key researchers in developing the De.Mem technology are both globally recognised experts in the fields of filtration membrane development for water treatment. Furthermore, NTU itself has been globally recognised by independent industry researchers as the second rank research institution in the world for water treatment research. The development of the technology therefore has been undertaken by credible researchers with globally recognised expertise in the field of membrane development and water treatment research.

The global water and wastewater treatment equipment market, which includes the supply of filtration membranes, is estimated to exceed USD 19 billion per annum, of which the market for membranes alone is over USD 2.8 billion per annum. As a part of this, the market value for Nanofiltration membranes is projected to grow to above US\$440 million per annum by 2019 and of this segment, approximately 75% of this expenditure will be on water and wastewater treatment. De.Mem is targeting both the market for Nanofiltration and to replace Ultrafiltration and Reverse Osmosis in some applications to address this market segment. It will supply it Nanofiltration technology both to its own projects on behalf of end users as well as to 3<sup>rd</sup> party system integrators in the water treatment segment.

De.Mem’s business model will encompass not only the supply of filtration technology but will also target design, build and operate projects for end users. This will initially target primarily industrial water and wastewater treatment applications but this may also expand into processing applications in a range of industry sectors in the future.

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## Declarations

### Statement of Independence

Wave Six Pty Ltd is an independent consulting firm specialising in early stage technology commercialisation. Apart from the preparation of this report, Wave Six does not have any business relationship with De.Mem, Ventnor Capital, or any other company that could reasonably be regarded as being prejudicial to its ability to give an unbiased and independent assessment.

Wave Six is remunerated for this report on a pre-agreed fixed fee basis, independently of the content of the report and any outcome arising from its use.

### Statement of Competence

This report was prepared by Neil Prentice of Wave Six Pty Ltd and a brief biography is set out below.

**Neil Prentice** has over 25 years' commercial experience working with R&D and technology based organisations. He holds degrees in multiple scientific disciplines as well as in Strategic Marketing and has worked in operational and consulting roles with a broad range of organisations. He has worked as an industrial chemist including dealing with membrane and membrane cleaning products as well as worked with various organisations on the research and commercialisation of various water purification technologies. In addition, Neil has worked extensively in the field of commercialisation of new technologies in commercial and university environments as well as working with Due Diligence teams for the acquisition of multiple companies.

### Disclaimer

Wave Pty Ltd has prepared this report for the sole use of the Client and for the intended purposes as stated in the agreement between the Client and Wave Six Pty Ltd under which this work was completed. The report may not be relied upon by any other party without the express written agreement of Wave Six Pty Ltd

This document has been prepared in good faith on the basis of information available at the date of publication without any independent verification. Wave Six Pty Ltd does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this and will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information in this report.

No representation, warranty or undertaking, express or implied, is made as to the accuracy, currency, reliability or completeness of any information contained in this Report or any further information supplied by or on behalf of Wave Six Pty Ltd or its officers, employees, shareholders, advisers or consultants or any other party involved in the preparation of or referred to in this Report

## Objective & Scope

The objective of this work is to express an independent opinion on a technical and market of the De.Mem technology and business opportunity as it currently stands. This opinion is specifically requested to address the technology in respect of:

- A. The characteristic of the De.Mem nanofiltration technology in the context of its capabilities and performance against the current market competitors and whether it fits a unique positioning in the market;
- B. Research to date and future development requirements;
- C. The context of the capabilities of Nanyang Technological University as a provider of the technology; and
- D. The market potential and identified applications for the De.Mem NF technology.

## Methodology

This report is based on discussions and written communications with De.Mem staff as well as documentation supplied by De.Mem in respect of their technology and business. Additional 3<sup>rd</sup> party materials were also reviewed in respect of the technology and market information where required.

Documents provided by De.Mem include:

- Laboratory test results and documentation;
- Presentation on the technology;
- Market research summaries;
- Academic research papers; and
- Engineering cost models.

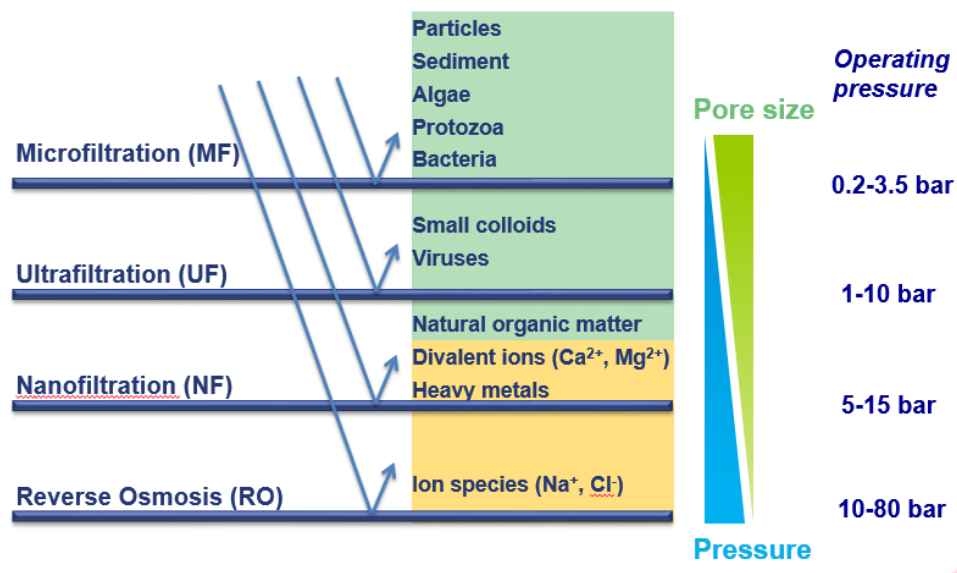
## De.mem Technology overview

### Over view of Nanofiltration technology

As a core part of the De.Mem business, the Company has licenced technology a nanofiltration (NF) membrane from Nanyang Technological University's Singapore Membrane Technology Centre. This licensed technology has novel features not found in existing NF membrane separation technologies including using a new material and manufacturing for the membrane construction.

NF membranes were originally developed in the 1980's as part of the growing field of membrane separation; the use of synthetic membranes to filter or purify liquids and reject unwanted materials including dissolved solids, organic materials and microscopic biological materials. Membrane filtration processes replaced older filtration technologies in many applications, particularly in water treatment and chemical processing. The use of membrane separation has grown to create a significant global market and these technologies are used in many industry sectors and constitute a multibillion dollar a year global market.

There are several different types of membrane separation technologies, each suitable for the removal (or retention) of different materials based on their physical size, molecular weight or chemical properties. Typically, the effectiveness for separation of membranes is classified in order of decreasing molecular size as microfiltration (MF), ultrafiltration (UF) nanofiltration (NF) and reverse osmosis (RO). A comparison of the different materials retained or transmitted by the different types of membranes can be seen below.



Source SMTC

While MF and UF are primarily physical barriers to passing particles through the membrane, NF and RO are driven to a degree by pressure based diffusion processes across the membrane, with RO exhibiting this diffusion effect to a greater degree than NF. However, all membrane separation processes are about the separation of dissolved and suspended solids from a liquid stream, typically

the liquid is water. Thus, the separation process in NF is a combination of selectively sieving and diffusion of molecules across a membrane barrier.

Due to the types of molecules that are passed through NF membranes, it makes the technology ideal for domestic and commercial water treatment processes, particularly the treatment of industrial wastewater. However, the technology faces direct competition in this role from the combination of UF and RO processes which are considered a standard set up in these situations. The use of UF combined with RO in series is implemented to prevent excessive fouling (blockage) of RO membranes due to the small particle size range rejected by RO.

NF falls between UF and RO in terms of the size of material that is rejected, making the technology suitable for many applications where UF alone is unsuitable. However, NF is not applicable in applications such as desalination, as it is unable to reject monovalent sodium and chloride ions.

Typically, NF and RO filtration operates at higher pressures than MF or UF due to the need to force diffusion of water across the membrane. However, this increased pressure limits the configurations of the membrane and its effective packing and surface area and this is discussed further below, specifically in respect of the De.Mem technology.

The key characteristics of NF that make it advantageous includes:

- Lower discharge volumes, lower retentate concentrations than RO for low value salts;
- Lower operating pressures and energy consumption than comparably sized RO systems;
- Reduction salt content and dissolved matter content (TDS) in brackish water;
- Reduction in heavy metals;
- Reduction in nitrates and sulphates;
- Reduction in colour, tannins and turbidity;
- Reduction of COD in permeate streams;
- Softens hard water (reduces  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$  ion concentrations);
- Does not require chemical additives chemicals during operation;
- pH of water after nano-filtration is normally non-aggressive;
- Capable of disinfection of permeate streams.

## The De.Mem NF technology

The De.Mem NF technology derives a competitive advantage over other NF membrane technologies as well as potentially replacing combined UF and RO systems in several key application areas in the treatment of wastewater. The key differences that De.Mem highlights for its competitive advantage are:

- The use of a novel polyethyleneimine (PEI) membrane;
- The use of a hollow fibre (HF) configuration in place of spiral wound sheets which are used in the majority of NF and RO filtration systems as well as a reversal of the normal flow process (outside-in rather than inside-out); and
- Lower energy consumption due to lower operating pressures than competing NF and combined UF/RO systems.

Each of these points of difference are further discussed below.

## **Membrane substrate**

The use of PEI as the membrane for the material in an NF application is unusual in as much as most other NF products on the market use different polymer materials such as polyamide (PA) or polyether sulfone (PES) in fabricating the membrane. Previously, SMTC had developed a combines PEI / PES membrane which was licensed to another commercial entity but the De.Mem technology has been developed independently of this and is not an extension of this earlier technology. Furthermore, the new pure PEI membrane licensed by De.Mem has superior performance characteristics to the earlier PEI / PES membrane and is seen as a significant technological advancement by the Company.

One of the greatest differences in the use of PEI in the construction of the membrane is that the membrane surface is positively charged under normal operating conditions. Conventional PES and PA NF membranes hold a negative surface charge. A membrane with a positively charged surface assists in the separation of some dissolved ionic species as part of the filtration process, particularly divalent metal ions. Published research on positively charged NF membranes has also indicated that there is also a beneficial effect on reducing scale formation during operation which has a significant impact on operation and maintenance involving the membrane.

## **Membrane configuration**

Membranes used in filtration processes are typically supplied as a cartridge unit which contains the membrane. The configuration of the membrane within the cartridge unit can have a significant effect on the efficiency of the filtration during operations, but there are operational requirements which make some membrane configurations inappropriate.

Most commercially available NF membranes are configured in a spiral wound configuration, that is, a flat membrane sheet wound into a spiral shape within a cylinder, using spacers to keep the sheet separated and allowing flow of liquid across the membrane. De.Mem's technology is based a hollow fibre configuration where clusters of hollows fibres are held within closed cylinders and this configuration is not normally used in commercially available NF products. Only one other NF membrane supplier has been found that uses hollow fibre systems, the rest supply filtration system in a spiral wound configuration.

Hollow fibre NF systems have one great advantage over spiral wound systems and that is that they have a significantly greater surface area per filtration module. Hollow fibre membranes have a significantly higher packing density than spiral wound units and therefore have a higher surface area per unit volume. For example, a 20cm x 1m module with a spiral-wound configuration would contain about 20 - 40 m<sup>2</sup> of membrane area. The equivalent hollow-fibre module filled with fibres of 100 µm diameter, will contain approximately 600 m<sup>2</sup> of membrane area. The higher the surface area, the greater the flux volume that can cross the membrane and therefore has a greater overall efficiency for the filtration process.



Spiral wound membranes are the norm in NF systems and they are more robust in terms of pressure as well as being typically less susceptible to physical damage than hollow fibre systems but spiral wound membranes are less resilient against fouling from small particles and cannot be cleaned as easily. This provides an operational advantage to the De.Mem system in the effluents that can be treated with other pre-treatment as well as facilitation cleaning and de-fouling operations.

Although hollow fibres are more resilient to small particulates than spirals, hollow fibres may also require pre-filtration where larger particulates or fibres are present in the feed material to prevent blockage. This is the same for many filtration processes where some pre-treatment is required and this is the typical function of the combination of the use of UF prior to RO treatment.

Hollow fibre filters have a higher packing density due to the fibres being flexible strands in parallel bundles but this creates an issue in that hollow fibres cannot deal with high pressure environments. That is, membranes with a hollow fibre configuration is not normally used in NF and RO applications as the operating pressures used in these processes collapses the fibre preventing fluid flow. Thus, in the normal high pressure NF applications, a spiral wound membrane is the only possible configuration but it is less efficient than hollow fibre configurations. The low pressure at which the De.Mem technology operates allows the use of the hollow fibre configuration which then allows lower energy consumption. However, the system could theoretically be operated at higher pressures if required but this is not likely to be applicable in most of its use cases.

Only one other commercially available NF membrane using hollow fibre configuration has been identified as currently being available on the market at this time. Based on PES, the product is a modified UF membrane with a lower molecular weight cut off. However, this membrane operates at higher pressures than the De.Mem technology and therefore is more energy intensive. Several research projects have been published in the academic literature using hollow fibre NF but none of these projects has yet appeared to have been commercialized to any major extent.

## **Reduced energy consumption**

The capacity for De.Mem's NF technology to operate at a lower pressure than comparable NF technologies means that the energy consumed in the process will be lower than that typically consumed by competing NF and RO systems. The primary energy consumption for filtration processes comes from the pumping required to transfer the mass and generate the operating pressures required by the process to effect filtration. Essentially, the higher the pressure, the greater the energy consumption required as an input to the process.

Most, if not all high pressure filtration systems such as NF and RO incorporate some form of energy recovery system which reduces the system's overall energy consumption. Energy recoveries in these instances may be in the order of 40-50% of the total energy requirements. However, due to the operating pressures involved, this energy consumption is still likely to be higher than for the De.Mem NF system, providing the De.Mem system an energy cost advantage during operations. The comparison of operating pressures and typical energy consumption for these systems can be seen in the following section.

## Comparison of De.Mem with other filtration technologies.

The table below outlines a comparison of the De.Mem technology against other membrane filtration solutions.

	Units	UF	NF	DeMem NF	RO
<b>Membrane Material</b>		PS, PP, CA, PLA	PA, PES	PEI	PA
<b>Configuration</b>		SW, HF	SW	HF	SW
<b>Flow direction</b>		Inside Out	Inside out	Outside In	Inside Out
<b>Operating pressure</b>	kPa	200-700	600-1,000	200	2,700-8,200
<b>Energy Consumption</b>	kWh/m <sup>3</sup>	0.3-1	1-3	0.12	2.5-5*
<b>Particle size rejection</b>	nm	10-100	1-10	1-10	<1
<b>MWCO</b>	Da	>10,000	200-1,000	>200	

MWCO-Molecular weight cut off; SW- Spiral Wound; HF- Hollow fibre; PES- Polyether sulfone; PP-Polypropylene; CA- Cellulose Acetate; PLA - Polylactic Acid; PA- Polyamide; PEI- polyethyleneimine.

\* - Energy consumption varies based on the osmotic pressure required by the process, water temperature and is net of energy recovery.

Based on the test results from laboratory scale trials, the De.Mem technology could provide significant operating cost benefits compared to both conventional NF and combined UF / RO systems. Furthermore, for applications where a combined UF/RO process is currently being used, there is the potential for capital cost savings as well in implementation of the De.Mem technology.

## Testing & Development of the De.Mem NF membrane

As part of the development, laboratory tests on the effectiveness of the NF membrane have been undertaken using a range of membrane formulations and samples. Testing the effectiveness of the NF membrane has been conducted using standardised laboratory solutions as well as actual water samples from natural and wastewater sources. Tests have shown effective reduction in permeate concentrations for a range of chemical species that are treated using the De.Mem NF process including:

- Divalent metal ions;
- Sulphates;
- Organic carbon (chemical oxygen demand);
- Colour as measured using the APHA-Hazen Scale.

The testing has also indicated that while there is some reduction in the pass through of monovalent sodium ions but this is minor compared to the level of removal of monovalent ions seen in RO processes and is comparable with that seen in other NF technologies.

All testing to date has been undertaken at a laboratory scale and a test scale pilot plant has not yet been built. Full pilot plant testing for extended periods has not yet been undertaken but is planned for 2017 once the membrane manufacturing plant is operational and 'plug and play' type filter cartridges can be produced. Pilot scale testing and use case examples for deployment will identify the operational requirements and issues with regard to the up-scaling of the technology for larger

commercial applications that have not been addressed at a laboratory scale. The De.Mem team has a significant engineering and system integration background and experience and as such has the skills and capabilities to undertake this work.

## Sensors & management software

The Company has taken out licenses on two technologies for monitoring membrane integrity and performance from SMTC which are separate from the NF membrane technology. The two technologies are:

- An **Integrity Sensor** which measures the membrane and pressure differential across the membrane and compares this to a separate ‘ideal’ sample cell to assess its ongoing performance in real time; and
- An **Acoustic Sensor** which measures the fouling on membranes to determine if and when cleaning operations are required.

The Integrity Sensor technology can be applied in any type of membrane filtration operations and is currently in operation along with monitoring and reporting software which has been developed by De.Mem for this specific application. The monitoring software provides a real-time summary dashboard for operators to monitor plant performance during operations. A view of the operational dashboard can be seen in the picture below.



The monitoring software has been developed with the capability to manage the operations of decentralised water facilities from a centralised location. While water production and utilities have evolved to a highly-centralised model for urban locations in the past, as new markets evolve and expand in Asia and Africa, there is a greater need for decentralised water production and treatment and De.Mem is targeting this emerging market.

The Acoustic Sensor technology has not yet been commercialised by De.Mem at this time but is merely under assessment for its effectiveness in monitoring membrane fouling. As this technology is still under assessment by De.Mem there is a possibility that it will not be commercialised by the Company in the future.

### **NTU experience in water technology**

The De.Mem technology has been licensed from NTU, Singapore, a noted leader in the development of water technologies. In 2013, independent researcher Lux Research listed NTU as the #2 water treatment research institution in the world after the National University of Singapore. Overall, NTU is ranked at 54<sup>th</sup> in the world by the Times Higher Education Rankings and the centre which has developed the technology, the Singapore Membrane Technology Centre (SMTC) has operated as a part of NTU's NEWRI institute since 2008.

De.Mem has engaged SMTC senior staff, Professors Wang Rong and Anthony Fane, as part of the team for commercialisation of the NF membrane technology. Both Professors Fane and Wang have held senior leadership positions in SMTC and both have been globally recognised as leading researchers in water technologies. In November 2016, Professors Wang and Fane were awarded the Alternative Water prize as part of the Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW) for their membrane research, at a ceremony in New York. While this was in relation to the creation of positively charged NF membranes this award was not in relation to the De.Mem technology.

Both Professors' Fane and Wang are listed as authors in multiple patents or patent applications involved with membrane separation and water treatment technologies. Between them

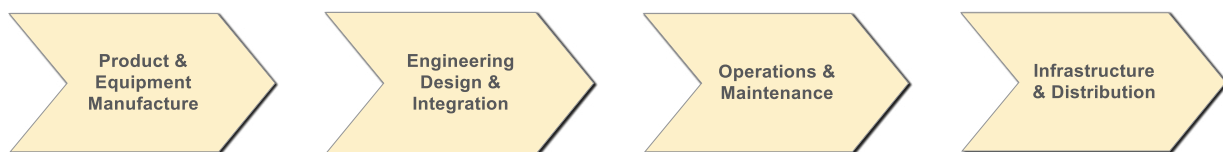
Since its inception in 2008, SMTC's publications list in the field of membrane separation technologies, includes over 300 peer reviewed journal articles and nearly 200 conference presentations. Review of a sample of the journals where these articles have been published, they are almost exclusively Q1 (top tier) journals with high impact factors. This is indicative of the quality of the research being undertaken at SMTC. Most these papers include either or both Professors Wang and Fane as contribution authors.

## Market opportunity

### Market value chain & segments

De.Mem plans to be both a manufacturer of filtration equipment as well as to design, build and operate systems for water treatment. As such, De.Mem will operate across the full extent of the value chain for waste water and water treatment.

The basic value chain can be seen below.



1. **Product & Equipment manufacture** - This covers the manufacture and distribution of equipment for the construction of the plant. De.Mem will only be supplying its NF technology and therefore will be acquiring or utilising other physical plant if it undertaken projects involved in the design and building of water treatment systems.
2. **Engineering Design & Integration**– The engineering design, integration & construction of turn-key systems
3. **Operation& Maintenance** – The ongoing operations and management of water treatment facilities on a fee for service basis. These operations may be integrated with the infrastructure and distribution business
4. **Infrastructure & Distribution**- Operation and management of the distribution infrastructure and maintaining service levels and quality of end point consumers.

De.Mem is currently operating in across a number stages of the value chain and they plan to enter into the Product & Equipment Manufacturing segment. The current De.Mem team has demonstrated experience in these areas within De.Mem’s operations and in their roles prior to joining De.Mem.

De.Mem’s business model includes the design, building and operation of decentralised water treatment processes/ facilities specifically industrial waste water, which is a different market than the larger, centralised systems that are targeted by the existing major players in the market. This niche market is one which is expected to grow in the future, particularly in the Asia / Pacific region. The market context of this is further discussed in the following section.

The entry into the Product and Equipment manufacturing space is also a new market opportunity for De.Mem as they can sell the NF modules as a separate product to 3<sup>rd</sup> party providers as well as applying the NF products in their own projects. This will also provide an additional, non-project based revenue stream for the Company.

## Market size and opportunity.

The majority of De.Mem's business is targeting the market for the treatment of wastewater and production of water. Globally this is a significant market worth hundreds of billions per annum which is also anticipated to see continuing growth in the future. The key global area of interest is in the Asian market with China and developing countries seen as the greatest potential opportunity in the future as water limits becomes an increasingly important factor for many countries. It is almost universally agreed that China has significant water problems, which will only increase in the future, making the Chinese market a significant opportunity. However, other market opportunities in the East and South Asian areas will also grow in the short to medium term.

The market for water and wastewater treatment can be segmented into multiple sub-segments, some of which are the most critical to the De.Mem Business. Segmentation of the water treatment market can be broken down into two main areas- water utilities and services and water and wastewater solutions, which is of the most interest to De.Mem. Water and wastewater solution can further be broken down into multiple areas as follows:

- Water and wastewater solutions
  - Build & maintenance
    - Chemicals, treatment & process equipment (including membranes)
    - Chemicals
  - Maintenance and monitoring services
  - Design and consulting
  - Building and infrastructure

Most of the areas, except the supply of chemicals are addressed by De.Mem in their market strategy. While an important part of the De.Mem business will be the manufacture and supply of its novel NF membrane technology, it will have the opportunity to capture value across multiple segments of the water and wastewater market based on its strategy. This arises from their role and designer, consultants and systems integrators as well as their capabilities in the operation of such plants on behalf of end users.

The global water treatment equipment market, which includes the supply of filtration membranes, is estimated by Frost and Sullivan to be in excess of USD 19 billion per annum, of which the market for membranes alone is over USD 2.8 billion per annum. Separately from this operational, maintenance and monitoring services market exceeds USD 64.8 billion. Further estimates by Frost and Sullivan note that by 2020 the design, build and operation market for water treatment in Asia will reach USD 65 billion through market growth of 8.6% per annum.

Industry research BCC research has forecast that the market value for NF membranes is projected to grow to above US\$440 million per annum by 2019 and of this segment, approximately 75% of the expenditure on NF membranes will be on water and wastewater treatment. A review of other research on the market value for NF has indicated that the market may be larger. Industry analysts Frost and Sullivan estimated that in 2010, the worldwide value of NF system was \$400 million and that it was estimated to grow further at a rate of 5-8% per annum. It is unclear whether the amount cited by Frost

and Sullivan refers only to membranes or complete NF systems including infrastructure as well as membranes. Regardless of this, both researchers indicate that there is significant global potential for the future growth of NF membranes and equipment in the future.

Currently, the market value for UF and RO systems is significantly larger than that for NF membranes. Capturing of part of the value of the UF and RO market share is part of the strategy for De.Mem. Together both UF and RO markets are valued in the billions per annum with high levels of growth predicted. De.Mem's intent is to capture part of the value of this market growth in new systems as well as the potential replacement of existing systems as they reach the end of their life expectancy.

The value of the segments other than for membranes in which De.Mem intends to operate is in the regions of multiple billions per year, with the Asian market seen as one where the greatest growth in opportunities will occur. Due to the nature of this market it is not possible to accurately quantify its specific future value based on the available information.

## **Applications for the De.Mem technology**

The applications for NF technology are primarily directed towards the treatment and recovery of wastewater / effluent for reuse but can also potentially be used to concentrate process flows to remove excess water or re-concentrate process liquors for recovery or re-use as part of a process. This is due to NF's key properties which includes its capabilities for:

- Separation of divalent ions from monovalent ions in process streams (water softening);
- Separation of natural and synthetic organic materials from aqueous streams;
- Dewatering or concentration of process streams;
- Separation of proteins, sugars or macromolecules from supernatant;
- Purifying acids or bases for reuse; and
- Potable water production.

Potential applications for the De.Mem technology includes any application where NF may be used and in some instances it may displace some RO applications. Industry segments where the De.Mem technology may be applicable includes but is not limited to:

- Food & beverage manufacture;
- Oil & gas processing to clean produced water effluent;
- Electronics manufacture;
- Mining water treatment;
- Industrial effluent including high organic effluents such as palm oil waste water;
- Medical / pharmaceutical production for purification of process flows;
- Textile /dyeing applications to remove dye chemicals from waste flows;
- Municipal and domestics water production for surface and brackish water.

This list should not be considered exhaustive as there are other potential applications as well where the technology may be applicable. Specific applications however, would need to be tested separately to ensure that the De.Mem membranes are suitable for the end use application. This is a part of the normal testing process to determine operational parameters as part of the overall system design process.



## Conclusions and Opinion

Based on the scope of this report, the following conclusions can be drawn in respect of De.Mem's technology and the business opportunity.

- A. The De.Mem NF technology has a unique position in the market place at this time and has the potential to save end-users in capital and operating costs. The De.Mem technology's uniqueness is due to its properties and capabilities that do not appear to be replicated by any other commercially available NF membrane systems. Other NF membrane systems may exhibit one or two of the characteristics that are exhibited by the De.Mem membrane technology but none exhibit all of the same properties. It is the combination of all of these which De.Mem will use to position the technology in the market.

The most significant market place advantage is the capability of the membrane to operate at lower pressures than competing systems providing a potential operating cost advantage in respect of the energy requirements. This operational cost advantage comes from the operational savings on energy use from the De.Mem NF system, where cost savings may be up to 80% compared to combined UF/RO systems. Furthermore, the ability to reduce capital cost in displacing combined UF / RO in some applications has the potential for commercial advantage where capital may be constrained but effective performance is also an issue.

The additional technology licensed from NTU in the form of sensor monitoring systems, along with monitoring software developed in house will provide internal capabilities for the operation and management of water and wastewater treatment facilities. Furthermore, like the NF technology, it may be separately commercialised as a product for use in 3<sup>rd</sup> party operated treatment facilities. However, one of these sensors is not yet at a commercial stage and is still under assessment by the Company.

- B. The technology that De.Mem has licensed from SMTC has been developed at a bench scale and has been extensively laboratory tested with multiple environmental samples as well as standardised test solutions to confirm membrane performance. Further development and testing will be required as part of the commercialisation process which will include the development of testing pilot plant capacity as well as the deployment of demonstration projects which will provide data that is invaluable for future product development and improvements.

The Company's knowledgebase incorporates the skills, knowledge and capabilities for the design, construction and operation of water and wastewater treatment facilities. This is due to their prior experience before joining De.Mem as well as the demonstration of these capabilities in a number of projects.

- C. NTU's SMTC is a leading researcher in water and wastewater treatment processes and technologies and it has been recognised globally for its work in these areas. The researchers involved in the development of the NF membrane technology have creditable reputations in the development of membrane technologies and each as multiple patent applications credited to them as well as an extensive history of academic research publications in the relevant areas. As such, the technology has a credible pedigree from a reputable source.
  
- D. The market for NF technology has been forecast to grow significantly in the future with a focus on the developing Asian market. The potential market for NF membranes is forecast to grow to \$440M per annum by 2019. The NF technology will be commercialised directly by the Company as well as being sold as a standardised product for 3<sup>rd</sup> party system integrators.

The global market for water and wastewater treatment are growth areas, particularly in the Asia Pacific region, with China as the greatest driver of this growth. With a focus on the sale of products and the development, deployment and operation of turnkey projects for operators, particularly in the industrial segment.

Along with the potential market for sales of NF membranes to system integrators, De.Mem has the potential to address the broader segments of the water and waste water treatment markets. This capability has already been demonstrated with the deployment of several turnkey water treatment projects.

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# RISK FACTORS

## 12.1 INTRODUCTION

The Securities offered under this Prospectus are considered highly speculative. An investment in the Company is not risk free and the Directors strongly recommend potential investors to consider the risk factors described below, together with information contained elsewhere in this Prospectus, before deciding whether to apply for Shares and to consult their professional advisers before deciding whether to apply for Shares pursuant to this Prospectus.

There are specific risks which relate directly to the Company's business. In addition, there are other general risks, many of which are largely beyond the control of the Company and the Directors. The risks identified in this Section, or other risk factors, may have a material impact on the financial performance of the Company and the market price of the Shares.

The following is not intended to be an exhaustive list of the risk factors to which the Company is exposed.

## 12.2 ACQUISITION RISK

In order for the Company to be able to achieve its objectives and complete the Acquisition, the Company is reliant on DMS and the Major Shareholders complying with their respective contractual obligations under the Implementation Agreement. Should one of these parties fail to comply with the terms of the Implementation Agreement, the Acquisition may not complete, meaning the Company will not acquire a 100% interest in DMS.

Further, as summarised in Section 15.1, the Implementation Agreement can be terminated by DMS in the event that DMS receives a bona fide written proposal or offer to enter into a transaction similar to the Acquisition which the DMS board determines in good faith is more favourable (as a whole) to the Vendors.



Additionally, if a party defaults in the performance of its contractual obligations it may be necessary for the Company to approach a court to seek a legal remedy. Legal action can be costly and there can be no guarantee that a legal remedy will be ultimately granted on the appropriate terms. There can be no guarantee that the Acquisition will be completed.

### 12.3 COMPANY SPECIFIC - UPON COMPLETION

#### (a) Limited history

The Company is essentially a start-up company with limited trading history. No assurance can be given that the Company will achieve commercial viability or profitability through its water treatment products and its existing (or to be developed) technology, through the successful implementation of its business plan or otherwise. Until the Company is able to realise value from its projects, it is likely to incur ongoing operating losses.

#### (b) Product Quality Risks

After Completion, the products and technology supplied by the Company may not be functional, faulty, or not meet customers' expectations. This may lead to requirements for the Company to repair or improve its products after sale and/or installation, which may diminish operating margins or lead to losses.

For those systems which the Company retains in ownership and operates on behalf of the customer under long term BOO agreements, or which the Company maintains under long term maintenance agreements, the Company may be made responsible as well if such systems are not functional or faulty. The Company may face fines from regulators or claims from customers if the product water does not meet regulatory discharge standards, or the contractually agreed upon performance.

#### (c) Manufacturing Risks

Given the comparably short manufacturing experience, the Company's products may be subject to product quality risks as described above. Given the currently relatively small scale of the Company's operations, there might be a dependency on single persons which could lead to manufacturing bottlenecks or delays, in case such people are leaving the company.

#### (d) Supplier Risk

The Company sources certain key components for its systems from third party suppliers. The delivery of such components may be delayed, or a specific supplier may not be able to deliver at all, which may lead to a longer sales cycle or may force the Company to shift to another supplier.

#### (e) Key Personnel Risk

Given the still relatively small scale of its operations, the Company depends on certain key personnel. This applies to both the commercial as well as the engineering / technology side. If such key people are leaving the Company, this may lead to disruptions of customer relationships or delays in the manufacturing and product development efforts.

#### (f) Recruitment Risk

The Company has aggressive growth plans. This will require the Company to recruit experienced people. The Company's ability to execute the growth plan may depend on its ability to hire qualified staff. There is no assurance that the Company will be able to find such qualified staff as required, or will be able to recruit such qualified staff at market-standard rates.

#### (g) Development Risks

The Company's new licensed proprietary nanofiltration membrane technology is still at an early stage of development and validation. The technology still requires substantial work, to be able to be used at a commercial scale.

As detailed in Section 7.12, once the pilot line of the nanofiltration membrane is operational, the Company intends to undertake in-field validation to test the application of the technology. The hollow fiber nanofiltration membrane has been fully developed and the Company does not expect the design composition to change materially during the validation testing phase. However, the in-field validation aims to provide further operating data that is required for the optimisation of operations and deployment of the membranes at a larger, commercial scale, and operational changes relating to the implementation of the hollow fiber nanofiltration membrane to water treatment systems may be necessary.

While the Company is not presently aware of any potential problems that may result from the in-field validation testing process and is unlikely to, until such time as the in-field validation testing has been completed, this process is subject to uncertainties and there may be delays, or the project may be unsuccessful as a whole.

**(h) New Product Technology Risk**

The Company may be reliant upon certain technologies and upon the successful commercialisation of these technologies. There is a risk that as marketable technologies continue to develop in the waste water treatment industry there may be certain product developments that supersede, and render obsolete, the products and services of the Company. This would adversely affect the profitability of the Company and the likely value of its Shares.

**(i) Intellectual Property Risks**

The success of the Company's new licensed proprietary nanofiltration membrane technology depends largely on the ability of the Company to protect the underlying know how, while not infringing the proprietary rights of others. The invention is protected based on a strategy of securing the underlying trade secrets – which is the manufacturing method and materials composition of the technology. There is no assurance that others will not be able to copy the technology. Refer to the summary of the Exclusive License Agreement in Section 15.3.

As summarised in Section 15.2, De.mem has also entered into the Non-Exclusive License Agreement under which it licenses technology from NTUitive which is protected by patents and a patent application. These patents and application relate to technology currently used by De.mem in the water treatment plants which have already been deployed and do not relate to the new hollow fiber nanofiltration technology. Consequently, the Company does not consider the non-exclusive nature of the agreement to be a risk.

**(j) Relationship with NTU**

The Company has a long standing relationship with NTU which has resulted in the licencing of technology from NTUitive. The ability of the Company to commercialise the Company's licensed proprietary technologies licensed from NTUitive, is reliant on the continued support of NTU and its scientists. There is a risk that without this support, there may be delays in the commercialization of these technologies or the commercial application of the technologies may not be possible at all.

**12.4 INDUSTRY SPECIFIC****(a) Market Risk**

The markets for ultrafiltration and reverse osmosis treatment technologies are large and well established which can make the commercialisation of new waste water treatment technologies difficult and ultimately unsuccessful,

including De.mem's low pressure nanofiltration membrane technology or other future technology developments.

**(b) Sales Risks**

As summarised in Section 15.5, the Company has entered into the Givaudan Build, Own, Operate Agreement, pursuant to which De.mem has agreed to provide, install, commission and operate a waste water treatment system and to provide waste water treatment services to Givaudan.

De.mem has also entered into a number of other agreements and purchase orders to provide waste water treatment services to customers which, given the monetary amounts of the agreements, are not deemed to be material to the business. Further, De.mem is currently in discussions with both potential new and existing customers to secure additional purchase orders. As such, De.mem does not consider that the success of its business is dependent upon its relationship with Givaudan.

While the Company already has secured a number of initial contracts and customer relationships as noted above, its ability to sell its products at a larger scale still needs to be proven. The ongoing demand for the Company's products still needs to be established. It needs to grow further by attracting additional customers, to be able to build a sustainable business.

**(c) Lead time to sales**

It may take considerable time for the Company's customers to evaluate, test and make a final decision about the purchase. The Company mainly deals with large corporations or municipal organizations, which are subject to certain formal administrative procedures and requirements which increase the time required for approval of a transaction.

**(d) Competition**

The waste water treatment industry in which the Company operates is subject to strong competition. Competitors may come up with new, better or cheaper products and solutions. The Company's competitors include both small and medium enterprises and large, established corporations or multinationals. Those may decide to enter the Company's target markets, and be able to fund aggressive marketing strategies. They may also have stronger financial capabilities than the Company. This may affect the operating and financial performance of the business.

Further, the Company is competing with existing technologies within the industry that are well established which can make the commercialisation

of new waste water treatment technologies difficult and ultimately unsuccessful, including De.mem's low pressure nanofiltration membrane or other future technology developments.

**(e) Price Risks**

The price of the Company's products may be too high compared to other products, in particular in emerging markets where there is a high price pressure. This may lead to difficulties in the market acceptance for the Company's products, as customers may switch to cheaper products, which may require the Company to decrease prices. As a result, there could be lower operating margins.

**(f) Debt Collection Risk**

Customers may be slow in making payment to the Company, or may not make payment to the Company at all. This applies in particular to customers from certain of the target geographies, where traditionally the payment morale is bad or where there is an insufficient legal environment to enforce the Company's claims. In addition, the Company may use local agents in certain regions, which may lead to a gap between when the agent is paid and when the Company is paid.

**(g) Customer Default**

For the long term BOO projects, where De.mem retains the ownership in the water treatment system and is paid recurring fees by the customer, there may be a risk if the customer goes into liquidation or bankruptcy. In that case, although De.mem is the owner of the water treatment system, it may be difficult for the Company to find an alternative customer to re-sell the water treatment system, whether under a BOO arrangement or as a one-off sale. It may also be difficult to re-use the components of the water treatment system in other projects. Consequently, in such a situation, De.mem may incur losses.

## 12.5 GENERAL RISKS

**(a) Economic**

General economic conditions, introduction of tax reform, new legislation, movements in interest and inflation rates and currency exchange rates may have an adverse effect on the Company's research and development programmes, as well as on its ability to fund those programmes.

**(b) Market conditions**

Share market conditions may affect the value of the Company's quoted securities regardless of the Company's operating performance. Share market conditions are affected by many factors such as:

- general economic outlook;
- introduction of tax reform or other new legislation;
- interest rates and inflation rates;
- changes in investor sentiment toward particular market sectors;
- the demand for, and supply of, capital; and
- terrorism or other hostilities.

The market price of securities can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and technology stocks in particular. Neither the Company nor the Directors warrant the future performance of the Company or any return on an investment in the Company.

**(c) Additional requirements for capital**

The Company's capital requirements depend on numerous factors. Depending on the Company's ability to generate income from its operations, the Company may require further financing in addition to amounts raised under the capital raising. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back its development and research programmes as the case may be. There is however no guarantee that the Company will be able to secure any additional funding or be able to secure funding on terms favourable to the Company.

**(d) Investment speculative**

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the Shares offered under this Prospectus.

Therefore, the Shares to be issued pursuant to this Prospectus carry no guarantee with respect to the payment of dividends, returns of capital or the market value of those Shares.

Potential investors should consider that the investment in the Company is highly speculative and should consult their professional advisers before deciding whether to apply for Shares pursuant to this Prospectus.



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# BOARD, MANAGEMENT AND INTERESTS



## 13.1 DIRECTORS AND KEY PERSONNEL

### **Mr Andreas Kroell** **Chief Executive Officer and Director**

Mr Kroell has been the director and CFO of De.mem since the company was established, and was appointed as the Chief Executive Officer in 2016. Prior to that, Mr Kroell has been involved in the venture capital and finance industries in Germany and Singapore since 2000. Mr Kroell has led investments and held board seats in numerous companies within the water, environmental, industrial and other technology related sectors and has managed over 20 venture capital investments throughout his career, including a number of exits by trade sale and initial public offerings. Mr Kroell has worked with several portfolio companies in management and financial roles.

### **Mr Cosimo Trimiglozzi** **Non-Executive Chairman**

Mr Trimiglozzi looks back at a successful, almost 30-year long career in the feed and food ingredients / flavors & fragrances industry, one of the key target sectors for De.mem. In his last assignment, he was the COO of Wild Flavors International, Germany, responsible in particular for the Asian and South American business expansion. Mr Trimiglozzi was a member of the key management team involved in the sale of Wild Flavors on behalf of owner Mr. Wild and private equity investor KKR to ADM Group for approximately 2.5 billion USD. Prior to that, Mr. Trimiglozzi had been in other senior management roles, amongst others as Managing Director – Asia for Givaudan, a multinational corporation headquartered in Switzerland.

### **Mr Bernd Dautel** **Non-Executive Director**

Mr Dautel has been a Venture Capital expert with New Asia Investments Pte Ltd in Singapore since 2012. In this function, he managed numerous investments into companies from the chemicals and electronics sectors. Prior to this, Mr Dautel was the Managing Director Asia/Pacific for Wieland Metals, a large German manufacturer of semi-finished copper goods. He built the company's business in the Asia/Pacific region from the early stage to approximately 400 million USD in annual revenues over 20 years, with operations in Singapore, China, India and many other countries in the Asia/Pacific region.

### **Mr Stuart Carmichael** **Non-Executive Director**

Mr Carmichael is a Chartered Accountant with over 20 years of experience in the provision of corporate advisory services both within Australia and internationally. Mr Carmichael is a principal and director of Ventnor Capital Pty Ltd and Ventnor Securities Pty Ltd which specialises in the provision of corporate and financial advice to small cap ASX listed companies including capital raisings, initial public offerings, corporate restructures and mergers and acquisitions. Mr Carmichael graduated from the University of Western Australia with a Bachelor of Commerce degree in 1995, gaining experience with KPMG Corporate Finance in Perth and London before joining ASX listed property services and engineering company UGL Limited (ASX:UGL).

### **Mr Michael Edwards** **Non-Executive Director**

Mr Edwards is a Geologist and Economist with over 20 years of experience in Senior Management in both the private and public sector. He has a Bachelor of Business (Economics and Finance) from Curtin University of Technology and a Bachelor of Science (Geology) from the University of Western Australia. Mr Edwards spent three years with Barclays Australia in their corporate finance department and then eight years as an exploration and mine geologist with companies such as Gold Mines of Australia, Eagle Mining and International Mineral Resources.

Mr Edwards also acts as a Non-Executive Director of ASX listed Norwood Systems Ltd (ASX:NOR) and as Non-Executive Chairman of International Goldfields (ASX:IGS).



## 13.2 MANAGEMENT

The Company is aware of the need to have sufficient management to properly supervise its development and research programmes and the Board will continually monitor the management roles in the Company. As our projects require an increased level of involvement the Board will look to appoint additional management and/or consultants when and where appropriate to ensure proper management of the Company's projects.

### Mr Nicanor Suarin, Chief Engineer

Mr. Suarin has extensive experience in the design, construction and operations of different types of membrane-based water treatment systems. He has been working in different leading engineering and project management roles related to the water sector for more than three decades. He joined De.mem from Hyflux, a supplier for centralized water treatment systems. Prior to that, he worked with Doosan Hydro., a Florida-based company providing de-centralized water treatment systems, and other companies from the sector. Mr. Suarin has completed projects and assignments on different continents and brings in a vast network among the industry.

### Mr. Kian Lip Teo, Chief Operations Officer

Mr. Teo is an experienced professional who looks back on a long career with companies in the engineering sector. In his last role, Mr. Teo managed the activities of a non-governmental organisation based in Singapore which funded and built numerous water treatment plants in South East Asia. He managed several projects for this group, while overseeing the design, construction and operations of the plants with the organization's team of engineers.

## 13.3 DIRECTORS' SECURITY HOLDINGS

Directors are not required to hold any Shares under the Constitution.

Set out in the table below are details of the anticipated relevant interests of the Directors in the Shares of the Company upon completion of the Offers.

DIRECTOR	EXISTING SHARES	SHARES RECEIVED PURSUANT TO THE CONSIDERATION OFFER	SHARES AT COMPLETION OF THE OFFERS <sup>1</sup>	% INTEREST AT COMPLETION OF THE OFFERS <sup>2</sup>	% INTEREST AT COMPLETION OF THE OFFERS <sup>3</sup>
Andreas Kroell	1	2,606,409	2,606,410	2.83%	2.72%
Cosimo Trimiglozzi	384,616	Nil	384,616	0.42%	0.40%
Bernd Dautel	Nil	Nil	Nil	Nil	Nil
Stuart Carmichael	Nil	Nil	Nil	Nil	Nil
Michael Edwards	Nil	Nil	Nil	Nil	Nil

1. These figures assume that no Options are exercised. None of the Directors intend to participate in the Public Offer.

2. These figures assume minimum subscription under the Public Offer and that no Options are exercised.

3. These figures assume maximum subscription under the Public Offer and that no Options are exercised.

Set out in the table below are details of the anticipated relevant interests of the Directors in Options upon completion of the Offers.

DIRECTOR	OPTIONS
Andreas Kroell	500,000 <sup>1</sup>
Cosimo Trimiglozzi	500,000 <sup>1</sup>
Bernd Dautel	500,000 <sup>1</sup>
Stuart Carmichael	2,400,000 <sup>1&amp;2</sup>
Michael Edwards	500,000 <sup>1</sup>

1. The terms and conditions of the Options are set out in Section 16.4.

2. Mr Carmichael's relevant interest in Options comprises the following holdings:

(a) 1,900,000 Options to be issued to Ventnor (or its nominee(s)) at an issue price of \$0.0001 per Option pursuant to the Advisor Offer as consideration for corporate advisory services, as detailed in Section 15.7 of this Prospectus. Mr Carmichael is a director and shareholder of Ventnor; and

(b) 500,000 Options held directly by Mr Carmichael on the terms and conditions set out in Section 16.4.

## 13.4 DIRECTORS' REMUNERATION

The Constitution provides that each Director is entitled to such remuneration from the Company as the Directors decide, but the total amount provided to all non-executive Directors must not exceed in aggregate the amount fixed by the Company in a general meeting. The current maximum amount of remuneration that may be paid to all non-executive Directors has been set at \$500,000 per annum.

The Company has paid no remuneration to its Board since incorporation to the date of this Prospectus and no remuneration will be paid or accrue until such time as the Company is admitted to the Official List.

For each of the Directors, the proposed annual remuneration for the two financial years following the Company being admitted to the Official List is set out in the table below.

DIRECTOR	PROPOSED REMUNERATION (2017)	PROPOSED REMUNERATION (2018)
Mr Andreas Kroell	\$160,000 <sup>1</sup>	\$160,000 <sup>1</sup>
Mr Cosimo Trimigliozzi	Nil	Nil
Mr Bernd Dautel	Nil	Nil
Mr Stuart Carmichael	\$30,000	\$30,000
Mr Michael Edwards	\$30,000	\$30,000

<sup>1</sup> The remuneration is payable in Singapore dollars at \$168,000 SGD per annum, and is converted to Australian dollars at an assumed exchange rate of 1.05 SGD: 1 AUD. A summary of Mr Kroell's employment agreement is set out in Section 15.10 of this Prospectus.

The remuneration of the executive Directors will be determined by the Board. A summary of Mr Kroell's employment agreement is set out in Section 15.10 of this Prospectus.

## 13.5 RELATED PARTY AND OTHER INTERESTED PARTY TRANSACTIONS

### 13.5.1 Relationship between Director, Mr Andreas Kroell and De.mem

One of the Directors, Mr Andreas Kroell, is a director and a shareholder of De.mem. The Company proposes to acquire the shares in De.mem held by Mr Kroell as part of the Acquisition. Following Completion, Mr Kroell will hold 2,606,409 Shares comprising voting power of 2.8% of the Company (assuming minimum subscription is reached and no Options are exercised).

### 13.5.2 Service Agreements

The Company has entered into services agreements with Ventnor, a company related to Mr Carmichael.

Refer to Sections 15.7 and 15.8 of this Prospectus for a summary of the service agreements.

### 13.5.3 Deeds of indemnity, insurance and access

The Company has entered into deeds of indemnity, insurance and access with each Director.

Refer to Section 15.12 of this Prospectus for a summary of the deeds of indemnity, insurance and access.

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# CORPORATE GOVERNANCE



## 14.1 ASX CORPORATE GOVERNANCE COUNCIL PRINCIPLES AND RECOMMENDATIONS

Our Company has adopted comprehensive systems of control and accountability as the basis for the administration of corporate governance. The Board is committed to administering the policies and procedures with openness and integrity, pursuing the true spirit of corporate governance commensurate with the Company's needs.

To the extent applicable, our Company has adopted The Corporate Governance Principles and Recommendations (3rd Edition) as published by ASX Corporate Governance Council (**Recommendations**).

In light of the Company's size and nature, the Board considers that the current Board is a cost effective and practical method of directing and managing the Company. As the Company's activities develop in size, nature and scope, the size of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

The Company's main corporate governance policies and practices as at the date of this Prospectus are outlined below and the Company's full Corporate Governance Plan is available for review at the Company's website [www.demembranes.com](http://www.demembranes.com).

### **Board of directors**

The Board is responsible for corporate governance of the Company. The Board develops strategies for the Company, reviews strategic objectives and monitors performance against those objectives. The goals of the corporate governance processes are to:

- (a) maintain and increase Shareholder value;
- (b) ensure a prudential and ethical basis for the Company's conduct and activities; and
- (c) ensure compliance with the Company's legal and regulatory objectives.

Consistent with these goals, the Board assumes the following responsibilities:

- (a) developing initiatives for profit and asset growth;
- (b) reviewing the corporate, commercial and financial performance of the Company on a regular basis;
- (c) acting on behalf of, and being accountable to, the Shareholders; and

- (d) identifying business risks and implementing actions to manage those risks and corporate systems to assure quality.

The Company is committed to the circulation of relevant materials to Directors in a timely manner to facilitate Directors' participation in the Board discussions on a fully-informed basis.

### **Composition of the Board**

Election of Board members is substantially the province of the Shareholders in general meeting.

### **Identification and management of risk**

The Board's collective experience will enable accurate identification of the principal risks that may affect the Company's business. Key operational risks and their management will be recurring items for deliberation at Board meetings.

### **Ethical standards**

The Board is committed to the establishment and maintenance of appropriate ethical standards.

### **Independent professional advice**

Subject to the Chairman's approval (not to be unreasonably withheld), the Directors, at the Company's expense, may obtain independent professional advice on issues arising in the course of their duties.

### **Remuneration arrangements**

The remuneration of an executive Director will be decided by the Board, without the affected executive Director participating in that decision-making process.

The total maximum remuneration of non-executive Directors is initially set by the Constitution and subsequent variation is by ordinary resolution of Shareholders in general meeting in accordance with the Constitution, the Corporations Act and the ASX Listing Rules, as applicable. The determination of non-executive Directors' remuneration within that maximum will be made by the Board having regard to the inputs and value to the Company of the respective contributions by each non-executive Director. The current amount has been set at an amount not to exceed \$500,000 per annum.

In addition, a Director may be paid fees or other amounts (i.e. subject to any necessary Shareholder approval, non-cash performance incentives such as Options) as the Directors determine where a Director performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director.

Directors are also entitled to be paid reasonable travelling, hotel and other expenses incurred by them respectively in or about the performance of their duties as Directors.

The Board reviews and approves the remuneration policy to enable the Company to attract and retain executives and Directors who will create value for Shareholders having consideration to the amount considered to be commensurate for a company of its size and level of activity as well as the relevant Directors' time, commitment and responsibility. The Board is also responsible for reviewing any employee incentive and equity-based plans including the appropriateness of performance hurdles and total payments proposed.

### ***Trading policy***

The Board has adopted a policy that sets out the guidelines on the sale and purchase of securities in the Company by its key management personnel (i.e. Directors and, if applicable, any employees reporting directly to the managing director). The policy generally provides that the written acknowledgement of the Chair (or the Board in the case of the Chairman) must be obtained prior to trading.

### ***External audit***

The Company in general meetings is responsible for the appointment of the external auditors of the Company, and the Board from time to time will review the scope, performance and fees of those external auditors.

### ***Audit committee***

The Company will not have a separate audit committee until such time as the Board is of a sufficient size and structure, and the Company's operations are of a sufficient magnitude for a separate committee to be of benefit to the Company. In the meantime, the full Board will carry out the duties that would ordinarily be assigned to that committee under the written terms of reference for that committee, including but not limited to, monitoring and reviewing any matters of significance affecting financial reporting and compliance, the integrity of the financial reporting of the Company, the Company's internal financial control system and risk management systems and the external audit function.

### ***Diversity policy***

The Company has not adopted an express policy specifically addressing the achievement of gender diversity. Due to the current limited size of the Board, the Board does not consider it necessary to have a gender diversity policy, but will consider adopting a gender diversity policy in the future following an increase in the size of the organisation.

## **14.2 DEPARTURES FROM RECOMMENDATIONS**

Following admission to the Official List of ASX, the Company will be required to report any departures from the Recommendations in its annual financial report.

The Company's compliance and departures from the Recommendations as at the date of this Prospectus are set out on the following pages.

PRINCIPLES AND RECOMMENDATIONS	COMMENT
1. LAY SOLID FOUNDATIONS FOR MANAGEMENT AND OVERSIGHT	
1.1. A listed entity should disclose the respective roles and responsibilities of its board and management; and those matters expressly reserved to the board and those delegated to management.	<p>The Board is ultimately accountable for the performance of the Company and provides leadership and sets the strategic objectives of the Company. It appoints all senior executives and assesses their performance on at least an annual basis. It is responsible for overseeing all corporate reporting systems, remuneration frameworks, governance issues, and stakeholder communications. Decisions reserved for the Board relate to those that have a fundamental impact on the Company, such as material acquisitions and takeovers, dividends and buybacks, material profits upgrades and downgrades, and significant closures.</p> <p>The Company has developed a Board Charter which sets out the roles and responsibilities of the Board, a copy of which is available on the Company's website.</p>
1.2. A listed entity should undertake appropriate checks before appointing a person, or putting forward to security holders a candidate for election as a director and provide security holders with all material information in its possession relevant to a decision on whether or not to elect or re-elect a director.	<p>As Board members are appointed to represent the interests of Shareholders, appropriate checks are undertaken by management before nominating or appointing candidates to the Board. Shareholders are provided with all material information in the Company's possession relevant to a decision on whether or not to elect or re-elect a director.</p> <p>Full details of the Company's policy and procedure for selection and appointment of new directors is available on the Company's website.</p>
1.3. A listed entity should have a written agreement with each director and senior executive setting out the terms of their appointment.	The Company maintains written agreements with each of its Directors and senior executives setting out their roles and responsibilities.
1.4. The company secretary of a listed entity should be accountable directly to the board, through the chair, on all matters to do with the proper functioning of the board.	The Company Secretary is engaged by the Company to manage the proper function of the Board. The Company Secretary reports directly to the Chair and is accountable to the Board.

PRINCIPLES AND RECOMMENDATIONS	COMMENT
<p>1.5. A listed entity should:</p> <ul style="list-style-type: none"> <li>(a) have a diversity policy which includes requirements for the board or a relevant committee of the board to set measurable objectives for achieving gender diversity and to assess annually both the objectives and the entity's progress in achieving them;</li> <li>(b) disclose that policy or a summary of it; and</li> <li>(c) disclose as at the end of each reporting period the measurable objectives for achieving gender diversity set by the board or a relevant committee of the board in accordance with the entity's diversity policy and its progress towards achieving them and either: <ul style="list-style-type: none"> <li>i. the respective proportions of men and women on the board, in senior executive positions and across the whole organisation (including how the entity has defined "senior executive" for these purposes); or</li> <li>ii. if the entity is a "relevant employer" under the Workplace Gender Equality Act, the entity's most recent "Gender Equality Indicators", as defined in and published under that Act.</li> </ul> </li> </ul>	<p>The Company has not adopted an express policy specifically addressing the achievement of gender diversity. Due to the current limited size of the Board, the Board does not consider it necessary to have a gender diversity policy, but will consider adopting a policy in the future. Furthermore, the Company has not set any objectives for achieving gender diversity. Should a gender diversity policy be considered appropriate for the Company in the future due to increases in size of the organisation, the policy will specifically deal with the objectives for achieving diversity.</p> <p>The Company's corporate code of conduct provides a framework for undertaking ethical conduct in employment. Under the corporate code of conduct, the Company will not tolerate any form of discrimination or harassment in the workplace.</p> <p>The Group currently has no female board members or senior executives.</p>
<p>1.6. A listed entity should:</p> <ul style="list-style-type: none"> <li>(a) have and disclose a process for periodically evaluating the performance of the board, its committees and individual directors; and</li> <li>(b) disclose, in relation to each reporting period, whether a performance evaluation was undertaken in the reporting period in accordance with that process.</li> </ul>	<p>The Board reviews its performance annually, as well as the performance of individual Committees and individual directors (including the performance of the Chairman as Chairman of the Board).</p> <p>Full details of the process for performance evaluation of the Board, Board committees, individual Directors and key executives are available on the Company's website.</p>
<p>1.7. A listed entity should:</p> <ul style="list-style-type: none"> <li>(a) have and disclose a process for periodically evaluating the performance of its senior executives; and</li> <li>(b) disclose, in relation to each reporting period, whether a performance evaluation was undertaken in the reporting period in accordance with that process.</li> </ul>	<p>Until Completion, the Company will not have had any senior executives and as such a policy for their performance evaluation has not been developed.</p> <p>The Company intends to develop its senior executive performance evaluation procedures in order to facilitate an evaluation to be undertaken within the first 12 months of the acquisition against the key objectives.</p>

PRINCIPLES AND RECOMMENDATIONS	COMMENT
<b>2. STRUCTURE THE BOARD TO ADD VALUE</b>	
<p>2.1. The board of a listed entity should:</p> <p>(a) have a nomination committee which:</p> <ul style="list-style-type: none"> <li>i. has at least three members, a majority of whom are independent directors; and</li> <li>ii. is chaired by an independent director, and disclose:</li> <li>iii. the charter of the committee;</li> <li>iv. the members of the committee; and</li> <li>v. as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</li> </ul> <p>(b) if it does not have a nomination committee, disclose that fact and the processes it employs to address board succession issues and to ensure that the board has the appropriate balance of skills, knowledge, experience, independence and diversity to enable it to discharge its duties and responsibilities effectively.</p>	<p>In view of the size and resources available to the Company, it is not considered that a separate nomination committee would add any substance to this process, as such the Board as a whole will act in regards to the responsibilities of the nomination committee. Those responsibilities are outlined in the Nomination and Remuneration Committee Charter which is available on the Company's website.</p>
<p>2.2. A listed entity should have and disclose a board skills matrix setting out the mix of skills and diversity that the board currently has or is looking to achieve in its membership.</p>	<p>The Board's skills matrix indicates the mix of skills, experience and expertise that are considered necessary at Board level for optimal performance of the Board. The matrix reflects the Board's objective to have an appropriate mix of industry and professional experience including skills such as leadership, governance, strategy, finance, risk, IT, HR, policy development, international business and customer relationship. External consultants may be brought in with specialist knowledge to address areas where this is an attribute deficiency in the Board.</p>
<p>2.3. A listed entity should disclose:</p> <p>(a) the names of the directors considered by the board to be independent directors;</p> <p>(b) if a director has an interest, position, association or relationship of the type described in Box 2.3 but the board is of the opinion that it does not compromise the independence of the director, the nature of the interest, position, association or relationship in question and an explanation of why the board is of that opinion; and</p> <p>(c) the length of service of each director.</p>	<p>The Company will disclose in its Annual Report those Directors it considers independent Directors and the considerations given in determining independence. The Annual Report also includes the length of service of each Director.</p>



PRINCIPLES AND RECOMMENDATIONS	COMMENT
2.4. A majority of the board of a listed entity should be independent directors.	Given the Company's present size and scope, it is currently not the Company's policy to have a majority of independent Directors. Directors have been selected to bring specific skills and industry experience to the Company. The Board has an expansive range of relevant industry experience, financial, legal and other skills and expertise to meet its objectives.
2.5. The chair of the board of a listed entity should be an independent director and, in particular, should not be the same person as the CEO of the entity.	Following Completion the Chairman, Mr Cosimo Trimiglozzi will be considered independent.
2.6. A listed entity should have a program for inducting new directors and provide appropriate professional development opportunities for directors to develop and maintain the skills and knowledge needed to perform their role as directors effectively.	<p>Upon appointment to the Board new Directors are provided with Company policies and procedures and are provided an opportunity to discuss the Company's operations with senior management and the Board.</p> <p>The Company encourages its Directors to participate in professional development opportunities presented to the Company and provides appropriate industry information to its Board members on a regular basis.</p>
<b>3. ACT ETHICALLY AND RESPONSIBLY</b>	
3.1. A listed entity should have a code of conduct for its directors, senior executives and employees and disclose that code or a summary of it.	<p>The Company has adopted a Code of Conduct for Company executives that promote the highest standards of ethics and integrity in carrying out their duties to the Company.</p> <p>The Code of Conduct can be found on the Company's website.</p>

PRINCIPLES AND RECOMMENDATIONS	COMMENT
<b>4. SAFEGUARD INTEGRITY IN FINANCIAL REPORTING</b>	
<p>4.1. The board of a listed entity should:</p> <p>(a) have an audit committee which:</p> <ul style="list-style-type: none"> <li>i. has at least three members, all of whom are non-executive directors and a majority of whom are independent directors; and</li> <li>ii. is chaired by an independent director, who is not the chair of the board,</li> </ul> <p>and disclose:</p> <ul style="list-style-type: none"> <li>iii. the charter of the committee;</li> <li>iv. the relevant qualifications and experience of the members of the committee; and</li> <li>v. in relation to each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</li> </ul> <p>(b) if it does not have an audit committee, disclose that fact and the processes it employs that independently verify and safeguard the integrity of its corporate reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner.</p>	<p>In view of the size and resources available to the Company, it is not considered that a separate audit committee would add any substance to this process, as such the board as a whole acts in regards to the responsibilities of the Audit Committee. Those responsibilities are outlined in the Audit Committee Charter which is available on the Company's website.</p>
<p>4.2. The board of a listed entity should, before it approves the entity's financial statements for a financial period, receive from its CEO and CFO a declaration that, in their opinion, the financial records of the entity have been properly maintained and that the financial statements comply with the appropriate accounting standards and give a true and fair view of the financial position and performance of the entity and that the opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.</p>	<p>Consistent with the requirements of the Corporations Act and best practice recommendations, the person or persons fulfilling the functions of chief executive officer and chief financial officer are required to make a statement to the Board that the Company's financial reports present a true and fair view in all material respects of the Company's financial condition and operational results and are in accordance with relevant accounting standards.</p>
<p>4.3. A listed entity that has an AGM should ensure that its external auditor attends its AGM and is available to answer questions from security holders relevant to the audit.</p>	<p>The Board encourages the external auditor to attend the annual general meeting to address any shareholder questions that may arise.</p>
<b>5. MAKE TIMELY AND BALANCED DISCLOSURE</b>	
<p>5.1. A listed entity should have a written policy for complying with its continuous disclosure obligations under the Listing Rules and disclose that policy or a summary of it.</p>	<p>The Company has a specific policy and procedures regime in order to comply with its continuous disclosure obligations under the Listing Rules. A copy of the Continuous Disclosure Policy is available on the Company's website.</p>

PRINCIPLES AND RECOMMENDATIONS		COMMENT
<b>6. RESPECT THE RIGHTS OF SECURITY HOLDERS</b>		
6.1.	A listed entity should provide information about itself and its governance to investors via its website.	The Company maintains a website which includes information about the operations of the Company and its governance policies and procedures.
6.2.	A listed entity should design and implement an investor relations program to facilitate effective two-way communication with investors.	The Company has a Shareholder Communication Policy to facilitate effective shareholder communication.
6.3.	A listed entity should disclose the policies and processes it has in place to facilitate and encourage participation at meetings of security holders.	The Company provides appropriate notification of and allocates scheduled question time at meetings of Shareholders to facilitate participation at those meetings.
6.4.	A listed entity should give security holders the option to receive communications from, and send communications to, the entity and its security registry electronically.	Investors may inspect the Company's governance and Shareholder Communications policies via the website which lay out the options to receive communications from, and send communications to, the entity and its security registry electronically.
<b>7. RECOGNISE AND MANAGE RISK</b>		
7.1.	<p>The board of a listed entity should:</p> <p>(a) have a committee or committees to oversee risk, each of which:</p> <ul style="list-style-type: none"> <li>i. has at least three members, a majority of whom are independent directors; and</li> <li>ii. is chaired by an independent director,</li> </ul> <p>and disclose:</p> <ul style="list-style-type: none"> <li>iii. the charter of the committee;</li> <li>iv. the members of the committee; and</li> <li>v. as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</li> </ul> <p>(b) if it does not have a risk committee or committees that satisfy (a) above, disclose that fact and the processes it employs for overseeing the entity's risk management framework.</p>	<p>The identification and management of risk, including calculated risk-taking activity is viewed by management as an essential component in creating shareholder value. Whilst there is currently no risk committee, the Board as a whole is employed to oversee the Company's risk management framework.</p> <p>Management is responsible for developing, maintaining and improving the Company's risk management and internal control system. A register of material business risks has been established, risks have been analysed and evaluated, risk management processes and controls are in place and reporting schedules developed. Management provides the Board with periodic reports identifying areas of potential risks and the safeguards in place to efficiently manage material business risks.</p> <p>The Risk Management Program of the Company is available on the Company's website.</p>
7.2.	The board or a committee of the board should review the entity's risk management framework at least annually to satisfy itself that it continues to be sound and disclose, in relation to each reporting period, whether such a review has taken place.	Strategic and operational risks are reviewed at least annually as part of the forecasting and budgeting process. The Company has identified and actively monitors risks inherent in the industry in which the Company operates.

PRINCIPLES AND RECOMMENDATIONS	COMMENT
<p>7.3. A listed entity should disclose:</p> <p>(a) If it has an internal audit function, how the function is structured and what role it performs; or</p> <p>(b) if it does not have an internal audit function, that fact and the processes it employs for evaluating and continually improving the effectiveness of its risk management and internal control processes.</p>	<p>The Board has established a framework for the management of the Group including a system of internal controls, a business risk management process and the establishment of appropriate ethical standards. This forms part of the overall Risk Management Program employed by the Company and available on the Company's website.</p>
<p>7.4. A listed entity should disclose whether it has any material exposure to economic, environmental and social sustainability risks and, if it does, how it manages or intends to manage those risks.</p>	<p>As a public listed company operating in the industrial and bio-technology industry, the Company has exposures to various risks which may include economic, environmental and social sustainability risks. The Risk Management Program employed by the Company is designed to identify and manage these risks accordingly.</p>
8. REMUNERATE FAIRLY AND RESPONSIBLY	
<p>8.1. The board of a listed entity should:</p> <p>(a) have a remuneration committee which:</p> <p>i. has at least three members, a majority of whom are independent directors; and</p> <p>ii. is chaired by an independent director,</p> <p>and disclose:</p> <p>iii. the charter of the committee;</p> <p>iv. the members of the committee; and</p> <p>v. as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</p> <p>(b) if it does not have a remuneration committee, disclose that fact and the processes it employs for setting the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive.</p>	<p>In view of the size and resources available to the Company, it is not considered that a separate remuneration committee would add any substance to this process, as such the Board as a whole acts in regards to the responsibilities of the Remuneration Committee. Those responsibilities are outlined in the Nomination and Remuneration Committee Charter which is available on the Company's website.</p> <p>The Nomination and Remuneration Committee may obtain independent advice on the appropriateness of remuneration packages.</p>
<p>8.2. A listed entity should separately disclose its policies and practices regarding the remuneration of non-executive directors and the remuneration of executive directors and other senior executives.</p>	<p>The Company separately distinguishes the remuneration of executives and non-executive directors. Disclosure of the remuneration arrangements for Directors and senior executives are disclosed in the Annual Reports of the Company.</p>
<p>8.3. A listed entity which has an equity-based remuneration scheme should have a policy on whether participants are permitted to enter into transactions (whether through the use of derivatives or otherwise) which limit the economic risk of participating in the scheme and disclose that policy or a summary of it.</p>	<p>The Company maintains a Securities Trading Policy which restricts the permission for employees and directors to enter transactions which limit the economic risks associated with the participation in the Company's equity based incentive scheme. A copy of the Share Trading Policy is available on the Company's website.</p>

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# MATERIAL CONTRACTS



## 15.1 IMPLEMENTATION AGREEMENT

On 20 October 2016, the Company, DMS and the Major Shareholders entered into the Implementation Agreement, pursuant to which the Company proposes to acquire all of the issued capital of DMS by making offers to the Vendors.

A summary of the key terms and conditions of the Implementation Agreement is set out below:

- (a) **(Transaction):** Pursuant to the Implementation Agreement:
- i. the Company shall make offers to acquire the DMS shares from the Vendors for the consideration (**Shareholder Offers**) on the terms and conditions set out in the Implementation Agreement;
  - ii. the Shareholder Offers will be made under this Prospectus; and
  - iii. the consideration for the Shareholder Offers will be the issue of 65,000,000 Shares to be apportioned amongst the Vendors according to the respective number of DMS Shares held by them.
- (b) **(Conditions Precedent):** Completion is conditional upon the satisfaction (or waiver) of the following conditions precedent:
- i. the Company completing a legal, financial and operational due diligence on DMS and its assets and the Company being satisfied with the results of that due diligence (in its sole and absolute discretion);
  - ii. DMS completing a legal, financial and operational due diligence on the Company and its assets and DMS being satisfied with the results of that due diligence (in its sole and absolute discretion);
  - iii. the Company obtaining all necessary regulatory and shareholder approvals required to complete the Acquisition;
  - iv. the Company making the Shareholder Offers and the Shareholder Offers becoming unconditional;
  - v. all of the Shareholder Offers being accepted, either by a Vendor or a duly authorised attorney for and on behalf of a Vendor;
  - vi. the Company complying with the requirements of Chapters 1 and 2 of the ASX Listing Rules;
  - vii. the Company preparing the Prospectus, lodging the Prospectus with the ASIC and receiving sufficient applications to meet the minimum subscription under the Prospectus;
  - viii. the Company receiving a letter from ASX confirming that ASX will grant conditional quotation of the Company's Shares on the Official List, on terms acceptable to the Company;
  - ix. the Company receiving the following documents from each of the Vendors, to be held in escrow by the Company until Settlement:
    - A. share certificates in respect of 100% of the DMS Shares;
    - B. undated separate instruments of transfer in registrable form for 100% of the DMS Shares in favour of the Company (as transferee) which have been duly executed by each of the Vendors or their duly authorised attorneys (as transferors) in relation to their respective DMS Shares;
    - C. completed application forms under the Prospectus for the issue of the Consideration Shares signed by each of the Vendors in respect of the Consideration Shares to be issued to them; and
    - D. signed restriction agreements pursuant to Chapter 9 of the ASX Listing Rules in respect of any escrow applied by ASX and or any voluntary escrow agreements pursuant to clause 14 from each of the Vendors in respect of the Consideration Shares to be issued to them; and
  - x. DMS obtaining any necessary third party consents or waivers (if any) to any of the material contracts set out in the Implementation Agreement.
- (c) **(Consideration):** The consideration to be offered by the Company to the Vendors pursuant to the terms of the Shareholder Offers shall be 65,000,000 Shares to be apportioned amongst the Vendors according to the respective number of DMS Shares held by them.
- (d) **(Option to subscribe):** If the Implementation Agreement is terminated prior to 30 April 2017 (**End Date**):
- i. DMS grants to the Company an option to subscribe for up to that number of fully paid

- ordinary shares in the capital of DMS which will equal a holding of 9.467% in DMS (prior to the exercise of the option) (**DMS Option Shares**) at an issue price of \$5.34 per share (**Exercise Price**) (**Subscription Option**); and
- ii. the Subscription Option is exercisable at the Company's sole election for a period of 12 months from the End Date. If exercised, DMS will cause the issue of the DMS Option Shares, in consideration of the payment of the Exercise Price by the Company to DMS.
- (e) (**Termination**): The Implementation Agreement may be terminated by DMS if:
- i. the DMS board has received a bona fide written proposal or offer by any person (other than from a party to the Implementation Agreement) to enter into any transaction similar to the Acquisition (or any part of it) received after the date of this Agreement which the DMS board:
    - A. acting in good faith and reasonably; and
    - B. in order to satisfy what the DMS board reasonably considers to be its fiduciary or statutory duties after, if necessary, consultation with external advisers,
 determines is more favourable to the DMS shareholders (as a whole) than the Acquisition (taking into account, among other things, all legal, financial, regulatory, conditionality, certainty, timing and other aspects of the third party proposal and the identity of the offeror) (**Superior Proposal**); and
  - ii. the DMS Board approves or recommends the implementation of a Superior Proposal.

## 15.2 NON-EXCLUSIVE LICENCE AGREEMENT

On 25 January 2016, DMS and NTUitive entered into the Non-Exclusive Licence Agreement. Pursuant to the Non-Exclusive Licence Agreement:

- (a) DMS is granted a non-exclusive licence during the term to develop, make, have made, import into, export from, offer for sale, sell and have sold licensed products, being any product or service the making, using, selling or import of which is covered by any claim of any patent under the licensed patents detailed below (**NEL Licensed Products**); and
- (b) DMS may use the licensed patents covered by the Non-Exclusive Licence Agreement, being the following patents and application (**Licensed Patents**):

TITLE	COUNTRY	GRANT NO.	FILING DATE	GRANT DATE
Detection Apparatus and Method Utilizing Membranes and Ratio of Transmembrane Pressures	Singapore	147235	10.05.07	28.11.08
Detection Apparatus and Method Utilizing Membranes and Ratio of Transmembrane Pressures	U.S.A	8,135,547 B2	10.05.07	13.03.12
A Membrane Sensor and Method of Detecting Fouling In A Fluid	Singapore	189 548	1.11.11	3.11.15
A Membrane Sensor and Method of Detecting Fouling In A Fluid ( <b>Application</b> )	U.S.A	13/882,783	01.05.13	

Each of the patents listed above has an expiry date 20 years from the filing date listed above. As such, the Company considers that this time frame provides the Company with sufficient time to continue its business operations.

The patents and application listed above relate to technology currently used by De.mem in the water treatment plants which have already been deployed and do not relate to the new hollow fiber nanofiltration technology. Consequently, the Company does not consider the non-exclusive nature of the agreement to be a risk.

A summary of the key terms and conditions of the Non-Exclusive Licence Agreement is set out below:

- (a) **(Term):** The Non-Exclusive Licence Agreement commenced on 25 January 2016 and continues until the date of expiration of the last to expire of any patents under the Licensed Patents, unless terminated earlier.
- (b) **(Fees and Royalties):** DMS is required to pay NTUitive the following fees and royalties:
  - i. S\$8,000 (exclusive of Singapore Goods and Services Tax (Singapore GST)) to be paid upon the signing of the Non-Exclusive Licence Agreement; and
  - ii. royalties on net sales of NEL Licensed Products.
- (c) **(Royalty Payments):** DMS will pay to NTUitive royalties on net Sales of Licensed Products as follows, exclusive of Singapore GST:
  - i. S\$120 per unit for cumulative net Sales of up to 100 units of sensor; and
  - ii. S\$72 per unit for cumulative net Sales of above 100 units of sensor,

where sensor refers to NEL Licensed Products in the form of a transmembrane pressure sensor derived from any of the Licensed Patents.

- (d) **(Intellectual Property and Licensed Patents):** Pursuant to the Non-Exclusive Licence Agreement:
  - i. DMS acknowledges that all intellectual property rights in and relating to the Licensed Patents belong to NTU;
  - ii. DMS agrees not to do anything which might bring into question NTU's ownership of the intellectual property rights or their validity; and
  - iii. DMS will notify NTUitive of any infringement, or suspected or threatened infringement, of any of the Licensed Patents.
- (e) **(Termination):** The Non-Exclusive Licence Agreement may be terminated:
  - i. by DMS, by giving ninety (90) days advance written notice; and
  - ii. by NTUitive, at its option, if:
    - A. DMS or any of its affiliates have committed a breach which is incapable of rectification or which is not rectified within sixty (60) days of written notice;

- B. DMS asserts a patent or any other intellectual property right against NTUitive;
- C. DMS ceases, or announces its intention to cease to carry on its business;
- D. DMS becomes insolvent or is unable to pay its debts as they fall due, or suspends or threatens to suspend making payments with respect to all or any class of its debts or enters into any composition or arrangements with its creditors or makes a general assignment for the benefit of its creditors;
- E. DMS goes into liquidation or an order is made or a resolution is passed for the winding up of DMS; or
- F. DMS has a receiver or receiver and manager or judicial manager appointed.

The Non-Exclusive Licence Agreement otherwise contains terms and conditions which are considered standard for an agreement of its nature, including those relating to actions upon termination, confidentiality, indemnities and warranties.

### 15.3 EXCLUSIVE LICENCE AGREEMENT

On 14 June 2016, DMS and NTUitive entered into the Exclusive Licence Agreement. Pursuant to the Exclusive Licence Agreement:

- (a) DMS is granted an exclusive licence during the term to develop, make, have made, important into, export from, offer for sale, sell and have sold licensed products, being any product or service that incorporates or that is or was developed in whole or in part through the use or application of any of the EL Licensed Proprietary Materials (**EL Licensed Products**); and
- (b) DMS may use the licensed proprietary materials, being any unpublished research and development information, technical information, manufacturing techniques, formulae, data, designs and other information in relation to the invention in possession of NTUitive as of the Effective Date to be transferred to DMS pursuant to the Exclusive Licence Agreement, for such purpose (**EL Licensed Proprietary Materials**).



A summary of the key terms and conditions of the Exclusive Licence Agreement is set out below:

- (a) **(Term):** The -Exclusive Licence Agreement commenced on 14 June 2016 (**Effective Date**) and continues for a period of twenty (20) years.
- (b) **(Sub-Licence):** DMS is entitled to grant sub-licenses of the EL Licensed Proprietary Materials under the Exclusive License Agreement.
- (c) **(Milestone Payments):** DMS is required to pay NTUitive the following Milestone Payments:
  - i. S\$15,000 (exclusive of Singapore GST) to be paid upon the signing of the Exclusive Licence Agreement; and
  - ii. S\$20,000 (exclusive of Singapore GST) to be paid on the second (2nd) anniversary of the Effective Date of the Exclusive License Agreement.
- (d) **(Royalty Payments):** In addition to any Milestone Payments, DMS will pay to NTUitive royalties in respect of all sales, leases or other transfers of EL Licensed Products during the Term, exclusive of Singapore GST, at the following rates:
  - i. three percent (3%) of net sales of Licensed Products; and
  - ii. twenty-five percent (25%) of all Sub-Licence consideration.
- (e) **(Infringement of Licensed Proprietary Materials):** Pursuant to the Exclusive Licence Agreement:
  - i. DMS will notify NTUitive of any infringement, or suspected or threatened infringement, of any of the EL Licensed Proprietary Materials; and
  - ii. DMS will be responsible for, after consultation with NTUitive, taking all appropriate steps as may be necessary to prevent or restrain any infringement by a third party of any of the EL Licensed Proprietary Materials.
- (f) **(Termination):** The Exclusive Licence Agreement may be terminated:
  - i. by DMS, by giving ninety (90) days advance written notice; and
  - ii. by NTUitive, at its option, if:
    - A. DMS has committed a breach which is incapable of rectification or which is not rectified within sixty (60) days of written notice;

- B. DMS asserts a patent or any other intellectual property right against NTUitive;
- C. DMS ceases, or announces its intention to cease to carry on its business;
- D. DMS becomes insolvent or is unable to pay its debts as they fall due, or suspends or threatens to suspend making payments with respect to all or any class of its debts or enters into any composition or arrangements with its creditors or makes a general assignment for the benefit of its creditors;
- E. DMS goes into liquidation or an order is made or a resolution is passed for the winding up of DMS; or
- F. DMS has a receiver or receiver and manager or judicial manager appointed.

The Exclusive Licence Agreement otherwise contains terms and conditions which are considered standard for an agreement of its nature, including those relating to actions upon termination, confidentiality, indemnities and warranties.

## 15.4 EQUIPMENT SALE AGREEMENT

On 20 October 2016, De.mem entered into the Equipment Sale Agreement with FCA for the purchase of equipment to be used by De.mem for membrane production by De.mem.

Under the Equipment Sale Agreement, FCA has agreed to provide hollow fiber spinning production line equipment to De.mem for total consideration of 1,250,000 RMB, to be paid in the following instalments:

- (a) 250,000 RMB to be paid upon execution of the Equipment Sale Agreement;
- (b) 375,000 RMB to be paid upon the submission and acknowledgment of technical drawing;
- (c) 375,000 RMB to be paid upon system completion and FAT; and
- (d) 250,000 RMB to be paid upon completion of shipment, installation, testing and commissioning of the system to De.mem.

The ownership in the equipment will pass to De.mem after completion of all of the payment instalments set out above. The consideration fee payable under the Equipment Sale Agreement also includes the costs payable for shipment, installation, testing and commissioning of the equipment.

## 15.5 GIVAUDAN BUILD, OWN, OPERATE AGREEMENT

On 23 November 2016, De.mem entered into the build, own, operate agreement with Givaudan Singapore Pte Ltd (**Givaudan**) (**Givaudan Build Own Operate Agreement**), pursuant to which De.mem has agreed to provide, install, commission and operate a waste water treatment system (**WWTS**) and to provide waste water treatment services to Givaudan (the **Services**). The objective is to treat the waste water from Givaudan's manufacturing plant, so that the waste water can be lawfully discharged.

A summary of the key terms and conditions of the Build Own Operate Agreement is set out below:

- (a) (**Term**): The Services to be performed under the Givaudan Build Own Operate Agreement commence on the commencement date, which shall be no later than 16 weeks from 23 November 2016. The Givaudan Build Own Operate Agreement then continues for a period of two (2) years (**Initial Term**). Following the Initial Term, it will be automatically renewed for subsequent periods of twelve (12) months (**Further Term**) unless either party provides written notice of termination at least three (3) months prior to expiration of the current term.
- (b) (**Payment**): Givaudan is required to pay De.mem a fixed lump sum fee of S\$13,000 (excluding GST) per month (**Monthly Fee**).
- (c) (**Financial Guarantee**): De.mem will indemnify Givaudan from and against all claims, demands, actions, proceedings, costs, losses and damages instituted or made against Givaudan or incurred or suffered by Givaudan should the treated water not meeting the quality service levels and/or any equipment or services provided by De.mem pursuant to the Givaudan Build Own Operate Agreement infringes or is alleged to infringe any intellectual property rights of any third party.
- (d) (**Termination**): The Givaudan Build Own Operate Agreement may be terminated:
  - i. by Givaudan:
    - A. by giving three (3) months' advance written notice, if De.mem receives a contractually defined termination payment; or
    - B. immediately by giving notice in writing, if:
      - i. De.mem abandons, or shows an intention to abandon, its obligations under the Givaudan Build Own Operate Agreement;
      - ii. the liability cap of S\$312,000 for the Initial Term or S\$156,000 for each Further Term has been reached or exceeded;
      - iii. the waste water treatment services do not commence on or before three (3) months from the scheduled completion date; or
      - iv. De.mem is in material breach of any of the terms of the Givaudan Build Own Operate Agreement which are not capable of remedy, or if they are capable of remedy, De.mem has failed to remedy that breach within thirty (30) working days of being notified in writing of it; or
  - ii. by De.mem:
    - A. by giving three (3) months' written notice prior to the end of the Initial Term or any Further Term that it does not intend to renew;
    - B. by giving four (4) weeks' prior written notice if Givaudan does not make payment of the Monthly Fee and fails to make payment of the Monthly Fee within thirty (30) calendar days; or
    - C. immediately by giving notice in writing if:
      - i. the liability cap of S\$312,000 for the Initial Term or S\$156,000 for each Further Term has been reached or exceeded; or
      - ii. Givaudan is in material breach of any of the terms of the Givaudan Build Own Operate Agreement which are not capable of remedy, or if they are capable of remedy, Givaudan has failed to remedy that breach within thirty (30) working days of being notified in writing of it.
- (e) (**Ownership**): During the Initial Term and any Further Term the WWTS remains the property of De.mem. Upon expiry or termination of the Givaudan Build Own Operate Agreement, De.mem will dismantle and remove the WWTS.

## 15.6 INTERCOMPANY LOAN AGREEMENT

On 25 January 2017, the Company and DMS entered into an intercompany loan agreement pursuant to which the Company has agreed to provide a loan of S\$300,000 to DMS.

The Company has subsequently provided a loan of S\$300,000 to DMS.

The loan will accrue interest at a rate of 6% per annum as from the date of disbursement and is repayable on demand.

## 15.7 VENTNOR LISTING MANDATE

On 15 February 2016, DMS and Ventnor entered into a corporate advisory mandate, as varied on 4 November 2016 (**Ventnor Listing Mandate**), pursuant to which Ventnor agreed to be appointed as DMS' corporate advisor in relation to the proposed initial public offering of DMS on the ASX.

A summary of the key terms of the Ventnor Listing Mandate is set out below:

- (a) (**Term**): DMS will engage Ventnor as a corporate advisor for a period of 12 months (effective from 16 February 2016), or until DMS lists on the ASX, whichever occurs earlier.
- (b) (**Capital Raising Fees**): Services to be provided by Ventnor are to be provided in three stages. DMS will pay the following fees, exclusive of GST, to Ventnor:
  - i. a monthly fee of A\$5,000 in arrears effective from the date of the Ventnor Listing Mandate until completion of the stage 1 services;
  - ii. a monthly fee of \$15,000 in arrears upon commencement of the stage 2 services and until completion of the stage 2 services;
  - iii. a monthly fee of \$12,500 in arrears upon commencement of the stage 3 services and for a term of four (4) months or until completion of the stage 3 services, whichever occurs earlier; and
  - iv. a success fee of \$25,000 payable upon DMS listing on the ASX.
- (c) (**Advisor Options**): Prior to the listing of DMS on the ASX, Ventnor or its nominees have the right to subscribe for up to 1,900,000 Advisor Options in DMS upon listing on the ASX, on the following terms:
  - i. the Advisor Options will be issued for \$0.0001 per Option;
  - ii. the Advisor Options will be exercisable at \$0.30 per share; and
  - iii. the Advisor Options will have a term of three (3) years from the date of issue.
- (d) (**Termination**): The Ventnor Listing Mandate may be terminated by both Ventnor and DMS with one month's notice, providing all outstanding fees and expenses have been paid.

## 15.8 VENTNOR COMPANY SECRETARIAL MANDATE

On 15 November 2016, the Company and Ventnor entered into a mandate under which Ventnor agreed to provide on-going company secretarial services to the Company.

The Company has agreed to pay Ventnor a monthly fee of \$7,500 in consideration for the provision of these services.

Either party may terminate the mandate by giving the other party three months' notice, providing all outstanding fees have been paid.

## 15.9 ALTO CAPITAL MANDATE

The Company has appointed Alto Capital as the exclusive lead manager in relation to the proposed initial public offering of the Company on the ASX. A summary of the key terms of the mandate is set out below:

- (a) (**Capital Raising Fees**): The Company will pay the following fees to Alto Capital, exclusive of GST:
  - i. a management fee of 1.0% of the total amount raised under the initial public offering;
  - ii. a capital raising fee equal of 5% of the total amount raised by Alto Capital;
  - iii. a success fee of 1,000,000 Shares to be issued to Alto Capital or its nominees at a deemed price of \$0.001 per Share and a cash payment of \$20,000 (ex GST) upon the Company being successfully admitted to the Official List; and
  - iv. following completion of the initial public offering, the Company will pay Alto Capital a monthly fee of \$5,000 (ex GST) per month for a period of 12 consecutive months.
- (b) (**Advisor Options**): Alto Capital have the right to subscribe for up to 1,900,000 Advisor Options upon listing on the ASX, on the following terms:
  - i. the Advisor Options will be issued for \$0.0001 per Option;
  - ii. the Advisor Options will be exercisable at \$0.30 per Share; and
  - iii. the Advisor Options will have a term of three (3) years from the date of issue.
- (c) (**Exclusivity**): The Company agrees to exclusively retain Alto Capital for a minimum of two (2) months with respect to the services to be provided under the Alto Capital Mandate (Exclusivity Period). Following the Exclusivity

Period, the Company agrees to offer Alto Capital a further exclusivity period.

- (d) **(Termination)**: The Alto Capital Mandate may be terminated by either party without cause at any time, by providing the other party with two (2) months' written notice. The capital raising fees referred to in Section 15.9(a):
- i. will remain payable on termination of the Alto Capital Mandate; and
  - ii. if, within six (6) months' of termination of the Alto Capital Mandate, the Company or the shareholders of the Company enter into a transaction with any third party purchaser introduced by Alto Capital (or any party assisting Alto Capital) during the course of the Alto Capital Mandate, the fees referred to in Section 15.9(a) will remain payable to Alto Capital.
- (e) **(Ongoing services)**: The Company will engage Alto Capital as its corporate advisor for a period of 12 months effective from the Company listing on the ASX.

### 15.10 ANDREAS KROELL - CEO AGREEMENT

DMS has entered into a service agreement with Andreas Kroell, pursuant to which Mr Kroell is engaged as the chief executive officer (**CEO**) of DMS on and from 15 September 2016 (**CEO Agreement**).

A summary of the key terms of the CEO Agreement is set out below:

- (a) **(Term)**: The CEO Agreement commenced on 15 September 2016 and continues unless terminated by the CEO or DMS.
- (b) **(Compensation)**: A monthly fee of SGD \$14,000 is payable to the CEO. A performance based bonus plan for the senior management of DMS will be implemented from the year 2017 onwards and the CEO will be eligible to participate in that plan.
- (c) **(Termination)**: The CEO Agreement may be terminated:
- i. by either party by giving two (2) months' prior written notice or the equivalent of two (2) months' salary in lieu of notice; or
  - ii. by DMS immediately for breach of the CEO Agreement, such as where the CEO is guilty of dishonesty or serious or persistent misconduct, where the CEO becomes bankrupt or where the CEO becomes of unsound mind.

(d) **(Invention Assignment Rights)**: The CEO agrees:

- i. to make full and prompt disclosure to DMS of all inventions, improvements, discoveries, methods, developments, software, and works of authorship whether patentable or not, which are created (whether directly or indirectly), made, conceived, received or reduced to practice by him or under his direction or jointly with others during the employment, whether or not during normal working hours or on the premises of DMS (**Developments**); and
- ii. that all Developments will be the exclusive property of DMS and the CEO's right, title and interest in and to all Developments and all related intellectual property rights are hereby irrevocably and unconditionally assigned to DMS.

(e) **(Trade Secrets)**: The CEO agrees that he shall keep confidential, and not disclose to others, or take or use for his own purposes (except in connection with his rights and obligations under the CEO Agreement) any trade secrets of any group company.

The CEO Agreement otherwise contains terms and conditions which are considered standard for agreements of this nature, including those relating to confidentiality, non-disclosure and assignment.

### 15.11 EXECUTIVE SERVICE AGREEMENTS

DMS has entered into executive service agreements with the following executives (**Executive Service Agreements**):

- (a) Nicanor Tan Suarin: Director – System Design and Engineering; and
- (b) David Chua: Director – Membrane Manufacturing; and
- (c) Kian Lip Teo: Director Operations, (together, the **Executives**).

The Executive Service Agreements have been entered into on the following terms and conditions:

- (a) **(Term)**: The Executive Service Agreements continue unless terminated by the Executive or DMS, by either party giving two (2) months' notice of termination to the other.
- (b) **(Invention Assignment Rights)**: The Executives have agreed:
- i. to make full and prompt disclosure to DMS of all developments; and

- ii. that all developments will be the exclusive property of DMS and the Executive's right, title and interest in and to all Developments and all related intellectual property rights are hereby irrevocably and unconditionally assigned to DMS.
- (c) **(Trade Secrets):** The Executives agree that they shall keep confidential, and not disclose to others, or take or use for their own purposes (except in connection with their rights and obligations under the Executive Service Agreements) any trade secrets of any group company.

The Executive Service Agreements otherwise contains terms and conditions which are considered standard for agreements of their nature, including those relating to confidentiality, non-disclosure and assignment.

## 15.12 DEEDS OF INDEMNITY, INSURANCE AND ACCESS

The Company is party to deeds of indemnity, insurance and access with each Director. Under these deeds, the Company indemnifies each Director to the extent permitted by the Corporations Act against any liability arising as a result of the Director acting as a Director of the Company. The Company is also required to maintain insurance policies for the benefit of the relevant Director and must also allow the Directors to inspect board papers in certain circumstances.

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# ADDITIONAL INFORMATION



## 16.1 LITIGATION

As at the date of this Prospectus, the Company is not involved in any legal proceedings and the Directors are not aware of any legal proceedings pending or threatened against the Company.

## 16.2 RIGHTS ATTACHING TO SHARES

The following is a summary of the more significant rights attaching to Shares. This summary is not exhaustive and does not constitute a definitive statement of the rights and liabilities of Shareholders. To obtain such a statement, persons should seek independent legal advice.

Full details of the rights attaching to Shares are set out in the Constitution, a copy of which is available for inspection at the Company's registered office during normal business hours.

### (a) General meetings

Shareholders are entitled to be present in person, or by proxy, attorney or representative to attend and vote at general meetings of the Company.

Shareholders may requisition meetings in accordance with Section 249D of the Corporations Act and the Constitution.

### (b) Voting rights

Subject to any rights or restrictions for the time being attached to any class or classes of Shares, at general meetings of Shareholders or classes of Shareholders:

- i. each Shareholder entitled to vote may vote in person or by proxy, attorney or representative;
- ii. on a show of hands, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder has one vote; and
- iii. on a poll, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder shall, in respect of each fully paid Share held by him, or in respect of which he is appointed a proxy, attorney or representative, have one vote for the Share, but in respect of partly paid Shares shall have such number of votes as bears the same proportion to the total of such Shares registered in the Shareholder's name as the amount paid (not credited) bears to the total amounts paid and payable (excluding amounts credited).

### (c) Dividend rights

Subject to the rights of any preference Shareholders and to the rights of the holders of any shares created or raised under any special arrangement as to dividend, the Directors may from time to time declare a dividend to be paid to the Shareholders entitled to the dividend which shall be payable on all Shares according to the proportion that the amount paid (not credited) is of the total amounts paid and payable (excluding amounts credited) in respect of such Shares.

The Directors may from time to time pay to the Shareholders any interim dividends as they may determine. No dividend shall carry interest as against the Company. The Directors may set aside out of the profits of the Company any amounts that they may determine as reserves, to be applied at the discretion of the Directors, for any purpose for which the profits of the Company may be properly applied.

Subject to the ASX Listing Rules and the Corporations Act, the Company may, by resolution of the Directors, implement a dividend reinvestment plan on such terms and conditions as the Directors think fit and which provides for any dividend which the Directors may declare from time to time payable on Shares which are participating Shares in the dividend reinvestment plan, less any amount which the Company shall either pursuant to the Constitution or any law be entitled or obliged to retain, be applied by the Company to the payment of the subscription price of Shares.

### (d) Winding-up

If the Company is wound up, the liquidator may, with the authority of a special resolution of the Company, divide among the shareholders in kind the whole or any part of the property of the Company, and may for that purpose set such value as he considers fair upon any property to be so divided, and may determine how the division is to be carried out as between the Shareholders or different classes of Shareholders.

The liquidator may, with the authority of a special resolution of the Company, vest the whole or any part of any such property in trustees upon such trusts for the benefit of the contributories as the liquidator thinks fit, but so that no Shareholder is compelled to accept any Shares or other securities in respect of which there is any liability.



**(e) Shareholder liability**

As the Shares under the Prospectus are fully paid shares, they are not subject to any calls for money by the Directors and will therefore not become liable for forfeiture.

**(f) Transfer of Shares**

Generally, Shares are freely transferable, subject to formal requirements, the registration of the transfer not resulting in a contravention of or failure to observe the provisions of a law of Australia and the transfer not being in breach of the Corporations Act or the ASX Listing Rules.

**(g) Variation of rights**

Pursuant to Section 246B of the Corporations Act, the Company may, with the sanction of a special resolution passed at a meeting of Shareholders vary or abrogate the rights attaching to Shares.

If at any time the share capital is divided into different classes of Shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class), whether or not the Company is being wound up, may be varied or abrogated with the consent in writing of the holders of three-quarters of the issued shares of that class, or if authorised by a special resolution passed at a separate meeting of the holders of the shares of that class.

**(h) Alteration of Constitution**

The Constitution can only be amended by a special resolution passed by at least three quarters of Shareholders present and voting at the general meeting. In addition, at least 28 days written notice specifying the intention to propose the resolution as a special resolution must be given.

**16.3 ADVISOR OPTIONS****(a) Entitlement**

Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

**(b) Exercise Price**

Subject to paragraph (i), the amount payable upon exercise of each Option will be \$0.30 (**Exercise Price**).

**(c) Expiry Date**

Each Option will expire at 5:00 pm (WST) on the date that is three years after the date of issue of the Options (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

**(d) Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

**(e) Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

**(f) Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

**(g) Timing of issue of Shares on exercise**

Within 15 Business Days after the later of the following:

- i. the Exercise Date; and
- ii. when excluded information in respect to the Company (as defined in section 708A(7) of the Corporations Act) (if any) ceases to be excluded information,

but in any case no later than 20 Business Days after the Exercise Date, the Company will:

- iii. issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- iv. if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- v. if admitted to the Official List at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under (g)(iv) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of

such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

(h) **Shares issued on exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

(i) **Reconstruction of capital**

If at any time the issued capital of the Company is reconstructed, all rights of an Optionholder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

(j) **Participation in new issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(k) **Change in exercise price**

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

(l) **Transferability**

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

## 16.4 DIRECTOR OPTIONS

The terms and conditions of the existing Options on issue as at the date of this Prospectus, held by Directors and unrelated consultants, are set out below.

(a) **Entitlement**

Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

(b) **Exercise Price**

Subject to paragraph 16.4(i), the amount payable upon exercise of each Option will be \$0.30 (**Exercise Price**).

(c) **Expiry Date**

Each Option will expire at 5:00 pm (WST) on the date which is three years from the date of issue (**Expiry Date**). An Option not exercised before the

Expiry Date will automatically lapse on the Expiry Date.

(d) **Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

(e) **Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

(f) **Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

(g) **Timing of issue of Shares on exercise**

Within 15 Business Days after the later of the following:

- i. the Exercise Date; and
- ii. (when excluded information in respect to the Company (as defined in section 708A(7) of the Corporations Act) (if any) ceases to be excluded information,

but in any case no later than 20 Business Days after the Exercise Date, the Company will:

- iii. issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- iv. if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- v. if admitted to the Official List at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under 16.416.5(g)(iv) for any reason is not effective to ensure that an offer for sale of the Shares does not require

disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

#### (h) **Lapse of Options**

In the event that the Company has not been admitted to the Official List on or before 30 June 2017 the Options will automatically lapse.

#### (i) **Shares issued on exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

#### (j) **Reconstruction of capital**

If at any time the issued capital of the Company is reconstructed, all rights of an Optionholder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

#### (k) **Participation in new issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

#### (l) **Change in exercise price**

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

#### (m) **Transferability**

Subject to the ASX Listing Rules, an Option granted under the Plan is only transferable, assignable or able to be otherwise disposed or encumbered in special circumstances with the consent of the Board (which may be withheld in its absolute discretion) or by force of law upon death to the Participant's legal personal representative or upon bankruptcy to the Participant's trustee in bankruptcy.

## 16.5 EMPLOYEE OPTION PLAN

(a) **Eligibility:** Participants in the Option Plan may be:

- i. a Director (whether executive or non-executive) of the Company and any associated body corporate of the Company (**each a Group Company**);

- ii. a full or part time employee of any Group Company;
- iii. a casual employee or contractor of a Group Company to the extent permitted by ASIC Class Order 14/1000 as amended or replaced (**Class Order**); or
- iv. a prospective participant, being a person to whom the offer is made but who can only accept the offer if an arrangement has been entered into that will result in the person becoming a participant under subparagraphs (i), (ii), or (iii) above,

who is declared by the Board to be eligible to receive grants of Options under the Option Plan (**Eligible Participants**).

- (b) **Offer:** The Board may, from time to time, in its absolute discretion, make a written offer to any Eligible Participant (including an Eligible Participant who has previously received an offer) to apply for up to a specified number of Options, upon the terms set out in the Option Plan and upon such additional terms and conditions as the Board determines.
- (c) **Plan limit:** The Company must have reasonable grounds to believe, when making an offer, that the number of Shares to be received on exercise of Options offered under an offer, when aggregated with the number of Shares issued or that may be issued as a result of offers made in reliance on the Class Order at any time during the previous 3 year period under an employee incentive scheme covered by the Class Order or an ASIC exempt arrangement of a similar kind to an employee incentive scheme, will not exceed 5% of the total number of Shares on issue at the date of the offer.
- (d) **Issue price:** Unless the Options are quoted on the ASX, Options issued under the Option Plan will be issued for no more than nominal cash consideration.
- (e) **Vesting Conditions:** An Option may be made subject to vesting conditions as determined by the Board in its discretion and as specified in the offer for the Option.
- (f) **Vesting:** The Board may in its absolute discretion (except in respect of a change of control occurring where vesting conditions are deemed to be automatically waived) by written notice to a Participant (being an Eligible Participant to whom Options have been granted under the Option Plan or their nominee where the Options have been granted to the nominee of the Eligible Participant

(**Relevant Person**)), resolve to waive any of the Vesting Conditions applying to Options due to:

- i. special circumstances arising in relation to a Relevant Person in respect of those Options, being:
    - A. a Relevant Person ceasing to be an Eligible Participant due to:
      - I. death or total or permanent disability of a Relevant Person; or
      - II. retirement or redundancy of a Relevant Person;
    - B. a Relevant Person suffering severe financial hardship;
    - C. any other circumstance stated to constitute "special circumstances" in the terms of the relevant offer made to and accepted by the Participant; or
    - D. any other circumstances determined by the Board at any time (whether before or after the offer) and notified to the relevant Participant which circumstances may relate to the Participant, a class of Participant, including the Participant or particular circumstances or class of circumstances applying to the Participant; or
  - ii. a change of control occurring; or
  - iii. the Company passing a resolution for voluntary winding up, or an order is made for the compulsory winding up of the Company.
- (g) **Lapse of an Option:** An Option will lapse upon the earlier to occur of:
- i. an unauthorised dealing in the Option;
  - ii. a Vesting Condition in relation to the Option is not satisfied by its due date, or becomes incapable of satisfaction, unless the Board exercises its discretion to waive the Vesting Conditions and vest the Option in the circumstances set out in paragraph (f) or the Board resolves, in its absolute discretion, to allow the unvested Options to remain unvested after the Relevant Person ceases to be an Eligible Participant;
  - iii. in respect of unvested Option only, an Eligible Participant ceases to be an Eligible Participant, unless the Board exercises its discretion to vest the Option in the circumstances set out in paragraph (f) or the Board resolves, in its absolute discretion, to allow the unvested Options to remain unvested after the Relevant Person ceases to be an Eligible Participant;
  - iv. in respect of vested Options only, a relevant person ceases to be an Eligible Participant and the Option granted in respect of that person is not exercised within one (1) month (or such later date as the Board determines) of the date that person ceases to be an Eligible Participant;
  - v. the Board deems that an Option lapses due to fraud, dishonesty or other improper behaviour of the Eligible Participant;
  - vi. the Company undergoes a Change of Control or a winding up resolution or order is made and the Board does not exercise its discretion to vest the Option;
  - vii. the expiry date of the Option.
- (h) **Shares:** Shares resulting from the exercise of the Options shall, subject to any Sale Restrictions (refer paragraph (i)) from the date of issue, rank on equal terms with all other Shares on issue.
- (i) **Sale Restrictions:** The Board may, in its discretion, determine at any time up until exercise of Options, that a restriction period will apply to some or all of the Shares issued to an Eligible Participant (or their eligible nominee) on exercise of those Options up to a maximum of seven (7) years from the grant date of the Options. In addition, the Board may, in its sole discretion, having regard to the circumstances at the time, waive any such restriction period determined.
- (j) **No Participation Rights:** There are no participating rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options.
- (k) **Change in exercise price of number of underlying securities:** Unless specified in the offer of the Options and subject to compliance with the ASX Listing Rules, an Option does not confer the right to a change in exercise price or in the number of underlying Shares over which the Option can be exercised.
- (l) **Reorganisation:** If, at any time, the issued capital of the Company is reorganised (including consolidation, subdivision, reduction or return), all rights of a holder of an Option are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reorganisation.

(m) **Trust:** The Board may, at any time, establish a trust for the sole purpose of acquiring and holding Shares in respect of which a Participant may exercise, or has exercised, vested Options, including for the purpose of enforcing the disposal restrictions and appoint a trustee to act as trustee of the trust. The trustee will hold the Shares as trustee for and on behalf of a Participant as beneficial owner upon the terms of the trust. The Board may at any time amend all or any of the provisions of the Option Plan to effect the establishment of such a trust and the appointment of such a trustee.

## 16.6 INTERESTS OF DIRECTORS

Other than as set out in this Prospectus, no Director or proposed Director holds, or has held within the 2 years preceding lodgement of this Prospectus with the ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) any property acquired or proposed to be acquired by the Company in connection with:
  - i. its formation or promotion; or
  - ii. the Offers; or
- (c) the Offers,

and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to a Director or proposed Director:

- (d) as an inducement to become, or to qualify as, a Director; or
- (e) for services provided in connection with:
  - i. the formation or promotion of the Company; or
  - ii. the Offers.

## 16.7 INTERESTS OF EXPERTS AND ADVISERS

Other than as set out below or elsewhere in this Prospectus, no:

- (a) person named in this Prospectus as performing a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- (b) promoter of the Company; or
- (c) underwriter (but not a sub-underwriter) to the issue or a financial services licensee named in this Prospectus as a financial services licensee involved in the issue,

holds, or has held within the 2 years preceding lodgement of this Prospectus with the ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) any property acquired or proposed to be acquired by the Company in connection with:
  - i. its formation or promotion; or
  - ii. the Offers; or
- (c) the Offers,

and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to any of these persons for services provided in connection with:

- (d) the formation or promotion of the Company; or
- (e) the Offers.

RSM Corporate Australia Pty Ltd has acted as Investigating Accountant and has prepared the Investigating Accountant's Report which is included in Section 10 of this Prospectus. The Company estimates it will pay RSM Corporate Australia Pty Ltd a total of \$16,500 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with the ASIC, RSM Corporate Australia Pty Ltd has not received any fees from the Company for any other services.

The Company has engaged RSM Australia Partners, who are associated with RSM Corporate, but determined to be independent for audit purposes, to provide audit and assurance services to the Company following the Company listing on the ASX. RSM Singapore acts as the auditor in relation to the audit of De.mem Pte Ltd. During the 24 months preceding lodgement of this Prospectus with the ASIC, RSM Singapore has received SGD \$18,058 in fees from De.mem Pte Ltd for audit and assurance services in relation to the audit of the De.mem Pte Ltd for the years commencing from 1 January 2014 to the half year period finishing on 30 June 2016.

Wave Six Pty Ltd is acting as Independent Technical Expert and has prepared the Technology Report which is included in Section 11 of this Prospectus. The Company estimates it will pay Wave Six Pty Ltd a total of \$8,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with the ASIC, Wave Six Pty Ltd has not received any fees from the Company for any other services.

Ventnor has acted as the corporate advisor to the Company in relation to the Offers and will be paid for these services on standard industry terms and conditions. In addition, Ventnor or its nominee will

receive 1,900,000 Advisor Options as detailed in Section 15.7 of this Prospectus. Ventnor will receive a fee of \$25,000 upon the Company successfully listing on the ASX. Subsequently, fees will be charged in accordance with normal commercial rates. Ventnor will also be paid fees for on-going company secretarial services, as set out in Section 15.8. During the 24 months preceding lodgement of this Prospectus with the ASIC, Ventnor has received \$63,104 (excluding GST) in fees from the Company for corporate advisory services. Further Ventnor Securities Pty Ltd, a company associated with Director Stuart Carmichael was paid a fee of \$25,500 (plus GST) in as brokerage in respect of a prior capital raising by the Company. Following the Company listing on the ASX, Ventnor will be engaged on standard industry terms and conditions to provide Company Secretarial, registered office and accountancy services to the Company. Mr Stuart Carmichael is a director and shareholder of Ventnor. Mr Brett Tucker is an employee of Ventnor.

Alto Capital is acting as Lead Manager to the Company in relation to the Offers. Alto Capital will receive 1,900,000 Advisor Options as detailed in Section 15.9 of this Prospectus. Following the Company's successful listing on the ASX, the Company will pay Alto Capital a success fee of \$20,000 and issue 1,000,000 Shares to Alto Capital or its nominees. Additionally, following the Company listing on the ASX, the Company will pay Alto Capital an ongoing Lead Manager fee of \$5,000 per month (exclusive of GST) for 12 consecutive months, following the Company being admitted to the Official List. During the 24 months preceding lodgement of this Prospectus with the ASIC, Alto Capital has not received any fees from the Company.

Steinepreis Paganin has acted as the solicitors to the Company in relation to the Offers. The Company estimates it will pay Steinepreis Paganin \$75,000 (excluding GST) for these services. Subsequently, fees will be charged in accordance with normal charge out rates. During the 24 months preceding lodgement of this Prospectus with the ASIC, Steinepreis Paganin has not received fees from the Company for any other services.

## 16.8 CONSENTS

Chapter 6D of the Corporations Act imposes a liability regime on the Company (as the offeror of the Securities), the Directors, the persons named in the Prospectus with their consent as Proposed Directors, any underwriters, persons named in the Prospectus with their consent having made a statement in the Prospectus and persons involved

in a contravention in relation to the Prospectus, with regard to misleading and deceptive statements made in the Prospectus.

Although the Company bears primary responsibility for the Prospectus, the other parties involved in the preparation of the Prospectus can also be responsible for certain statements made in it.

Each of the parties referred to in this Section:

- (a) does not make, or purport to make, any statement in this Prospectus other than those referred to in this Section; and
- (b) in light of the above, only to the maximum extent permitted by law, expressly disclaim and take no responsibility for any part of this Prospectus other than a reference to its name and a statement included in this Prospectus with the consent of that party as specified in this Section.

RSM Corporate Australia Pty Ltd has given its written consent to being named as Investigating Accountant in this Prospectus and to the inclusion of the Investigating Accountant's Report in Section 10 of this Prospectus in the form and context in which the information and report is included. RSM Corporate Australia Pty Ltd has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

RSM Australia Partners, who are associated with RSM Corporate Australia Pty Ltd, has given its written consent to being named as Auditor in this Prospectus. RSM Australia Partners has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

RSM Singapore has given its written consent to being named as auditor to DMS in this Prospectus. RSM Singapore has not withdrawn its consent prior to lodgment of this Prospectus with the ASIC.

Wave Six Pty Ltd has given its written consent to being named as Independent Technical Expert in this Prospectus and to the inclusion of the Technical Report in Section 11 of this Prospectus in the form and context in which the information and report is included. Wave Six Pty Ltd has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

Ventnor has given its written consent to being named as the Compliance Manager to the Company in this Prospectus. Ventnor has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

Alto Capital has given its written consent to being named as Lead Manager in this Prospectus. Alto Capital has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.



Steinepreis Paganin has given its written consent to being named as the solicitors to the Company in this Prospectus. Steinepreis Paganin has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

Link Market Services Limited has given its written consent to being named as the share registry to the Company in this Prospectus. Link Market Services Limited has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

## 16.9 EXPENSES OF THE OFFERS

The total expenses of the Offers (excluding GST) are estimated to be approximately \$500,000 for minimum subscription or \$550,000 for full subscription and are expected to be applied towards the items set out in the table below:

ITEM OF EXPENDITURE	MINIMUM SUBSCRIPTION (\$)	OVER SUBSCRIPTION (\$)
ASIC fees	2,350	2,350
ASX fees	78,212	78,962
Broker Commissions*	245,000	290,000
Legal Fees	75,000	75,000
Advisor Fees	65,000	65,000
Independent Technical Report	8,000	8,000
Investigating Accountant's Fees	15,000	15,000
Printing and Distribution	5,000	5,000
Miscellaneous	6,438	10,688
<b>TOTAL</b>	<b>500,000</b>	<b>550,000</b>

\* Broker commissions will only be paid on applications made through a licensed securities dealers or Australian financial services licensee and accepted by the Company (refer to Section 6.11 of this Prospectus for further information). The amount calculated is based on 100% of applications being made in this manner. For those applications made directly to and accepted by the Company no broker commissions will be payable, except for a 1% management fee, and the expenses of the Offers will be reduced and the additional funds will be put towards working capital. The Broker commissions includes a fee of \$20,000 payable upon successful listing of the Company on the ASX.

## 16.10 CONTINUOUS DISCLOSURE OBLIGATIONS

Following admission of the Company to the Official List, the Company will be a "disclosing entity" (as defined in Section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company will be required to

continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or the value of the Company's securities.

Price sensitive information will be publicly released through ASX before it is disclosed to shareholders and market participants. Distribution of other information to shareholders and market participants will also be managed through disclosure to the ASX. In addition, the Company will post this information on its website after the ASX confirms an announcement has been made, with the aim of making the information readily accessible to the widest audience.

## 16.11 ELECTRONIC PROSPECTUS

If you have received this Prospectus as an electronic Prospectus, please ensure that you have received the entire Prospectus accompanied by the Application Form. If you have not, please contact the Company and the Company will send you, for free, either a hard copy or a further electronic copy of this Prospectus or both. Alternatively, you may obtain a copy of this Prospectus from the website of the Company at [www.demembranes.com](http://www.demembranes.com).

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

## 16.12 FINANCIAL FORECASTS

The Directors have considered the matters set out in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings on the basis that the operations of the Company are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

## 16.13 CLEARING HOUSE ELECTRONIC SUB-REGISTER SYSTEM (CHES) AND ISSUER SPONSORSHIP

The Company will apply to participate in CHES, for those investors who have, or wish to have, a sponsoring stockbroker. Investors who do not wish to participate through CHES will be issuer sponsored by the Company.

Electronic sub-registers mean that the Company will not be issuing certificates to investors. Instead,

investors will be provided with statements (similar to a bank account statement) that set out the number of Shares issued to them under this Prospectus. The notice will also advise holders of their Holder Identification Number or Security Holder Reference Number and explain, for future reference, the sale and purchase procedures under CHESS and issuer sponsorship.

Electronic sub-registers also mean ownership of securities can be transferred without having to rely upon paper documentation. Further monthly statements will be provided to holders if there have been any changes in their security holding in the Company during the preceding month.

#### 16.14 PRIVACY STATEMENT

If you complete an Application Form, you will be providing personal information to the Company. The Company collects, holds and will use that information to assess your application, service your needs as a Shareholder and to facilitate distribution payments and corporate communications to you as a Shareholder.

The information may also be used from time to time and disclosed to persons inspecting the register, including bidders for your securities in the context of takeovers, regulatory bodies including the Australian Taxation Office, authorised securities brokers, print service providers, mail houses and the share registry.

You can access, correct and update the personal information that we hold about you. If you wish to do so, please contact the share registry at the relevant contact number set out in this Prospectus.

Collection, maintenance and disclosure of certain personal information is governed by legislation including the Privacy Act 1988 (as amended), the Corporations Act and certain rules such as the ASX Settlement Operating Rules. You should note that if you do not provide the information required on the application for Securities, the Company may not be able to accept or process your application.



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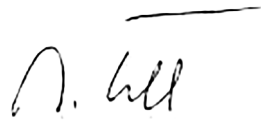
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# DIRECTORS' AUTHORISATION



This Prospectus is issued by the Company and its issue has been authorised by a resolution of the Directors.

In accordance with Section 720 of the Corporations Act, each Director has consented to the lodgement of this Prospectus with the ASIC.

A handwritten signature in black ink, appearing to read 'A. Kroell', with a horizontal line above it.

Mr Andreas Kroell  
Chief Executive Officer and Director

For and on behalf of  
De.mem Limited

# GLOSSARY

Where the following terms are used in this Prospectus they have the following meanings:

**\$ or AUD** means an Australian dollar.

**Acquisition** means the acquisition of 100% of the issued capital of DMS from the Vendors.

**Advisor Offer** means the offer of 3,800,000 Options to Ventnor and Alto Capital in consideration for the provision of corporate advisory services and lead manager services.

**Advisor Options** means the 3,800,000 Options to be issued to Ventnor and Alto Capital under the Advisor Offer.

**Alto Capital** means ACNS Capital Markets Pty Ltd T/A Alto Capital (ACN 130 462 592) (AFSL 279099).

**Alto Capital Mandate** means the lead manager mandate entered into by the Company and Alto Capital as summarised in section 15.9.

**Applicant** means an applicant for Securities under this Prospectus.

**Application Form** means the application form attached to or accompanying this Prospectus relating to the Public Offer, the Consideration Offer or the Advisor Offer, as applicable.

**ASIC** means Australian Securities & Investments Commission.

**ASX** means ASX Limited (ACN 008 624 691) or the financial market operated by it as the context requires.

**ASX Listing Rules** means the official listing rules of ASX.

**Board** means the board of Directors as constituted from time to time.

**BOO** means a build, own, operate model of production.

**Closing Date** means the closing date of the Offers as set out in the indicative timetable in the Investment Overview in Section 5 of this Prospectus (subject to the Company reserving the right to extend the Closing Date or close the Offers early).

**Company or DMA** means De.mem Limited (ACN 614 756 642).

**Completion** means completion of the Acquisition in accordance with the Implementation Agreement.

**Conditions** has the meaning given in Section 2.4.

**Consideration Offer** means the private offer of the Consideration Shares to the Vendors or their nominee(s) in consideration for the Acquisition.

**Consideration Shares** means the 65,000,000 Shares offered to the Vendors or their nominee(s) in consideration for the Acquisition.



**Constitution** means the constitution of the Company.

**Corporations Act** means the Corporations Act 2001 (Cth).

**De.mem Group** means DMS and each of the companies of which it is the ultimate holding company of, including De.mem Viet Nam Ltd, GD Wasser Pte Ltd, GD Wasser Viet Nam Ltd, GD Wasser Long An Ltd and GD Wasser Nghe An Ltd, as set out in Section 7.2.

**Directors** means the directors of the Company at the date of this Prospectus.

**DMA or the Company** means De.mem Limited (ACN 614 756 642).

**DMS or De.mem** means De.mem Private Limited, a company incorporated in Singapore (UEN No. 201307015R).

**Equipment Sale Agreement** means the equipment sale agreement entered into by De.mem and FCA on 20 October 2016, as summarised in Section 15.4.

**ESOP** means the Company's employee option plan.

**Exclusive Licence Agreement** means the exclusive licence agreement entered into by DMS and Ntuitive on 14 June 2016, as summarised in Section 15.3.

**Exposure Period** means the period of 7 days after the date of lodgement of this Prospectus, which period may be extended by the ASIC by not more than 7 days pursuant to Section 727(3) of the Corporations Act.

**FCA** means Foshan Chinese Academy of Science Membrane Technology Co. Ltd, Guangdong, China.

**Givaudan** means Givaudan Singapore Pte Ltd of 1 Woodlands Avenue 8, Singapore 738972.

**Givaudan Build Own Operate Agreement** means the agreement between De.mem and Givaudan dated 23 November 2016, as summarised in Section 15.5.

**Implementation Agreement** means the agreement entered into by the Company, DMS and the Major Shareholders on 20 October 2016 to complete the Acquisition, as summarised in Section 15.1.

**Independent Technical Expert** means Wave Six Pty Ltd ACN 160 498 233.

**Major Shareholders** means the major shareholders of DMS, New Asia Investments Pte Ltd and NA Singapore Early Stage Venture Fund I Pte Ltd.

**Membrane Integrity Sensor** has the meaning given in Section 7.6

**Non-Exclusive Licence Agreement** means the non-exclusive licence agreement entered into by DMS and Ntuitive on 25 January 2015, as summarised in Section 15.2.

**Ntuitive** means Nanyang Technological University – Ntuitive Pte Ltd (a wholly owned subsidiary of NTU).

**Offers** means the Public Offer, the Consideration Offer and the Advisor Offer.

**Official List** means the official list of ASX.

**Official Quotation** means official quotation by ASX in accordance with the ASX Listing Rules.

**Original Prospectus** means the prospectus dated 31 January 2017 relating to Securities of the Company.

**Option** means an option to acquire a Share.

**Optionholder** means a holder of an Option.

**Prospectus** means this prospectus.

**Public Offer** means the public offer of 18,750,000 Shares to raise a minimum of \$3,750,000 pursuant to this Prospectus as set out in Section 6.1 of this prospectus.

**RO** means reverse osmosis.

**Secondary Offers** means the Consideration Offer and the Advisor Offer.

**Section** means a section of this Prospectus.

**Securities** means the Shares and Options offered pursuant to this Prospectus.

**SGD** means a Singapore dollar.

**Share** means a fully paid ordinary share in the capital of the Company.

**Shareholder** means a holder of Shares.

**Subscription Option** has the meaning given in Section 15.1(d).

**UF** means an ultrafiltration membrane.

**UF-RO** means an ultrafiltration – reverse osmosis membrane process.

**Vendors** means the holders of fully paid ordinary shares, series a preference shares or series b preference shares DMS.

**Ventnor** means Ventnor Capital Pty Ltd (ACN 111 543 741).

**Ventnor Listing Mandate** means the mandate entered into by DMS and Ventnor, as summarised in Section 15.7.

**WST** means Western Standard Time as observed in Perth, Western Australia.

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