

31 January 2025

DOTZ Q4 FY2024 ACTIVITY REPORT*Secures first commercial order for DotzShield in the U.S.**Piloting DotzEarth toward commercial viability for both point source emissions
and Direct Air Capture***Key highlights of fourth quarter and recent weeks:**

- Received first commercial order for the Company's proprietary in-product tagging solution, DotzShield, from a leading provider of energy solutions to the Oil & Gas industries worldwide;
- Dotz's newly developed modified sorbent demonstrates high adsorption capacity and low energy usage for Direct Air Capture (DAC);
- Signed strategic collaboration agreement with Bar-Ilan University to pilot an innovative electrochemical DAC technology;
- U.S. institutional shareholder invests a further A\$2.0 million to support the development of the DotzEarth carbon capture technology.

31 January 2025 - Dotz Nano Limited (ASX: DTZ, "Dotz" or "Company"), a leading developer of innovative climate and industrial nanotechnologies, provides its Activity Report for the quarter ended 31 December 2024, along with the Appendix 4C cash flow report.

Commenting on activities in the December 2024 quarter and the 2024 calendar year more broadly, Dotz CEO Sharon Malka said: "During this reporting period, Dotz achieved several key milestones that position us for significant growth and innovation in the carbon capture and energy solution sectors.

"During the fourth quarter, we were delighted to announce the first sale of DotzShield tagging solution. The adoption of our tagging solution by a world-leading service provider to the oil and gas industry validates Dotz's ability to transform an innovative deep-tech into a commercial solution and represents potential market opportunity for DotzShield.

"We successfully demonstrated the superiority of our DotzEarth CO₂ capture technology for both DAC and point source capture applications, which broadens our reach in the carbon management space and opens new opportunities in low CO₂ concentration industries.

"Dotz is honoured to have been awarded a development grant from the Israel Innovation Authority to partner with Bar-Ilan University to develop an electrochemical pilot system for DAC. This collaboration strengthens our position in the DAC space, which is crucial for achieving global climate goals.

“We were pleased to continue our partnership with Mercer Street Global and welcomed its additional investment in the Company. Mercer’s continued backing demonstrates their confidence in Dotz’s carbon capture technology and our management team’s ability to execute on our strategy.

“Following a year of substantial progress in 2024, we have stepped into 2025 with great confidence, enthusiasm and momentum. This year, our focus remains resolute on advancing the development of DotzEarth and we look forward to providing shareholders with an update on our progression towards further technology demonstration at scale.”

CORPORATE & OPERATIONAL

Committed to a sustainable future, the Company is focussed on advancing carbon management technologies that facilitate the transition to a carbon-neutral world.

First commercial sale of Dotz Shield tagging solution

During the quarter, Dotz received the first commercial order of its **DotzShield** in-product tagging solution from ChampionX, a leading U.S. based provider of oilfield technology services and chemistry solutions to Oil & Gas companies worldwide.

The order marks a pivotal milestone for Dotz in its commercialisation journey of **DotzShield**, validating the Company’s innovative solution for real-time detection and dosage management of corrosion inhibitors (CI). The order follows a long-term collaboration to develop, scale-up, and field test this unique solution across various locations in North America, delivering an advanced approach to CI management. *Refer ASX announcement dated 18 December 2024 for further details.*

Developed an innovative modified sorbent for DAC and low concentration

Dotz developed an innovative functionalized microporous sorbent with ideal features for DAC and low-concentration CO₂ industrial point-source applications. The functionalized sorbent is a proprietary surface-modified, microporous polymeric-based sorbent. It has been designed to maximize its adsorption properties, yielding a superior adsorbent material, specifically tailored for efficient capture of CO₂ in very low concentrations including DAC and low-concentration CO₂ industrial emissions.

Validation testing and process modelling conducted by Dotz's development partner, SINTEF¹ and by industrial third parties, confirmed that Dotz’s new surface-modified polymeric sorbent demonstrates exceptional adsorption capacity at very low CO₂ concentrations such as air with 400 PPM CO₂. Process modeling of DAC resulted with more than double adsorption capacity compared with the current industry standard PEI-sorbent and indicated excellent sorbent kinetics and low affinity for moisture. Most notably, it demonstrated higher productivity of CO₂ adsorption and low energy usage compared to commercial PEI-sorbents. *Refer ASX announcement dated 9 October 2024 for further details.*

Strategic collaboration with Bar Ilan University to pilot electrochemical DAC technology

¹ SINTEF is Norway's largest (and one of Europe’s largest) independent research organizations for energy and climate technology.

Recently, Dotz entered into a technology collaboration agreement with BIRAD Research and Development Ltd. (**BIRAD**), the technology licensing subsidiary of Bar-Ilan University (**BIU**), to develop a pioneering electrochemical pilot system for DAC.

Under the collaboration agreement, the parties will jointly design, construct, and operate an outdoor field pilot system to demonstrate the technology in real life. The BIU research team will lead the development program, leveraging BIRAD's extensive experience and knowledge in electrochemical technologies and gas separation capabilities.

The parties received approval for a non-dilutive grant from the Israel Innovation Authority (**IIA**) of approximately USD250,000 under the IIA's Magneton program to develop an electrochemical pilot system. BIRAD also granted the Company an option for an exclusive, royalty-bearing worldwide license to commercialise the technology following a successful pilot. *Refer ASX announcement dated 19 December 2024 for further details.*

Secured additional investment to support development of DotzEarth

Current shareholder Mercer Street Global Opportunity Fund II LP (Mercer II), a U.S. institutional investment fund managed by Mercer Street Capital Partners, LLC, agreed to invest an additional A\$2.0 million in the Company, under the Convertible Securities Agreement announced 5 February 2024. The subsequent investment demonstrates Mercer's continued confidence in Dotz's strategy and the **DotzEarth** carbon capture technology.

The funds will be used to maintain the strong momentum currently underway in the development of the **DotzEarth** carbon capture technology. *Refer ASX announcement dated 27 November 2024 for further details.*

Business Continuity

Dotz confirms that it has a business continuity plan and procedures in place, ensuring operational and financial continuity. As a result, Dotz's operations and development activities are not impacted by the current situation in Israel.

FINANCIALS (all figure in US\$)

As at 31 December 2024, Dotz had \$0.8 million in cash and cash equivalents, compared with \$0.3 million as at 30 September 2024.

The Company remained on budget, utilising \$0.5 million in the fourth quarter of FY24 for its operational activities. Notably, the Company generated \$1.1 million from financing activities, of which \$1.0 million represents proceeds from the additional investment by Mercer in accordance with the convertible note agreement signed in February 2024.

Payments to related parties during the fourth quarter of 2024 were \$0.1 million, including executive remuneration and fees paid to non-executive Directors.

The Company will continue to evaluate its capital needs and alternatives to fund its capital requirements to ensure that it has the appropriate financial pathway to fund its operation towards the commercialisation of the DotzEarth technology. The Company believes that it has access to sufficient funds to continue to meet its working capital requirements as at the date of this report.



2025 OBJECTIVES & OUTLOOK

Committed to a sustainable future, Dotz will continue to pursue key milestones that represent significant growth opportunities for both its **DotzShield** and **DotzEarth** technologies through ongoing activities, focusing on advancing carbon management solutions that facilitate the transition to a carbon-neutral world.

With a solid foundation in place, 2025 promises to be a year of accelerated innovation, collaboration, and impact. Dotz's priority will be to advance the technology readiness of **DotzEarth** through pilot demonstrations and ongoing optimisation of its sorbents, while further commercializing its tagging solution, **DotzShield**.

Dotz's objectives for 2025 include:

- Advancing its DAC sorbent through a lab-scale pilot followed by a small-scale outdoor pilot;
- Validating its point source sorbent for different applications through lab-scale piloting;
- Scaling-up its sorbent production capacity; and
- Partnering with third parties.

This announcement has been authorised for release by the Board of Directors of Dotz Nano.

For further information, please contact:

Investor and Media Enquiries:

John Hurst

E: info@dotz.tech

P: +61 (0)418 798 663

About Dotz Nano Limited

Dotz Nano Limited (ASX: DTZ) is a pioneering developer of innovative climate and industrial nanotechnologies dedicated to addressing pressing global environmental and industrial challenges.

Our focus lies in advancing carbon management technologies offering an efficient and sustainable approach, thereby supporting the shift towards a carbon-neutral future. At the heart of Dotz Nano's mission are groundbreaking carbon management solutions, which include direct air capture and point source capture. Our unique strategy integrates novel porous sorbents with advanced process designs, enabling low-cost carbon capture and removal applications.

With a commitment to innovation and sustainability, Dotz Nano Limited is at the forefront of carbon management technologies, offering innovative and cost-effective solutions that play a crucial role in addressing climate change and promoting a sustainable future.

To learn more about Dotz, please visit the website via the following link www.dotz.tech

Future Performance and Forward-Looking Statements

This announcement contains certain statements that constitute forward-looking statements that may be identified by the use of terminology such as "may," "will," "expects," "plans," "anticipates," "estimates," "potential" or "continue" or the negative thereof or other comparable terminology. Examples of such statements include, but are not limited to, statements regarding the design, scope, initiation, conduct and results of our research and development programs; our plans and objectives



for future operations; and the potential benefits of our products and research technologies. These statements involve a number of risks and uncertainties that could cause actual results and the timing of events to differ materially from those anticipated by these forward-looking statements. These risks and uncertainties include a variety of factors, some of which are beyond our control. Forward looking statements, opinions and estimates provided in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements including projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

DOTZ NANO LIMITED

ABN

71 125 264 575

Quarter ended ("current quarter")

31 DECEMBER 2024

Consolidated statement of cash flows		Current quarter \$US'000	Year to date (12 months) \$US'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	7	7
1.2	Payments for		
	(a) research and development	(147)	(964)
	(b) product manufacturing and operating costs	(1)	(1)
	(c) advertising and marketing	(53)	(284)
	(d) leased assets	-	-
	(e) staff costs	(203)	(1,173)
	(f) administration and corporate costs	(127)	(940)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	4
1.5	Interest and other costs of finance paid	7	13
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other – Input VAT and other	41	265
	Other – Transaction costs/ commitment fee	-	-
1.9	Net cash from / (used in) operating activities	(476)	(3,073)
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	(5)	(112)
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$US'000	Year to date (12 months) \$US'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(5)	(112)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	247	1,770
3.2	Proceeds from issue of convertible notes	949	4,204
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(81)	(383)
3.5	Proceeds from borrowings	-	576
3.6	Repayment of borrowings	-	(3,210)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (principal element of lease payments)	(72)	(274)
	Other (proceeds from unissued shares)	38	38
3.10	Net cash from / (used in) financing activities	1,081	2,721

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	260	1,346
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(476)	(3,073)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(5)	(112)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,081	2,721

Consolidated statement of cash flows		Current quarter \$US'000	Year to date (12 months) \$US'000
4.5	Effect of movement in exchange rates on cash held	(60)	(82)
4.6	Cash and cash equivalents at end of period	800	800

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$US'000	Previous quarter \$US'000
5.1	Bank balances	800	260
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	800	260

6.	Payments to related parties of the entity and their associates	Current quarter \$US'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	88
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
Payments for CEO salary, non-executive director fees and entities related to directors.		

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$US'000	Amount drawn at quarter end \$US'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other *	3,815	3,815
7.4	Total financing facilities	3,815	3,815
7.5	Unused financing facilities available at quarter end		
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

*** Convertible Securities Agreement**

On 5 February 2024 the Company entered into a Convertible Securities Agreement with Mercer Street Global Opportunity Fund LLC (**Mercer**), a US-based investment fund managed by Mercer Street Capital Partners, LLC, to raise up to AU\$12 million via the issue of convertible notes. The Convertible Securities Agreement was varied by a deed of variation on 27 November 2024. Under the Convertible Securities Agreement the Company will issue to Mercer (or its nominees) up to 13,200,000 convertible notes with a face value of AU\$1 (Convertible Notes). The Company issued 7,150,000 convertible notes in consideration for AU\$6.5 million invested to date.

In January 2025, following a shareholder's approval, the Company issued an additional 650,000 convertible notes in consideration of a AU\$0.5 million investment. Subject to agreement by the Company and Mercer, further Convertible Notes to raise a maximum of AU\$5 million are available subject to satisfaction of customary conditions.

On 20 May 2024, the Company has issued 1,792,115 fully paid ordinary shares in the capital of the Company as a deemed issue price of AU\$0.11 in connection the Convertible Securities Agreement.

On 13 December 2024, the Company has issued 2,202,643 fully paid ordinary shares in the capital of the Company as a deemed issue price of AU\$0.07 in connection the Convertible Securities Agreement.

The summary of key terms of the Agreement are detailed in an ASX Announcement dated 5 February 2024 and, in respect of the variation, in an ASX Announcement dated 27 November 2024.

8.	Estimated cash available for future operating activities	\$US'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(476)
8.2	Cash and cash equivalents at quarter end (item 4.6)	800
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	800
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	1.68
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>		
8.6	If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	<p>Answer:</p> <p>The entity expects that it will continue to have the current level of net operating cash flows.</p>	
8.6.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	<p>Answer:</p> <p>In August 2024, the Company raised AU\$2.2 million (US\$1.5 million) via private placement offering to a combination of existing and new institutional and sophisticated investors, of which AU\$0.1 million was received post 31 December 2024.</p> <p>In November 2024, Mercer agreed to invest an additional AU\$2.0 million under the Convertible Securities Agreement, out of which AU\$0.5 million was invested on 9 January 2025, following shareholders' approval.</p> <p>The Company is in discussions with multiple investors and brokers and evaluating alternatives to fund its capital requirements, including the potential to raise up to an additional AU\$5 million under the Convertible Securities Agreement with Mercer under the terms of that agreement.</p> <p>The Company continuously evaluates its capital needs and financial alternatives to fund its capital requirements to ensure that it has the appropriate financial pathway to fund its operation and believes that any such raise will be successful.</p>	

8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

Yes. As detailed in the response to question 8.6.2, based on the entity's expectation to successfully raise additional funds, the Company believes that it will have access to sufficient cash to continue to meet the Company's working capital requirements as at the date of this report and to finance the operations of the Company.

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:**30 January 2025**.....

Authorised by: **Board of Directors**.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.