



# **Sustainable Coastal Cities Transform Oceans**

**Australian Vocational Education and Training (VET) Accreditations**  
**Marine Habitat Conservation and Restoration – Ecosystem Management**





# CORALZ-ENVIROTECH GROUP

Strategic education partner, developers and exporter of Australian sustainable Technical Vocational Education and Training (TVET) frameworks and accredited courses.

- TVET research, development, registration, delivery and assessment specialist.
- Student mobility expert with developed international networks.
- Passionate innovator for Sustainable Blue Economy and climate change solutions.

## Professional Accredited Courses



### Sustainable VET Framework

R&D expert of responsive, dynamic, quality marine environmental. Ecosystems management, sustainability TVET accreditations frameworks



### Eco-Education & Connectivity

Expanding on eco-tourism by connecting ecology with immersive environmental projects accreditations. Environmental technology & innovation



### ECO-Workforce Development

TVET aligned with leading projects methodologies to qualify environmental projects workforce



### Mobility and Integration

Development partner for international student mobility environmental study with professional internship placement programs



### Localized Academic Resources

International curriculum tailored locally training design addressing local biodiversity Challenges, IP assignment and international R&D connectivity



### Blue Economy ESG Governance

Training and consulting services on environmental governance and capacity building with national regulators.





# Marine VET RESEARCH & DEVELOPMENT (R&D)

**“Elevating Our Curriculum to Meet Tomorrow’s Environmental Challenges”**



Capacity Enablers  
Communities  
Climate Resilience



TVET Skill Sets and  
Micro Credentials  
Eco-Edu Tourism



Blue Economy  
Industry, R&D, &  
CSR Partnerships



Ed-Tech R&D  
International  
Connectivity



# PROBLEM

## MARINE LIFE & REVENUE LOSS

- Global exponential marine life loss
- High % project failure & short-term impact due to local labor & skills shortage
- Fly in- Fly out scientists and academia
- Inflated marine project labor costs
- Import Vs locally developed environmental technologies, products & services.

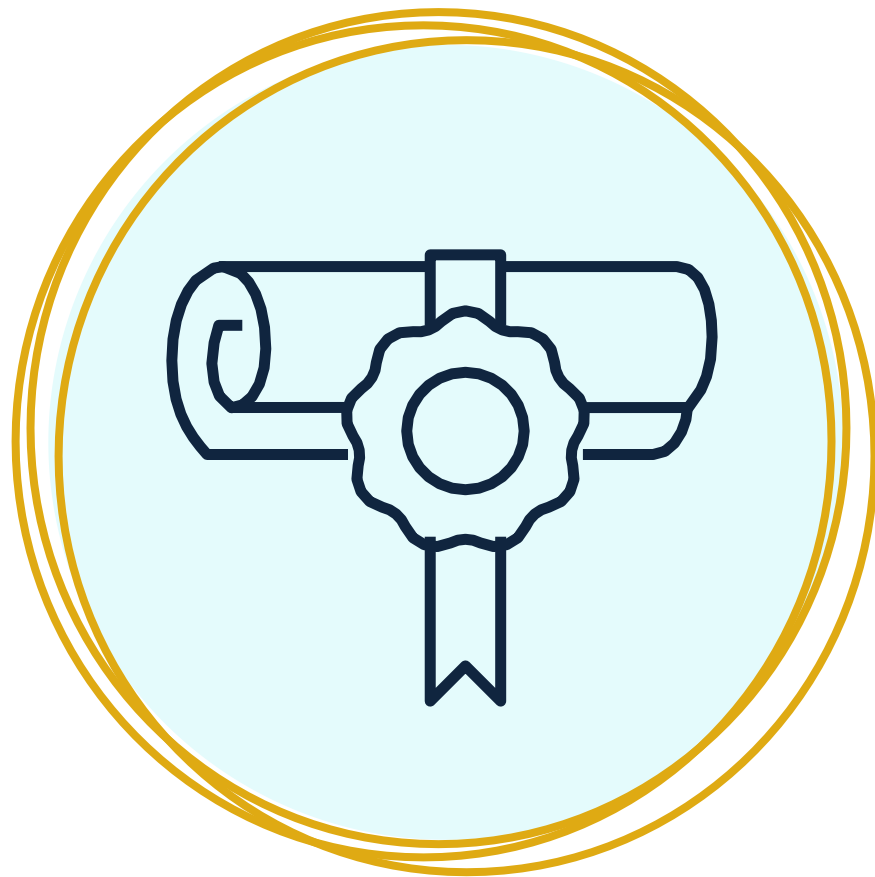
## SKILLS & EMPLOYABILITY GAP

- Academic glass ceiling
- Marine eco-investment barriers
- Insufficient internship and work placement opportunities
- No training for fishers, & fishing industry is under crisis.
- No professional TVET in schools

## ABSENCE OF MARINE VET PROFESSIONAL ECO-EDUCATION

- No marine environmental TVET sector
- Minimal domestic & International mobility
- Limited professional development
- Limited expensive labor for marine projects.

# SOLUTION



## ECO-VET DEVELOPMENT

Development of STEM VET environmental conservation and restoration accreditations, enhancing regional education offerings and community social, financial and ecological empowerment



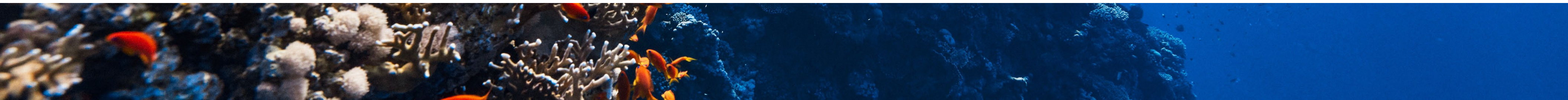
## BUILDING NATIONAL CAPACITY

Building People, Communities, National and international capacity for domestic and international students through the provision of Marine and Terrestrial VET Pathways and technologies in and led by remote coastal Communities



## ENHANCING PLACEMENT OPPORTUNITIES

Enhancement of internship and work placement opportunities on regional marine and terrestrial conservation projects, reduce project costs and drive sustainable remote coastal community resilience ecosystems.



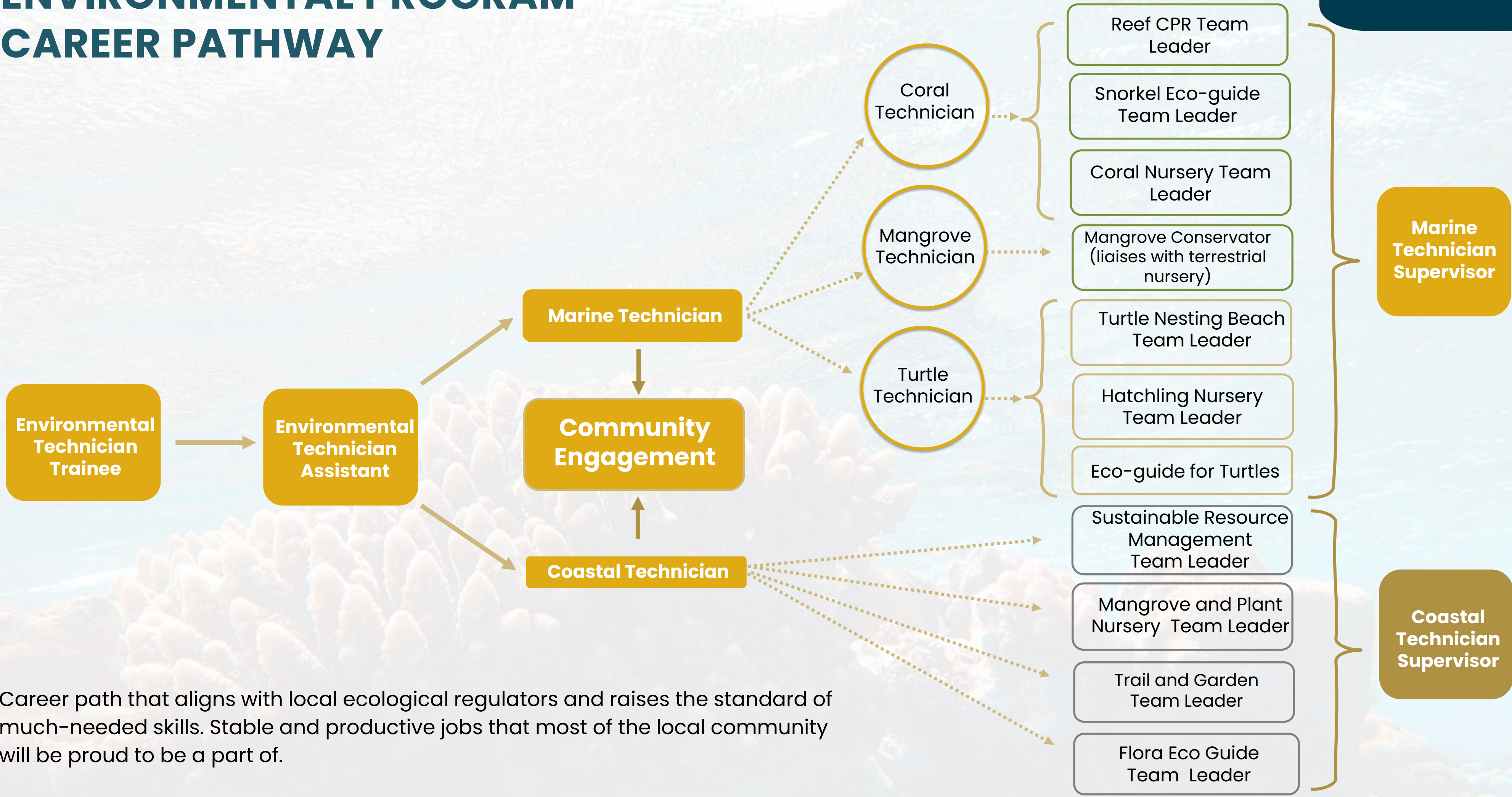


# ENVIRONMENTAL PROGRAM ACCREDITATION PATHWAY





# ENVIRONMENTAL PROGRAM CAREER PATHWAY



Career path that aligns with local ecological regulators and raises the standard of much-needed skills. Stable and productive jobs that most of the local community will be proud to be a part of.



# ENVIRONMENTAL COMPLIANCE CAREERS





# GROWTH & PER LOCATION GO TO MARKET

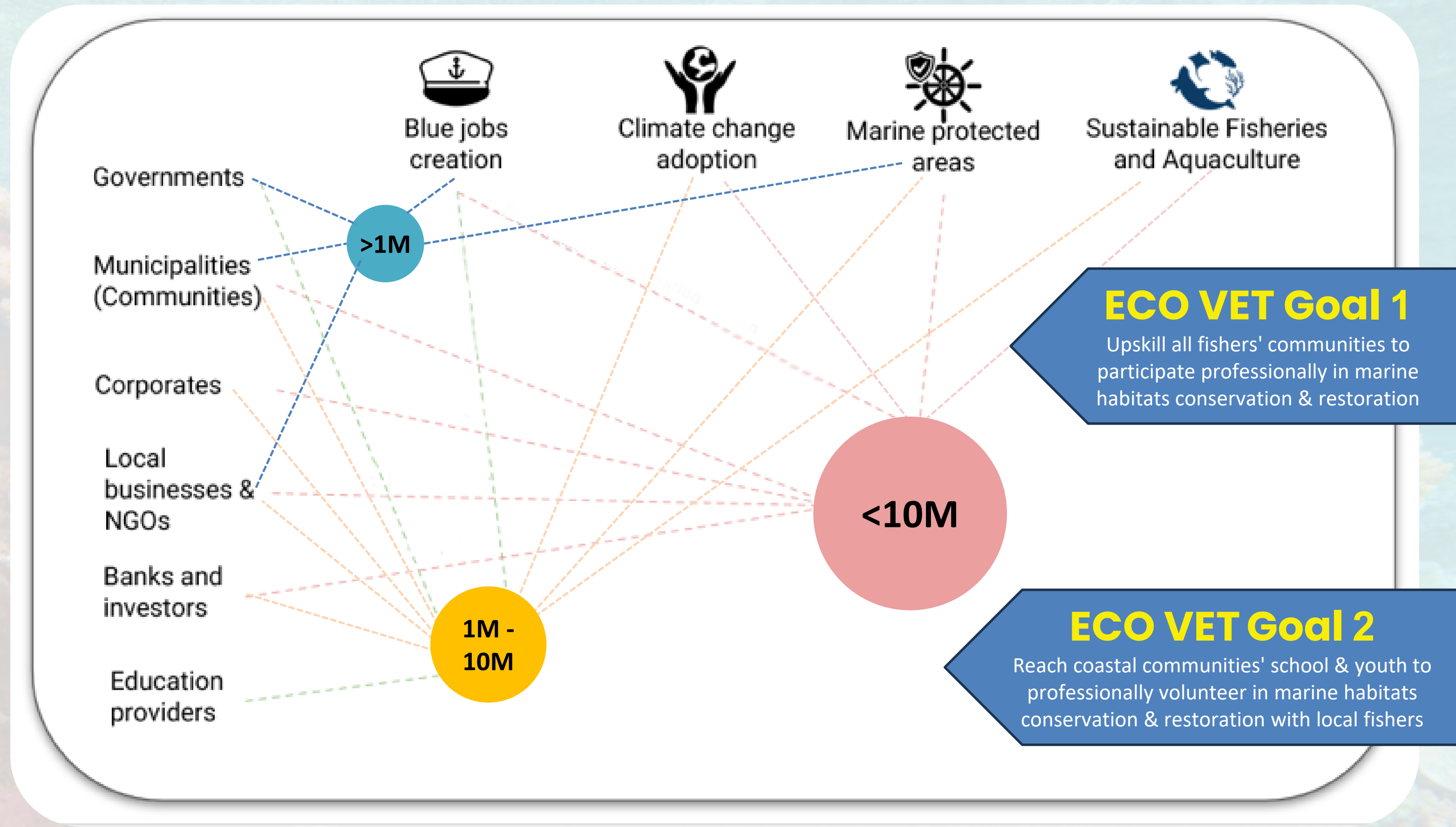




# VET BY WORLD BANK BLUE ECONOMY PRINCIPLES

## CORALZ Offerings

- ✓ Copyrights: TVET Marine Habitats Conservation and Restoration
- ✓ Professional Certifications
- ✓ International Experienced Teams
- ✓ Training Coastal Communities
- ✓ Sustainable Blue Economy Enablers
- ✓ Biodiversity & Carbon Credits
- ✓ Marine Sustainable Jobs Creation
- ✓ Indigenous Livelihood Projects
- ✓ Aquaculture and Marine Ranching





# ENVIRONMENTAL TVET

## AUSTRALIA'S MARINE VET ACCREDITATIONS FRAMEWORK R&D & IP OWNERS:

- [11246NAT – Certificate II in Marine Habitat Conservation and Restoration](#)
- [11247NAT – Certificate III in Marine Habitat Conservation and Restoration](#)
- [11078 NAT – Certificate IV in Marine Habitat Conservation and Restoration](#)
- [11087NAT – Diploma in Marine Habitat Conservation and Restoration](#)

### **MARINE & ENVIRONMENTAL VOCATIONAL ACCREDITATIONS** **AQF VET Certificates to Diploma**

- Marine Habitat Conservation & Restoration
- Ecosystems Conservation & Management
- Sustainable Operations
- Aquaculture (Marine and Land Based)
- Sustainable Fisheries
- Outdoor Leadership (SCUBA DIVING)
- Sampling and Measuring (outdoor laboratory)
- English for Environmental Vocational Pathways

### **RAPID PROFESSIONAL UPSKILLING** **Skill Sets & Micro-Credentials**

- Coral Nursery Establishment
- Mangrove Conservation and Reforestation
- Artificial Reefs, Oyster Reefs, Bivalves & Pearls
- Blue Carbon Ecosystems
- Hatcheries and Nurseries
- Rivers and Riverain
- Marine Project Planning and Management Marine Conservation Project Practical Skills



# IMPACT MODEL

## Economic, Ecological, and Social Engine



Building inter-sectoral  
eco-educational  
systems in coastal  
communities



Sustainable marine  
tourism and  
collaborations



Carbon Adsorption  
Increased  
Biodiversity  
Sustainable Fisheries

**Social  
empowerment  
of fishing  
communities**

**Creating  
livelihoods for a  
circular blue  
economy**

**Projects to Conserve  
and Restore Marine  
Biodiversity**

**Blue Technical  
Professional  
Certifications**



[Video link: Marine Eco-Accreditation](#)



# SOCIAL ENVIRONMENTAL ECONOMIC IMPACT



## Environmental Management

**Empowerment of citizens in environmental management**

**“Designed for non-scientists”**

Providing a solid foundation in environmental management through a curriculum that combines environmental knowledge and practical experience



## Social Sustainability, Circularity & Inclusion

**Engagement of Nationals in environmental skill development**

**“Encouraging national inclusion”**

Preparing regional communities for **New projects opportunities and encouraging participation.**  
hands-on applications



## Commercialising Ecosystem Restoration & Propagation

**Job-Ready Application of best practice environmental protocols**

**“Restoring traditional ecosystems”**

Qualifying local talent for workplace requirements in traditional ecosystem protection and enhancement.  
Industry Vocational Placements



# REGIONAL SKILLS CAPACITY DEVELOPMENT



## Communities

We aim to collaborate with local communities to understand cultural knowledge and traditional practices in caring for land and sea.

Engaging community in creation of meaningful skill development programs that are relevant to place and of value to each unique community.



## Education Providers

Partner with local educational institutions, scuba-diving training centers and schools to build providing innovative solutions for building national environmental VET capacity, with global international partnerships and participants.

Scaling up sustainable VET training and accreditation pathways from schools to university and industry



## Government & Blue Economy Industry

We aim to collaborate with corporate and Government Entities that are committed to conservation of their traditional terrestrial and marine ecosystems. Entities that are engaged in conservation projects and sustainable development.

Enable the skills backbone for large and small MHCR Projects, we are building a local workforce that is industry-ready.



# FLEXIBLE “SITES RELATED” ECO-MODULES

## Water Quality and Marine Ecosystems

Water quality is important to ensure the longevity of marine ecosystem health.

**Location:** Waters around islands, lagoons and marinas

**Training:** Understanding, assessing and monitoring water parameters to ensure highest water quality standards are maintained.

## Coral Reef Ecosystems

Corals are key to ecosystem services.

**Location:** All islands and lagoons with coral

**Training:** Understanding coral ecosystem health and proactive restoration techniques to support regional conservation objectives.



## Mangroves and Seagrass

Mangroves and seagrasses provide essential habitat, foraging grounds and shelter for many marine species.

**Location:** Coast-wide where mangroves and seagrass occur

**Training:** Understanding mangroves and seagrass meadow ecosystems to contribute to restoration work for sustainable use and management of the ecosystems.

## Sea Turtles

Sea turtles are key-stone species on coral reefs. Species of critically endangered species nest on beaches and islands.

**Location:** Where turtles swim, forage and nest

**Training:** Understanding marine turtles, habitat and nesting behaviours to provide meaningful contribution to conservation management strategy.





# Water Quality and Marine Ecosystems

Sea Country supports an abundance of marine species and diverse ecosystems. Maintenance of water quality is essential to maintain healthy habitats that support rare and common marine species, water movement and sediment flows resulting in high ecological value of the coastal and marine environment. Students will gain skills to contribute to proactive management of marine ecosystems.

**01**

Identify marine debris and impacts on marine ecosystems

**02**

Identify local sources of pollution and investigate methods to reduce impact

**03**

Understand beach clean-up methods and marine debris management

**04**

Participate in community awareness and education events

**05**

Assist in collection of water samples and understand basic water quality monitoring

**06**

Assist in taking basic measurements using handheld monitoring equipment



# Mangroves and Seagrass Eco-module

Mangroves and seagrass ecosystems provide a suite of ecological functions and services in coastal environments of the Sea Country, including shoreline protection, water quality improvement, carbon storage and wildlife habitat.

Students will be supported to collect and nurture seeds/saplings and contribute to mangrove conservation work leading to sustainable use and management of seagrasses and mangroves.

**01**

Understand basic ecology of local mangrove species

**02**

Map and monitor local mangroves including key fauna found in the ecosystem

**03**

Take part in collection and preparation of propagules for transplanting

**04**

Assist in monitoring transplanted propagules and nursery area

**05**

Assist in collection of samples to assess water quality in mangrove ecosystem

**06**

Identify seagrass present in adjacent lagoons and mangrove area



# Corals

## Eco-module

Coral reefs are one of the most biodiverse and productive ecosystems on the planet. Worldwide reefs support a quarter of all marine species and provide important services to coastal communities supporting the livelihoods of coastal populations.

Students will be supported to contribute to the World's largest floating coral nursery and coral garden initiative.

**01**

Understand coral reef ecosystems and nurseries

**02**

Assist in workplace tool preparation, familiarization and maintenance

**03**

Take part in identifying appropriate corals for fragmentation and transplant activities

**04**

Assist in creating nubbins from coral fragments and prepare nubbins for transplant

**05**

Perform basic recording of water quality and coral health to inform nursery area management

**06**

Support in maintenance and management of coral nursery area

**07**

Participate in community awareness events on the importance of coral



# Sea Turtles

## Eco-module

Sea turtles play an important role in ocean ecosystems by maintaining healthy seagrass beds and coral reefs which provide key habitat for other marine life, balancing marine food webs and facilitating nutrient cycling from land to sea.

Students will gain skills to contribute to regional conservation management of critically endangered Hawksbill sea turtles and other species in the Sea Country.

**01**

Identify the 2 key  
Local turtle species,  
map nesting and  
foraging  
grounds

**02**

Clear area of debris  
and monitor for  
arrival of nesting  
female turtles

**03**

Participate in collection  
and relocation of eggs  
to a safe hatchery  
area

**04**

Assist in managing  
the hatchery and  
record hatchling  
release information

**05**

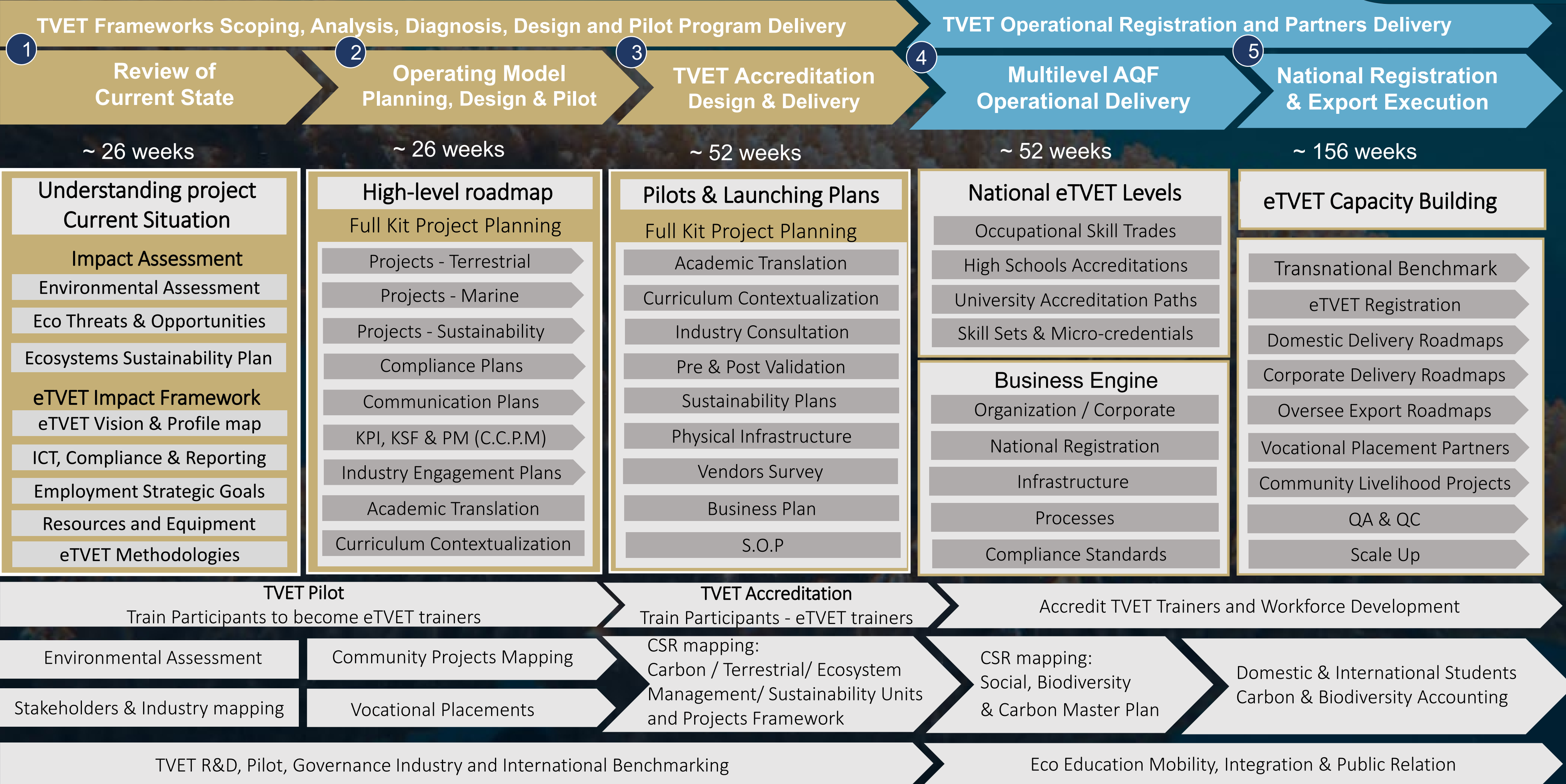
Participate in the  
development of a  
nesting season  
management plan

**06**

Participate in sea  
turtle community  
education awareness  
initiatives



# IP ASSIGNMENT AND CAPACITY BUILDING TESTED METHODOLOGIES





## Government Funded Programs

### **Contact Us**

#### **Shelly Bengiat**

Founder and Chairwoman  
Envirotech International Group

+61 402 219 927

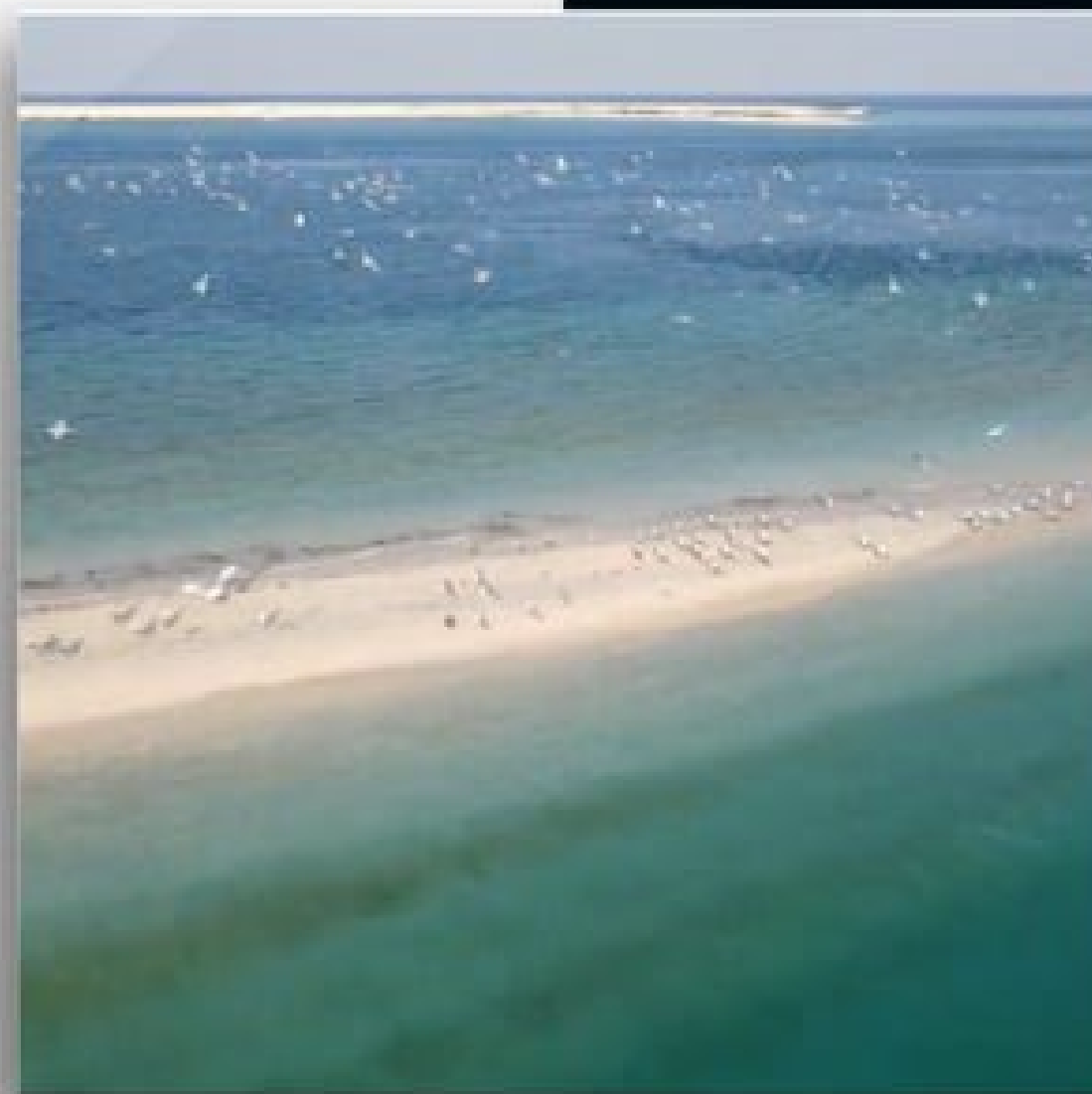
[director@envirotech.edu.au](mailto:director@envirotech.edu.au)

#### **Melinda De Luna**

Co-CEO  
Offshore Academic Program Coordinator  
Envirotech International Group

+632 917 708 3261

[melinda.deluna@envirotech.edu.au](mailto:melinda.deluna@envirotech.edu.au)



**A sustainable Blue Economy future is in our collective hands.**