

Climate resilience in the Australian Seafood Industry

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ABARES Outlook 2023 Conference

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Who are we?



United • Effective • Respected

The national peak-body representing the Australian Seafood Industry

Snapshot of Australian fisheries and aquaculture



\$3.09b

↓ 1%
in 2020–21

Production

Production value decreased, largely a result of lower prices for Rock Lobster, Abalone and Tunas in the export market, as trade and pandemic disruptions continued to limit export demand. Higher aquaculture production value across most Finfish, Crustaceans and Molluscs species partially offset the decline in wild-catch fisheries.

\$1.25b

↓ 11%
in 2020–21

Exports

Total export value decreased driven by lower export returns for Rock Lobsters, Abalone, Prawns and Tunas, though higher Salmonids export value partially offset the overall decrease.

\$2.14b

↓ 2%
in 2020–21

Imports

Lower import value was driven by a reduction in finfish import value, mainly lower value of Tunas and Salmonids.

356kt

of seafood
was consumed
in 2020–21

Consumption

Apparent seafood consumption increased in 2020–21. Imports accounted for 62% of consumption, a decrease from previous years.

17,000

people employed
in 2020–21

Employment

10,000 people were employed in wild-catch fisheries and 7,000 people were employed in aquaculture.

Note: 2020–21 figures are preliminary. Source: ABS, ABARES

We have the **agility to lead** in this space and we are **committed** to stay at the forefront

So.....

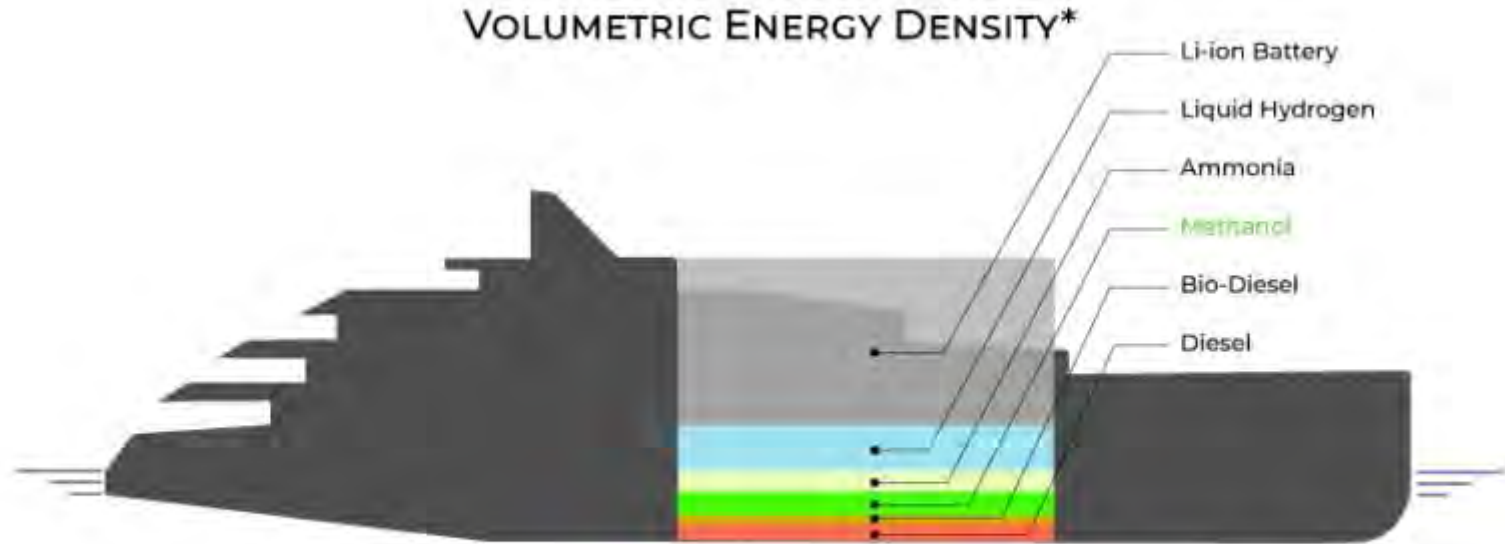
How can the fishing industry demonstrate rapid and practical progress to achieve climate resilience by the fisheries, aquaculture and seafood supply chain by 2030?

The bottom right corner of the slide features decorative wavy lines in a light blue color, resembling stylized waves or a coastline. These lines are layered, with some being more prominent than others, creating a sense of depth and movement.

Project: Climate Resilient Wildcatch Fisheries



Volumetric Energy Density Summary



With tank width and length remaining the same, the diagram shows the additional height required for the various alternative energy carriers.

*Based on DNV GL Comparison of Alternative Marine Fuels

Methanol x2, Liquid-Hydrogen x8, Li-ion Batteries x18 (vs Diesel)

Comparison: Diesel vs Grey Methanol vs Green Methanol

	Diesel	Grey Methanol	Green Methanol
Energy Density	~30-38 megajoules (MJ) per litre (Depending on grading, supply variability etc)	~Half the energy density of diesel	~Half the energy density of diesel
Cost:	\$600 ton (2x more expensive than Grey Methanol)	\$300 ton (~Half the price of diesel)	\$800 ton (Bell Bay TAS project estimate)
Availability:	Readily available	Available	Not yet available
Environmental Impact	Toxic and carcinogenic. Not biodegradable.	Water soluble and biodegradable.	Water soluble and biodegradable.
GHG Emissions:			
NOx (Nitrogen Oxides)	Baseline	60% reduction	60% reduction
SOx (Sulphur Oxides)		99% reduction	99% reduction
Particulate Matter		95% reduction	95% reduction
CO2 (Carbon)		25% reduction	95% reduction

Focus vessel




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FISHERIES**
SUSTAINABLE SEAFOOD

Equipment supply



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+



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6090SFM85

Marine Propulsion Engine

- 9.0L PowerTech™
- 242-410 kW (325-550 hp)

Liquid fuel

Highly efficient Common Rail or PLN fuel injection system for liquid fuels.



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CORPORATION

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EVOLVE 4EL23

Dual fuel

Micro pilot liquid fuel injection
combined with gas injection system.



Spark ignited

100 % gas using a spark plug



Saleable alternative energy solutions for aquaculture



Seafood Industry
Australia
The Voice of Australian Seafood



FRDC
FISHERIES RESEARCH AND
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BLUE
ECONOMY
COOPERATIVE RESEARCH CENTRE

SIA Climate Resilience Project introduction webinar - September 2022

