



Ten Carbon — — Chemistry

MARCH 2023



TEN CARBON CHEMISTRY

OUR STORY

2020

Started at Wintermute biomedical, an **antimicrobial therapeutics company**.

COVID **created urgent need for environmental antimicrobials**: hand sanitisers & surface disinfectants.

Realisation that the antimicrobial technology could be used more broadly than just medical uses.

Wintermute began making and testing **commercial sanitisers**.

2021

Expanded beyond cleaning and hygiene **to testing in meat processing facilities** and **glass recycling**.

Refined our model and focus, getting feedback from markets and customers.

2022

Ten Carbon Chemistry was created to focus on repurposing the technology for **non-medical applications**.

Split off timing to capitalise on our momentum and focus on growing revenue.

Mission

To provide safe, effective, and sustainable antimicrobial solutions to global markets to support food safety, maintain recycling, and protect public health.

INDUSTRIAL, ENVIRONMENTAL, AND AGRICULTURAL ANTIMICROBIALS

Widely used non-medical uses of antimicrobials.

➤ WHERE THEY'RE USED

- Environment & Industry, Agriculture, Cleaning & Hygiene



Recycling and waste disposal



Animal agriculture in livestock housing



Hospitals



Crops pre-harvest and post-harvest



Food preparation and packaging rooms



Schools and offices

➤ WHAT THEY'RE USED FOR

- Reduce contamination of bacteria, fungi, and viruses
- Prevent disease spread in humans and livestock
- Prevent food spoilage
- Control smell

➤ WHAT THEY CONTAIN (OUR COMPETITORS)

- Quaternary ammonium compounds (quats)
- Alcohol
- Bleach
- Formaldehyde

PROBLEM WITH EXISTING ANTIMICROBIALS

Limitations of competitor products.

1 INCREASING ANTIBIOTIC RESISTANCE

- Reducing the effectiveness of current antimicrobials
- Caused by antimicrobial overuse
- >1.2 million people died in 2019 as a direct result of antibiotic resistance

2 MANY ARE DANGEROUS

- Health and OHS concerns e.g. quats, formaldehyde

*Two hygiene giants - **The Clorox Company & Reckitt** - have acknowledged these concerns by advertising that they are seeking alternatives.*



OUR SOLUTION

An antimicrobial platform with robust activity, safety, and flexibility.

Antimicrobial Fatty Acids



Naturally occurring
in plants



In our diet and naturally
exuded by human skin to
kill microbes



Demonstrate broad-spectrum
antiviral, antibacterial, and
antifungal properties

Core formulation verified

by independent laboratories and
universities.

Worldwide license from parent company

- For all nonmedical uses, & medical uses for livestock
- Exclusive 20-year license
- Royalty-free period

BENEFITS OF OUR SOLUTION

Our formulations provide a competitive advantage over current offerings.

Benefits to Customers

- 1 Superior activity to current antimicrobials**
Reduces profit loss from unusable product.
Provides a long-term effective solution.
- 2 Long-lasting activity**
Antimicrobial activity remains on surfaces,
so fewer applications needed.
- 3 Safe for workers and livestock**
Free of harmful ingredients such as quats and
ammonia and OHS benefits.

Benefits to Public Health

- 1 Reduces biosecurity threat**
e.g. Foot and mouth disease, avian flu
- 2 Reduces spread of disease**
e.g. Food poisoning
- 3 Reduces threat of antimicrobial resistance**
Ensures medical antibiotics remain
effective.

A MULTIPLE MARKET OPPORTUNITY

Wide variety of use-cases.

Industrial

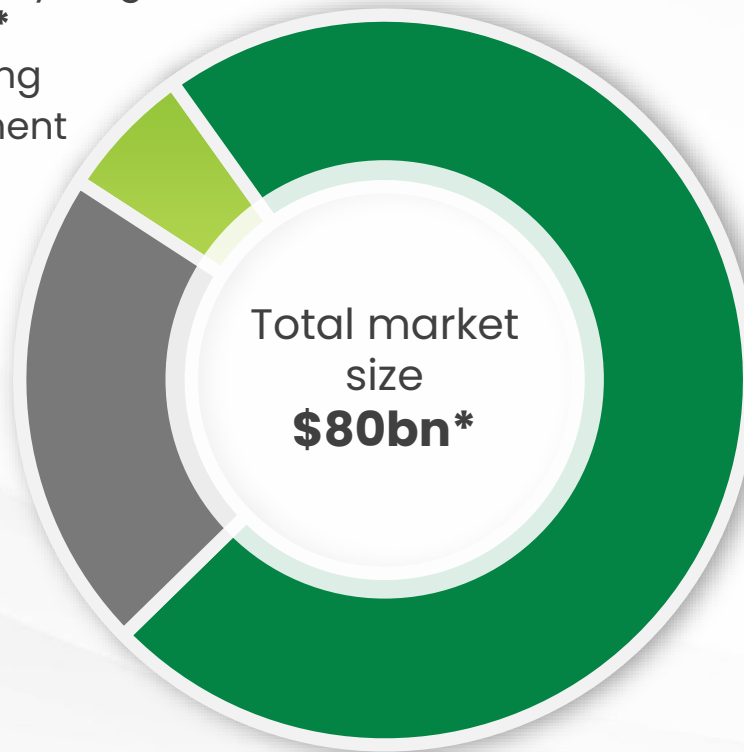
Global Glass Recycling Market **\$4.8bn***

- Glass Recycling
- Water Treatment

Cleaning & Hygiene

Global Commercial Cleaning Product Market **\$17.3bn***

- General Cleaning
- Commercial Cleaning



Agriculture

Global Crop Protection Market **\$58.4bn***

- Crop Protection
- Food Protection
- Livestock Housing
- Stockfeed

Initial focus on low barrier to entry markets

- ✓ Low regulatory requirements
- ✓ Existing partner relationships
- ✓ Most urgent needs already clearly identified

BUSINESS MODEL

We co-design solutions with end users for seamless market fit and rapid adoption.

Stage 1
Partner with industry leaders seeking better antimicrobials: Suppliers and end consumers with a clear need for a new solution.

Stage 2
Tailor solution: Co-design and tailor antimicrobial solutions with partners; ensure market offering is in line with customer needs and use case.

Stage 3
Validation and testing: Trial product at partner sites and in lab testing; joint access to scientific methodology and results.

Stage 4
Sales or sub-license for selected use: Long-term contracts with buyers; license to suppliers allows existing suppliers to sell to the market through their established pipelines.

PARTNER WITH INDUSTRY LEADERS

DISCUSS MARKET NEEDS

IDENTIFY PAIN POINTS

IDENTIFY REGULATORY REQUIREMENTS

TRIAL ON SITE

LAB TESTING

OBTAIN REGULATORY APPROVAL

SALES

LICENSE

License fees at 2-8%

12-18 months

GROWTH STRATEGY

Growing sales and sub-licenses and expanding to new sites and regions whilst continuing to build specialised use cases to enter new markets for rapid business expansion.

ESTABLISH

Develop 'ready-to-use' solutions tailored to markets & use cases & build initial traction

Use case #1: Waste & recycling

Use case #2: Meat processing facilities

Use case #3: On crops

Use case #4: On food

Continue to build use cases

SCALE

Expand adoption of established solutions

Grow Sales At Existing Sites

Expand Sites

Enter New Regions

Create Similar Use Cases

TRACTION

Awards, accelerators, credibility, and revenue.



IFPA Accelerator

1 of 12 companies selected



InClean Excellence Award

Innovative Cleaning Agent category



\$350,000 Raised in Pre-Seed Round

From parent-company investors



USDA Grant

\$260,000 USD over 2 years to test product on reusable food packaging



Revenue Generating Partner

Glass recycling; 2 plants out of 10 in Australia.



3 Peer-Reviewed Publications

Demonstrating efficacy in lab testing and superior activity on pork abattoir surfaces

MOMENTUM

TESTIMONIAL



WHERE WE ARE NOW

15

Partnerships

5

Markets

11

Use Cases

GLASS RECYCLING



NanoKill – On crushed glass to stop odour

- Re-selling to waste management sites
- Revenue generating in FY21-22
- 2 of 10 Australian sites secured

Scaling

ANIMAL AGRICULTURE



Sanitiser in meat processing facilities

- Preliminary testing complete, in discussion to increase sales

Sanitiser in livestock housing

- Engaging with partners to begin testing on site

Establishing

PLANT AGRICULTURE (pre-harvest)



On crops as an insecticide

- Co-filing patent for new use in March, sub-license to follow

On crops as a fungicide

- Testing beginning in Feb

Establishing

PLANT AGRICULTURE (post-harvest)



On food to prevent spoilage

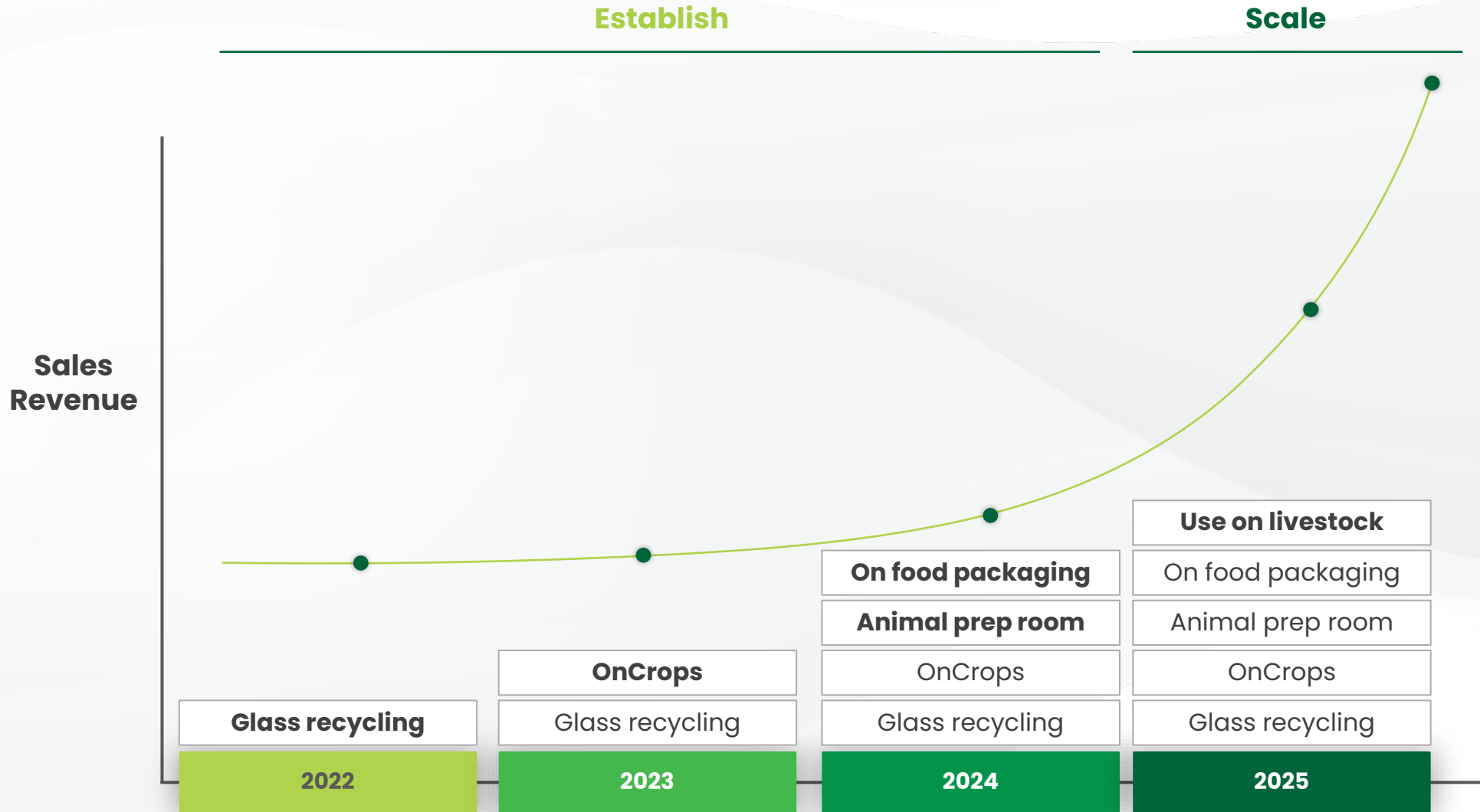
- Preliminary testing at partner sites

On food packaging to prevent food spoilage

- Funded by USDA grant

Establishing

TARGET SALES MILESTONES



TARGET R&D MILESTONES

Further product development and refinement to provide greater consumer confidence, superior product differentiation, and entry into new markets.

All markets & uses

Validate **residual activity**
in different use cases

Understand **resistance profile**

Determine activity
against biofilms

RESIDUAL ACTIVITY

RESISTANCE PROFILE

BIOFILMS

Specific markets & uses

Establish **new partners** to
enter new markets with
new use cases:

ON FRESH PRODUCE

IN ANIMAL BEDDING

ON LIVESTOCK ANIMALS

Research subsidised with grant funding e.g. CRC-P
Utilising the Australian R&D tax rebate

EXIT

Potential for medium-term exit via a trade sale, with similar industry acquisitions recently completed.

Notable Acquisitions Amongst Big Antimicrobial Players



Acquired IFF Microbial Control Business (suppliers of antimicrobial active ingredients and formulations) for **\$1.3B** 2021



Acquired Nutranext for **\$700M** 2018



Acquired RenewLife for **\$290M** 2016



Polygiene[®]
STAYS FRESH

Acquired Addmaster (supplier of antimicrobial additives, anti-counterfeit additives, and bespoke formulas) for **\$35.7M** 2020



Acquired 4 companies in last 5 years - amounts undisclosed

MEET OUR TEAM

Our executive team has over 75 years of experience in science and commercialisation.



Dr. Tony Peacock, FAICD, FTSE

Chairman & Co-Founder



Dr. Thomas Rau

CSO, Director, & Co-Founder



Stuart Nicol

Director



Bob Goodman

Director



Dr. Alyce Mayfosh

Scientific Project Manager & Co-Founder



Carolyn Riska

Operations Manager



Dr. Rob Smits

Agriculture Leads Consultant

COMPANY HIGHLIGHTS

STRONG TRACTION



IFPA Incubator
Awards & Grants

Successful in waste application
and pork processing application

URGENT MARKET NEED

USD \$80b

Urgent need to replace existing
chemical-based solutions
causing harm to people and/or
the planet.

TECHNOLOGY EXCELLENCE



3 peer-reviewed scientific
publications

Multiple **IP patents** globally

CREDENTIALLED TEAM



Network of expertise to support
new applications and markets of
the solution.

MODEL FOR SCALE

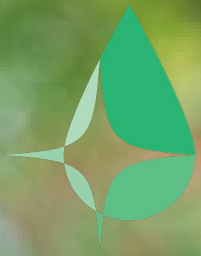


Targeting **lower regulation
markets** for entry first, while
preparing for higher regulation
markets.

ESIC



Company seeking **Early-Stage
Innovation Company (ESIC)**
status - may have tax benefits for
investors.



TEN CARBON

CHEMISTRY

We welcome discussions about investment opportunities with us.



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