



# ENVIRONMENTAL FACT SHEET

## ENVIRONMENTAL IMPACT AT A GLANCE

### CARBON-NEUTRAL & CHEMICAL-FREE

- **Low-Energy Process:** RegenAqua runs on solar and gravity-fed flows—only requiring energy to pump water and turn paddle wheels.
- **Macroalgae as Nature's Solar Panel:** Macroalgae are among the most efficient organisms on earth at capturing carbon. Every cell is a highly effective photosynthetic unit, actively sequestering CO<sub>2</sub> during growth.
- **Zero Chemicals:** No chemicals are used in the treatment process. RegenAqua can even help reduce chemical dosing requirements in upstream and downstream treatment steps (e.g. Alum, chlorine).

### KEY METRICS

**50t**

**Carbon Sequestration** up to 50tCO<sub>2</sub>/ha/year captured by macroalgae during growth.

**370t**

**RegenAqua abates** 370 tCO<sub>2</sub>-e/ha/year through avoided emissions, chemical offsets, and biomass reuse.

**~1/8**

The energy of conventional Membrane Bioreactors (MBRs)

**2 t DIN**

Removes up to 2t DIN and 1t TP/ha/year

# CIRCULAR ECONOMY IN ACTION

**Capture → Reuse:** RegenAqua traps nutrients and contaminants before they reach natural ecosystems – then transforms that captured biomass into valuable products.

**One Biomass, Multiple Pathways:** RegenAqua's harvested algae enables low-emissions reuse across agriculture, biofuels, and soil restoration.

**From Waste to Worth:** Closing the loop with macroalgal innovation.



## WATERWAYS & ECOSYSTEMS

RegenAqua is protecting waterways and ecosystems through its nature-based solution:



### Waste as a Resource

RegenAqua treats wastewater not as a burden, but as a source of recoverable nutrients and carbon.



### Improved Discharge Quality

By removing nitrogen, phosphorus, and other pollutants before water is released, RegenAqua protects rivers, reefs, and aquatic ecosystems.

## LAND-FRIENDLY DEPLOYMENT

- RegenAqua is suitable for non-arable land—it doesn't compete with agriculture for high-value farmland.
- Modular design means it scales to suit available space and budget while maximising environmental return.



#### CONTACT US

Phone: +61 438 508 445

Email: [info@pacificbio.com.au](mailto:info@pacificbio.com.au)

#### MORE INFORMATION

Website: [regenaqua.com.au](http://regenaqua.com.au)

LinkedIn: [/regenaqua](https://www.linkedin.com/company/regenaqua)

#### HEAD OFFICE

88 Jolimont Street, East Melbourne,  
Victoria, 3002, Australia

