# **GREENING THE WORLD OF WORK IN THREE DIMENSIONS**

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### **OVERVIEW**

- **Lewandowsky 2012**: 'The only conclusion about the climate that is taken seriously by every single reputable scientific institution in the world is that the Earth's climate is changing due to human greenhouse gas emissions.' *The Age*, April 26.
- **Fankhauser et.al. 2008:** :'Creating a global economy that emits a half or a quarter of the greenhouse gases of today's economy will require wholesale changes in the way economic activities take place'. S. Fankhauser, F. Sehlleier, N. Stern. 'Climate change, innovation and jobs'. *Climate Policy* 8 : 421-9.
- **I.L.O. 2011**: '(O)ver 80% of emissions [in the European Union] originate from firms' production of goods.' *Towards a Greener Economy: the Social Dimensions*.



### **Big-Picture Questions**

- How do we deal with climate warming without going backward on other big issues , like poverty, global mobility and vulnerability, the struggle to preserve and create decent jobs?
- How we work will change because of climate warming. How can the world of work in developed countries contribute more effectively to battling climate warming?



### Outline

- I. Big-picture questions
- II. Framing the issue
- III. The *Work in a Warming World* Research Programme (W3)
- IV. Can Australia use W3?
- V. Greening work in three dimensions



### Framing the issue

#### **Central question for the work/climate dilemma:**

The need for paid work will not disappear. However, how we work will change because of climate warming. How can the world of work in developed countries respond more effectively to the battle to slow climate warming?



## Framing the issue: the central argument

- 1. Climate change is a social issue.
- 2. Climate/work relationship includes both impact and response.
- 3. The work world is a major producer of GHGs [80% in EU]
  - *Adapting* work processes *mitigates* GHG emissions: major contribution to slowing GW. [Integrating A & M]
- 4. Adapting work to mitigate GHGs= decarbonisation.
  - Decarbonisation is a process of transition to more environmentally responsible work processes in the production of goods, services, ideas.



### The central argument

- 5. Decarbonising work focuses on:
  - labour process
  - technology
  - physical environment of work
- 6. Environmentally responsible work practices can also be broader: Decarbonise work indirectly by adapting energy and water use and treatment of waste, etc.
- 7. Work adaptation can also be extended to include training and education; inputs; outputs; distribution; disposal.



### The central argument

- 8. Green jobs vs. greening work? decarbonising the work world
  - *Green Jobs* = jobs which serve the environment in some way
    - No consensus on definition
    - Focuses on newly created jobs
    - Numbers unreliable but reliably small as % of total jobs
  - -- *Greening work* =adapt work in existing, current jobs: the vast majority of jobs.
- 9. Focus efforts on greening work in the vast majority of current jobs: this makes social and strategic sense.



### The central argument

- **11. The world of work (WoW),** a major producer of GHGs, **can lead GHG reduction by adapting to mitigate GHGs.**
- 12. Who, in the work world, are the key actors? What would it take for them to mobilise for leadership in greening work?



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- 1. A multi-year research programme with 3 funded projects and 3 goals:
  - **Map:** labour market organisations' analysis of and response to the impact of climate warming in their sectors
  - **Respond** via action research: engage community partners and labour market organisations in training for environmental leadership
  - **Train**: a new Canadian generation of 'social climate change' researchers.



### Work in a Warming World (W3)

- **2. Funding:** Social Science and Humanities Research Council of Canada: *Community-University Research Alliance Programme* :
  - 2010-2015. \$1 mill. funding
  - 44 academics; 10 universities 16 researchers; 19 community organisations, 6 unions

#### 3. Four Themes:

- How and where will you work in 2025? Industries, Occupations, Professions
- Policy and Regulation
- Training
- Intersections



### Work in a Warming World (W3)

#### 4. Sectors

- Agriculture
- Transportation equipment
- Forestry
- Manufacturing
- Tourism
- Construction
- Postal services [communication]
- Public services
- 5. 14 projects completed/completing in 2012



### W3's Public Outreach 2010-2013

- 1. Atlantic Cross-Border [with US] Forum (Sept. 2011)
- 2. Work and Climate Change Report (monthly)
  - Free. To subscribe: <u>w3info@yorku.ca</u>
- 3. Youth, Climate, Jobs Institute ( final year secondary school students)
- 4.International Panel: Greening Work in a Chilly Climate: Canadian Challenges & International Perspectives
- 5. 2013 International Conference
- 6. International Student Network
- 7. Free and publicly accessible database of 1700+ documents.



### W3: questions

#### **Research shaped, at the outset, by these questions:**

- 1. As the climate warms, what industries will continue to provide jobs domestically, in what numbers in which regions?
- 2. Which sectors will shrink?
- 3. How should employment transitions and active labour market transitions be organised? By whom?
- 4. Carbon tax & government policy will force industries to change their energy use domestically. *How will adaptation be organised? What rewards?*



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### W3: questions

- 5. How to ensure that enterprises operating internationally reduce GHGs and energy use throughout their supply chain?
- Will national governments develop integrated strategies to reduce GHGs, including interventionist planning for greentech start-ups & manufacturing?
- 7. How different will greener jobs be from traditional jobs? In which sectors, occupations, professions?
- 8. Climate literacy should be universally required. How should universities and TAFEs adapt their programmes and accessibility for a'green turn'in the job market?
- 9. How will the systemically vulnerable access climate literacy training and the new jobs?



### W3: questions

- 10. Are new laws needed for workers to negotiate for environmental responsibility in workplaces? What protection now exists?
- 11. Will new forms of workplace environmental citizenship emerge?
- 12. How can remote communities benefit from a green turn?
- 13. Will small business be able to deal adequately with the challenge of a green transition?
- **14. It make sense for the work world to challenge government** to play an interventionist and incubating role.
- **15. It makes sense to challenge the unions and professional associations.** Workplace knowledge plus the ability to create engagement might produce workplace leadership in adaptation and mitigation.



### W3: General findings so far

- Climate warming is destroying jobs in forestry, tourism, agriculture. Green training? Patchy, resented by small business. Beyond forestry & construction trades, little sectoral planning for response to climate change.
- 2. Canada's sector councils, which could take a lead in green training, are being terminated by the federal government in 2013. Unclear who, if any organisation, will take up their crucial role.
- 3. Canadian government is neither an actor nor a leader; provincial governments now lack integrated strategy.
- 4. Good policy is vulnerable to politics and to change of government.
- 5. Collective bargaining for environmental responsibility slowly gaining union interest.



### W3 and Australia: Moving from Impact to Response

#### Can the W3 research model be useful for Australia?

- 1. Is there interest in broadening the focus from jobs to work?
- 2. Who would benefit from this? Leadership?
- 3. The political climate and potential are different—Canada's national government is denying, destructive and decentred. And Australia?
- 4. Could a young generation of social climate change researchers, trained for action-research, be helpful?
- 5. Does Australia deal with the perception of competing rights?
- 6. Could international cross-pollination be useful?



### Three dimensions of greening work

- 1. Green the production of goods, services, ideas
  - Reduce GHG production in the labour process
  - Green-design technology
  - Reduce GHGs in the built and natural environment of work
  - Strategies will vary from sector to sector.
- 2. Shift to green technology and green design
  - New technology and adapted technology which put environmental responsibility at the forefront of design.
  - A real role for environmental & industrial engineers.



### Three dimensions of greening work

- 3. Educate and train the present and future labour force for environmental responsibility.
  - Climate literacy– for all age groups and educational levels– essential.
  - Lifelong training accessibility for the systemically vulnerable-essential.

#### And a 4<sup>th</sup> dimension:

#### Trade unions and professional associations are powerful,

potential leaders in greening the world of work. They have been neglected actors, to date. **What would it take for them to take up leadership?** 



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### The End?



