



sense-t
smart. data. innovation.

Data Driven Transformation

We use data to solve real world challenges. Sense-T demonstrates the potential of data to improve economic, environmental and social outcomes.

Data is helping us see alignments and opportunities that improve decision making and create real impact.

It is helping farmers improve yields, and helping the wine industry better understand disease. It is helping people breathe easier and improving their quality of life.

Sense-T currently engages more than twenty research and development projects in the areas of agriculture, aquaculture, viticulture, water management, health, tourism, freight, logistics, transport and finance.

**Discover more at
sense-t.org.au**

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Australian Government



Oyster Biosensors

Helping oyster farmers make better decisions

Opportunity

Tasmania has a reputation for premium oysters - with excellent growing areas located on the North, East, and South-East coasts.

However, oysters can be susceptible to changing environmental conditions such as freshwater input and rapid change in temperature, which can slow their growth or cause mortalities.

Solution

Sense-T, CSIRO and IMAS have worked together to develop and trial a network of oyster and environmental biosensors.

These biosensors record oyster heartbeat and metabolism, and match this with environmental changes in temperature, salinity, pH, dissolved oxygen, turbidity and algal abundance.

Monthly measurements of growth and oyster condition aim to link all of these parameters, and this information will be used to develop farm management models that maximise oyster production.

Impact



Having real-time environmental data available to oyster farmers is helping the industry become more competitive, efficient and sustainable.

Demonstrating how conditions affect oysters will enable producers to better manage their stock, helping to reduce oyster stress and improve growth.



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