

# Scalable Method, Premium Product: Gaining Market Share in Three Ways

Ocean Grown Abalone (OGA) is the largest sea-based producer of greenlip abalone in Australia. Through multiple growth options presently available, we estimate that, by FY28, OGA will improve its share of the overall Australian abalone market to 16% (from 2.1% now), gain scale and improve gross margin to the high 20s (from 19%), and achieve ROE of high teens %.

## Multiple opportunities for growth

Increased yield: By improving yield of the existing asset base through better mortality and productive growth rates, OGA should be able to lift its harvest to 140T pa in FY25 from 76T pa now.

**Premiumisation:** Adopting a premiumisation strategy through building out the brands and brand loyalty with customers as they target varying package sizes, domestic restaurants, building out additional brands and potentially adding new product that could be processed (not grown). We believe this will improve gross margins on price increases.

Joint venture for new hatchery/farmed abalone site: OGA's most significant growth option is through a current Heads of Agreement with Yumbah Aquaculture Ltd for a new hatchery and farmed abalone site nearby in Esperance, WA. This could see an additional 300T pa net to OGA (from its 50% interest), lowering the cost of juveniles and boosting margins through scale. This would significantly increase market share and improve returns.

# A fresh perspective through new management

Newly appointed management has brought fresh eyes to the founder's existing model, introducing a number of short-term operational efficiencies. The opportunity set and the significant experience of the new management team with regards to 'turnarounds' should provide confidence that the strategic focus will be well executed. KPIs include harvest numbers and EBIT.

# Funding: cash flow neutral in FY22, FCF+ in FY26

OGA has a net cash position of \$2.7m, with annual cash burn of \$1m currently. Management expects to be cash-flow neutral in FY22, including costs for the potential Esperance project. We assume the cost of this project is \$37m net to OGA funded 70:30 by debt and equity, including a \$10m capital raising in FY23. We expect OGA to be FCF positive in FY26. If they do not carry out the development, we expect them to be FCF positive in FY23.

# Valuation: potential upside of 3.7 times

Our base-case 12-month forward DCF valuation is \$0.35, implying a total return of 3.7x from the current price. As a conservative cross-check, taking out the Esperance growth project continues to imply 70% upside from the current share price.



Ocean Grown Abalone (OGA) grows wild greenlip abalone through an aquaculture technique known as 'sea ranching'. With this method, hatchery-bred juvenile abalone are placed in the ocean onto OGA-designed artificial reefs ('abitats') and left to nature to grow for 2-3 years until they reach a marketable size. The company has the competitive advantages of providing yearround supply to meet market demand and a method that offers proven sustainability.

https://www.oceangrown.com.au/

Stock	OGA.ASX
Price	A\$0.073
Market cap	A\$15m
Valuation (per share)	A\$0.35

Catalysts	
2QFY22	Esperance bankability study
3QFY22	Esperance investment decision
4QFY22	Esperance funding details





Source: FactSet.

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# Financial Forecasts

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Process   Proc								28/9/ 3/10/ 1/11/ 1/11/ 11/ 30/ 11/ 24/ 6/1.	23/3/ 23/3/ 5/4	16/4, 29/4, 12/5,	25/55 7/6, 18/6,	, / / / / / / / / / / / / / / / / / / /	2/9,	6/87
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wiedend	rice to free cash flow per share	х	nm	570.5	nm	nm	nm	Tax expense	\$m	1.2	0.1	0.0	0.0	(
ywout	CF yield	%	-11.4%	0.2%	-3.6%	-134.1%	-76.3%	Reported NPAT	\$m	-4.6	-1.7	0.6	0.4	-0
yayut								Adjustments to underlying	\$m	0.0	0.0	0.0	0.0	(
In the proper   Interprise value	ividend	¢	0.0	0.0	0.0	0.0	0.0	Underlying NPAT	\$m	-4.6	-1.7	0.6	0.4	-0
anking			0%	0%	0%	0%	0%							
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Visales	ranking	%	0%	0%	0%	0%	0%	Weighted average diluted shares	m	190.5	200.7	201.7	201.7	20:
VIEBITDA   X	nterprise value	\$m	17.4	13.4	12.5	22.1	33.6	GROWTH PROFILE		FY20A	FY21A	FY22E	FY23E	FY24E
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rice to book (NAV) rice to book	V/EBITDA	х	-6.0	<del>-</del> 7.3	<b>-</b> 7.9	-14.5	-22.0	EBITDA	%	nm	nm	nm	nm	r
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FY216   FY216   FY216   FY216   FY216   FY216   FY217   FY217   FY217   FY217   FY217   FY218   FY21	rice to NTA	Х	1.2	1.0	0.9	0.4	0.3	, 0						n
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Name			nm	nm			nm							5
Biological assets   Sm   7,0   6,3   7,4   7,8   Restangible assets per share   c   8,0   6,8   6,9   12,2   12,2   Property, plant & equip, ROUA   Sm   5,2   4,6   4,3   23,9   3,0			nm	nm			nm							2
tet tangible assets per share	OA	%	nm	nm	3.5	1.0	nm	•						(
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Name														(
rearing (net debt / EBITDA)	, ,													
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Property Analysis   Fy204   Fy216   Fy218   Fy228   Fy248     Fy264   Fy646	everage (net debt / (net debt + equity)	х	-0.2	-0.2	-0.2	0.2	0.4	9						22
See   Profit Margin   %   -106.5   -3.3   9.3   5.6   -3.6   Net assets   Sm   15.4   13.7   14.0   24.6   24.5	NIPONT ANALYSIS		EV20A	EV21A	EV22E	EV23E	EV24E							
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Leturn on Equity         %         -29.7         -12.3         3.9         1.5         -1.2         Shareholders' equity         \$m         15.4         13.7         14.0         24.6         24           LEY PERFORMANCE INDICATORS         FY20A         FY21A         FY21B         FY21B         FY22E         FY24E         CASH FLOW         FY20A         FY21A         FY22E         FY23E         FY24E           lological asset base         T         247.1         210.4         201.8         202.2         217.9         Net Income (Cashflow)         \$m         -3.6         -2.5         -2.2         -2.1         -2.2         -2.1         -1.5         -1.5         -1.5         -1.5         Net Income (Cashflow)         \$m         -3.6         -2.5         -2.2         -2.1         -2.1         -2.2         -2.1         -2.2         -2.1         -1.5         -2.2         -2.1         -2.1 <td></td>														
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Net	EV PERFORMANCE INDICATORS		FY20A	FY21A	FY22E	FY23F	FY24E	CASH FLOW		FY20A	FY21A	FY22E	FY23E	FY24
Sm   7.0   6.3   7.4   7.8   8.8   Depreciation & Amortization   Sm   0.8   0.7   0.6   0.6		Т							\$m					
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ological asset base         T         234.6         263.0         247.1         266.8         21.04         Financing cash flow         \$m         2.5         -0.1         -0.1         21.9         12           ological asset base         \$m         9.9         10.0         7.0         7.4         6.3         Opening cash         \$m         2.6         2.8         2.7         2.2           arvest         T         26.3         35.5         19.2         47.5         28.4         Net cash flow         \$m         0.2         -0.1         -0.5         2.4         0           oles         T         22.4         26.1         22.1         35.4         36.6         Closing cash         \$m         2.8         2.7         2.2         4.6	ALF YEAR		2H <u>19</u>	1H20	2H20	1H21	2H21							
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· · · · · · · · · · · · · · · · · · ·	iological asset base			35.5	19.2	47.5	28.4	Net cash flow	\$m	0.2	-0.1	-0.5	2.4	0
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# Thesis: 3 Key Growth Opportunities to Fuel Strong Potential Upside

Ocean Grown Abalone (OGA) is the largest sea-based producer of greenlip abalone in Australia, with 'sea ranches' located in Flinders Bay in WA. This sea-ranching technique involves placing hatchery-bred juvenile abalone on OGA-designed artificial reefs, known as 'abitats'. The ranches are self-sustaining as the 'planted' abalone feed on natural ocean life. This enables OGA to compete in the premium wild-caught category in terms of quality and price, while not being subject to stringent wild-caught quota limits. With wild-caught quota limitations declining and greater supply coming out of lower-priced farmed aquaculture, OGA has a competitive advantage with its existing business. OGA currently has a market share of 2.1% of total Australian abalone production.

## Multiple Growth Opportunities to Increase Market Share

#### Opportunity 1: increased yield from existing asset base

OGA currently harvests 76T pa of abalone, just over half of its potential 140T pa, a target which we expect OGA will reach by FY25. This potential should be achievable through establishing a continuous improvement approach at the existing abalone ranches. Essentially this will come from less wastage (improved mortality rates) and optimal growth as the abitats are repositioned using experience to select optimal food locations. This should see OGA's market share improve to 4.4% by FY25.

#### Opportunity 2: premiumisation strategy

OGA is embarking upon a premiumisation strategy for its product through building out the brands and brand loyalty with customers. New avenues to customers will come through varying abalone package size options, targeting domestic restaurants, boosting retail sales, building out additional brands and potentially adding new product that could be processed (not grown). We expect gross margin to improve from 19% currently towards the high 20s. This is reasonable, given indications from peers on similar metrics. We expect returns for the business to move higher with ROA and ROE in FY26 of 8% and 15% respectively.

#### Opportunity 3: joint venture for new hatchery/farmed abalone site

The most significant growth option for OGA is through a current Heads of Agreement (HoA) with Yumbah Aquaculture Ltd for a new hatchery and farmed abalone site, nearby in Esperance, WA. This could see an additional 300T pa net to OGA (50% interest), lowering cost of juveniles and higher margins through scale. Yumbah is a very credible partner, being the largest abalone aquaculture producer in Australia. We assume the cost of this project is \$37m net to OGA funded 70:30 by debt and equity. We estimate this would see OGA's market share kick up to 15.7% by FY28. Our ROA and ROE estimates for FY28 are 11% and 17% respectively.

# Industry and Competition: Wild-Caught/Farmed 'Hybrid' Product a Unique Advantage

#### Supply, demand and pricing

Abalone demand is primarily from Asia, particularly China, and is linked to the rise of the middle class with the resultant increase in discretionary spend. Domestic demand is driven by Asian immigration and tourism.

Over time Australian farming has picked up supply (+11% pa) as commercial wild-caught quotas have dropped (-8% pa). Australian farming growth has also been supported by declining annual trade tariffs in China, although we are watching for any changes in this area, given recent sporadic commodity-focused trade issues with China which have posed additional challenges for exports.

Abalone can be sold in several forms including live, meat, canned, dried or frozen. Producers can attract a premium for wild-caught abalone (which includes OGA's sea-ranched product).



#### Competition

Direct competition for OGA is limited given its patented 'sea ranching' design, which creates a wild-caught quality product. These patents are a barrier to entry and give at least a 10-year lead over competitors – OGA's expertise is held in-house with an end-to-end knowledge base. Additionally, very few locations in southern Australia are suitable for the implementation of sea ranching. Other direct competition for OGA is abalone that is wild-caught using divers, but abalone taken in this method is decreasing because of quota limits.

## 'Fresh Eyes' Through Recently Appointed Management

Newly appointed management (CEO Rob Jorden and CFO Brent Stockden) have brought 'fresh eyes' to the founder's existing model. Many of the short-term operational efficiencies have been introduced from their new perspective. The opportunity set and the significant experience of the new management team with regards to 'turnarounds' give us confidence that the strategic focus will be well executed. Management KPIs are currently focused on harvest numbers and EBIT. Management and the Board own 11.4% of OGA.

### **Funding**

OGA has net cash of \$2.7m, \$25k of debt and annual cash burn of \$1m. Management expects to be cash-flow neutral in FY22, excluding funding of the potential Esperance project. We assume the cost of this project is \$37m net to OGA funded 70:30 by debt and equity, including a \$10m capital raising in FY23. We expect OGA to be FCF positive in FY26. Without Esperance, we expect OGA to be FCF positive in FY23.

## Valuation: Potential Upside of 3.7x

We have looked at OGA on both a 12-month DCF (our base case) and asset base approach (as an alternative look at valuation). Our DCF gives an equity value of \$0.35, implying 3.7x upside from the current share price. If we exclude the Esperance opportunity from our expectations, our valuation falls to \$0.12, still implying opportunity for returns above the current share price. Comparing OGA to peers on an asset base (EV/biomass), OGA looks cheap at 2.0x, vs median for peers in Australia of 2.7x (range 1.9-76.5x) and in the larger and more established Northern European market of 11.5x (range 5.5-43.1x).

## Catalysts

- We believe the decisions within the next 6-9 months with regard to the Esperance expansion should be a key driver for the share price. Assuming the project is approved, the associated production and cost savings should start to be factored into the share price.
- Quarterly and semi annual result announcements should confirm our investment thesis with 1) abalone sales price
  improvements from the company's focus on premiumisation; and 2) improved biomass growth will the company's
  focus on improving wastage.

#### Risks

Risks to our view include:

- aquaculture operational risks, including risk associated with abalone diving, disease, theft, environmental changes, predation and severe weather events
- valuation of the biomass: there is a risk the asset base is over- or understated
- the price of greenlip abalone, and as such the supply and demand dynamics of this industry
- the application of Chinese trade tariffs on abalone, which would lead to weaker sales and price, as per lobsters
- FX risk with export abalone sold in US dollars
- current concentration risk on both the supplier and vendor side, and associated risk of dependency
- government relationships through lease and licence approvals
- relationship risk through the various partnerships. Esperance expansion plans depend on an effective relationship



- key management, which could be a risk if they departed the business and took key business relationships with them
- funding risk: in order to successfully execute its growth plans, OGA will require external funding. The equity markets may be closed to OGA for a variety of reasons, in which case it may have to seek alternative options.



# The Journey for OGA: Unique 'Sea-Ranching' Technique Scalable for Quantity, and in the Premium Category for Quality

OGA is the largest sea-based producer of abalone in Australia. It specialises in wild greenlip abalone (*Haliotis leavigata*) harvested from its sea ranch in Flinders Bay, Augusta, Western Australia (WA). It was founded by Brad Adams and Ian Ricciardi. Mr Adams is a third-generation fisherman and former commercial abalone diver. His father Terry founded the commercial wild abalone diving industry in Flinders Bay in the 1960s. The Ricciardi family were pioneers of the Shark Bay prawn fishery and are involved in a number of WA-based seafood enterprises. Mr Ricciardi has significant experience in WA commercial fishery–related processes and has been an active member of WAFIC Resource Access Advisory Committee (RAAC) since 2019.

OGA was incorporated in 2011 and operates under the product brand 'Two Oceans Abalone'.

OGA was listed in November 2017, raising \$10m at \$0.25 which saw it with an EV at the time of \$34m. The IPO funds were used to fund the second sea ranch at Flinders Bay, processing facilities and trials at new sites for Wylie Bay and Port Lincoln (which was subsequently abandoned in February 2017 after high mortality rates due to predators).

# The Technique: 'Sea Ranching' – Growing a Competitor to Wild-Caught Product

After working on various iterations of abalone aquaculture techniques, Mr Adams and his partners developed 'sea ranching'. This technique has been validated by marine biologists at Curtin University and has patented design. Sea ranching uses OGA-designed artificial reefs, known as 'abitats'. These are 900-kg, pyramid-shaped, formulated from a mixture of high strength concrete and fibre, measuring about 1m high by 2m wide (see Exhibit 1), with openings and a void in the centre to enable changes in water flows and not disturb the surrounding sea life. The company estimates the useful life of an abitat to be at least 100 years.

Hatchery-bred juvenile abalone are placed on the abitats and left to grow in the ocean for 2–3 years. OGA currently purchases the juvenile abalone (abalone under the average size of 40mm) under an exclusive supply agreement with 888 Abalone, a land-based hatchery in nearby Bremer Bay, WA.

Ranches are self-sustaining – the abalone feed on abundant, naturally occurring red algae seaweed dislodged from nearby reefs and seagrass beds by frequent storms and strong ocean currents. The ranches are tended by divers monitoring for growth and density. The abalone are typically harvested after 2–3 years, once they reach a marketable size of 90–130 mm. The end result is a natural 'wild-harvested' premium product.

The key competitive advantages of this approach are that it:

- is a clean, sustainable model with a minimal environmental footprint
- produces a product that can compete with wild-caught abalone, because the abalone grow in the same environment and feed on the same natural algae as nearby wild abalone stocks. The product has consistent texture and taste to wild-caught abalone.
- can supply abalone year round to meet market demand as it reduces the seasonality.

#### What are abalone?

Abalone are a family of reef-dwelling marine snails. They are a type of single-shelled (gastropod) herbivorous marine mollusc. Their body is large and fleshy, with a broad, muscular foot they use to attach themselves to reefs or rocks with suction. Unlike other marine snails, abalone suck water through their gills and send it out through a small row of holes along the edge of their shell. As the abalone grows, these holes progressively close up.

Abalone are widely distributed across tropical and temperate coastal areas. WA has one of the few remaining sustainable wild abalone fisheries. There are 11 species of abalone in WA, but only three are large enough in size to be fished: Roe's abalone (*Haliotis roei*); Greenlip abalone (*Haliotis laevigata*) and Brownlip abalone (*Haliotis conicopora*). OGA's focus is on the greenlip abalone (see Exhibit 1).



Exhibit 1 - Abitat going into position (left); Greenlip abalone (right)





Source: OGA (left and right).

#### Sites and Infrastructure

OGA owns two ranches for growing abalone, Flinders Bay 1 and Flinders Bay 2, in Augusta, WA. Each site has 5,000 abitats. Augusta was chosen for its suitable habitat, as it is protected from large swells by an island chain to the west of the lease, has abundant wild algae and is close to export supply chains. OGA also has a processing facility within the Augusta marina, near the ranches, that was completed with fit out in November 2019.

The current set up of 10,000 abitats has a maximum production target of 140T pa, based on 14–15kg per abitat in line with OGA's current best-performing abitats. We assume the company reaches this target by FY25. Original expectations were for 200T pa based on 20kg per abitat over the 10,000 abitats, but due to higher mortality this estimate has been revised back. Current harvest rates are 76T pa.

#### Potential additional capacity within existing lease: Flinders Bay, Augusta, WA

OGA is licenced to install an additional 5,000 abitats within its existing Flinders Bay lease (Flinders Bay 3). Management estimate that this could add another 60-80T pa. Inspection of trial sites have shown that an area to the south-west of the lease boundary is also suitable for expansion. Our estimates do not include production associated with this additional area.

#### Trial underway for sea ranching at potential new site: Wylie Bay, Esperance, WA

Subsidiary jointly held with Ocean King Fishing has begun sea ranching trials at Wylie Bay site. In 2015, OGA earmarked the Wylie Bay site in Esperance, WA as a potential development site for sea ranching (the Wylie Bay Project). A subsidiary that is 67%-owned by OGA and 33%-owned by local operator Ocean King Fishing Pty Ltd was granted an aquaculture licence and lease for this site in July 2017 for 21 years and has approval for 10,000 abitats. Ocean King Fishing is running a trial. The two companies agreed that Ocean King Fishing would incur the cost of construction, deploying and seeding a 350-abitat sea ranch, while OGA would sell the juvenile abalone to Ocean King Fishing and monitor the operation. An agreement with Ocean King Fishing provides OGA with exclusivity to all sales and 10% of the net income.



#### Potential new hatchery and farmed abalone site: Wylie Bay, Esperance, WA

Potential JV with Yumbah Aquaculture for land-based hatchery and grow-out facility. In February 2019, with the idea of bringing in vertical integration and product diversity by developing its own land-based hatchery and grow-out facility, OGA secured 36 ha at the southern end of 170 Wylie Bay Road, Esperance. This land was secured under a lease with the local shire, with an option to purchase the land until July 2022 (originally July 2021). A conceptual study was conducted in November 2019 suggesting the site was suitable for a hatchery and grow-out facility for 500T pa of abalone.

In December 2020, OGA progressed the Esperance 500T facility further and entered into a Heads of Agreement for 12 months with Yumbah Aquaculture Ltd for a feasibility study into the proposed project (the Esperance Project). In 3QFY21, the project commenced a bankable feasibility study which is expected to be delivered during 2QFY22. This will follow with an investment decision expected within 3 months (3QFY22). If OGA and Yumbah both make a positive investment decision, they intend to form a JV to develop, own and operate the Esperance Project.

Yumbah is the largest producer of farmed abalone in Australia. It is vertically integrated with an aquafeed company, through to the sale and export of abalone. Yumbah brings a new technology and IP, known as Nyamat Technology, that is expected to deliver the benefit of reducing the construction and operating costs to the project. Nyamat Technology is a farm design that incorporates automating several farming processes including: feeding with Yumbah's own aquafeed which is largely plant based and free from antibiotics, pesticides, artificial colouring or pigments and growth hormones; along with the grow-out system involving a continuous mix of crashing, rushing and slow flowing seawater to replicate the tidal movements that provide the perfect conditions for abalone.

In 4QFY21, OGA and Yumbah secured a two-year option to purchase an additional 107 ha at Lot 4 Wylie Bay Road, located next to the existing lease at 170 Wylie Bay Road, that would give a total site of 143 ha. This newly amalgamated site would enable a 600T pa onshore abalone hatchery and grow out facility, up from the original scoping study target of 500T pa. Due to the large, combined land parcel of 143 ha secured by the JV, the property has the potential to significantly expand abalone production beyond 600T and/or diversify its aquaculture product offerings in future years.



Exhibit 2 – Location of OGA operations, supplier and potential expansion site in Western Australia

Source: OGA, MST Access.



# **Industry and Competition: Constrained Supply from Sustainability**

#### **Demand**

Population and income growth are the key drivers of increased demand for seafood overall. Abalone demand comes from traditional Asian cuisines, where it is viewed as a premium delicacy. Asian demand, from China in particular, is linked to the rise of the middle class, leading to greater discretionary 'dining out' spend. Domestic demand is driven by Asian immigration and tourism.

#### Supply

#### Australian abalone production

**Australian abalone farming is growing as wild-caught quotas decline.** Over time Australian farming has picked up supply (+11% pa) as commercial wild-caught quotas have dropped (-8% pa) due to sustainability concerns by fishery managers. Total Allowable Catch (TAC) limits are set annually by the Department of Fisheries for each area and allocated to licence holders as individual units of entitlement. This trend from wild-caught towards farming is a common theme across the fisheries industry. OGA's "hatch n catch" supply sits alongside both wild caught production, through its product quality and premium pricing, and farmed, through its sustainability.

... and Chinese tariffs are zero at present. Australian farming growth has also been supported by declining annual trade tariffs in China since the China–Australia Free Trade Agreement was introduced in December 2015. Since 2019 the tariffs on Australian abalone exports to China have been zero. More recently, sporadic commodity-focused trade issues with China have posed additional challenges for exports, including lobsters, so this remains an area to watch.

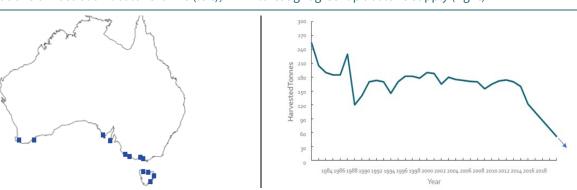
Australia produces abalone species not native to China and these wild-caught species attract a premium in China. According to ABARES, around 60% of Australian supply is currently exported.

**Australia's total market share is ~3%, including a ~50% share of the wild-caught abalone market,** but only 1% of global farmed production through on-land farming. Wild-caught abalone is managed by quotas, with a restricted number of operating licences in the wild-harvest sector. According to the Abalone Association of Australasia, farming is projected to underpin most of Australia's medium-term growth in abalone supply. Australian farms operate from 12 sites across the four southern states, producing around 1,350 T in 2021. Australian farms can only produce locally occurring species, such as greenlip, due to strict biosecurity protocols.

On these estimates, OGA's market share is:

- around 3.1% of Australian wild-caught (including OGA 'hatch n catch') of the Australian wild greenlip abalone market (including OGA 'hatch n catch'), OGA has 16% market share with another 6% coming from WA
- 2.1% of the total Australian market (wild-caught + OGA 'hatch n catch' + farmed aquaculture)
- 5bp of the global abalone market.

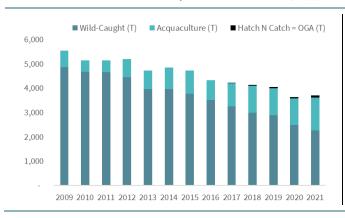
Exhibit 3 – locations of Australian abalone farms (left); WA wild-caught greenlip abalone supply (right)

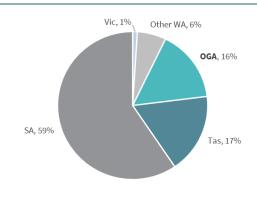


Source: FRDC Strategic Plan 2020–2025 (left), OGA (right).



Exhibit 4 - Australian abalone production volume (left); OGA's share of wild greenlip market, 2021 (right)





Source: OGA, MST Access .

#### Global abalone production

**China dominates global market share.** Global supply is largely from China, which has about 85% total market share. China absorbs its own production, which is all through sea farming, and supplements with imports. Chinese production is expected to decline 25% by 2025 as a result of the degradation of coastal farm environments and COVID-19 constraints. Given higher-density sea farming methods in China, its supply is more vulnerable to the spread of disease.

**South Korea and South Africa provide extra supply.** Key competition outside of Australia for quality farmed products comes from sea-farmed abalone in South Korea (~8% of total production) and on-land farmed abalone in South Africa (~1%).

Exhibit 5 - Global abalone supply

Production, '000 T	2012a	2013a	2014a	2015a	2016a	2017a	Grwth p.a. 3yr 2014-17
Wild catch	7.8	7.6	7.3	7.2	6.5	6.3	-4.8%
Australia	4.5	4.3	3.9	3.8	3.4	3.4	-4.5%
Overseas	3.3	3.3	3.4	3.4	3.1	2.9	-5.2%
Australia mkt share	58%	57%	53%	53%	52%	54%	
Aquaculture (Farmed)	97.0	117.0	123.0	137.0	151.0	168.1	11.0%
Australia	0.6	0.7	0.8	0.9	0.8	1.0	6.7%
China	87.0	106.0	110.0	123.0	135.0	149.0	10.6%
Other, incl Sth Korea and Sth Africa	9.4	10.3	12.2	13.1	15.2	18.1	14.1%
Australia mkt share	1%	1%	1%	1%	1%	1%	
Global	104.8	124.6	130.3	144.2	157.5	174.4	10.2%
Australia	5.1	5.0	4.7	4.7	4.2	4.4	-2.4%
China	87.0	106.0	110.0	123.0	135.0	149.0	10.6%
Other	12.7	13.6	15.6	16.5	18.3	21.0	10.4%
Australia mkt share	5%	4%	4%	3%	3%	3%	
China mkt share	83%	85%	84%	85%	86%	85%	

Source: FRDC Strategic Plan 2020–2025, MST Access.



Exhibit 6 – Global production has shifted towards farming (left);

Source: The World Abalone Industry, University of WA (left), ABARE, MST Access (right).

## **Pricing**

Abalone can be sold in several forms including live, IQF meat, canned, dried or whole frozen. Wild-caught abalone attracts a premium compared with abalone produced via aquaculture. Export prices are quoted in US dollars. Comparisons include:

- sea-farmed abalone (China/Korea) around US\$10-20/kg
- land-farmed abalone (Australia/South Africa) around US\$28-30/kg
- wild-caught abalone around US\$45-55/kg.

OGA is aiming to cultivate abalone that are larger than wild caught. Minimum legal harvest size limits in traditional quota fisheries are greater than 140mm, the average harvest size from a land-based farm is 90–100mm, whereas OGA is targeting 110–130mm.

\$100.00 Total Volume, kT RHS Export Volume, kT RHS = Export Price, \$/kg LHS \$90.00 \$100.00 \$80.00 \$90.00 \$70.00 \$80.00 \$70.00 \$60.00 \$60.00 \$50.00 \$50.00 \$40.00 \$30.00 \$30.00 \$20.00 \$20.00 \$10.00 \$10.00 2013-14

Exhibit 7 – Export pricing of Australian abalone, per kg (left); Australia abalone export pricing vs volume (right)

Source: The World Abalone Industry, University of WA (left), ABARE, MST Access (right).

# Regulatory

Australian farmed abalone operates in a complex multijurisdictional regulatory environment, with varying levels of regulation from host jurisdictions, including for aquaculture site licensing, biosecurity and stock movement, wastewater, food safety, food labelling, and work health and safety. OGA operates under a licence from the WA Government.



### Competition

Direct competition for OGA is limited given its patented 'sea ranching' design, which creates a wild-caught quality product. These patents are a barrier to entry and give OGA at least a 10-year lead over competitors – OGA's expertise is held in-house with an end-to-end knowledge base covering IP founded on many years of trial and error site selection and husbandry.

Additionally, very few locations in southern Australia are suitable for the implementation of sea ranching, as the ranches need to be sited close to existing infrastructure (marina, towns) and have the required environmental characteristics (access to abundant natural algae, sandy seabed, oceanic water) to support high densities of abalone growing on the reefs.

Other direct competition for OGA abalone that is wild-caught using divers, but abalone taken in this method is decreasing because of quota limits, due to past overfishing, poaching and impact from climate changes during critical spawning periods

#### Farmed abalone competitors

**Yumbah Aquaculture, 700T pa.** OGA's nearest competitor is Yumbah Aquaculture. Yumbah was established out of an amalgamation of abalone sites across the Australian southern and is now the largest land-based abalone farmer in Australia (and, according to Yumbah, the largest greenlip producer in the world). The company farms greenlip and tiger abalone, and they estimate they can produce 700T pa. It has recently announced plans to significantly expand production at its Kangaroo Island and Portland farms.

Yumbah sells domestically and globally (Japan, Singapore, Hong Kong, China, USA, Canada and EU). Its retail product is sold under the 'AUSAB' brand and sold in Costco stores, after Yumbah bought out AUSAB in 2013 making it a wholly owned subsidiary. Yumbah Aquaculture is privately owned.

**Craig Mostyn Group, 400T pa.** This food and agribusiness company was originally established in 1923). It is a Victoriaand Tasmania-based abalone business branded as Jade Tiger Abalone. The company is the world's first ASC-certified sustainable source of abalone with Australia's largest environmentally sustainable abalone aquaculture facility. It comprises a hatchery, nursery and export facility across three sites with capacity to produce over 400T pa.

**Southern Ocean Mariculture (SOM), 110T pa.** Privately-owned SOM was founded in 1996 by local abalone divers. It farms a hybrid cross of greenlip and blacklip abalone in Victoria, and sells under the brand 'Ocean Road Abalone'. It has the capacity to produce 110T pa.

**888 Abalone, 100T pa.** 888 Abalone was incorporated in 2010 and is privately owned. It has a greenlip hatchery and commercial land-based abalone farm in WA, with the capacity to product 100T pa. 888 Abalone is OGA's hatchery partner (located in Bremer Bay) for the 40–50mm juvenile abalones.

#### Wild-caught abalone competitors

Australian wild-caught abalone operates under the Australian Fisheries Quota Management System. Quotas are strictly regulated by the Australian Government in order to protect and preserve abalone, and regulations determine the minimum size permitted for harvesting. All areas are in a depletion mode with one area of WA reported as 'depleted'. The greatest volumes continue to be caught in South Australia, with 286T in 2021, followed by Tasmania with 84T, while WA and Victoria are their volumes more quickly from previous years with 30T and 5T, respectively.



Exhibit 8 – Greenlip abalone, Australian wild-caught commercial catch, 2009–2021



Source: FRDC, MST Access.



# Focus on ESG - A Sustainable Approach

## The ESG Context for the Abalone Market: Sustainability Concerns the Key Factor

The consumer benefits of abalone from a diet and health perspective are relatively well known, given its high levels of nutrients. Abalone is high in omega-3 and a good source of iron and phosphorous. The sustainability of long-term abalone production has caused more uncertainty, given a gradual decline in wild fisheries due to pollution, overfishing and habitat destruction. This challenge is illuminated further against a broader backdrop for the seafood industry overall, where an extra 1 billion consumers globally are expected by 2030, creating demand for an estimated additional 25m T p.a. of seafood. With limited room for expansion in the wild-caught commercial fishing sector, aquaculture will need to provide most of the additional supply.

# Long-Term Sustainability of OGA's Production Methods

OGA's production model is built around sustainable long-term solutions for the whole production cycle of abalone. OGA's operation, in the natural ocean waters of the protected Ngari Capes Marine Park, is the first commercial greenlip abalone ranching business of its kind in the world. OGA's commercial operations follow more than two decades of research and harvesting experimentation, aided by an ongoing relationship with marine biologists at Curtin University. The model is clean, green and sustainable with a minimal environmental impact..

#### Undertaking audit of sustainability credentials

As part of its ongoing commitment to sustainability, OGA is undertaking a voluntary independent third-party assessment of its sustainability credentials under the Marine Stewardship Council (MSC) audit criteria. This assessment will be carried out over 4QFY22/1QFY23. The audit will assess the health of stock, the operational impact on the marine ecosystem and OGA's overall management of greenlip abalone. WA's State Government is funding the assessment, in partnership with the WA Fishing Industry Council (WAFIC). MSC certification provides external confirmation that a fishery is well managed and is sustaining resources and livelihoods for current and future generations. The accreditation would further support the marketing of OGA's wild-caught credentials, the Two Oceans Abalone brand and validate its sustainability credentials, building consumer and social trust. OGA hopes that this recognition would also improve public perceptions of the sector overall.

#### Sustainable ocean-based 'wild' farming at lower cost

Compared to competitor models, which farm more on land, OGA's process is ocean based, making it the closest farming method to pure wild catch. This 'wild' farming method justifies the premium branding attached to OGA abalone. Additionally, OGA's practice of only growing abalone produced from brood stock lines that come from inside the genetic zone where the farm is located in Flinders Bay adheres to WA's Abalone Aquaculture Policy (DOF 2013).

#### Natural feed minimises impact on normal nutrient flows in the ocean

The ocean grown environment allows OGA to capitalise on natural feed (seaweed) without the need to incur separate feed costs, which land farming requires. The Flinders Bay area provides adequate food sources through species of fast-growing, ephemeral, epiphytic red algae that grow on seagrass blades, which break off and migrate across the lease area during episodes of swell and tide.

The natural occurrence of feed also means that there is no application of antibiotics, pesticides, artificial colouring or pigments, or growth hormones to the juveniles. The only impact to normal nutrient flows from OGA's ranching occurs because (1) more algal wrack is processed through abalone and (2) the processed nutrient is also removed during abalone harvests. To determine the degree of impact, OGA implemented a precautionary sediment monitoring plan. Results of these surveys (latest conducted in August 2018) have concluded that 'there is no evidence to suggest that OGA's aquaculture activities in Flinders Bay are having a significant influence on nutrient content of the surrounding marine sediments'. The chance of detecting impactful change going forward is also very low according to the report.



This conclusion is important as organic enrichment or accumulation of organic matter can lead to lower oxygen levels within the water environment, potentially adding stress from aquaculture. Sampling reports to date have also concluded that because of OGA's low impact, further seagrass or water quality monitoring is not required.

#### Sustainable concrete abitats

The primary input in the ocean from OGA is the creation of its abitats (essentially artificial reefs), which allow abalone to thrive in large populations where they would not otherwise because of the low occurrence of natural reef (especially in the Flinders Bay area). The abitats also provide habitat for other species of marine life, enhancing the marine biodiversity of the lease area.

The use of concrete for artificial reefs is supported by the United Nations Environment Program (UNEP), which provides guidelines stating concrete is the most preferred material for the creation of marine aquaculture habitat modules for ranching. This is because concrete is most compatible with marine environments, is readily available and is highly stable and durable (IMO 2009). OGA has sourced concrete materials only from local suppliers.

#### Biosecurity

As part of OGA's licence to undertake aquaculture of greenlip abalone in Flinders Bay (Aquaculture Licence No. 1630), OGA is subject to additional biosecurity measures. This is partly because the licensed site is within 5 NM of a productive reef area. OGA's Biosecurity Plan is also a requirement under s.92A of the Fish Resources Management Act 1994.

Primary sources of biosecurity risk include:

- transfer of contaminated abalone, contaminated water pests, or diseases from the land farm to the sea ranch, or from the sea ranch to the land farm
- movement of contaminated equipment (wetsuits, boats, dive equipment) from outside the OGA sea ranch to the lease area, or from the sea ranch itself into outside waters.

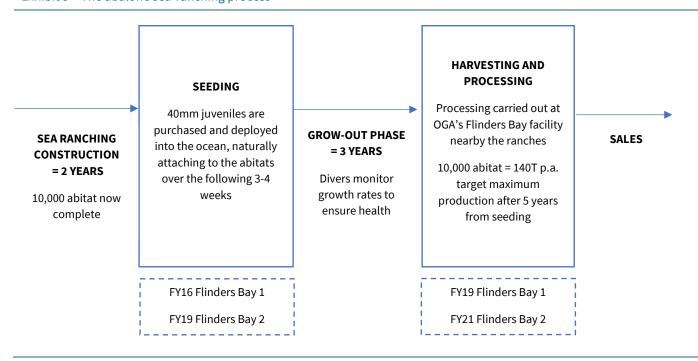
To date, OGA has not experienced any disease on its sea ranches. The continual challenge of maintaining aquatic farming and animal health means that ongoing research on biosecurity preparedness, diagnostic capability, surveillance and treatment will be required. OGA's strict protocols include the following:

- Each batch of abalone from Bremer Bay hatchery has a health certificate. Visual inspections are also carried out before being deployed to the sea ranch where divers hand place juveniles on the structures.
- No dive equipment and gear used previously in an area outside of the OGA lease is permitted to be used in the lease area.
- Each employee undertakes induction and protocol training.
- Incident and emergency procedures are in place, as are procedures for dealing with suspected cases of diseased abalone.



# **Business Model: How Does OGA Make Money?**

Exhibit 9 – The abalone sea-ranching process



Source: MST Access.

# Asset Base Is Set Up for Strong Growth

#### Asset base calculation via audit

OGA calculates its asset base every 6 months through its audit, in which 6% of the ranch is calculated as a sample and then extrapolated. This process takes eight weeks to complete. The current biomass is at 210.4T, 92% of which is a commercial size (greater than 90mm). After increasing 161T over FY19, the commercial biomass growth slowed over FY20 and FY21 at 54T and 64T respectively, as OGA battled COVID and an unusual mortality event in March 2020. The current annual harvest rate is 76T, implying that the current biomass should last for 3 years of production, which is in line with the abalone life cycle. We have assumed that the commercial biomass continues to increase naturally by 130–140T pa by FY24/25 on a base of 10,000 abitats.

#### Sales and inventory

Typically sales have accounted for about 95% of abalone that is harvested each year with harvest of 76T in FY21 vs sales of 72T. Abalone that is harvested and not sold is accumulated as inventory. Abalone can last in the freezer for 3 years, but typically inventory is sold within 2 months. Given seasonality with sea temperature and swells, the 1HFY is typically higher for harvest and sales given the winter months as more prosperous for the abalone growth. The inventory supply helps to balance out the seasonality and lumpy orders.

#### Fair value of biomass

A fair value adjustment of the biomass is taken as a non-cash item through the income statement each period. This takes into account the fair value less the assumed costs to sell, along with an assumed 10% mortality rate. It is essentially the assumption for forward sales estimates. The latest biomass valuation is \$6.27m (30 June 2021), with



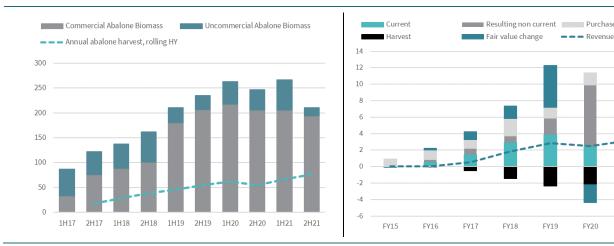
FY21

current asset valuation of \$2.7m being the assumed harvest potential for the forward year. This is in comparison to FY21 abalone revenue of \$3.1m.

#### Licences and leases

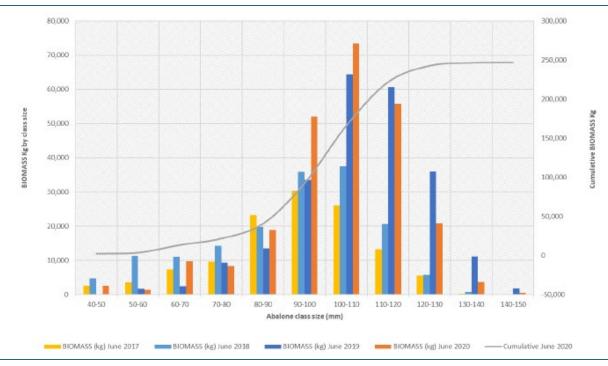
OGA has all the relevant government licences with the WA Department of Fisheries, which are typically renewed annually. Leases are with the WA Minister of Fisheries until 30 June 2035. OGA may apply to renew for another 21 years after that date.

Exhibit 10 – Biomass vs. harvested, T (left); Biomass valuation vs. revenue, A\$bn (right)



Source (left and right): OGA, MST Access.

Exhibit 11 - Biomass and growth rates - with maturation, will grow out to follow the S curve



Source: OGA.



# Broadening of Earnings Sources to Come Over Time

#### Current situation: highly concentrated in supplier and customer terms

Currently, OGA has concentration on both the supplier and vendor side of the equation.

**Suppliers:** OGA has an exclusive supplier agreement with 888 Abalone in Bremer Bay, WA. This supply agreement runs for 10 years from 1 July 2014 until 30 June 2023. It is exclusive on both sides, with 888 Abalone solely supplying OGA, and OGA solely purchasing from 888 Abalone, unless the juveniles are (1) for sea ranching outside WA and (2) 888 Abalone cannot supply at the same price or does not have the stock. Prices are reviewed every two years based on size, weight and quantities. OGA currently buys about \$1.3–1.4m of juveniles pa. FY21 was an anomaly at \$0.9m as a result of COVID.

**Customers:** OGA currently sells a large portion of its produce to a major customer in Hong Kong, accounting for 60% of FY21 revenue. This buyer largely takes the product as individual quick frozen meat (IQF) and the product moves through Asian export supply chains.

#### Future situation: new supply source and expanded sales avenues likely to dilute concentration

Over time we would expect both of these concentrations to be diluted.

**Suppliers:** The hatchery expansion plans at Esperance will see a new source of supply.

**Customers:** While export bulk orders will continue to provide the sales base, OGA is beginning to develop its trader network, expanding its export opportunities (first bulk deliveries went to Taiwan and the UK in April 2021, followed by China in July 2021), targeting high-end customers, restaurants and wholesalers and introducing new package sizes to broaden optionality: 10 x 1kg retail boxes (Whole In Shell, WIS), 10kg (bulk), and 3 x 3kg (live). OGA is also creating a retail avenue by developing its high-end digital route and tourism offering from its purpose-built facility in Augusta. The impact of COVID-19 encouraged OGA to adjust its sales and marketing strategy to focus more on domestic markets, collaborate with other export seafood industry participants, diversify its product range, and expand its sales capacity.

# Other Earnings Impacts: FX, Processing, Grants

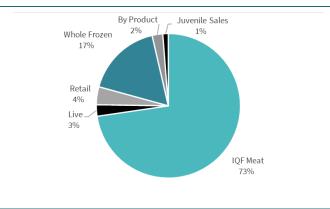
Export abalone sales are exposed to negative impacts from appreciation in the Australian dollar. Management aims to hedge out secured forward orders (6 months +). We would expect this FX impact to reduce as the domestic customer base grows in the future. There are no natural FX debt hedges.

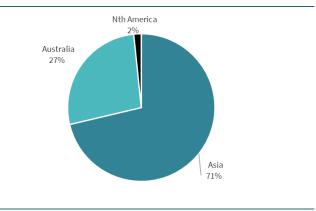
OGA also earns revenue processing abalone for third parties, including local wild catch and processing 888 Abalone's farmed abalone harvest. Rates are at about 15% of sale prices.

OGA has successfully applied for both government grants of around \$200k pa and R&D incentives of \$1.3–2m pa. The incentives have encouraged the pursuit of continuous improvements and have been a strong support to OGA's traditional cash flow. We would expect these to continue as OGA continues to innovate in the industry.



Exhibit 12 - Revenue by product, FY21 (left); Revenue by geography, FY21 (right)





Source (left and right): OGA, MST Access.

Exhibit 13 - R&D incentive vs. cash burn, A\$m (left); R&D incentive vs. revenue, A\$m (right)





Source (left and right): OGA, MST Access.

# Operating Leverage an Opportunity

When the ranch reaches steady state, costs are largely fixed, and operating leverage will come through improved labour productivity, lower juvenile costs and ranch growth.

The largest component of operating costs are employees. For a 10,000 abitat ranch system, there are four dive teams, equivalent to 14 divers. This final dive team configuration is expected by OGA to be sufficient to meet the targeted production capacity of 140T pa for the Flinders Bay ranches. Currently employee costs account for about 44% of revenue (based on accounts); we expect this to come back towards 30% by FY25. Management is looking to tighten overall employee accountability and as a result will establish an organisation-wide equity plan.

As a result of COVID-19, OGA proved it has the flexibility to control costs. The company reduced or deferred expenditure, including keeping the abalone on the reefs longer (enabling them to grow larger for future revenue), and cut employee costs through remuneration reductions and headcount.



# **Growth Strategy: Three Clear Opportunities Ahead**

## Opportunity 1: Improving Productivity on the Current Asset Base

New management has brought new ideas about how to extract more out of the existing asset base. This will improve the value of the biomass assets as well as increase future yields.

The focus is on minimising wastage through R&D. Current wastage of the juveniles is around \$0.7m pa on cost of juveniles (50% mortality). The company expects to improve this through a focused R&D approach seeking to develop a way to clean and lift the abitats to promote biomass growth between harvests. Our estimates assume that the mortality rate falls to 28% by FY23 and 7% by FY24.

Sub-optimal growth rates are occurring at 20% of the current 10,000 abitats. The company is working to improve this through R&D to gain a deeper understanding of the current sites in the face of swells and ocean conditions. Early research has led to 30% of the abitats being moved from their original position. We would expect benefits to start to come through earnings over FY22/23.

## **Opportunity 2: Premiumisation Strategy**

Management is taking a premiumisation approach to OGA's product, aiming to elevate the product from a commodity and developing various strategies to build out the brand and encourage brand loyalty with customers. This is reminiscent of the path taken by Treasury Wine under the fresh eyes of CEO Michael Clarke. OGA will develop new avenues to customers through:

- varying abalone package size options
- targeting domestic restaurants
- boosting retail sales
- building out additional brands
- potentially adding new product that could be processed (not grown).

A premiumisation sales strategy should see OGA move to be a price maker, rather than a price taker, with a resultant improvement in forward sales and gross margins. We would expect these benefits to come through earnings over FY22/23.

We expect OGA's market share of Australian-produced abalone (including wild-caught, aquaculture and 'hatch n catch') to increase to 4.4% in FY25 from 2.1% in FY21. This assumes an industry decline of 4% pa in line with the last four years.

We expect OGA's gross margin to improve to 23% by FY24 from 19% currently. We believe this is reasonable, given indications from peers on similar metrics. We expect returns for the business to move higher with ROA and ROE in FY26 of 8% and 15%, respectively.

# Opportunity 3: Vertical Integration – Improving the Supply Chain

The establishment of the HoA with Yumbah Aquaculture in December 2020 should progress the opportunity for OGA to build out its own land-based hatchery and grow-out facility, enabling an additional 600T pa of abalone (50% to OGA).

## Advantages of agreement with Yumbah

The advantages of this agreement are:

- its site, which
  - provides access to oceanic water at a temperature ideal for abalone aquaculture (14–21C) very important for the growth of abalone
  - has low-lying sand dunes allowing abalone tanks to be built and seawater to be supplied with the pumping head at an average of 6m above the mean low tide, facilitating efficient pumping of seawater to the grow tanks



- is located near the town of Esperance for access to labour, infrastructure and third-party support services
- has the potential for installation of green energy with solar/wind/harvesting outflow water, as well as the potential for future expansion and further diversification
- benefits from a supportive shire council and community
- its potential for product improvement with access to its own hatchery supply
- a reduction in costs as a result of its partnership. Yumbah is an established player in farmed abalone, with 30 years of R&D and technology into its approach. This technology and IP, known as Nyamat Technology, should reduce the project's construction and operating costs, benefitting OGA. Juveniles from the hatchery will be less expensive than the price OGA is paying now.

#### Proposed project timetable

- 2QFY22: Complete bankable feasibility study
- 3QFY22: Investment decision on whether to proceed with development with Yumbah
- 4QFY22: Assess funding strategies, approvals and all conditions precedent
- 2QFY24: Hatchery construction complete and first spawning of juveniles
- FY27: First harvest and sales of farmed greenlip abalone

#### Our assumptions

- Total cost of the project is \$37m to OGA.
- 10% pa cost saving of juveniles to come through its their existing supply contract.
- Juveniles under the new hatchery to come in at about a quarter to a third of the original cost.
- Price of farmed abalone is at a 10% discount to sea-ranched abalone.
- Additional sales of 300T pa to OGA by FY28.
- Funded by 70:30 by debt:equity with a \$10m equity raising in FY23. This will see overall OGA debt/assets max out
  at 45% in FY25. Management expects that, if the project goes ahead, OGA could also look at government grants for
  funding support.
- Overall impact for OGA if it were to go ahead with this project: we expect OGA's market share for Australian-produced abalone (wild, aquaculture and 'hatch n catch') to increase from 2.1% in FY21 to 15.7% in FY28. This assumes an industry decline of 4% pa in line with the last four years.
- We expect OGA's gross margin to improve from 19% currently towards 25–28% by FY29/30.
- We expect ROE (including non-cash fair value adjustment) to improve from negative currently towards 17% by FY28.

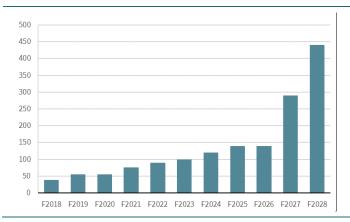
#### Exhibit 14 – Esperance Project concept design

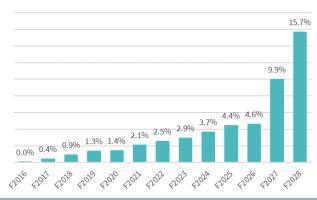


Source: OGA.



Exhibit 15 - Harvest tonnes, pa (left); Forecast OGA market share of total Australian abalone volumes (right)





Source (left and right): OGA, MST Access.

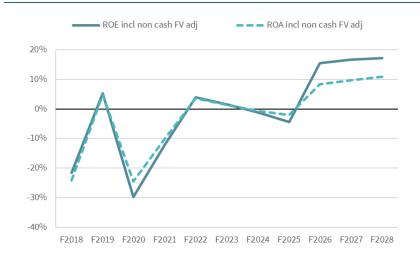
Exhibit 16 – Sales volume (LHS) vs. sales price (RHS) (left); Gross margin forecasts (right)





Source (left and right): OGA, MST Access.

Exhibit 17 – Returns (including non-cash fair value adjustment)



Source: OGA, MST Access.



# Funding

#### **Net Cash Balance**

OGA has a net cash balance of \$2.7m at end-FY21, with \$25k of debt. This debt is in the form of equipment loans over the dive vessels. The loan is with NAB, with a facility of up to \$1.5m at a rate of 4.0-5.2% pa.

Current cash burn is \$250k per quarter (4Q21), which would imply OGA's current funding position should satisfy the base business for the coming 3 years. **Management expects to be cash flow neutral in FY22, including potential Esperance costs.** 

## **Equity Raisings, Debt and Other Funding**

OGA listed in November 2017, raising \$10m at \$0.25. The company raised an additional \$2.9m in 1H20 through a rights issue at \$0.13.

There is currently a total of 13.5m options, of which 12.5m expire on 30 September 2021 with strike prices of \$0.39-\$0.44. We assume these do not vest. The remaining 1m options expire in November 2023 with a strike price of \$0.14. We assume this will raise \$0.14m for OGA in 1H24.

If the Esperance expansion goes ahead, management has indicated that the company would look at various funding avenues including debt, equity and government grant income opportunities. We have assumed an expansion would be funded 70:30 debt:equity including a \$10m capital raising in FY23.

We expect OGA to be FCF positive in FY26. If the Esperance development did not proceed, we expect OGA to be FCF positive in FY23.

# Valuation: Base-Case DCF Value of \$0.35

# Base Case DCF Implies 3.7x Upside

We have looked at OGA on a 12-month DCF approach. This includes the change in the value of the biological assets through working capital (inventory) adjustment. This gives an equity value of \$0.35, implying 3.7x upside from the current share price. The value is weighted to the back end given the capex required ahead of higher earnings from the potential Esperance project.

#### Key assumptions of our DCF

- As with all valuations, there are many assumptions. The key metrics are in Exhibit 18, and Exhibit 19 shows a sensitivity analysis.
- We assume that **prices** (and, in turn, **COGS**):
  - kick up 15% in FY22, coming out of COVID
  - increase 5% pa over FY23-FY25 as OGA benefits from its premiumisation strategy
  - continue to grow 3% pa long term.
- We assume that harvested volumes:
  - increase to hit the company's target of 140T pa by FY25
  - increase beyond this with Esperance to 440T pa by FY28.
- We assume that the business benefits from **leverage at most cost lines** (excluding employee costs rising between 3-10% pa and corporate costs rising 2% pa).
- **Tax losses** of \$14.4m imply that OGA will not be paying tax until FY29 on our estimates. These tax losses include the non-cash item of fair value adjustment on the biological assets, which has accumulated +\$7.7m in FY15–FY21. Therefore this tax loss underestimates the true cash loss.



• Terminal year is CY31 with **terminal growth rate** of 3%.

Exhibit 18 - MST Access DCF analysis

DCF		-Y22	FY23	FY24	FY25	FY26
EBIT	•	2.16	-2.11	-3.50	-4.14	-4.14
Less: Taxes		0.00	0.00	0.00	0.00	0.00
Post-tax EBIT	-	2.16	-2.11	-3.50	-4.14	-4.14
Plus: D&A		0.58	0.59	1.98	2.78	2.89
Post-tax cash flow	-	1.57	-1.52	-1.53	-1.35	-1.26
Less: Capex	•	0.62	-20.10	-12.09	-4.08	-0.32
Less: Change in WC		0.10	-0.11	-0.20	-0.21	-0.03
ess: Change in inventory of biological assets		1.57	1.99	2.58	3.10	3.17
ree cash flow	-	0.52	-19.75	-11.24	-2.53	1.57
Discounted cash flow	-	0.49	-16.86	-8.76	-1.80	1.02
Sum of discount streams		-8.6		САРМ		
Terminal growth	;	3.0%		Risk free rate		2.50%
Future value into perpetuity	1	57.9		Equity beta		1.50
NPV of terminal value		71.2		Equity risk prer	nium	4.70%
PV of cash flows		62.6		Cost of equity		9.6%
.ESS: Minority interests		0.0				
PLUS: Value of tax losses, incl FV adj		4.3		Debt		0%
Add: Net Cash		2.7		Equity		100%
Add: Options		0.1		Interest rate		
Equity value		69.7		Tax rate		30%
Diluted shares	2	01.7		WACC		9.6%
Value per share (A\$)	\$ (	.35				
Upside	3	73%				

Source: MST Access.

Exhibit 19 – DCF sensitivity analysis

	DCF	Potential upside from current share price
Take out the Esperance project from our expectations	\$0.12	70%
Increase the equity beta from 1.5x to 2.0x	\$0.20	180%
Bring back the equity beta from 1.5x to 1.0x	\$0.67	810%
Increase the debt:equity mix from 0:100 to 25:75	\$0.52	610%
Increase the terminal growth from 3% to 4%	\$0.41	470%

Source: MST Access.



## Cheap on Alternative Book Value Approach (EV/Biomass)

We have cross referenced our valuation with book value (biological mass) compared with peers (see Exhibit 20). Variances arise in the underlying premium nature of each seafood product and associated assumptions in the stated mass. For OGA, we believe its biomass is an underestimate given the company's growth opportunities.

OGA is currently trading on a EV/biomass of 2.0x, vs median for peers in Australia of 2.7x (range 1.9-76.5x) and in the larger and more established Northern European market of 11.5x (range 5.5-43.1x).

Exhibit 20 – OGA comparables

		Share Price Ticker Local		EV A\$m	EV/Sales	EV/Sales	Biomass \$m	EV/ Biomass (x)	
						Jun'21	Jun'22	last stated	last stated
Ocean Grown Abalone Ltd	Abalone	OGA-AU	\$	0.078	13	2.5	2.1	6	2.0
Australia & NZ									
Clean Seas Seafood Limited	Kingfish	CSS-AU	\$	0.565	61	1.3	1.1	33	1.9
Murray Cod Australia Limited	Murray Cod Fish	MCA-AU	\$	0.330	190	20.8	10.3	15	12.8
New Zealand King Salmon	Salmon	NZK-NZ	\$	1.420	233	1.4	1.3	85	2.7
Seafarms Group Limited	Prawns	SFG-AU	\$	0.055	170	6.1		2	76.5
Tassal Group Limited	Salmon & Prawns	TGR-AU	\$	3.450	1,059	1.8	1.6	463	2.3
Average - weighted					618	4.9	2.3		17.2
Average					342	6.3	3.6		19.2
Median					190	1.8	1.5		2.7
Offshore									
Kingfish Zeeland BV	Kingfish	KING-NO	\$	23.05	265	8.3	14.0	6	43.1
Bakkafrost P/F	Salmon	BAKKA-NO	\$	753.40	7,587	1.9	5.6	457	16.6
Norway Royal Salmon ASA	Salmon	NRS-NO	\$	184.00	1,688	0.6	1.6	221	7.6
Grieg Seafood ASA	Salmon	GSF-NO	\$	85.60	2,236	0.9	2.5	407	5.5
Leroy Seafood Group ASA	Salmon, Trout, Whitefish	LSG-NO	\$	76.24	8,268	0.7	2.2	785	10.5
SalMar ASA	Salmon	SALM-NO	\$	596.80	11,957	1.6	4.8	957	12.5
Average - weighted					9,277	1.2	3.7		11.4
Average					5,333	2.3	5.1		16.0
Median					4,911.2	1.2	3.6		11.5

Source: MST Access, FactSet.

#### **Risks**

- **Aquaculture-related operational risks**: these include the risks associated with safety of abalone diving, disease, theft, environmental changes, predation and severe weather events.
- **Incorrect biomass assessment:** given the assessment of biomass is carried out every 6 months using a sample, there is a risk the asset base is over- or understated.
- **Greenlip abalone prices and industry supply/demand dynamics:** this can include additional unexpected supply domestically or offshore, through potential advanced technologies. It can include depressed demand from economic volatility or through government intervention with additional tariffs applied to the sector.
- **Tariffs:** an increase in the Chinese trade tariff on abalone would lead to weaker sales and prices, as occurred with lobsters.
- Forex risk, with export abalone sold in US dollars.
- Current concentration risk on both the supplier and vendor side, and associated risk of dependency.
- **Government relationships** through lease and licence approvals.
- **Partner relationships** relating to various partnerships including Ocean King Fishing and Yumbah Aquaculture. Expansion plans depend on an effective relationship.



- **Key management risk:** key management could be a risk if they departed the business and took with them their business relationships that may impact OGA.
- **Funding:** in order to successfully execute their growth plans, OGA will require external funding. The equity markets may be closed to OGA for a variety of reasons, in which case it may have to seek alternative options.

# **Board and Management**

#### **Board Members**

The Board has four members, with broad and relevant experience for a company of this size. The CEO is not on the Board.

- **Peter Harold, Non Executive Chairman**. Mr Harold's background is in mining and listed companies. He is currently the CEO of Poseidon Nickel (POS-ASX) and was formerly the MD and founder of Panoramic Resources (PAN-ASX). He has previous Board experience includes the following listed companies: Alloy Resources, Spectrum Rare Earth, Peak Resources and Boab Minerals. Mr Harold owns 0.1% of OGA.
- **Brad Adams, Founder and Executive Director**. Mr Adams' background is in fishery. He was the MD of OGA prior to the recent appointment of Rob Jorden. His current focus within the business is developing the proposed onshore abalone hatchery and facility in Esperance alongside Yumbah Aquaculture. Mr Adams owns 2.6% of OGA.
- Ian Ricciardi, Founder and Non-Executive Director. Mr Ricciardi's background is in fishing The Ricciardi Family is involved with One Sea Pty Ltd, producer of Rottnest Island Scallops, and have built and operated an export food processing facility in North Coogee WA, holding a 50% interest in Fremantle City Coldstores. Mr Riccardi's son Vincenzo Ricciardi is an employee of OGA as Group Financial Controller. Ian Ricciardi owns 8.7% of OGA.
- **Danielle Lee, Non Executive Director**. Ms Lee's background is in corporate law and governance. She is currently on the Board of Hazer Group (HZR-ASX) and Openn Negotiation Ltd (OPN-ASX).

## **Key Management**

Key management have recently come in with fresh eyes, as the former executive team was not operating at its full potential.

- **Rob Jorden, CEO**. Mr Jorden's background is in management consulting with experience in start-ups and turnaround situations. He was appointed to the CEO role in March 2021. He was formerly Head Business Development & Operations at GPR Dehler Pty Ltd.
- **Brent Stockden, CFO**. Mr Stockden's background is in finance and accounting. He was formerly group financial controller at ASX-listed ToxFree Solutions ahead of the company being bought out by Cleanaway. He was appointed to the CFO role at OGA in April 2021.

# Ownership and Remuneration

Management KPIs are currently focused on harvest numbers and EBIT. Mr Adams has 4m performance rights outstanding from August 2017 with regard to the success of the Port Lincoln Development or under a takeover. These will expire on November 2022. Given the Port Lincoln development has been abandoned, we do not expect these to vest.

Management and the Board (predominantly, the founders) own 11.4% of OGA. Mr Adams recently completed an off-market share sale of 1m shares to Mr Ricciardi to fund a personal tax obligation from the conversion of performance rights in previous years.

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