



Rewarding Investors. Advancing Sustainability.  
Proven Advanced Nanomaterial. Game-Changing  
Product Solutions.



**Multi-Generation Opportunity for Shareholders and Customers**

January 2024

# Safe-Harbor Statement

This document contains "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact in this announcement are forward-looking statements, including ] but not limited to, the company's ability to obtain the necessary financing to continue and expand operations, to market its products in new markets and to offer products at competitive pricing, to attract and retain management, and to integrate and maintain technical information and management information systems; compliance with laws and regulations of the PRC, the effects of currency policies and fluctuations, general economic conditions and other factors detailed from time to time in the company's filings with the United States Securities and Exchange Commission and other regulatory authorities. The company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.



# A Changing World

Climate change and the growing after effects of a global pandemic continue to reorder people's thinking and buying habits.

The global market for innovative solutions addressing change is growing, fueled by markets/buyers seeking proven, sustainable products.

Dais's product solutions re-establish a balanced ecosystem by protecting the core elements of life.

Introducing **Aqualyte™**  
SUSTAINED BY  **DAIS**

The Forbes logo is displayed in white serif font on a black rectangular background.

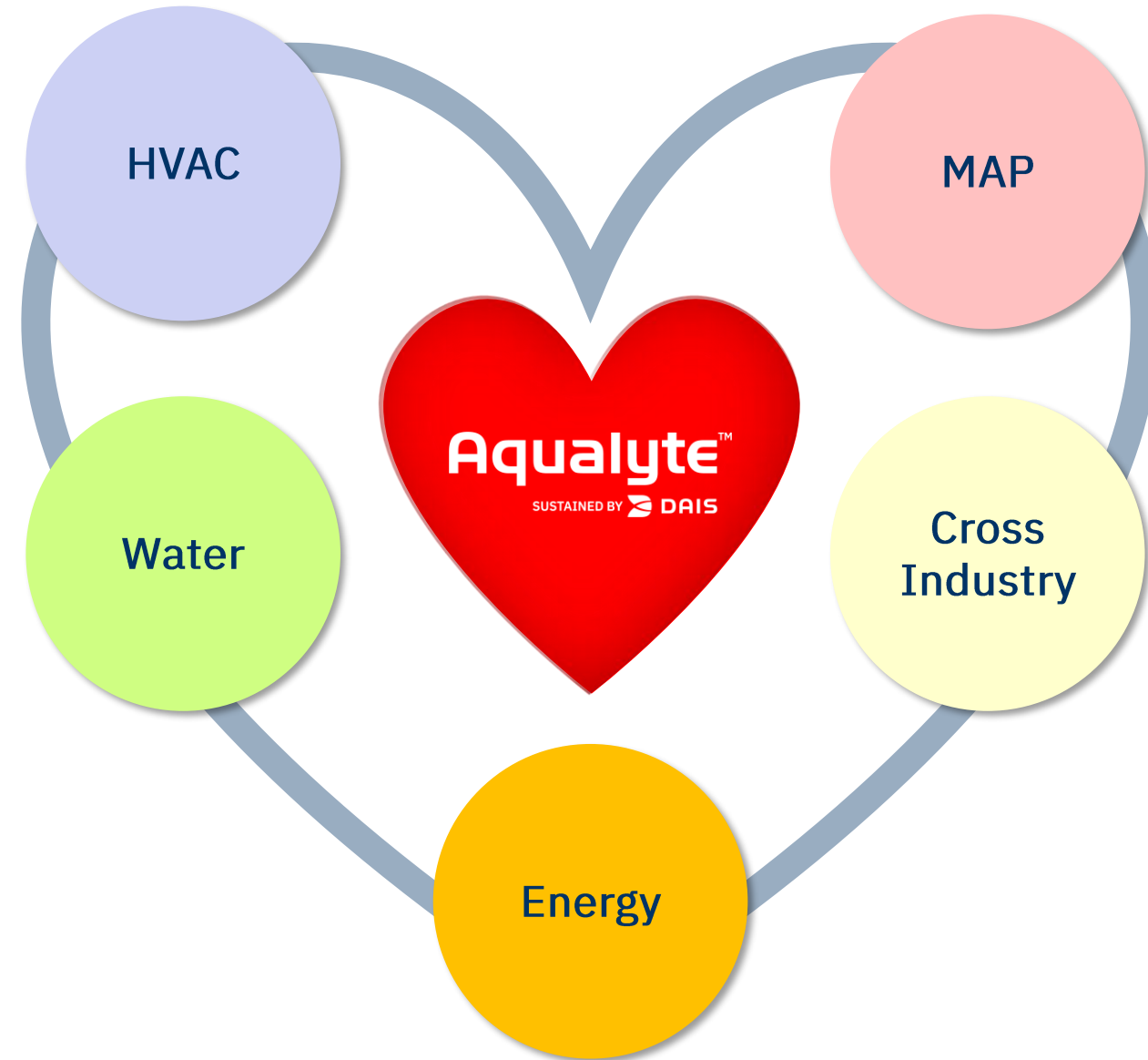
“Changes In Buying Behavior Brought On By The Pandemic and Increased Sensitivity to Climate Change” February 2021

## Advanced Nanomaterial v. Today's *State of the Art* Products

- We manage the features and attributes of a platform of proven nanomaterial enabling highly efficient product component(s) or product(s):
- Contrast to today's *state of the art* product components or product(s) which:
  - Are inefficient: Energy and underlying architecture
  - Break-down prone
  - Fewer features than market(s) are seeking
- Addresses product solutions
- Imagination is the gate for uses .. think “semi-conductor” or “penicillin”
- Patented. Technically Proven.
- Revenue producing. Real Products. Strong market pull. Supply Chain. Manufacturing.

# Identified Markets for Aqualyte™ ...

- **Aqualyte™** is the heart of technology disrupting multiple industries
- **Five Primary Markets:**
  - **HVAC** (Heating, Ventilation and Air-Conditioning)
  - **Water** (repurpose industrial wastewater, separate PFAS, desalinate other sources)
  - **Renewable Energy** (green energy, energy storage)
  - **M.A.P.** (Modified Atmosphere Packaging)
  - **Cross Industry** – sundry uses limited only by the imagination



# Dais Can Make a Global Difference

Water and energy are a huge part of the battle against climate change

Aqualyte™ materials from Dais enable innovative products that can

- Improve efficiency, comfort, and health
- Prevent the release of more than 3 billion metric tons of CO<sub>2</sub> per year

## Projected Emissions Avoided by 2032

Industry/Market	Annual Energy Savings (TWh)*	Annual CO <sub>2</sub> Savings (metric tons)
Specialty Aqualyte™ uses (OEM sales)	929	626 million
Heating, ventilation and air-conditioning (HVAC)	4,379	2,021 million
Energy (green hydrogen)	N/A	885 million
Clean water	655	371 million
Modified atmosphere packaging (MAP)	N/A	401 million
<b>Projected total annual savings</b>	<b>5,963</b>	<b>3,022 million</b>

\* 1 TWh = 3.6 x 10<sup>12</sup> kJ

Humanity adds roughly  
**40 billion**  
**metric tons**  
of CO<sub>2</sub> pollution to the  
atmosphere every year.

Pieter Tans (NOAA) 2021

### The Air Conditioning Trap

The warmer it gets, the more we use air conditioning. The more we use air conditioning, the warmer it gets.

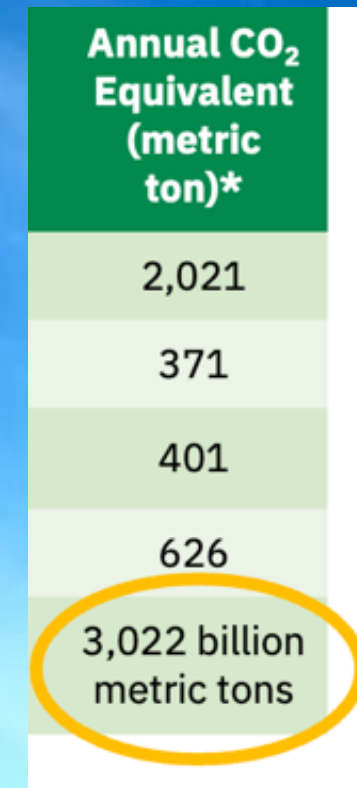
Guardian News & Media Limited (2023)

# Summary

- Timely features for today's concerns
  - Saving money with benefit of resetting our environment
  - Only the beginning ...
- Commercialization possibilities
  - Demand for key products – large drivers
- Risk-reduced:
  - Proven Aqualyte™ nanomaterial platform.
  - Five identified Groups: not a one product company
  - HVAC, PFAS removal, PFAS product replacement, Green Energy



## Innovation for Economic and Social Good







Dais 20W PEM  
Fuel Cell Stack

## MARKET GROUPS

### THE FIVE MAJOR MARKETS THE COMPANY IS TARGETING

GROUP 1: CROSS INDUSTRY

GROUP 2: HVAC (NANOAIR)

GROUP 3: MODIFIED ATMOSPHERIC PACKAGING (M.A.P.)

GROUP 4: RENEWABLE ENERGY/FUEL

GROUP 5: INDUSTRIAL WASTEWATER REPURPOSING

**NanoCap™**  
Test Cell





## Group One: Cross Industry

### Cross Industry Group: Capitalizing on the Advantages of Aqualyte™ Uses limited only by the imagination...

- **Uses:**

- Specialty clothing and active wear
- First responder and military markets
- Building wraps
- Anti-fouling coatings and marine paint
- Sensors
- Single-use adhesive ...
- just to name a few.

- **Benefits include:**

- Improve performance with selective transfer abilities
- Combine isolation with moisture handling ability
- Decrease ship drag with permanent coating that prevents adhesion from marine life



# Group Two: Heating, Ventilating, and Air Conditioning (HVAC)

## HVAC to keep occupants Healthier, Wealthier, and Wiser

Ventilation:

**ConsERV™**

Selling since 2006

> 45,000 units sold  
2-year payback typical

Industry-leading provisioning and management of ventilation air saves energy while improving health and productivity. Projected 30%+ energy and CO<sub>2</sub> savings, and best in class ventilation

Evaporation:

**DisruptorCC™**  
**PolyCool™**

Available 2Q24

Soft-selling to strategic partners today

Precise humidity control & evaporative cooling without releasing *legionella* bacteria. Projected Savings 34% and up.

Cooling and Humidity Control:

**PolyChill™**  
**PolyVap™**

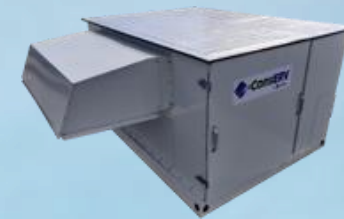
Available 2Q 2025

Projected soft-selling to strategic partners 2Q24

Manage humidity and temperature independently to reduce energy usage 30 – 50% and improve comfort. Eliminate “forever chemical” refrigerants driving climate change.

## NanoAir™

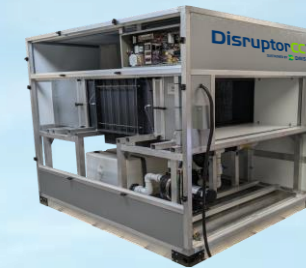
The World's HVAC Product Solution Team for the 21<sup>st</sup> Century



ConsERV™ - Ventilation



PolyCool™ - Novel evaporative cooling



DisruptorCC™ - Moisture management with limited cooling



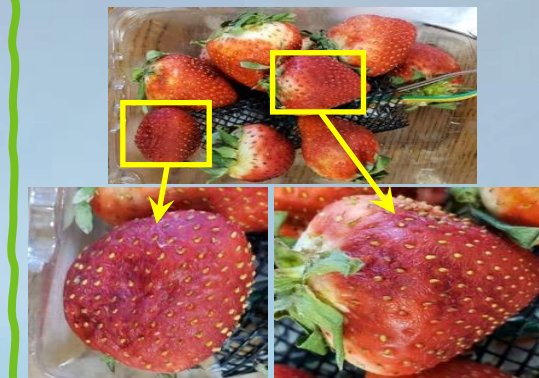
PolyChill™ & PolyVap™ - Novel chilling loop

# Group Three: Modified Atmospheric Packaging (M.A.P.)

## Revolutionize the MAP market

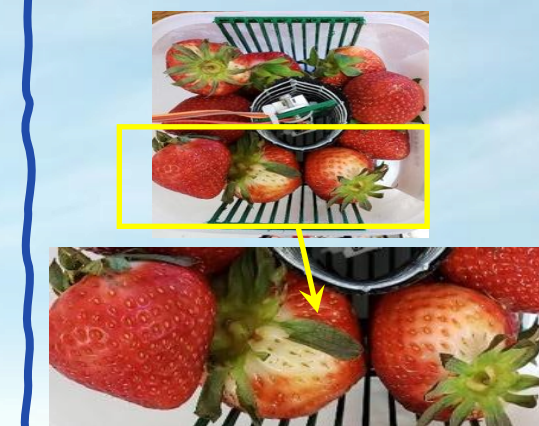
- More than **ONE THIRD** of all food produced for human consumption is wasted
  - Huge carbon footprint to grow, process, package, transport, and market this food is lost
  - Wastage accounts for 4,400 Mt of CO<sub>2</sub> equivalent emissions per year
- Proven selective isolation extends usable life by days or weeks
  - Reduced atmospheric exchange – less oxidative stress and exposure to foreign chemicals
  - Rapid exchange of water molecules to prevent condensation and freezing
  - Commercialized – installed in crisper drawers on hundreds of thousands of refrigerators

Conventional perforated container after 11 days



Strawberries are inedible

NanoFresh™ container after same 11 days



Strawberries are flawless



## Group Four: Renewable Energy

### “Green Hydrogen”, energy storage and biofuel applications

- **Proven ability as a proton-exchange membrane**
  - Turn renewable electricity into clean hydrogen by electrolysis
  - Turn hydrogen into electricity via fuel cells with water vapor as the only byproduct
- **Store renewable electricity in revolutionary ultracapacitors**
  - High voltage material with ability to store large electric charges
  - Rapid storage & release of electrical power over millions of cycles
- **“Green Hydrogen” Applications**
  - Aqualyte™ membranes do not have PFAS issues, tested by 3<sup>rd</sup> party to perform better.
  - Developed electrode assemblies and complete subsystems
  - Sold 600+ 10W units.



PEM fuel cell constructed with Aqualyte membrane electrode assemblies

# Group Five: NanoClear™ - Industrial Wastewater

## NanoClear™ ultrapure water from problematic waste

- **Aqualyte membrane turns the harshest water crystal clear**
  - Typically 1 ppm dissolved solids in product water
- **Ideal for desalination, pharmaceuticals, paints, biowaste**
  - Separate PFAS “forever chemicals” from water supplies
  - Salts and dissolved solids to 25% concentration (3X most RO)
  - Chemical oxygen demand (COD) to 300,000 mg/L
- **High Performance**
  - Recover more water than competing processes
  - Greatly reduced fouling, especially biofouling
  - Simple, low-pressure system with minimal prefiltration
  - Up to 77% lower OPEX than complex alternatives





## Awards and Third-Party Certifications



AHR Innovation Award



US Congress Recognition for Innovation



Bright Lights Award



**Forbes**

12 Energy Projects to Watch



Frost & Sullivan Best Practices Award



FEBRAVA Innovation Award



Passive House Institute China Performance Award 2015, 2016



Cooltech Award

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***THANK YOU. WE HOPE YOU ARE AS EXCITED ABOUT DAIS'S FUTURE AS WE ARE!***

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