

ACIL Tasman
Tasmanian Applied Innovation

The Economic Impacts of Construction Sector Innovation

Possibilities, threats and role of clients

Presentation to the CRCCI Conference:
Clients Driving Construction Innovation

26 October 2004

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Agenda

- Why an economic impact model?
- Why TG Construction?
- What does it allow the CRC to do?
- What lessons have emerged already?
 - What of particular relevance to clients driving demand?

Slide 2

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Why an economic impacts model?

- Purpose of the CRC is to improve sector performance through smart innovation
 - Create benefits, in sector and wider economy, through productivity improvement and growth
- Choose R&D with good prospects for achieving this
- Account to stakeholders – including government - for the research under way
- Demonstrate the value of what gets delivered

Slide 3

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Why AT Construction?

- Building & construction pervades the whole economy
 - Innovation in the sector translates into growth across the whole economy, more so than almost any other sector
- AT Construction is designed to model these benefit flows over time – 2020
 - Dynamic, whole of economy model
- Incorporates substantial disaggregation of the sector
 - Sector detail for shocks and reporting

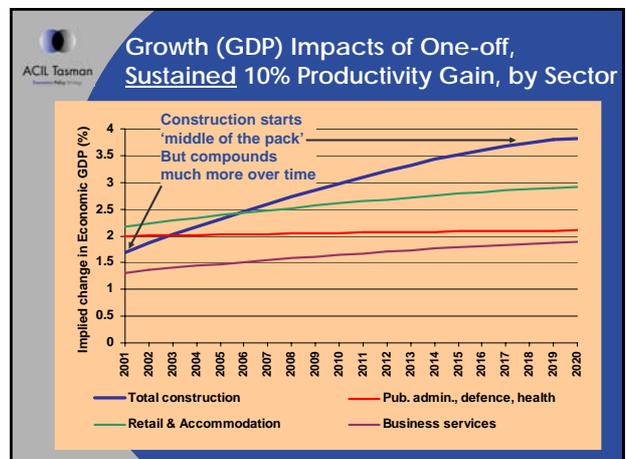
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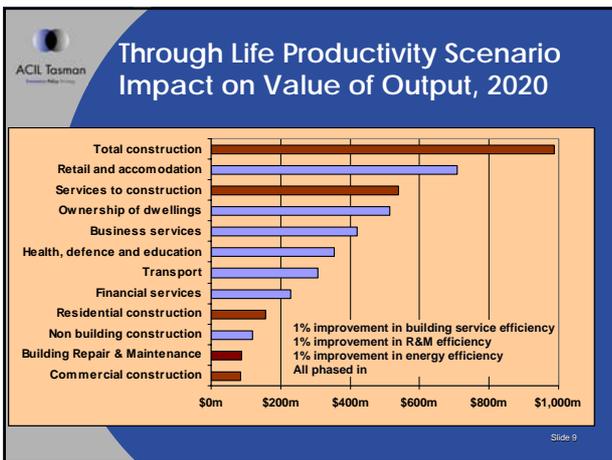
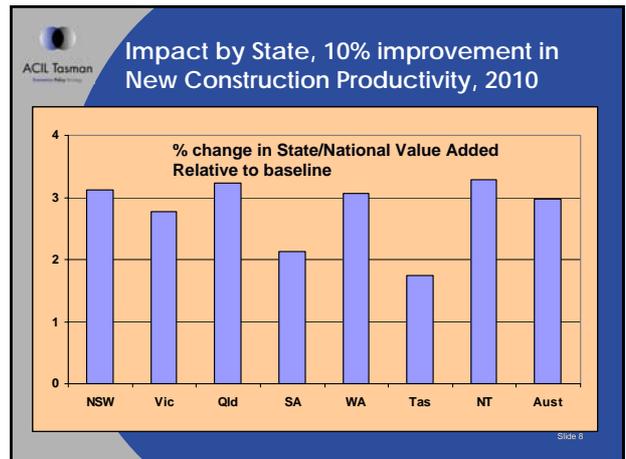
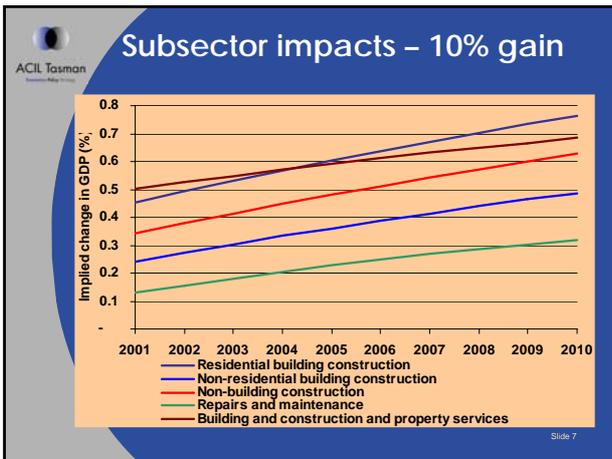
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What does it allow?

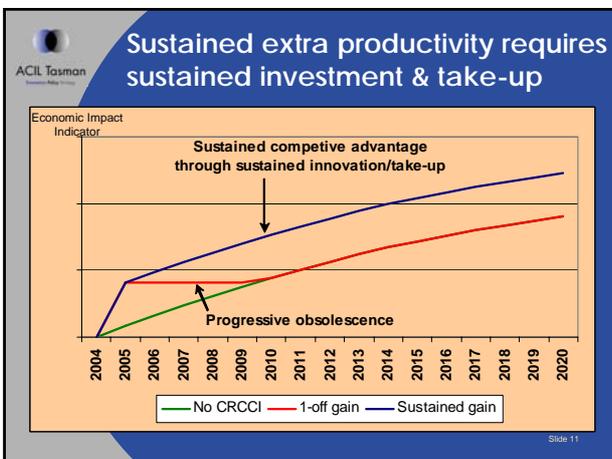
- Specify changes in productivity – value and/or cost – in components of sector activity and infer:
 - Impacts throughout industry over time
 - Employment, value of output, activity levels, value added, carbon emissions
 - Relative to a 'No CRC Innovation alternative'
 - Impacts across States & industry subsectors
 - Impacts of different rates of industry adoption or of obsolescence
 - Impacts of R&D risks

Slide 5





- ### Scenario Evaluation Toolkit
- Collection of simulations based on changing a single productivity driver
 - Each based on a standardised (eg, 1%) shock
 - Tabulating impact on GDP, employment, output, exports, emissions etc
 - Specific scenarios can be approximated by blending data from the table, without running the model
 - Eg, 10*build efficiency + 2*R&M efficiency
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- ### Client demand/innovation matters
- Great and successful research has no economic impact unless it is utilised
 - Innovation must match client needs
 - Easy if purely reliable cost reducing
 - Harder if changes the nature of the services
 - Slow uptake hastens obsolescence and can dramatically reduce the gains
 - Can be modelled using AT Construction
 - But innovation driven by clients who are ready to exploit the opportunities can offer add greatly to competitiveness
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