ASI

Australian Seafood Industries

Ver 1.0

2019 - 2024

FOUNDATIONS FOR SUSTAINABLE GROWTH

Five-year strategic plan

MESSAGE FROM THE CHAIRMAN AND GENERAL MANAGER

ASI has been instrumental in the Australian Pacific Oyster Industry's fight against Pacific Oyster Mortality Syndrome (POMS), which threatened to destroy the sector. Over the past five years we have been very successful in producing oysters that are highly resistant to POMS as adults and in doing so achieving the company KPI's which were developed in 2015. Over the next five years we aim to develop oysters that are highly resistant to POMS at 2-3 months of age, which is when commercial oysters are placed into estuaries and are first exposed to POMS. This will allow industry to return to profitability and sustainability. We will also increase the emphasis on selection for other commercially important traits.

Growers pay for this service through a service fee (levy), paid to hatcheries. The service fee is collected as specified by an ACCC Determination. This Determination was issued for ten years and it ceases in 2024 – the last year of this plan. Over the next five years, the company will endeavor to demonstrate the commercial value proposition of the breeding program with a view to securing the service fee for the longer term. If there is a case and opportunity, we will seek continuation of ACCC determination, but our broad aim is to be viable and attractive to partners.

The company has also been dependent on emergency funds provided by the Commonwealth Government during the 2016 POMS outbreak. It has also been bolstered by a major CRC-P research grant that enabled, amongst other things, the breeding program to be expanded to South Australia. The CRC-P finishes in June 2019. Over the next 5 years we will continue to seek out funding opportunities which assist in improving the oysters we breed, assist with financial stability and strengthen our strategic partnerships.

Over the next five years, the company will endeavor to identify and implement new sustainable and scalable income to improve financial stability and achieve a reserve operational fund. This will be done by working with the industry to build technical collaborations, improve and diversify services, introduce new technology, such as genomics, and by building staff capacity.

GLOSSARY OF TERMS

ACCC	Australian Competition and Consumer Commission	**NSW DPI**	New South Wales Department of Primary Industries
CVO	Chief Veterinary Officer	**FRDC**	Fisheries Research and Development Council
CRC-P	Cooperative Research Centres Project	**IPA**	Intellectual Property Australia
ITRG	Industry Technical Reference Group	**TORC**	Tasmanian Oyster Research Council
KRA	Key Results Area	**WH&S**	Work Health and Safety
ASI	Australian Seafood Industries	**EBV**	Estimated Breeding Value
POMS	Pacific Oyster Mortality Syndrome	**IT/ICT**	Information Technology/Information Change Technology
CSIRO	Commonwealth Scientific and Industrial Research	**FIAL**	Food Innovation Australia Limited
SARDI	South Australia Research and Development Institute	**SOP**	Standard Operating Procedure
ASIC	Australian Securities and Investments Commission	**OA**	Oysters Australia
ATO	Australian Taxation Office	**IMAS**	Institute of Marine and Antarctic Studies

EXECUTIVE SUMMARY

This Strategic Plan focuses on creating a solid foundation for future sustainable growth and highlights the operational Key Result Areas (KRAs) upon which Australian Seafood Industries Pty Ltd ("ASI") will sustainably consolidate and grow its business over the next five years.

This plan aims to also foster industry unity through the clear communication of the ASI's vision, mission and values to our stakeholders. Our strategy focuses on:

- Improve and clearly define our customer relations whereby commercial hatcheries are our primary customer and the growers are the ultimate beneficiary of the breeding program outcomes;
- Continued and improved breeding Pacific Oysters which contributes to profitability and sustainability of the Pacific Oyster industry;
- Demonstrate and communicate the commercial benefits achieved by the breeding program that is irrefutable;
- Expand our business on a state-wide, national and international basis through partnering with industry and developing key strategic alliances;
- Make investments with partners to initiate genomic selection within the breeding program, and;
- Build diverse income streams and securing funding opportunities to reduce the reliance on the breeding service fee.

When referencing hatcheries throughout this strategic plan, we are applying a lens that includes as well as passes through the hatcheries and out to the ultimate end-users of our oysters – the Growers.

Implementation progress will be measured and reported at least quarterly, with a full review of the plan occurring annually observing a rolling five-year planning horizon. Plan delivery will be monitored by the Board and communicated more broadly to our Shareholders and key industry stakeholders.

ABOUT US

ASI is an industry owned company, formed in 2000 to carry forward an Australian-wide pacific oyster selective breeding program which commenced in 1997.

ASI's mission is to collaboratively advance the Australian oyster industry through selective breeding oysters for commercially important traits.

ASI is owned by Oysters Tasmania and the South Australian Oyster Research Council/South Australian Oyster Growers Association, who each have an equal shareholding. There have been several iterations of the ASI business plan but currently the model revolves around collecting a POMS breeding service fee on Pacific Oyster seed under agreement with commercial hatchery producers. The agreement is with the commercial hatcheries but ultimately it is the growers who pay the service fee.

Since the introduction of the Pacific Oyster Mortality Syndrome (POMS) to Australia the breeding program has focused on 5 traits determined as economically important in the production of commercial oysters: growth rate, shell width index, time to reach market condition, general survival and POMS disease resistance. POMS resistance has been the primary trait for selection over the last 5 years with the aim to keep the other traits steady. In 2015, a target was set to achieve 70% POMS resistance in 1-year-old animals and this has been achieved. The program will now move to improving resistance in younger 2-3-month-old spat.

The breeding program is fully pedigreed and based on a single pair mated breeding design. Our work is cyclical and consists of:

1. Selecting broodstock based on scientific data (i.e. shell length, width and weight, total weight, meat composition and disease resistance);
2. Spawning the selected animals;
3. Housing them in nursery after settling has occurred;
4. Sending them to our trial sites;
5. Collecting data on each trait over a growth period;
6. Sending the data to specialised shellfish geneticists to create Estimated Breeding Values for each trait, and;

7. Repeating the cycle for the next generation of oysters.

ASI relies on collaborations to achieve the research outcomes required by industry. We have long standing relationships with:

- CSIRO: provision of genetic services and advice
- IMAS: family line production and associated research in Tasmania
- SARDI: family line production and associated research in South Australia
- NSW DPI for research activities in New South Wales.

We also rely on grower partnerships who provide our test sites in Tasmania and South Australia.

PACIFIC OYSTER MORTALIITY SYNDROME

POMS is a viral disease harmless to humans but lethal to oysters. It causes up to 90 per cent mortality and can kill millions of oysters within days. The first POMS outbreak was seen in 2007 in France and nearly wiped out the oyster industry. In 2010, New Zealand's Pacific Oysters also succumbed to the virus. Eight months later, POMS entered Botany Bay and the Georges River in NSW. Again, huge losses were seen at Pacific Oyster farms.

By 2013, POMS had spread to a second NSW estuary, the Hawkesbury River; known for large production of oysters in NSW. The disease killed 10 million oysters over three days. Then, in January 2016, POMS made its way to Southern Tasmanian waters. It was considered to be an unlikely destination for POMS because the virus that causes the disease prefers water temperatures above 21-22°C. Sixty per cent of Tasmania's oyster growing areas were affected by POMS and the industry lost 50 employees as a result of the commercial impact of the disease and.

The foundation of ASI's business is the 80 family lines of oysters that have been bred over the past decade. Subpopulations of these families are maintained in various estuaries around Australia. After the POMS breakout in Georges River, oysters from ASI's 80 family lines were relocated from clean locations to the Georges River to test the genetic difference in POMS survival. NSW DPI ran the trials and CSIRO analysed the data. CSIRO found that there was a strong genetic basis for differences between families in resistance to POMS.

Currently ASI is in its sixth generation of POMS selective breeding. Some of the elite performing lines (one-year old animals) have shown levels of resistance up to 80-90 per cent. However, the challenge for ASI is that the mortality rates of 2 - 3-month-old spat are still much higher than those for one-year old stock. ASI's current research target will be quantified once data from this POMS season will be collected prior to the finalization of this strategic plan.

OUR VISION	To be recognized as the world leader in oyster science and technology.
OUR PURPOSE	Collaboratively advance the Australian oyster industry through selective breeding.
OUR VALUES	***Customer Commitment.*** We always put the customer at the centre of our thinking through a commitment to quality, and professional service. ***Altruism.*** We work closely with industry to understand their needs and always put them first. ***Passion.*** Passion is at the heart of our Company. We are proud diligent, and continuously move forward, innovating and improving. ***Innovation.*** We use the best and most practicable methods available. It is at the core of what we do. ***Reliable.*** We do what we say and our systems and processes do what they are meant to. ***Sustainable.*** We aim to operate in a way that is socially, financially and environmentally sustainable.

OUR FIVE STRATEGIC PILLARS

This plan groups activity into five strategic pillars, each with core goals underpinned by Key Results Areas, with delivery planned over the next five years.

1. ***Our Customers.*** Understanding the changing needs and expectations of our industry customers and delivering on those needs and expectations.
2. ***Our People and Partners.*** Encourage and rewarding exceptional work, educating and training our own staff, driving the benefits from our committed and dedicated workforce, providing a safe workplace, developing long term core strategic alliances and ensuring continuity of key contractors.
3. ***Our Products and Services.*** Delivering an industry relevant long- term breeding strategy, broadening our products and service offering in place, fostering an ongoing culture of Innovation.
4. ***Our Systems and Processes.*** Securing ongoing access to and / or ownership of our data, essential computer and software systems, applying best practice and efficient internal process es, implementing flexible and robust.
5. ***Our Financial Sustainability.*** Generate sustainable and scalable income, Drive a ‘Cost Warrior’ mentality.

	STRATEGIC PILLARS				
	Our Customers	**Our People and Partners**	**Our Product and Services**	**Our Systems and Processes**	**Our Financial Sustainability**
GOALS	**Understanding the changing needs and expectations of our industry customers and delivering on those needs.**	**Enhance and encourage our workforce and strategic partnerships.**	**Delivering an industry relevant long- term breeding strategy and broadening products and services.**	**Creating streamlined processes and data security.**	**Cost efficiently generate sustainable and scalable income.**
OBJECTIVES	Customer satisfaction and Improved service delivery across all operations.	Encourage and reward exceptional work and drive the benefits from a committed and dedicated workforce.	Industry relevant long-term breeding strategy.	Secure and ongoing access to and / or ownership of our data, essential computer and software systems and core infrastructure.	**Operate a surplus budget to allow operational reserve to be built.**
	Improved communication with growers.	Educate and train our staff.	Work with regulators to streamline biosecurity parameters that benefit industry and ASI.	Best practice and efficient operational processes implemented across the organisation.	Revenue diversification / business identification strategy.
	Commercially sound and undisputed “Proof of Product” demonstrated to Industry.	Maintain a highly skilled workforce and be recognised as a good employer.	Broaden products and service offering.	Scoping of IT to meet business needs.	Develop FRDC strategy.
		Developing long term strategic alliances to share and gain access to people, technology, ideas and funds.	Ensure commercial Broodstock supplied meets customer expectations.		Tax effective Research and Development strategy.
		Secured engagement of key contractors.	Streamlined broodstock delivery and Broodstock Catalogue.		Review/refine appropriate business structure to maintain business and IP.
VALUES	**Customer commitment, Altruism**	**Passionate**	**Innovative**	**Reliable**	**Sustainable**

KEY RESULTS AREA

	OBJECTIVES	INITIATIVES			RISK ANALYSIS	
		Year 1	Year 2	Year 5	Risks	Treatments
OUR CUSTOMERS	**Customer satisfaction and improved service delivery across all operations.**	Work with the ITRG to Surveys / Monitor customer feedback and create needs report.	Develop services and products in line with customer needs.	Continue to improve service and product. Undertake a review of customer needs.	ASI not visible in the value chain.	Close liaison with ITRG, ensure ASI product is consistent with long term breeding strategy. Continual liaison with growers.
	Improved communication with growers.	Work with the ITRG to Develop communications strategy. Be a network broker and trend leader for the industry.	Implement strategy and undertake a review of the strategy effectiveness.	Continue to implement strategy and revise as needed.	Inferior/ineffective ASI product or product failure.	Develop, implement and continually review ASI Communication Plan. Constantly liaise with growers. Obtain feedback from industry bodies.
	Commercially sound and undisputed "Proof of Product" demonstrated to Industry.	Work with growers who use digital stock management applications to investigate opportunities to measure the commercial performance of ASI lines.	Assess performance of ASI lines under commercial conditions. ASI must own the definitive measure of the performance of its stock.	Continue benchmarking performance of ASI lines under commercial conditions.	Unable to technically establish valid comparisons.	Work closely with ITRG and app suppliers.

OUR PEOPLE AND PARTNERS	OBJECTIVES	INITIATIVES			RISKS ANALYSIS	
		Year 1	Year 2	Year 5	Risks	Treatments
	Encourage and reward exceptional work and drive the benefits from a committed and dedicated workforce.	Ensure position descriptions are created for all roles and review performance based upon position requirements.	Ensure the right people are in the right roles and have succession plans in place for all critical positions.	Review workforce.	Ineffective Human Resources program.	Open communication with staff, honesty about expectations.
		Establish key performance indicator's for all roles and implement an appropriate remuneration framework.	Make sure remuneration framework stays contemporary.	Review of remuneration framework.	Ineffective Human Resources program.	Open communication with staff, honesty about expectations.
	Educate and train our staff.	Establish a service standard initiative and assess skill levels of all employees & ensure trained in core competencies.	Prioritise and implement plans to address skill gaps.	Ensure all employees are trained to the required skill level and that appropriate reviews are in place.	Ineffective Human Resources program.	Ensure trained staff are regularly tested/supervised with feedback and guidance Look for company support packages and funding. Recruit skilled staff.
		Best practice review of Work Health and safety (WH&S) compliance framework.	WH&S compliance framework refreshed.	WH&S compliance framework reviewed.	Workplace incident with negative consequences.	Staff safety committee. Ensure supervisors meet their obligations. Report to each Board meeting.
	Maintaining a skilled workforce.	Strategies to identify and support casuals for the required duration. Look at TORQ scholarship and partnerships.	Revisit TORC scholarship or similar.	Review casual staff retention policy.	Ineffective staff recruitment program.	Regularly review and update staff recruitment program in line with industry practice.
	Developing long term core strategic alliances.	Grow genomics alliance with CSIRO (genetics) and IMAS (breeding). Maintain with SARDI (SA breeding) and NSW DPI and emergence commercial entities.	Develop and implement a strategic alliance framework and investigate other opportunities for alliances. to build human capital.	Expand strategic alliances by actively finding funding for other potential projects, nationally and internationally.	Ineffective strategic alliance program.	Regularly review and update strategic alliance plan.
	Secured engagement of key contractors.	Develop contractual arrangements which ensure continuity of key service providers.	Review contractual arrangements.	Ongoing review.	Organisations unwilling to commit.	Investigate other options for service delivery.

OUR PRODUCTS AND SERVICES	OBJECTIVES	INITIATIVES			RISK ANALYSIS	
		Year 1	Year 2	Year 5	Risks	Treatments
	Industry relevant long-term breeding strategy.	Delivery of spat that is resistant to POMS: 70% for TAS spat and 90% for SA one-year-olds.	Delivery of spat that is resistant to POMS: 70% for TAS spat and 90% for SA one-year-olds.	Delivery of spat that is resistant to POMS: 70% for TAS spat and 90% for SA one-year-olds.	Ineffective long-term Breeding strategy.	ITRG to Review and update long term breeding strategy in line with industry best practice.
		Work with ITRG to Re-focus on selection for traits in addition to POMS.	Obtain feedback from industry on trait performance.	Review and refine approaches.	Traits not accepted by growers.	Update and review trait expectations from industry participants and develop in accordance with industry needs.
	Work with regulators to streamline biosecurity parameters that benefit ASI and industry.	Publish paper on vertical transmission, agreed review plan in place with CVO's.	Implement biosecure spat translocation plan.	Review translocation plan.	ASI stock deemed not transferable by regulators.	Ensure biosecurity plan is in line with regulators expectations.
	Broadened products and service offering in place.	Beginning a genomics program to augment the ASI breeding program.	Implement the genomic program and experimental trials and integrate genomic EBV's for hatcheries.	Refine processes based on the feedback of industry.	Business model of genomics not sustainable.	Develop clear cost benefit statement.
		Best practice for commercially relevant approaches to triploid production using ASI germplasm	Triploid production plan project developed.	Seek funding for plan if appropriate business case exists.	Patent Restrictions, IFREMER non-participation.	Develop other strategies.
		To keep abreast of new ideas, technologies (Maintaining credibility and finding opportunities).	Review and improve strategy.	Review and improve strategy.	Market does not accept alternate offer/s.	Review market expectations and ensure alternative products plan is in line with industry expectations.
	Streamlined broodstock delivery and Broodstock Catalogue.	Resume production of broodstock catalogue and initiate customer feedback process.	Review.	Review.	Customer needs too high to be achievable.	Work with ITRG to define ASI role in service delivery.

OUR SYSTEMS AND PROCESSES	OBJECTIVES	INITIATIVES			RISK ANALYSIS	
		Year 1	Year 2	Year 5	Risks	Treatments
	Secure and ongoing access to and / or ownership of our data, essential computer and software systems and core infrastructure.	External technical review of the ASI database, data collection and data entry, for security, portability business continuity and technical suitability.	Implement best practice methods.	Review processes.	Current alliance with CSIRO fails.	Develop Business Continuity Plan that finds a practical solution to ASI data ownership and accessibility.
	Best practice and efficient operational processes implemented across the organisation.	Productivity review of systems & processes. Investigate opportunity to automate as many practices as possible e.g. assessment of family lines in field trials.	Create an ASI operations manual and relevant SOPs.	Review and update manuals and SOPs.	ASI internal operational system failure.	Develop Business Continuity Plan that finds a practical solution to ASI operational requirements.
	Scoping of IT to meet business needs.	IT review and exploring systems for stock management.	Implement best practice methods.	Review processes.	Loss of IT.	Develop Business Continuity Plan that finds a practical solution to ASI ICT requirements.

OUR FINANCIAL SUSTAINABILITY	OBJECTIVES	INITIATIVES			RISK ANALYSIS	
		Year 1	Year 2	Year 5	Risks	Treatments
	Operate a surplus budget to allow operational reserve to be built.	Operate 150K surplus budget.	Operate 150K surplus budget	Operate 150K surplus budget	ASI Income not adequate to meet operational requirements.	Develop Business Continuity Plan that explores and offers alternative viable options for income sustainability.
	Revenue diversification / business identification strategy.	Strategy developed and communicated to industry. Seek funding for SA breeding program. Seek overseas sales of ASI germplasm in consultation with industry	Implemented.	Implemented.	ASI Income not adequate to meet operational requirements.	Develop Business Continuity Plan that explores and offers alternative viable options for income sustainability.
	Develop FRDC Strategy.	Engage with OA on FRDC IPA development.	Develop appropriate project.	Further project development.	No relevant grant funding programs available.	Regularly review all relevant industry grant program offerings. Maintain membership of relevant industry grant bodies.
	Tax effective research and development strategy.	Explore and implement R&D tax effective structures (if relevant).	Implement R&D tax plan if appropriate.	Review.	Stakeholder/owner disallowance. ASIC/ATO non – qualification.	Seek professional advice on best practice business structures to satisfy regulator requirements and stakeholder/owners best interests.
	Review/refine appropriate business structure to maintain business and IP.		Under take a review of the levy arrangements as required under the ACCC Determination	Make arrangements for dealing with the cessation of the ACCC Levy Determination on 24 December 2024. In 2023 prepare value proposition paper.		

DOCUMENT CONTROL AND REVISION RECORD

Document Control			
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Copies	This is a controlled document. A soft copy is kept on the ASI server. Any print-off of this document will be classed as uncontrolled. ASI personnel may print off this document for training and reference purposes but are responsible for regularly checking with ASI for more recent versions.		

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