



# Education for sustainability and the green economy

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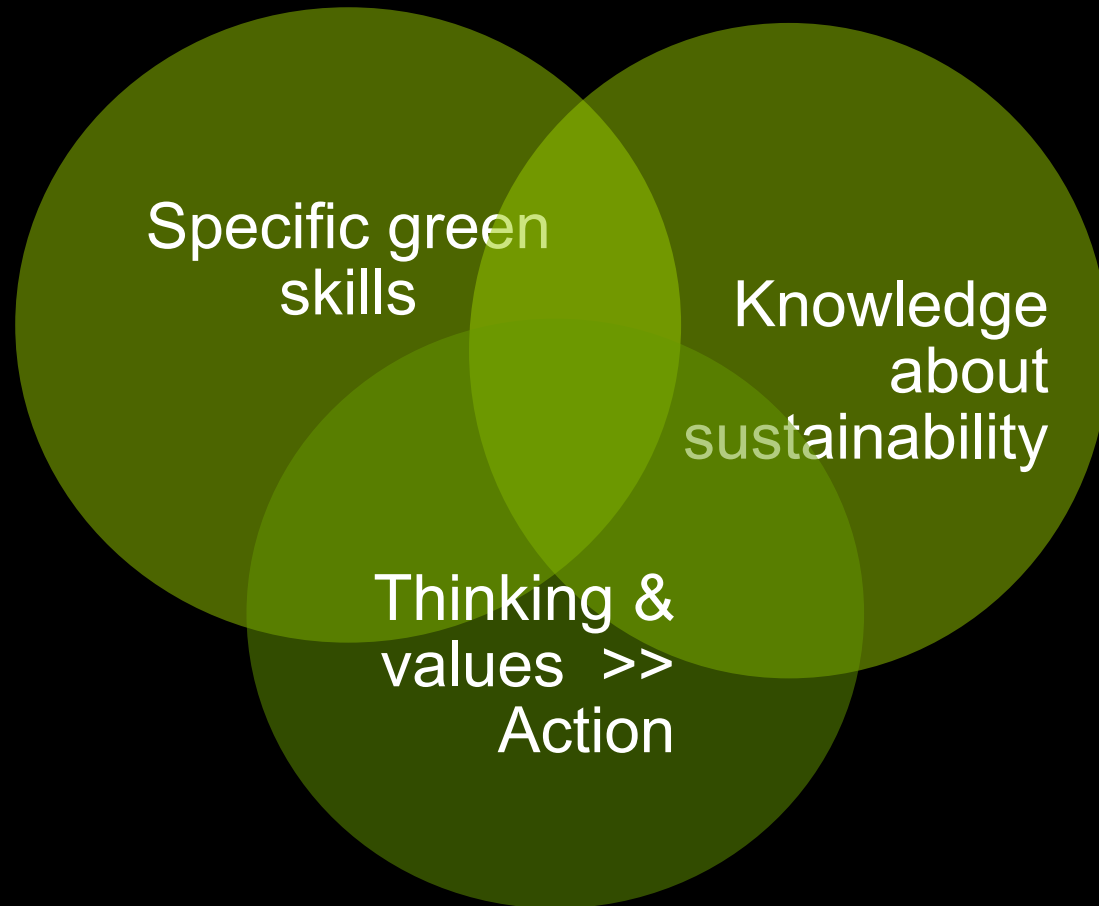


# Key messages

- Businesses in a low carbon (green) economy require:
  - > specific “green skills” and
  - > staff with sustainable behaviours.
- Education *about* and Education *for* Sustainability addresses this need.



# Educational challenge for the green economy



# 1. Specific green skills

- Green design, building and construction
- Renewable energy
- Water savings and recycling
- Green services (auditing, accounting, banking)
- Transport

From The Green Gold Rush (ACF, ACTU Oct 2008)



## 2. Knowledge and skills about sustainability

- Sustainability science
- Sustainability in business
- Lean manufacturing
- Sustainability competencies:

eg “Implement & monitor environmentally sustainable work practices”

- Manage resource use
- provide tools to achieve positive environmental and business outcomes



# 3. Thinking & values that lead to Action



## Education for sustainability delivers

the skills, attitudes and values needed for:

- Envisaging a better future
- Systems thinking
- Problem solving
- Critical thinking and reflection

# Education for sustainability requires

teaching practices that shift from:

- Transmissive → transformative, engaging pedagogies
- A focus on content → nature of the learning experience
- Didactic, instructional → “learning by doing”

Challenging!



# Education for Sustainability is values based

- Develops understanding of the inter-relatedness of systems (work, community, natural).
- Promotes self development in context of sustainability issues (Stirling 2004)
- Builds attitudes and values towards sustainability (and sustainable behaviours)
- Extends the sense of obligation to sustainable outcomes (Orr 2010)



# The EfS approach teaches students:



about sustainability

& about themselves

After SB Hill





fic  
ki

# Graduates for a greener economy

Knowledge &  
skills about  
s

Thinking &  
values that  
lead to Action



# Some current education programs that reflect this approach

## **New qualification:**

Vocational Graduate Certificate in  
Education and Training for Sustainability

## **The TDC/NCS program:**

Integrating sustainability into  
teaching practice



# Thank you

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# Education for Sustainability

Denise Stevens

CEO

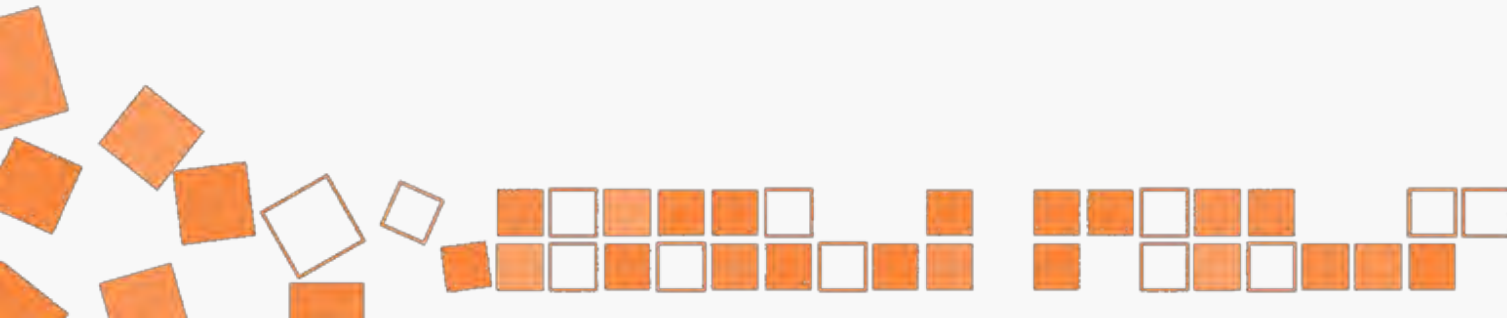
[dstevens@tafecentre.vic.edu.au](mailto:dstevens@tafecentre.vic.edu.au)



# Green Skills PD Program

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- A one day, interactive program designed & developed by TDC and NCS
- Funded by Skills Victoria in response to issues raised in National Green Skills Agenda
- Practical ways to support VET practitioners who play an important role in EfS

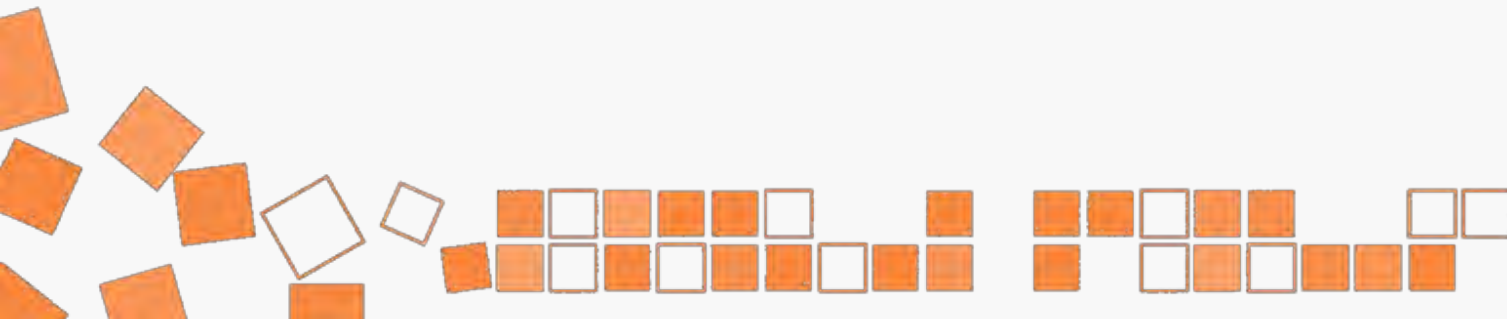


# Green Skills PD Program

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VET practitioners need:

- to engage with industry to identify and understand new requirements
- to keep up to date with the latest and emerging environmental practices, technologies, systems, techniques and theory

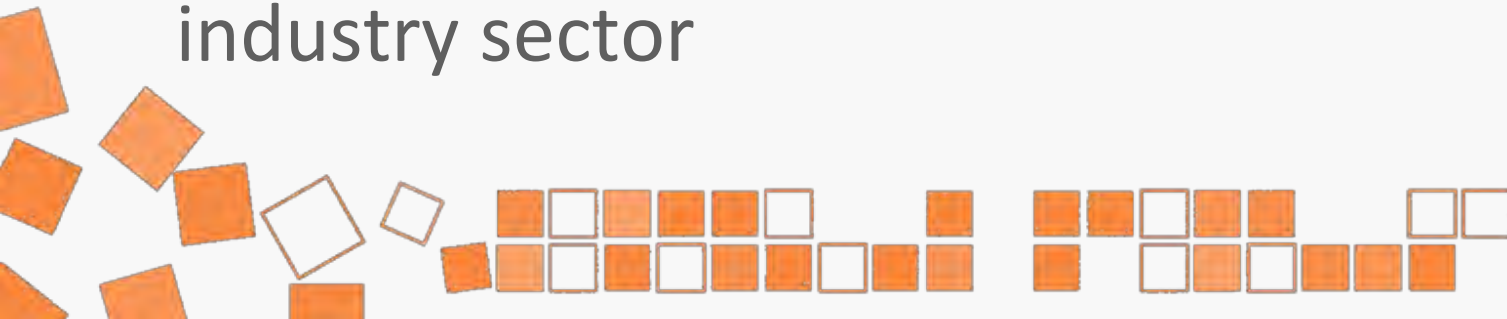


# Green Skills PD Program

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***3 key areas*** of capability required by VET Practitioners

- Introduction to Sustainability – Issues, Impacts and Principles
- Vocational Education & Training Practice
- Maintaining professional competency in own industry sector



# Green Skills PD Program

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## What was achieved

- 19 workshops conducted across the state
- 510 participants registered
- Learner Guide developed
- Portal established on the TDC website to access resources and to share knowledge & experiences

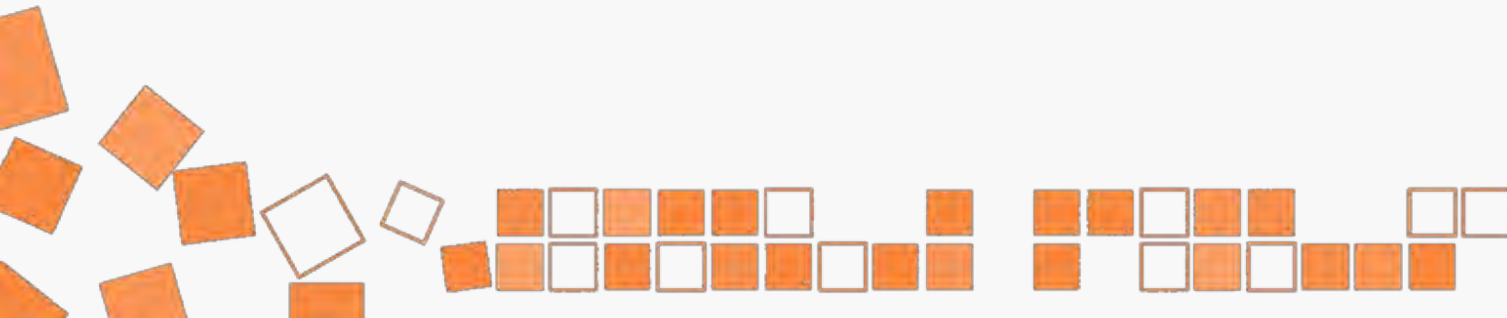


# Green Skills PD Program

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## Great feedback!

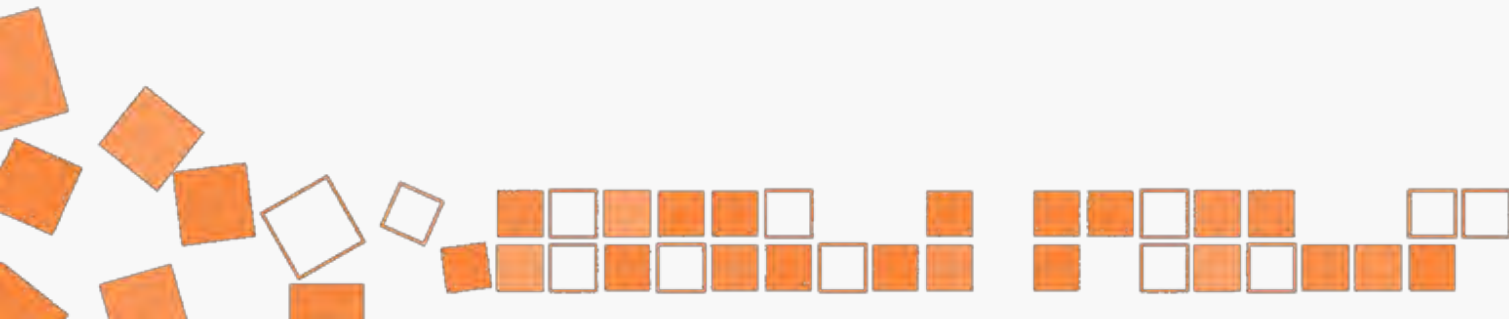
- “I found that I/we are actually teaching more sustainability than I thought”
- “Fantastic program and assisted to identify what I am currently doing and what is possible for the future”
- “I have not been as engaged for a long time. Thank you”



# Green Skills PD Program

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- “This workshop should be compulsory!”
- “We need Sustainability 2 workshop – follow up on this workshop”
- “All areas of the day course were thought-provoking and very relevant”

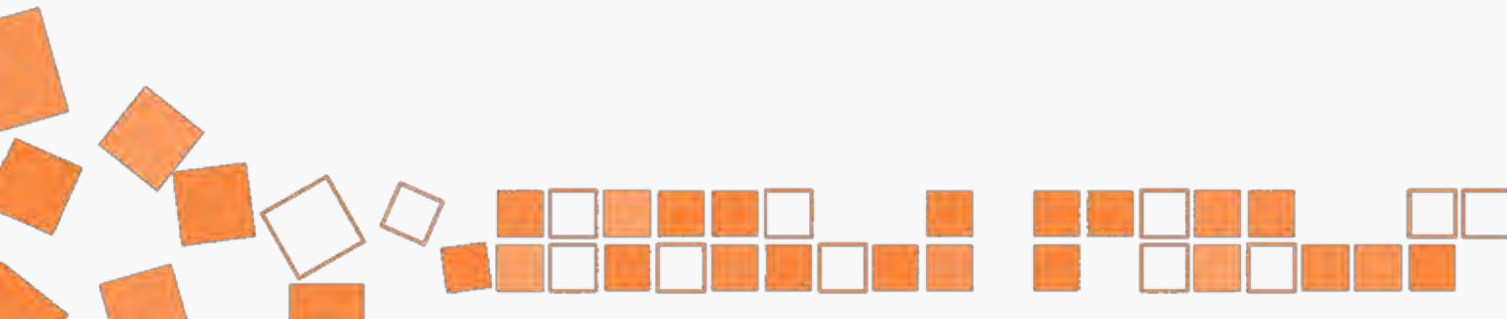


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## Outcomes for participants:

- Opportunity for dialogue re their values/filters
- Problem solving exercises
- Modelling of great teaching practice!
- Examples of resources they could use
- Working with their industry unit of competency

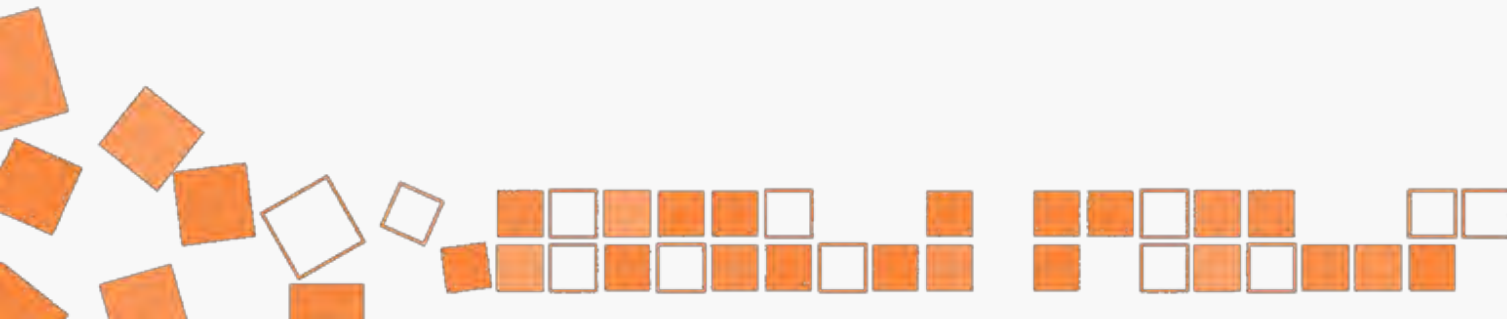


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## Outcomes for participants:

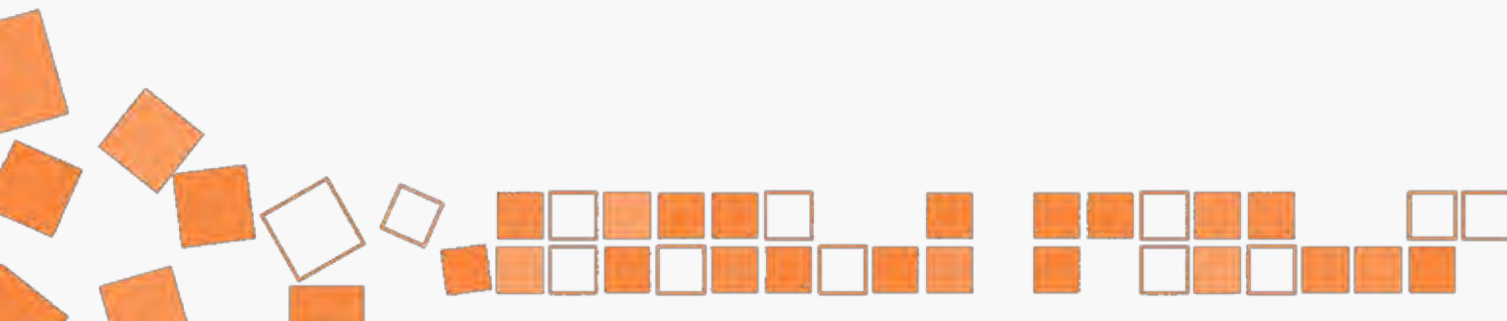
- An increased understanding of the definitions and key concepts of sustainability
- Strategies to apply critical thinking of sustainability practices in their workplace



# Green Skills PD Program

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- The ability to include sustainability principles in the design and development of learning, assessment and reporting tools
- Information of current VET principles, policies and frameworks for EfS including implementing Training Package competencies



# Green Skills PD Program

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## Hope for the future?

*“I will also try to start implementing change at our campus”*

## Next steps:

Maintain the momentum

Proposals into Skills Victoria for Stage 2

Programs linked to industry sectors

