

Media Release

AMGC BACKS PROVECTUS ALGAE'S BLOOMING GREAT IDEA

- ***Australian biotechnology company receives \$250,000 co-funding grant to commercialise novel manufacturing technology***
- ***Provectus Algae's proprietary bioreactors to support leading-edge algae manufacture for food, pharmaceutical and agricultural sectors***
- ***Provectus's innovation to deliver higher-quality, higher-volume and more diverse algae species for use in medicines, fertilisers, food and a variety of other products***
- ***Project to generate initial revenues of up to \$10 million per annum from food and agriculture applications, while delivering up to twenty new jobs***

The Advanced Manufacturing Growth Centre (AMGC), part of the Federal Government's Industry Growth Centre initiative, has co-funded an industry project with Queensland based biotechnology start-up Provectus Algae. The project aims to develop and scale-up the commercial manufacture of algae used to produce various compounds for a variety of sectors.

Closely followed as an exciting breakthrough, the biotechnology company uses precise control of algae growing conditions to produce valuable compounds, with applications ranging from pharmaceuticals to environmentally friendly pesticides.

The commercialisation of Provectus's leading algae manufacturing technology has the potential to expand supply and feed-stock for protein-based drugs treating infectious, inflammatory and cardiovascular diseases. More widely, this valuable and flexible resource can be used in plant-based protein products, for flavourings and could be employed to clean air and wastewater.

The technology autonomously micromanages the growing environment using LED lights, sensors, and artificial intelligence to provide optimal growing conditions. Tests have shown up to a 500% increase in biomass over a 7-day period using Provectus Algae's proprietary lighting technology when compared to an industry leading lighting system.

Nusqe Spanton, Chief Executive Officer at Provectus Algae, said that algae represents a new and sustainable way of creating valuable ingredients for a range of sectors.

"Our biorefinery platform can precisely control light, CO₂, nitrogen and input media. This gives us the ability to formulate different recipes and generate predictable results across different batches, producing a variety of compounds at scale.

"AMGC's co-funding grant has enabled us to move closer to commercialisation and in the process linked us to other Australian based manufacturers that are now assisting us with local supply of components to scale up," said Spanton.

Existing algae production systems can produce 12 (out of a possible 5 million) algae species in Good Manufacturing Practice (GMP) compliant facilities. However, production limitations of these existing systems restrict the potential discovery and commercialisation of high-value natural products and impede the viability for algae to be used in pharmaceutical, agrochemical and food applications.

Managing Director of the Advanced Manufacturing Growth Centre, Dr Jens Goennemann, said Provectus Algae is a shining example of manufacturing having a far greater impact beyond production.

"Modern manufacturing is a capability and an enabler, and Provectus Algae's biorefinery technology will drive change, accelerate development and in the process offer a better product that delivers greater value and commercial potential in Australia and abroad.

"Provectus Algae exemplifies a modern manufacturer. They serve to demonstrate that modern manufacturing is not what you make, but how you make it. In this instance, their product will go on to generate growth in many sectors including food and pharmaceuticals," said Dr Goennemann

On completion of this project, Provectus Algae will have implemented a fully automated, commercial scale, algae biologics manufacturing facility and added up to twenty additional jobs. The first commercial products will be food flavouring and agricultural in nature and are expected to generate between \$1 million and \$2 million annually per product, and a product pipeline of between three and five products a year.

More broadly, this project is expected to benefit the Australian biological manufacturing industry by improving yields through real-time optimisation, and reducing contamination through automation. It is anticipated that the project will lead to further collaborative research into the use of algae in the pharmaceutical, food and agriculture industries.

For further details of the project, partner organisations and funding arrangements visit - <https://www.amgc.org.au/project/manufacturing-of-high-value-algae-species/>

ENDS

About Provectus Algae.

Provectus Algae is an Australian biotech startup specialising in the optimisation of algae to produce high-value compounds for use in a wide array of industries and applications. Provectus Algae's groundbreaking capabilities are enabled by a well-balanced fusion of its proprietary innovative technology and thorough knowledge of the unique biological traits of algae.

www.provectusalgae.com

About Advanced Manufacturing Growth Centre (AMGC)

The Advanced Manufacturing Growth Centre (AMGC) is an industry-led, not-for-profit organisation established through the Australian Government's Industry Growth Centres Initiative. AMGC's vision is to transform Australian manufacturing to become an internationally competitive, dynamic and thriving industry with advanced capabilities and skills at its core.

Through the delivery of its world-leading research, Manufacturing Academy, workshops, and ground-breaking projects, AMGC aims to develop a highly skilled and resilient local manufacturing sector that delivers high-value products – via the integration of innovative technology – to domestic and international markets.

<http://www.amgc.org.au>

Industry Growth Centres

The Australian Government targets sectors of competitive strength and strategic priority through the Industry Growth Centres Initiative. The Industry Growth Centres Initiative is strategic, sector based

approach to growing our industries and creating jobs by focusing on areas of competitive strength and strategic priority. This approach supports economic growth and job creation for all Australians. The six Industry Growth Centres address barriers to productivity, competitiveness and innovative capacity to support the growth of the Australian economy.

For more information: www.industry.gov.au/industrygrowthcentres

Media Contact

Tyson Bowen

Advanced Manufacturing Growth Centre

M: 0418 826 936

E: Tyson.bowen@amgc.org.au