

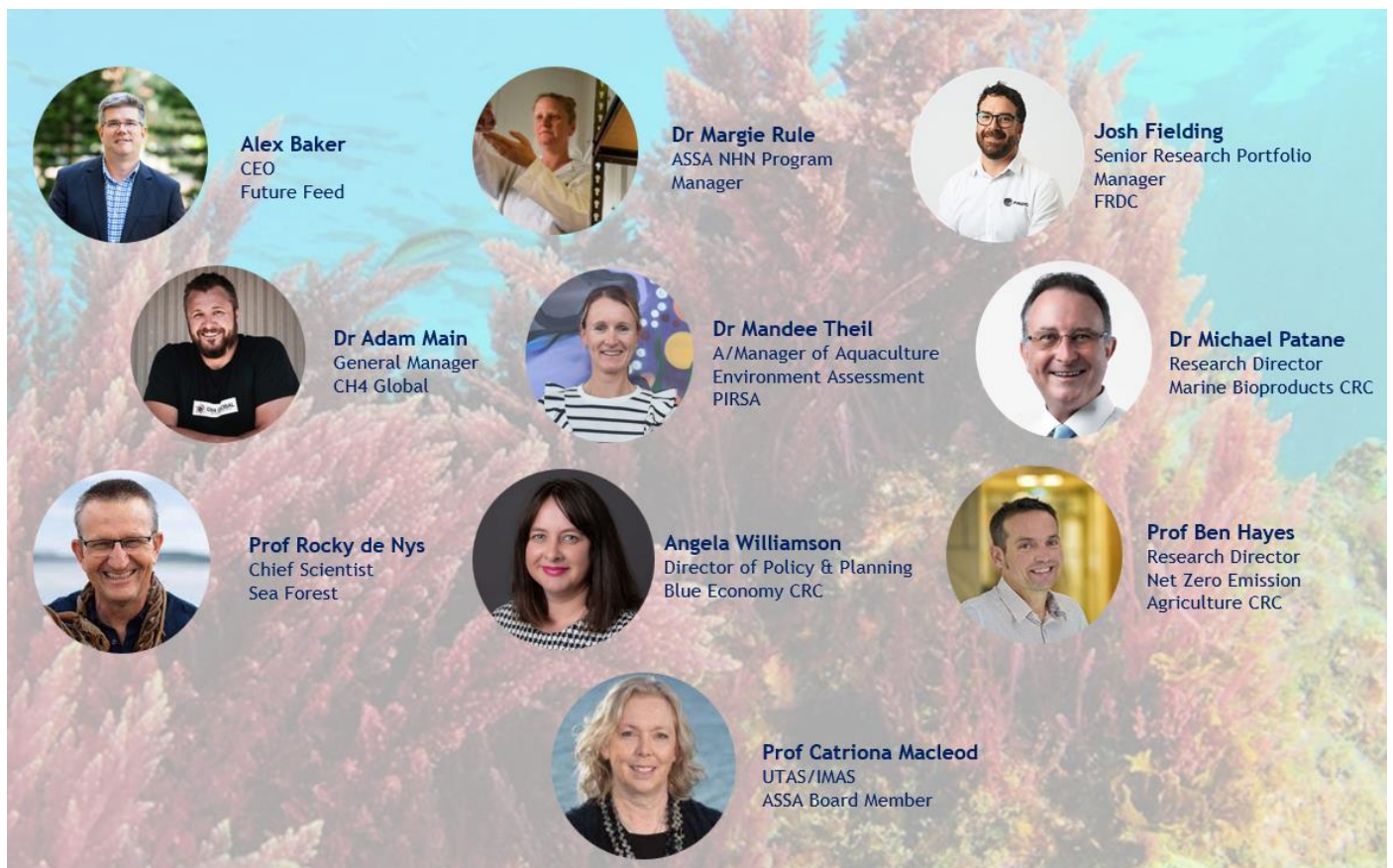
ASSA R&D Workshop (29 February 2024): Strategies for Success

- *Asparagopsis Aquaculture in Australian Industry and seaweed R&D Initiatives*

Positioned as an emerging market, the Australian seaweed industry stands on the brink of significant expansion, propelled by the promise of substantial economic and health advantages. As foreseen in the [Australian Seaweed Industry Blueprint – A Blueprint for Growth](#), this sector holds the potential to achieve a remarkable \$1.5 billion valuation by 2040, generating over 9,000 direct employment opportunities.

The [Australian Seaweed Sustainable Alliance \(ASSA\)](#), is the peak body for the Australian seaweed industry with an objective to provide a unified voice for the sector and to foster sustainable growth. The Workshop brought together industry leaders, policy experts, and funding bodies to explore advancements in *Asparagopsis* aquaculture and relevant research and development (R&D) initiatives.

Nine esteemed speakers spoke on different topics, and ASSA board member Prof. Catriona Macleod coordinated and facilitated an open discussion with over 40 stakeholders, scientists and partners participating online. Within this four-hour webinar, ASSA prepared three video clips for introducing members to the audience, with support from [greenHorizon](#).



This event provided a platform for experts to share insights, discuss challenges, and foster collaboration in the pursuit of sustainable seaweed aquaculture development, with a particular focus on the potential of *Asparagopsis* and relevant seaweed R&D opportunities. This workshop was in partnership with [FRDC](#), [PIRSA](#), [Marine Bioproducts CRC](#), [Blue Economy CRC](#), [Zero Net Emissions from Agriculture CRC](#) and the [Australian Seaweed Sustainable Alliance](#).

Key Messages

By fostering dialogue and collaboration, the workshop aimed to accelerate the development of sustainable *Asparagopsis* cultivation, contributing to the broader goals of marine ecosystem health and climate change mitigation.

Asparagopsis Aquaculture Trends:

- Lots of encouraging comments from participants underscored the industry's promising nature (Fig. 1).
- The predominant current emphasis within the industry is directed towards advancing the scale-up of seaweed production and associated efficacy preservation.
- ASSA has leading efforts particularly via the development of a National Hatchery Network (NHN), with more work to do over the course of 2024, especially the endeavours on advancing the hatchery process and implementing effective anti-contamination strategies.
- Discussions also highlighted successful case studies, outlining the great potential for climate change mitigation and scale-up cultivation.



Figure 1: Key word survey to best describe the current Australian *Asparagopsis* business activity

Policy Frameworks and Regulations:

- Aquaculture environment authorities outlined the regulatory landscape for seaweed cultivation, emphasizing the need for supportive frameworks to encourage industry growth.
- Collaborative efforts were explored to streamline regulatory processes and ensure sustainability.

Funding Opportunities and Investment:

- Representatives from funding bodies outlined available grants and funding opportunities for *Asparagopsis* aquaculture and other seaweed R&D initiatives.
- Panel discussions explored the collaborative spirit and success strategies to attract investments including funding support for seaweed scaling up production and commercialization.

Research and Development Initiatives:

- Experts presented the latest advancements in R&D initiatives related to *Asparagopsis*, including biosecurity exploration on genetic level for enhanced productivity and resilience.
- Collaborative projects were discussed, emphasizing the importance of interdisciplinary research to address challenges and unlock new possibilities.

Environmental Impact and Sustainability:

- The workshop dedicated sessions to address concerns related to the environmental impact of seaweed cultivation, and the carbon neutral potential from seaweed farming.

- Researchers and industry leaders shared strategies for sustainable practices, including waste reduction and biodiversity conservation.

Market Opportunities and Challenges:

- Participants explored market trends domestically and internationally, and potential challenges in the commercialization of *Asparagopsis* products.
- Discussions focused on creating market demand through awareness campaigns and innovative product development (e.g., employment of advanced biorefinery techniques and IMTA - integrated multi-trophic aquaculture - approaches)

Conclusion

Feedback from participants was that the workshop was a very worthwhile exercise. With distinguished speakers offering insights from various perspectives, the workshop provided a comprehensive overview of the current landscape in seaweed cultivation, particularly emphasizing the promising developments in *Asparagopsis* aquaculture.

The diverse range of speakers also contributed to a rich tapestry of knowledge, covering key aspects such as cultivation techniques, industry trends, and ongoing research initiatives. The open discussion segment allowed participants to actively engage, fostering an environment where ideas and experiences were shared.

As the workshop achieved its aims of disseminating knowledge, promoting dialogue, and laying the groundwork for potential future collaboration in the field of seaweed cultivation, not only with respect to advancing *Asparagopsis* development, but also for other species such as Kelp and Ulva.

Next Steps

To all attendees, your participation was very much appreciated and has inspired ASSA to convene additional workshops in the future, including for other seaweed species such as Kelp, which will be our next focus. If you have any ideas for these future workshops, please get in touch, otherwise ASSA will reach out soon.

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