



GREEN SKILLS STRATEGY FORUM

Priorities for 'green skilling'
of the NSW electricity, gas and water workforce

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OVERVIEW



- Purpose and introductions
- What are 'green skills'
- The environmental challenge
- Environmental opportunities
- NSW Green Skills Strategy
- FORUM: Your expert input
- Summary and close



PURPOSE of this forum

- Inform industry about NSW Green Skills Strategy
- Inform the Department of Education and Training about industry training needs
- Establish green skills training priorities for electricity, gas and water workforce



INTRODUCTIONS

- Name and organisation
- How the 'green debate' affects my daily work



WHAT ARE GREEN SKILLS?

Workforce skills used, developed or needed to support a business response to environmental challenges and opportunities





EXAMPLES

Environmental Challenge/ Opportunity	Green Skill Response
High energy use of electric hot water systems	Recommend, install/connect and maintain alternatives (solar, gas, other?)
Water shortages	Detect and repair leaks on water infrastructure
Emission trading schemes	Carbon accounting (measure emissions and reductions)

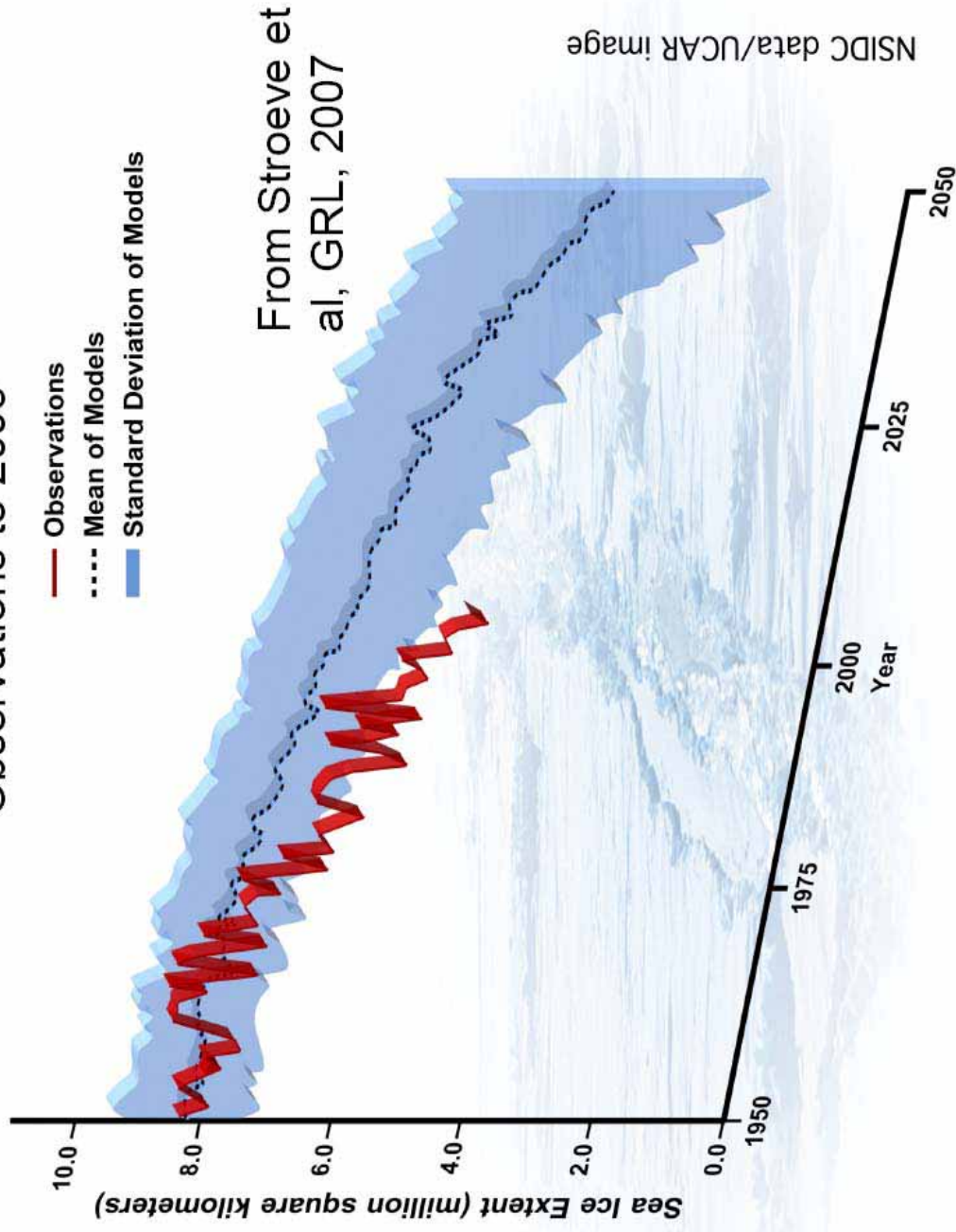


THE ENVIRONMENTAL CHALLENGE

**Is climate change real...
and how does it affect my
workplace?**

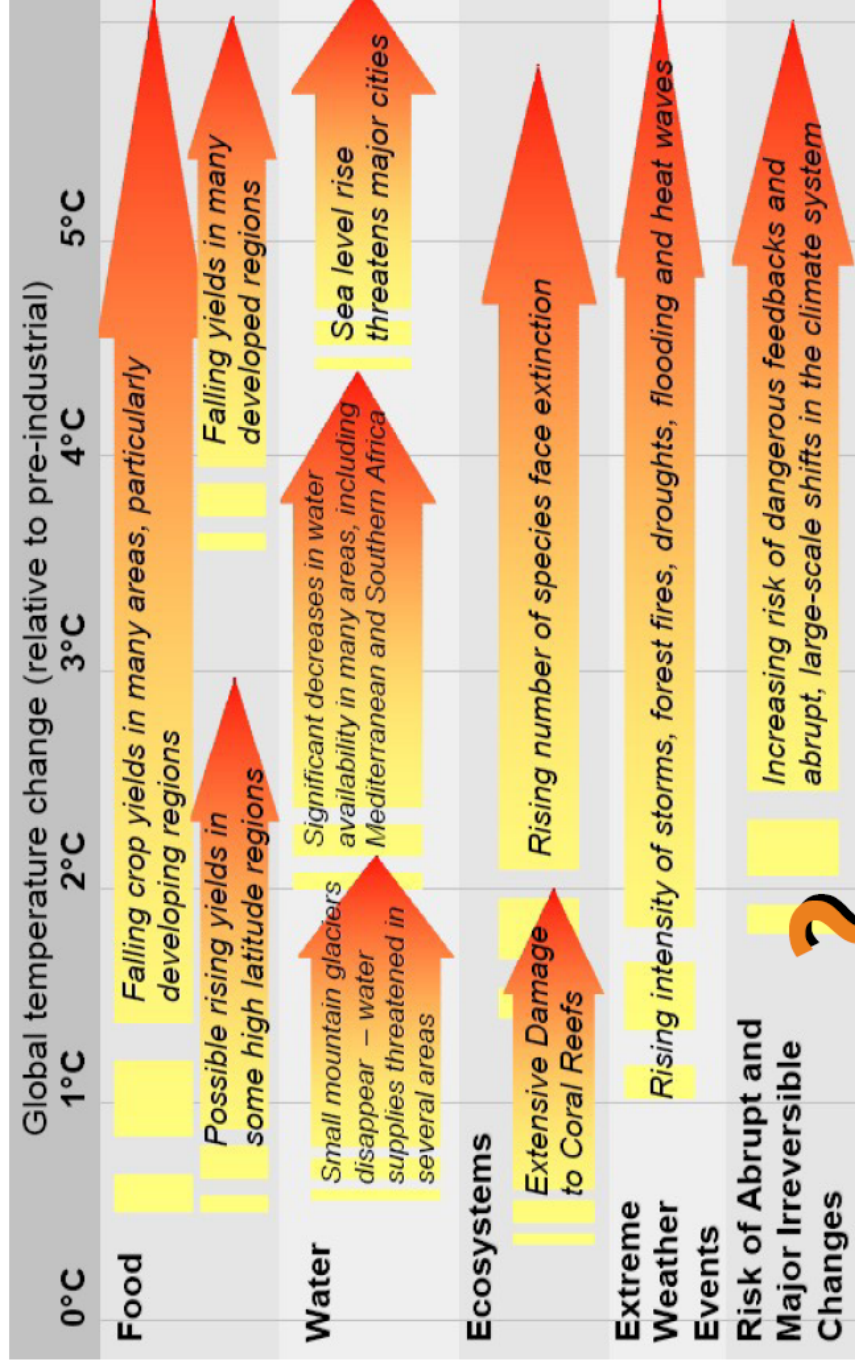
Arctic September Sea Ice Extent: Observations and Model Runs

Observations to 2005





Re-calibrating Risk

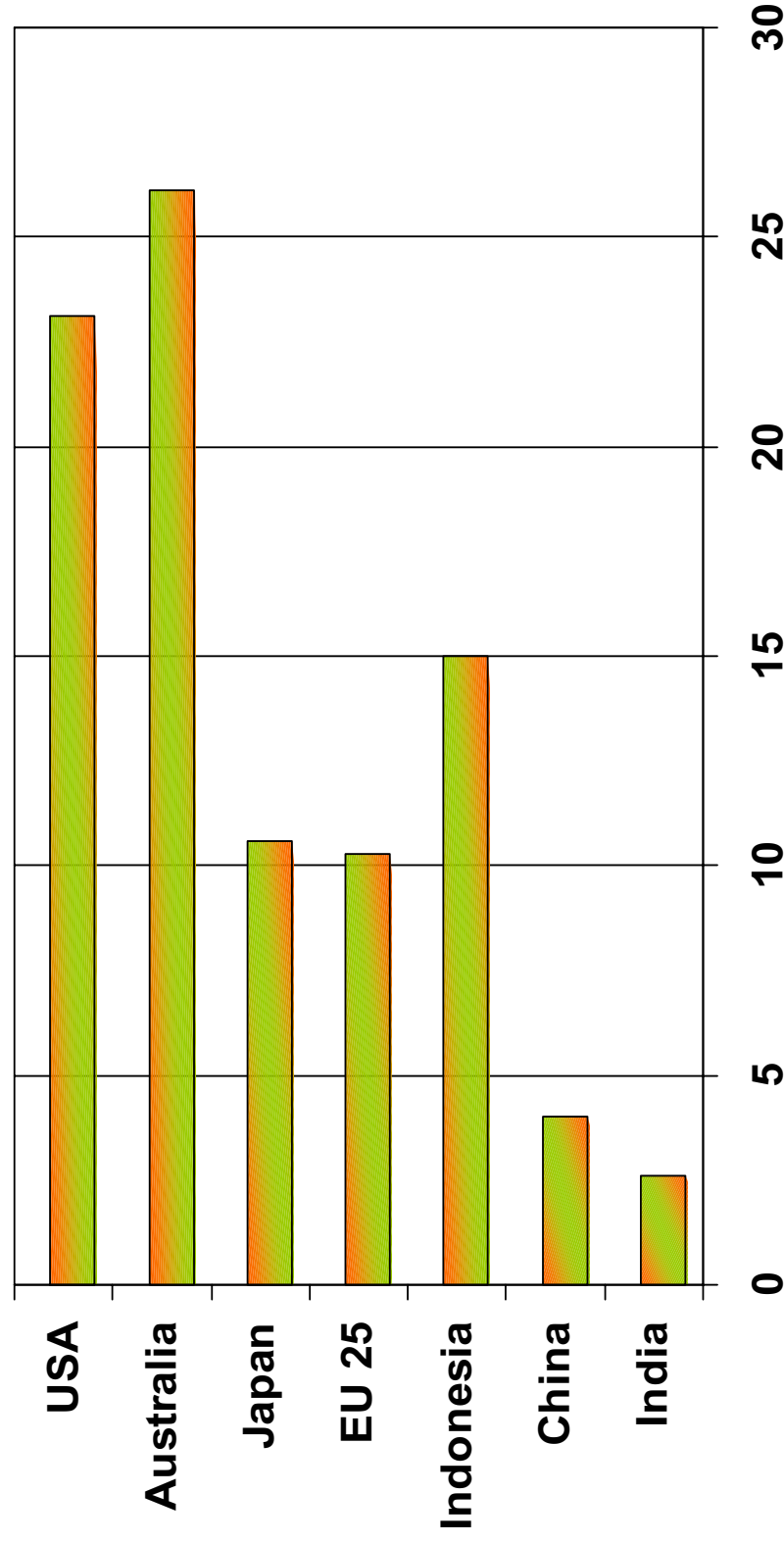


Source: 5 term Review 2006

Ian Dunlop 2008

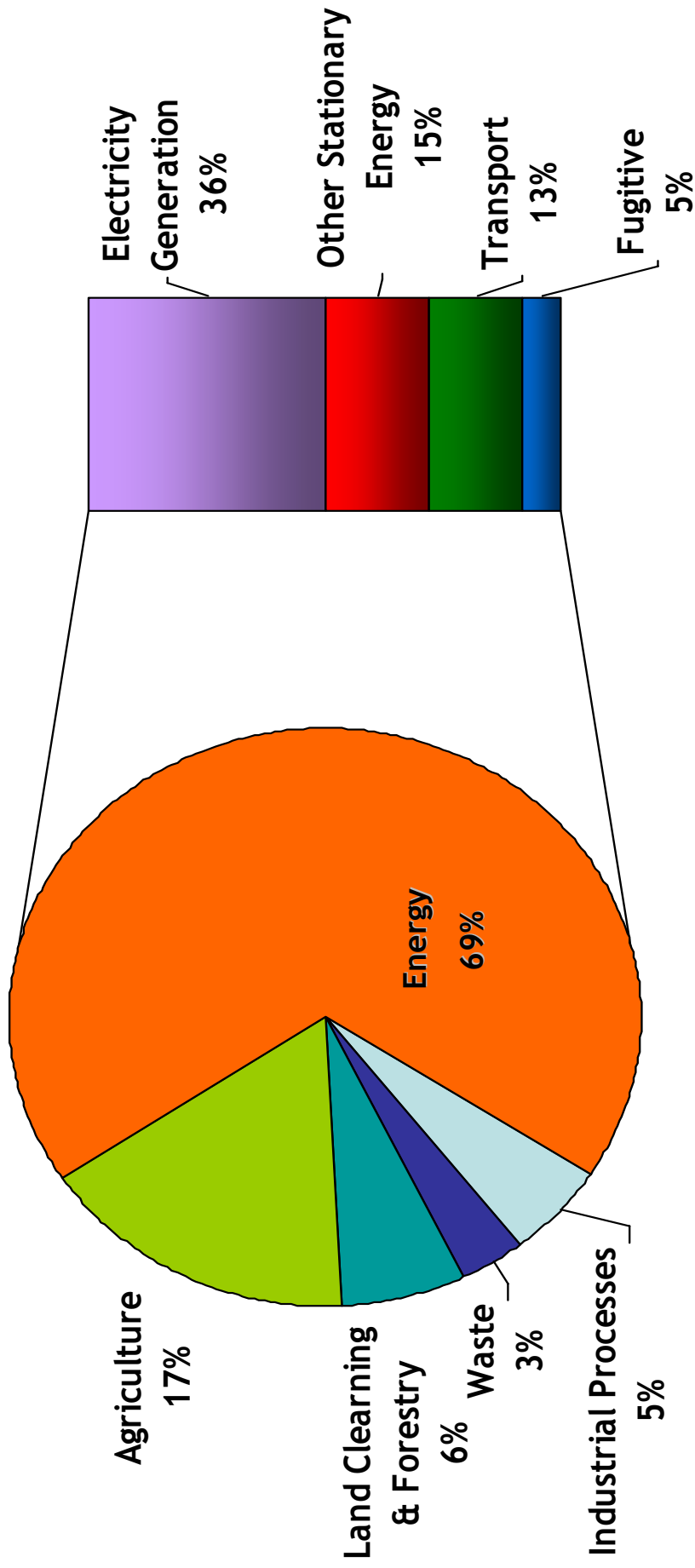


Australia's contribution to climate change: Greenhouse gas emissions per person



Covers all GHGs, including land use change (tonnes CO2-e/person); Source: World Resources Institute

Industry contribution



Australian Greenhouse Emissions by Source Sector, 2004; Data Source: Australian Greenhouse Office

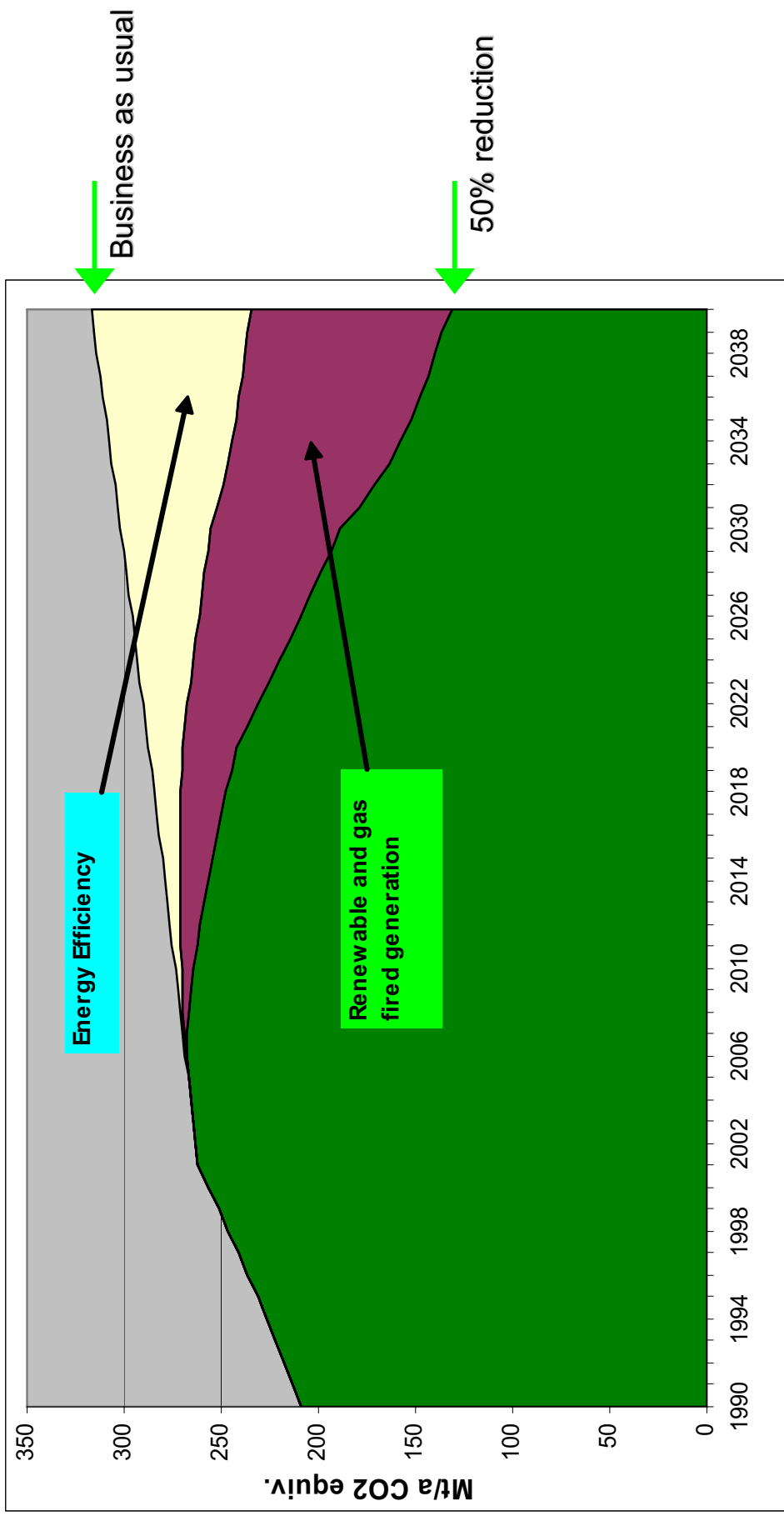


ENVIRONMENTAL OPPORTUNITIES

“Action on climate change will also create significant business opportunities, as new markets are created in low-carbon energy technologies and other low-carbon goods and services.

These markets could grow to be worth hundreds of billions of dollars each year, and employment in these sectors will expand accordingly.”

SCENARIO for a clean energy future



50% Reduction of CO2 emissions. Time path is notional. Source: Saddler, Diesendorf & Dennis, 2004.

TRIPLE BOTTOM LINE A 'NEW' WAY TO DO BUSINESS?



Sustainable business measures:

- Economic
- Social and
- Environmental longevity

Traditional business measures:

- Financial outcomes
- Rewards for the 'business family' (owners and workforce)
- Ability to adapt to market changes



The NSW Green Skills Strategy

How the NSW Department of Education and Training plans to support the transition to a low carbon economy

Five Elements

- Prioritise funding for green training
- Increase capacity of training providers
- Green industry partnerships
- Green workforce business guide
- Support NSW Government green programs



Key green jobs in electricity and gas

- Engineer
- HVAC installer
- Electrician (and electrical trade assistant)
- Plumber
- Renewable energy installer (and assistant)
- Fitter/mechanic
- Welder/sheet metal worker
- Power station operator
- Project manager



Key green jobs in the water industry

- Plumber
- Irrigation manager and operator
- Environmental water manager
- Save Water officer, controller and assistant
- Trade waste controller
- Project manager
- Site supervisor (hydro, dams)
- Water auditor
- Hydrographer
- Remote sensing technician



Green Skills Forum (your turn)

- Questions and comments about the strategy
- Which jobs and skills should we focus on?
- How can we best support the required skills development?



Where would you start?

- Engineer
- HVAC installer
- Electrician (and electrical trade assistant)
- Plumber
- Renewable energy installer (and assistant)
- Fitter/mechanic
- Welder/sheet metal worker
- Power station operator
- Project manager
- Or



Priority job	
Skills currently used	
Additional skills needed	
What industry can do (about the skills gap)	
What DET can do (to support industry)	



Where would you start?

- Plumber
- Irrigation manager and operator
- Environmental water manager
- Save Water officer, controller and assistant
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- Project manager
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What DET can do (to support industry)	



SUMMARY

- What we found out
- Where to from here
- Questions and comments

Thank you



THANK YOU!