



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. ٠
- Student mobility expert with developed international networks.
- Passionate innovator for Sustainable Blue Economy and climate change solutions. ullet



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



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



Professional Accredited Courses



ECO-Workforce Development

TVET aligned with leading projects methodologies to qualify environmental projects workforce



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** **Micro Credentials** Eco-Edu Tourism

Blue Economy Industry, R&D, & **CSR** Partnerships



International Connectivity



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.

• Academic glass celling

SKILLS &

EMPLOYABILITY

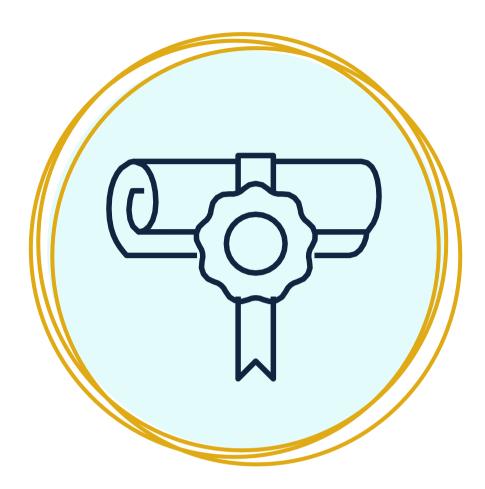
GAP

- 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

02 Environmental Technician

LEVEL

Assistant

18 - 30 weeks

Take measurements and participate in performing entrylevel environmental conservation and restoration activities

LEVEL 03

Environmental Technician

52 weeks

Perform conservation and restoration tasks; gather and provide information

Carry out assigned tasks from the team supervisor

BASIC GUIDED TASKS

LEVEL

01

Environmental

Technician

Trainee

4 - 16 weeks

Assist in performing basic tasks in environmental

conservation and restoration

GUIDED TASKS WITHIN SUPERVISED TEAM TECHNICAL WORK



LEVEL 04 Environmental

Officer

30 - 52 weeks

Analyze gathered data to inform site management and conservation activities

Supervise a small team and carryout environmental monitoring and maintenance tasks 52 weeks

EVEL

05

Environmental

Supervisor

Plan, design and execute environmental conservation and restoration projects

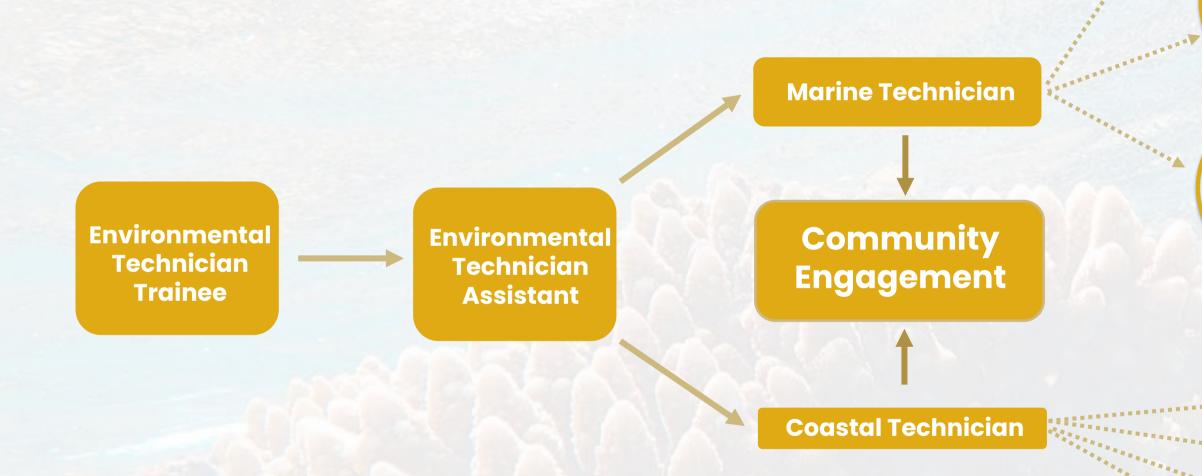
Manage a small team of technicians to achieve objectives aligned with conservation and environmental management activities

Collaborate and communicate with stakeholders on conservation project initiatives

TEAM SUPERVISION

PROJECT SUPERVISION

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.



Coral Technician

Mangrove Technician

.....

Turtle Technician

......

Reef CPR Team Leader

Snorkel Eco-guide Team Leader

Coral Nursery Team Leader

Mangrove Conservator (liaises with terrestrial nursery)

Turtle Nesting Beach Team Leader

Hatchling Nursery Team Leader

Eco-guide for Turtles

Sustainable Resource Management Team Leader

Mangrove and Plant Nursery Team Leader

> Trail and Garden Team Leader

Flora Eco Guide Team Leader Marine Technician Supervisor

Coastal Technician Supervisor

ENVIRONMENTAL COMPLIANCE CAREERS

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Environmental Compliance & Sustainability Trainee Environmental Compliance & Sustainability Assistant Fisheries Compliance Assessor

Community Environmental Engagement Officer

-

.....

Environmental and Sustainability Assessor Community Liaison

Plant Nursery Technician

Marine Compliance Technician

> Fisheries Technician

Field Safety Technician

Species Population Management Technician



GROWTH & PER LOCATION GO TO MARKET

Develop relationships with Government and Giga Project Authorities

Establish infrastructure (Business, IP, Tech.) Sign 1st batch of Partnerships / license Franchisees / Train the trainers

3-6 months

3-6 months



Scale to other territories

Run for 1 year **Education Summits** Education **Conferences** and Exhibition



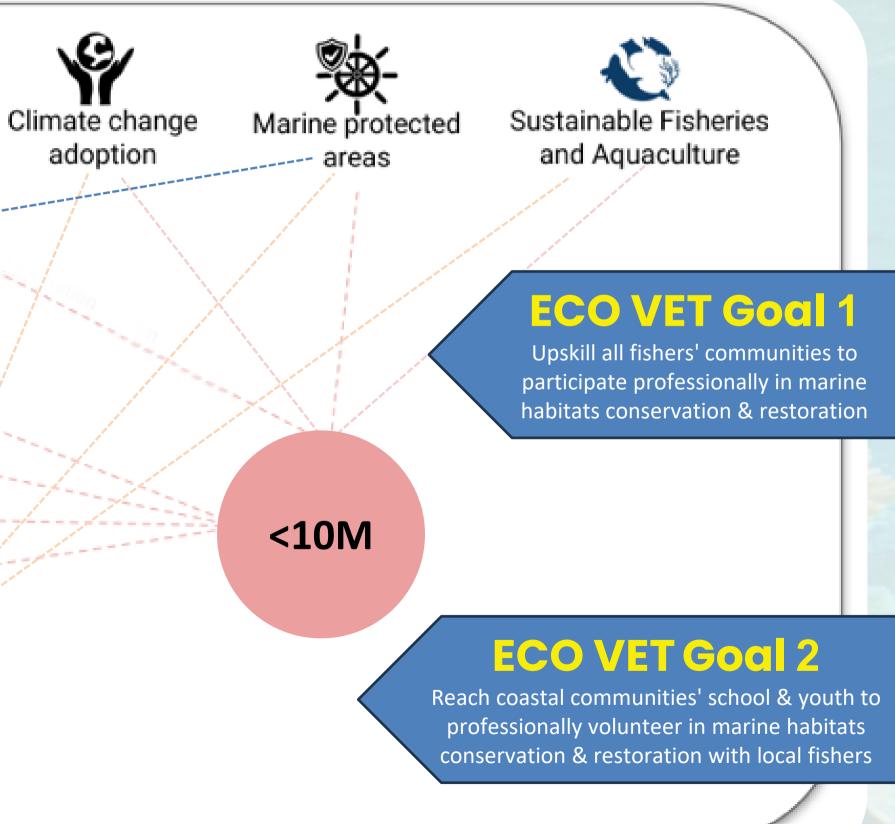
12+ months

VET BY WORLD BANK BLUE ECONOMY PRINCIPLES

CORALZ Offerings ✓ Copyrights: TVET Marine Habitats **Conservation and Restoration** Blue jobs creation Governments Professional Certifications International Experienced Teams >1M Municipalities Training Coastal Communities (Communities) ✓ Sustainable Blue Economy Enablers Corporates ✓ Biodiversity & Carbon Credits Marine Sustainable Jobs Creation Local businesses & Indigenous Livelihood Projects NGOs Aquaculture and Marine Ranching Banks and investors 1M -**10M** Education providers <10M 1M -

>1M

10M



ENVIRONMENTAL TVET

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

- <u>11246NAT Certificate II in Marine Habitat Conservation and Restoration</u>
- <u>11247NAT Certificate III in Marine Habitat Conservation and Restoration</u>
- 11078 NAT Certificate IV in Marine Habitat Conservation and Restoration
- <u>11087NAT Diploma in Marine Habitat Conservation and Restoration</u>

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



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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**



SAL DIAL PROFILM CONSERVATION AND EDITORSTEN MANAGEMENT MARINE HABITAT CONSERVATION AND RESTORATION

Video link: Marine Eco-Accreditation

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

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 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.

Identify marine debris and impacts on marine ecosystems

> Participate in community awareness and education events

04

Identify local sources of pollution and investigate methods to reduce impact

02

Understand beach clean-up methods and marine debris management

03

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. Understand basic ecology of local mangrove species

01

04

Assist in monitoring transplanted propagules and nursery area

02

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

03

Take part in collection and preparation of propagules for transplanting

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

05

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

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

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

04

Assist in managing the hatchery and record hatchling release information

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

05

Participate in the development of a nesting season management plan

06

Participate in sea turtle community education awareness initiatives

IP ASSIGMENT AND CAPACITY BUILDING TESTED METHODOLOGIES

TVET Frameworks Scoping, Analysis, Diagnosis, Design and Pilot Program Delivery		
Review of Current State	Operating Model Planning, Design & Pilot	TVET Accreditation Design & Delivery
~ 26 weeks	~ 26 weeks	~ 52 weeks
Understanding project	High-level roadmap	Pilots & Launching Plans
Current Situation	Full Kit Project Planning	Full Kit Project Planning
Impact Assessment	Projects - Terrestrial	Academic Translation
Environmental Assessment	Projects - Marine	Curriculum Contextualization
Eco Threats & Opportunities	Projects - Sustainability	Industry Consultation
Ecosystems Sustainability Plan	Compliance Plans	Pre & Post Validation
eTVET Impact Framework	Communication Plans	Sustainability Plans
eTVET Vision & Profile map	KPI, KSF & PM (C.C.P.M)	Physical Infrastructure
ICT, Compliance & Reporting	Industry Engagement Plans	, Vendors Survey
Employment Strategic Goals	Academic Translation	Business Plan
Resources and Equipment		
eTVET Methodologies	Curriculum Contextualization	S.O.P
TVET Pilot Train Participants to become eTVET trainers		TVET Accreditation Train Participants - eTVET train
Environmental Assessment	Community Projects Mapping	CSR mapping: Carbon / Terrestrial/ Ecosyste
Stakeholders & Industry mapping	Vocational Placements	Management/ Sustainability L and Projects Framework
TVET R&D, Pilot, Governance Industry and International Benchmarking		

IVET R&D, Pilot, Governance Industry and International Benchmarking



TVET Operational Registration and Partners Delivery

5

Multilevel AQF Operational Delivery

~ 52 weeks

National eTVET Levels

Occupational Skill Trades

High Schools Accreditations

University Accreditation Paths

Skill Sets & Micro-credentials

Business Engine

Organization / Corporate

National Registration

Infrastructure

Processes

Compliance Standards

National Registration & Export Execution

~ 156 weeks

eTVET Capacity Building

Transnational Benchmark

eTVET Registration

Domestic Delivery Roadmaps

Corporate Delivery Roadmaps

Oversee Export Roadmaps

Vocational Placement Partners

Community Livelihood Projects

QA & QC

Scale Up

iners

em Units CSR mapping: Social, Biodiversity & Carbon Master Plan



Accredit TVET Trainers and Workforce Development

Domestic & International Students Carbon & Biodiversity Accounting

Eco Education Mobility, Integration & Public Relation

Government Funded Programs

Contact Us

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A sustainable Blue Economy future is in our collective hands.

www.envirotech.edu.au |www.envirotech-international.com |www.training.gov.au/organisation/details/31871



