





Getting on **TRACK** for Sustainability in Education

Unitec Environmental
Sustainability Strategy

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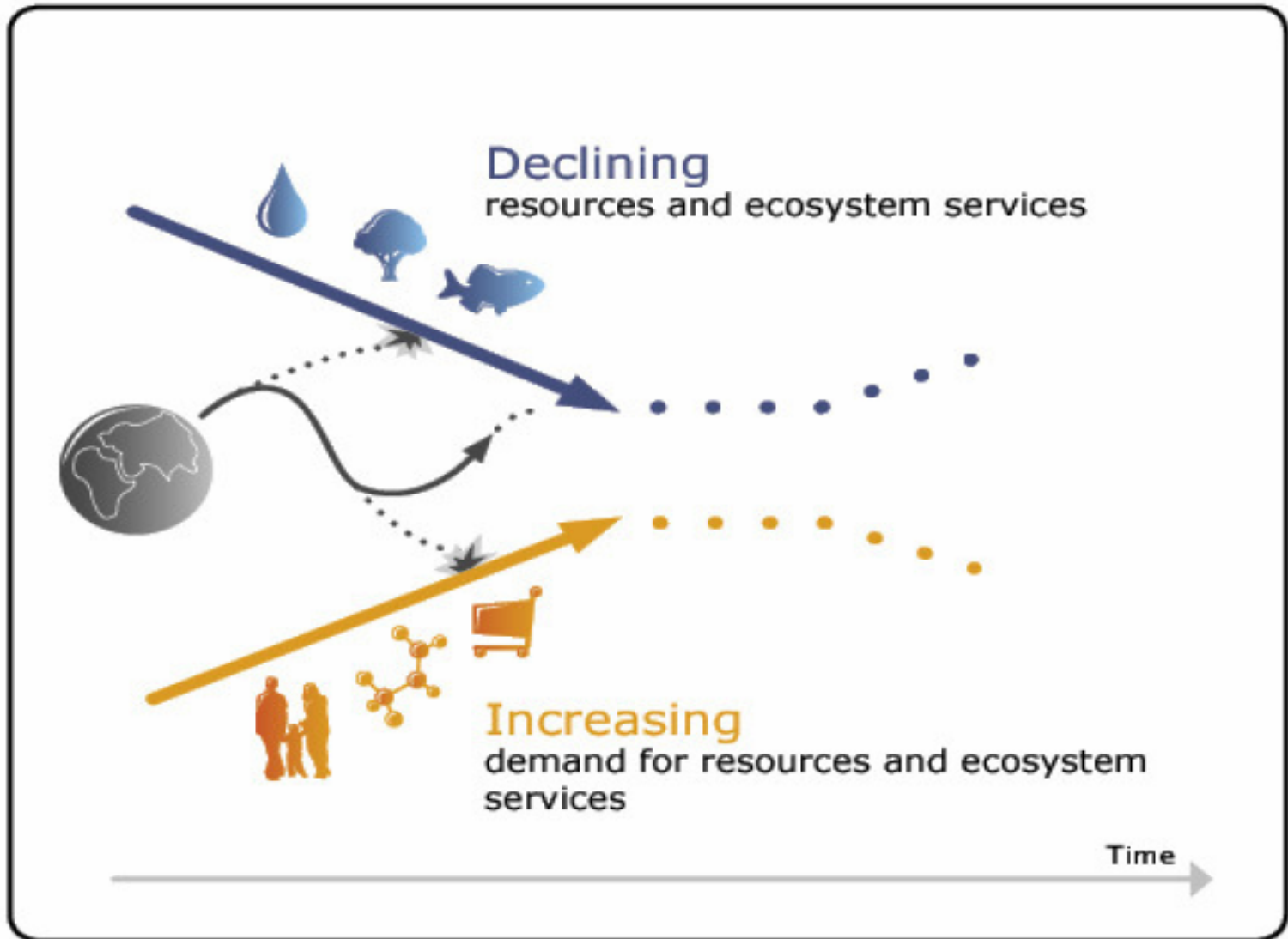
Overview

- Why Sustainability in Education?
- Sustainability at Unitec
 - History
 - Environmental Sustainability Strategy (ESS) Development
- Unitec's Draft ESS
- Case Study: Education for Sustainability in Primary Schools
- Change Processes





Sustainability





Sustainability in Education

- Build understanding and awareness
- Imparting knowledge, skills and strategies
- Developing values and ethics
- Benefits of complexity of sustainability issues as case studies.
- Normalise sustainable ways of behaviour. “Walking the talk”

Unitec's Sustainability Opportunity



- Waste Audit (1992)
- BE (ENV) (1998)
- Educating for Sustainability Forum (2004)
- Sustainability Audit (2007)
- Unitec Sustainability Community of Practice (2009)
- ESS Hui and Terms of Reference (2009)

Unitec ESS Framework

- Holistic strategy that cuts across the organisation.
- Embeds sustainability at the core of Unitec's four major areas of operation -
 - Teaching,**
 - Research,**
 - Advocacy,**
 - Campus operation**
 - Kaitiakitanga**



Teaching: "Greening Unitec's curriculum"

- “every Unitec student to gain an understanding of sustainability from an individual and cultural perspective”.
- Teach the tools and strategies to apply sustainability in real-world situations.
- Unitec will become a leader in offering integrated, specialised sustainability programmes that cut across disciplines.
- ES related teaching will be based on real information from authentic from practical on campus examples.



Research: “Plugging in to eco-innovation”



- Implement Unitec’s Research Strategy **vision** that “focuses on practically oriented and applied research that has an impact on and adds value to our stakeholders and our community.”
- Environmental Sustainability research ‘cluster’ targeting trans disciplinary opportunities
- Target solutions where industry and society will receive the greatest benefit.

Unitec research: Improving house energy efficiency

Robert Tait, Unitec lecturer in the Department of Building Technology is leading a group of Unitec researchers in a project beginning with modelling potential improvements to sustainability and internal environmental quality of a standard Unitec house.



Advocacy -

“Unitec as a microcosm of a super-eco-city”



- Unitec to join the organisations leading change in and become an environmental sustainability contributor.
- Drawing on the traditions of the tangata whenua of Wairaka
- Focus on human values, behaviour and communication, and how these affect our engagement with whenua, infrastructure and communities.



Campus operation – “Manage each campus as an ecosystem”



- The infrastructure and systems of Unitec's campuses operate as a day-to-day **metabolism** that supports the academic pursuits of the business.
- Become an exemplar of a sustainable business, operating at peak resource efficiency
- development of eco-campuses that operate as living classrooms and bring the metabolism of Unitec within reasonable economic and ecological limits.





Kaitiakitanga – Nurturing the Spirit of Guardianship

- The spirit and reason that binds all the strategy elements together and provides a central support and growing strength.
- Engage with mana whenua and mātauranga Māori
- Recognition of the importance of individual ownership and cultural and ethical framework that encourages for change

Information Gathering

- Capture institutional knowledge
 - Desktop study
 - Interviews
- Establish the baseline
 - History & review of existing practices
 - Site plan/process flows
 - Compliance with legislation
- Identify key opportunities
- Identify gaps and obstacles to change

Program Delivery

- Databases and Project Management
 - Comprehensive - no loose ends
 - Adaptive - reprioritise for change
 - Responsible – Dedicated roles
- Embedded processes for integration
 - Collaboration
 - Interdepartment cooperation
 - Business case processes
- Targets, budgets, timelines and indicators.



Prioritisation of Objectives

- A database of existing objectives, issues and opportunities has been developed that provide a start for coordination and management of projects
- Working groups to rate and prioritise objectives using the following method in order to encompass four wellbeing improvements in a benefit/cost ratio:

$$\frac{E + I}{\$ + T}$$

- E = Effect, relating to the level of consequence of the objective (i.e. how will it avoid, remedy or mitigate Unitec's environmental footprint).
- I = Impact, relates to wider influence in creating a culture for sustainability, educating members of the Unitec community and promoting or advancing environmental sustainability in a social or cultural context.
- \$ – resources required to implement the objective (time & money)
- T – Likely timeframe to implement the objective (essentially, staff/hours)

Sustainability Framework

- Container to catch all aspects of the ‘picture’
- Embody Unitec strategy and elements of sustainability
- Embody processes of effective and sustainable change
- Allow for prioritisation, feasibility analysis and delivery of initiatives
- Allow measurement and communication of success
- Teaching resource

Sustainable Change

- Committed leadership
- Focus on Benefits of all aspects of Campus influence – “TRACK”
- Cultural re-engineering - writing a new story.
- Interdepartmental collaboration and transdisciplinary focus
- Diverse engagement with organised responsibility and accountability
- Community engagement – both internal and external stakeholders

