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Societal acceptance of energy technologies

An overview of CSIRO social science

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All-Energy Australia, 7 October, 2009



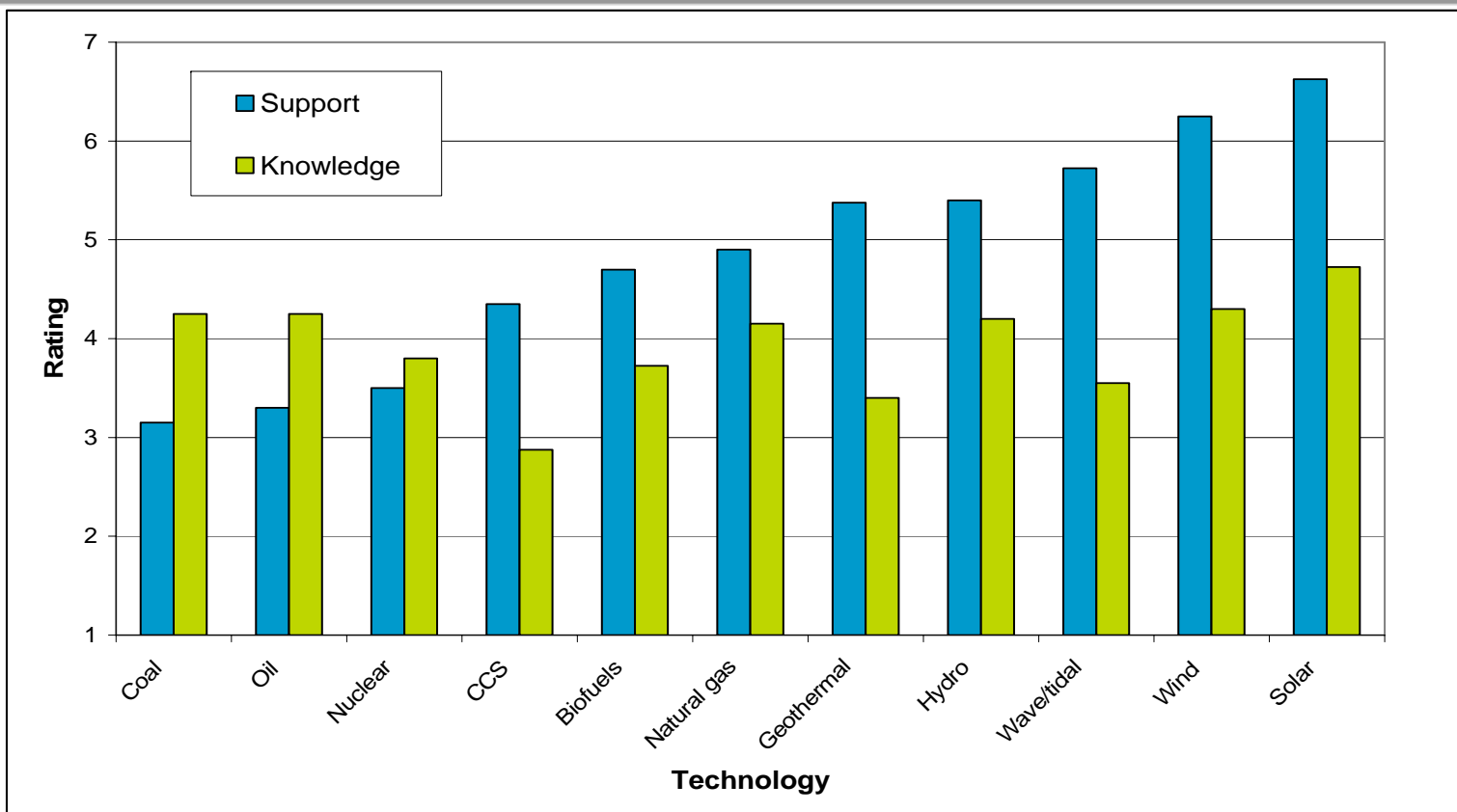
Social research at CSIRO

- Understanding the social issues associated with emission reductions for individuals, communities and businesses
 - Levels of knowledge and concern
 - Uptake of renewable energy technology
 - Drivers of behaviour change
 - Ways to increase public knowledge
 - Public acceptability of various mitigation options

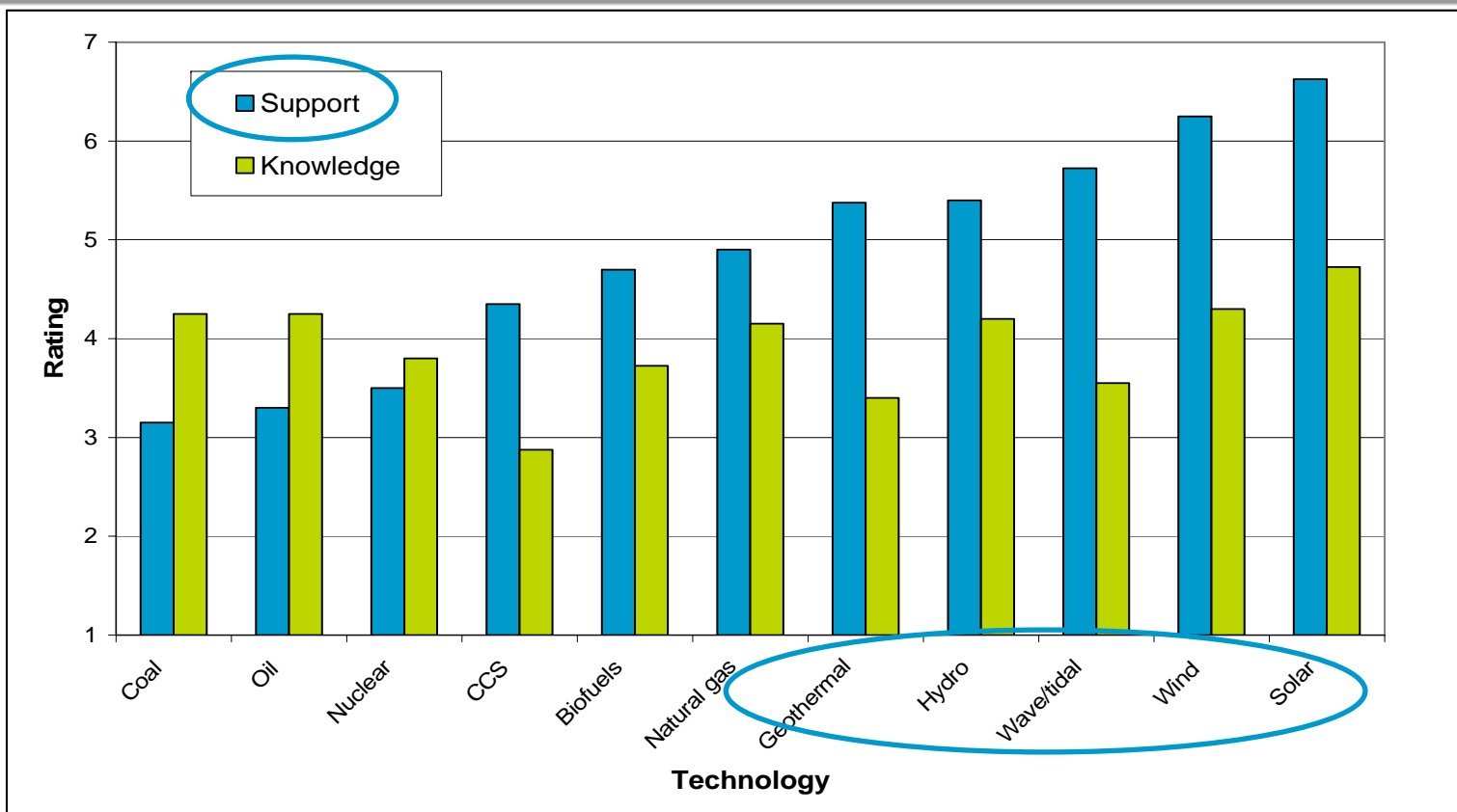
Sources of information

- **Surveys:**
 - 2200 people from Qld, NSW, Victoria and South Australia
 - 1800 people from Qld, 900 people from NSW
 - 1000 people from across Australia compared with similar samples from the USA, UK, Japan, Sweden and Spain
- **Workshops:**
 - Large groups of people in all-day workshops about energy technologies and climate change held in Brisbane, Perth, Melbourne and Adelaide
- **Plus:**
 - Focus groups, interviews, case studies and smaller surveys from research with specific groups and organisations

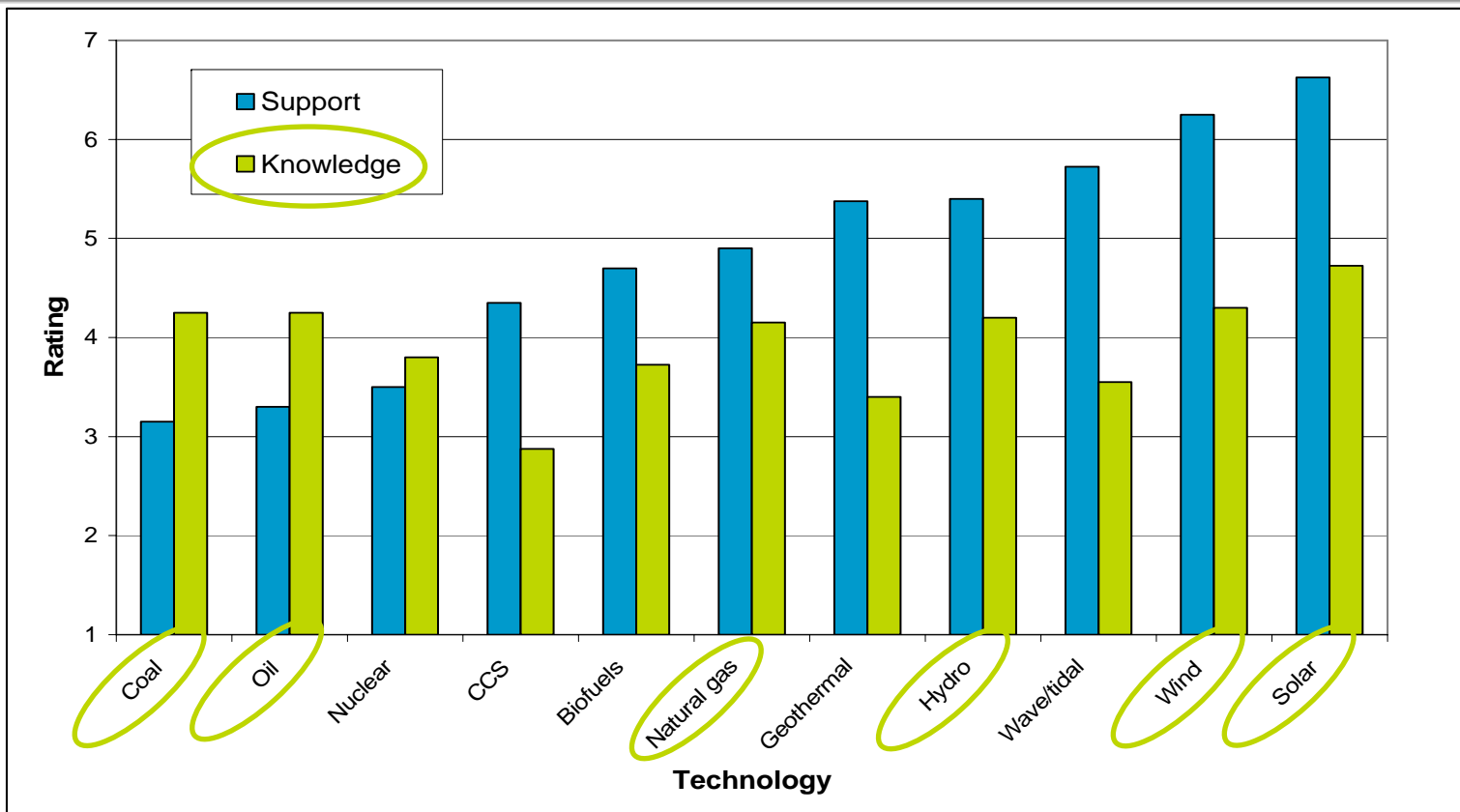
What energy technologies do people support?



What energy technologies do people support?



What energy technologies do people know about?



Knowledge is low

- In a survey of over 2000 Australians, the average response to a short quiz on energy and environmental issues was equivalent to guessing
- Most people are very hazy on where electricity comes from and how it works
- Most people don't see the links between their own consumption and greenhouse gas emissions

How will we respond to global warming?

Response	AUS	USA	UK	SWE	SPN	JPN
We will change our lifestyles to reduce energy consumption	45	35	27	22	26	66
New technologies will be developed to solve the problem	25	19	26	37	26	22
We will live with it and learn to adapt to a warmer climate	8	13	13	19	21	4
Global warming is a problem but [my country] won't do anything about it	16	28	21	14	21	6
We should do nothing since global warming is not a problem	2	5	3	2	1	NA

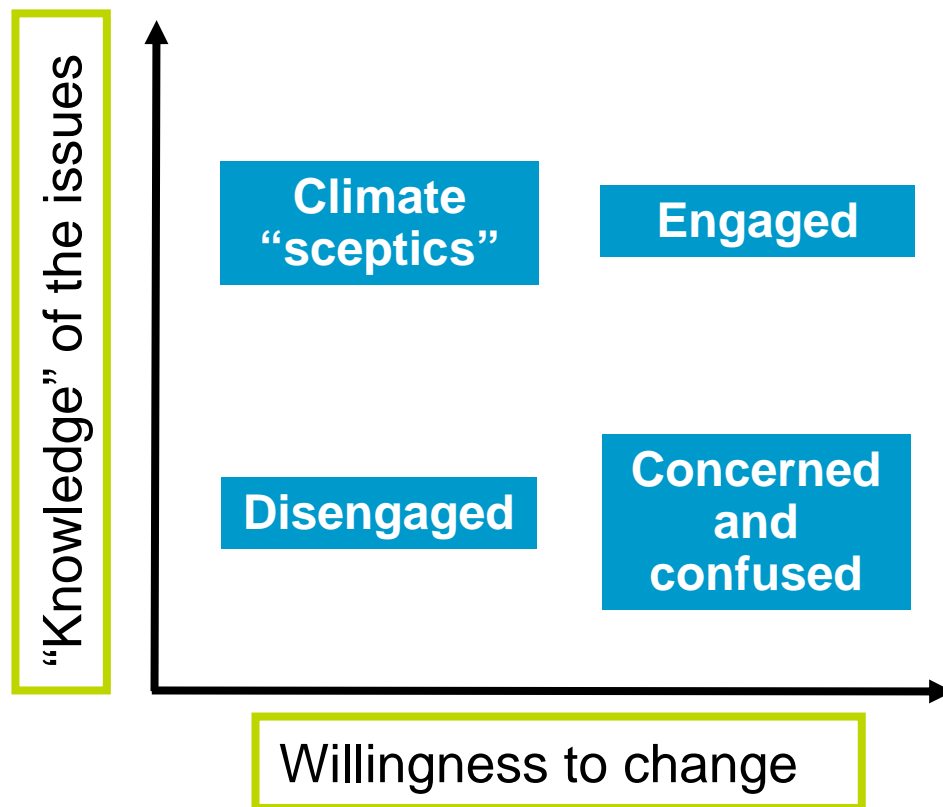
Suggestions for Government energy spending:

Options	AUS	USA	UK	SWE	SPN
New energy sources	60	52	52	51	41
Clean drinking water	32	13	7	9	1
Energy conservation	19	18	22	27	13
More energy efficient vehicles	16	24	18	26	-
Removing atmospheric CO ₂	12	6	7	11	9
Anti-terrorism and security	11	29	23	7	17
Nuclear power	10	6	9	20	3
Public transport	10	8	24	12	10

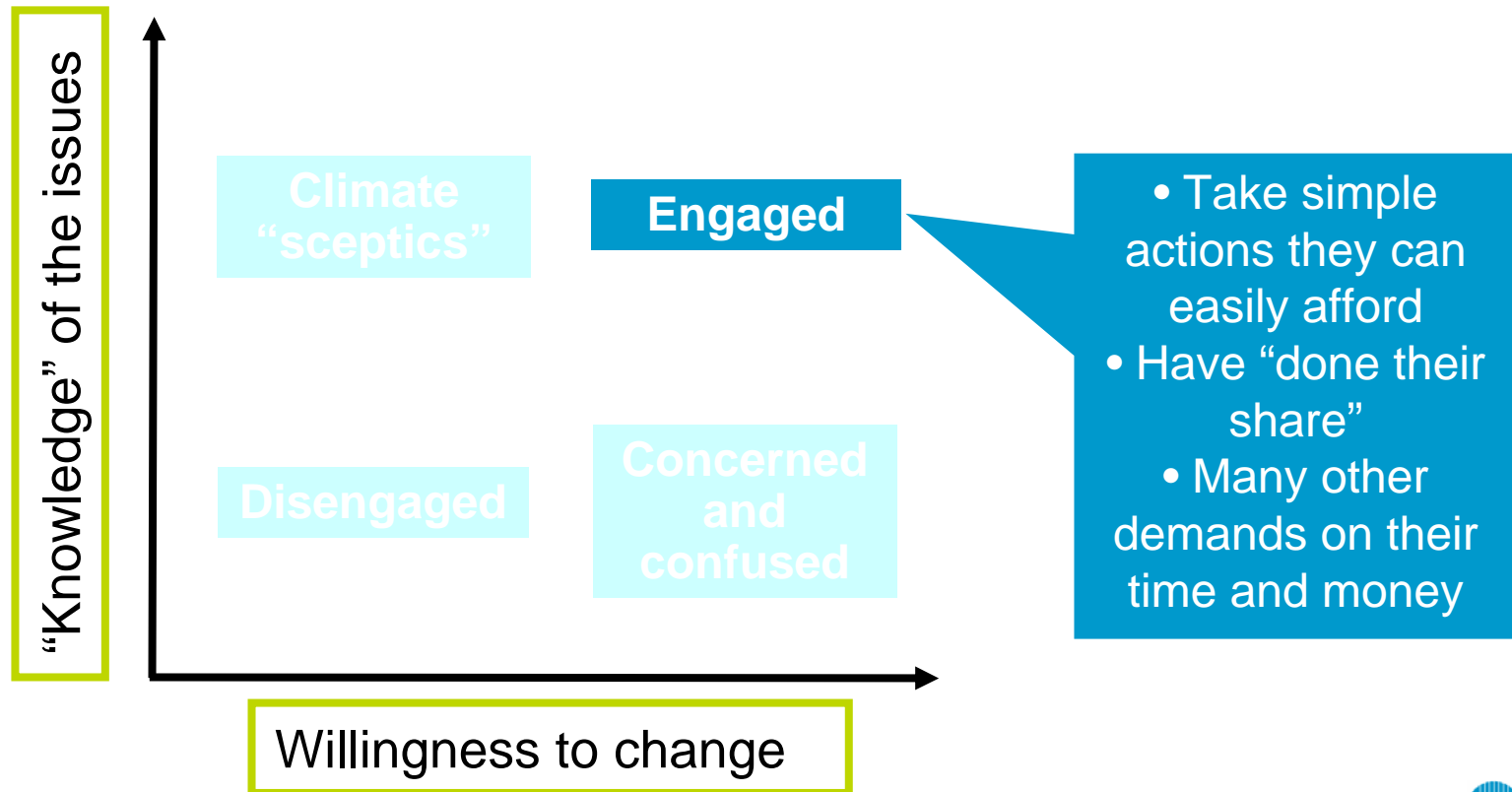
Four types of public response:



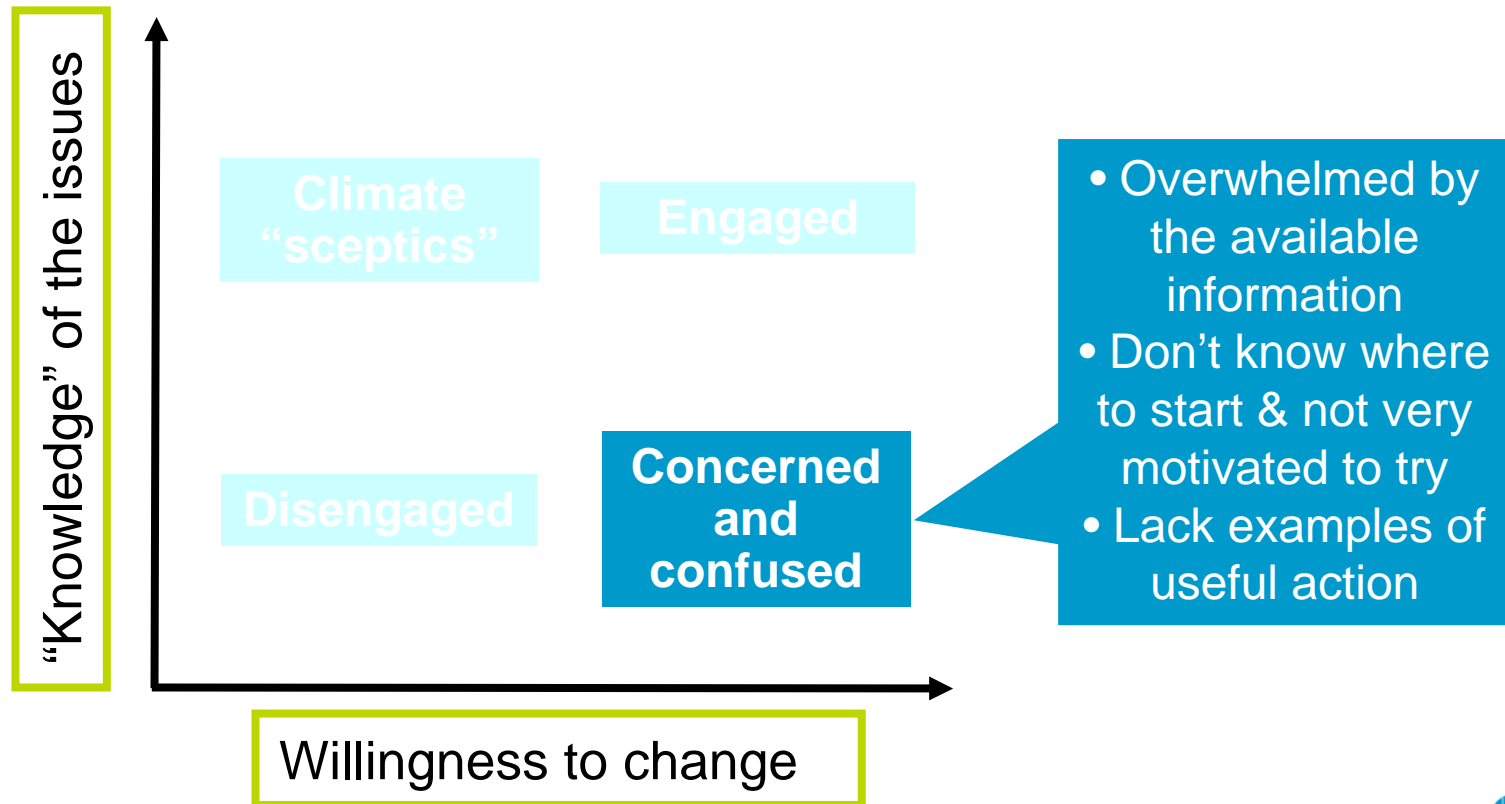
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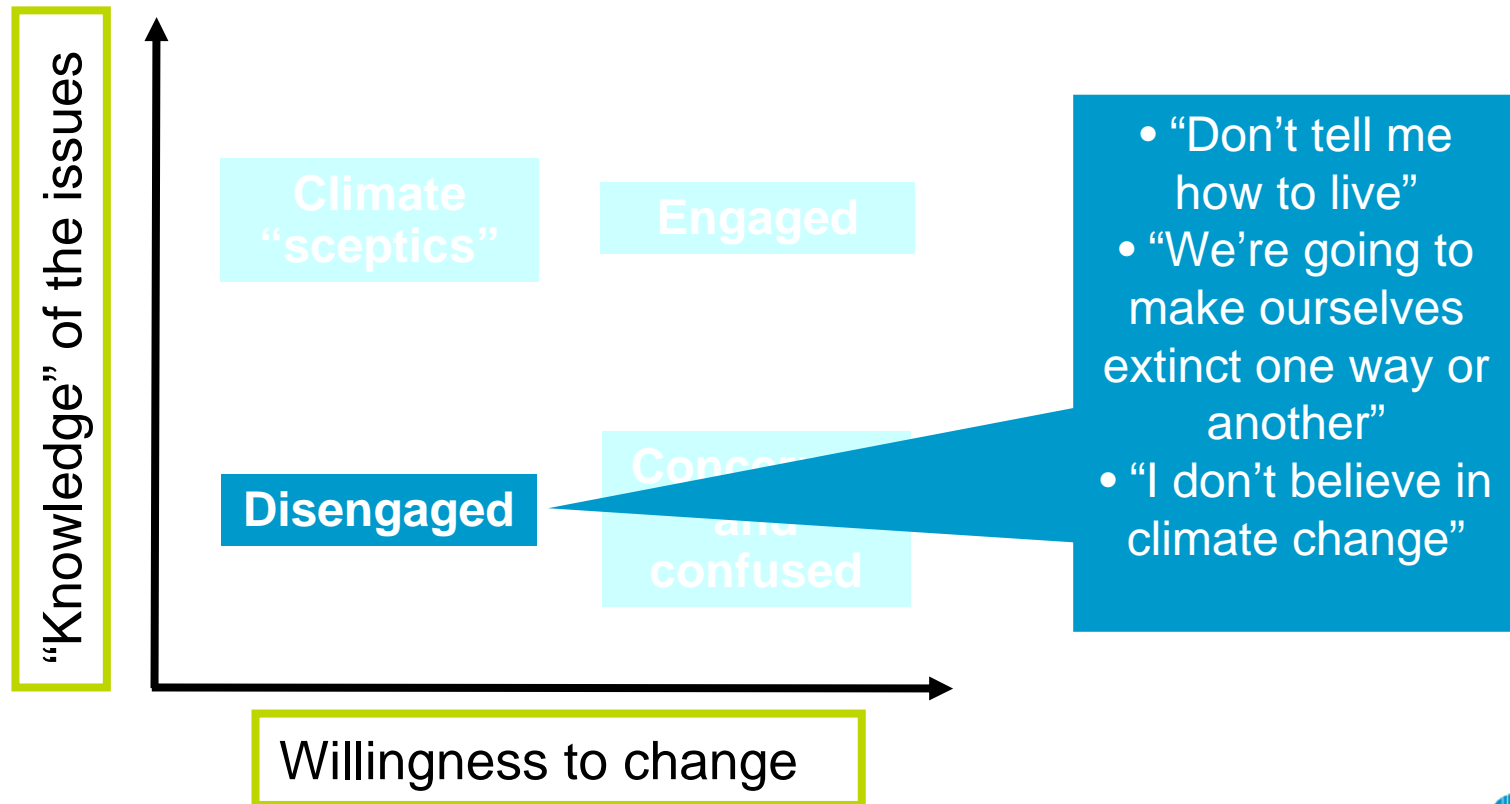
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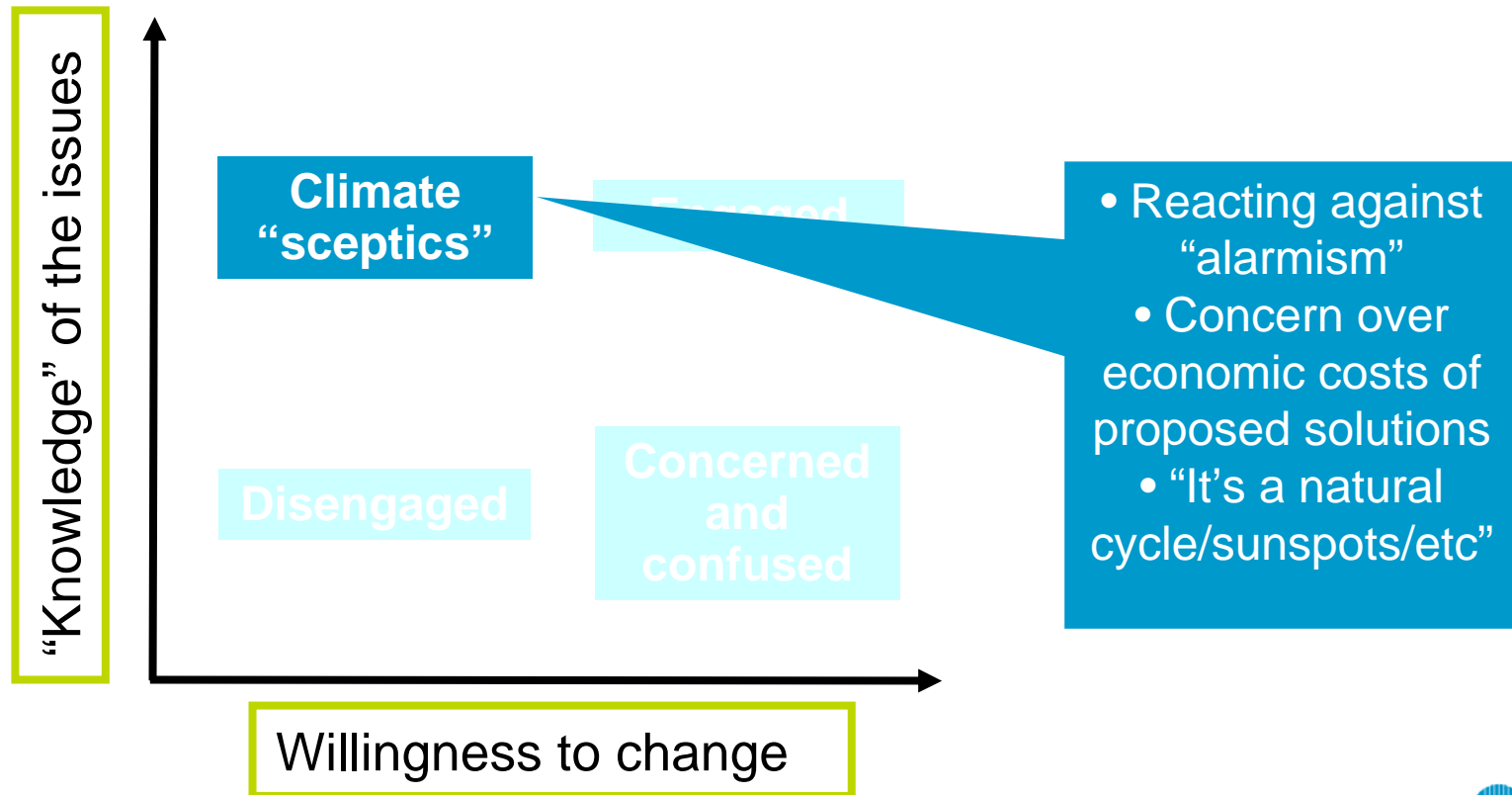
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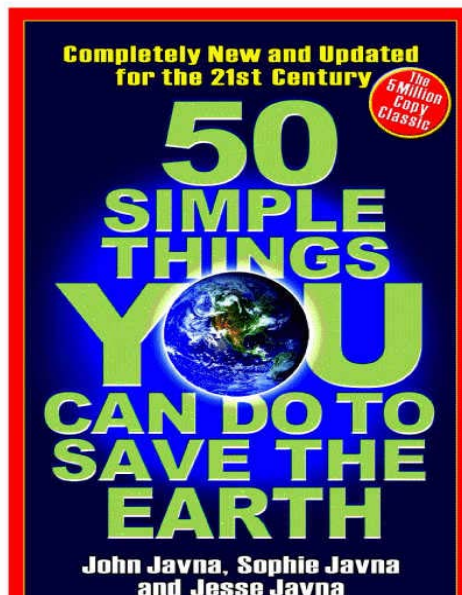
Four types of public response:



Influences on public and business decision-making

- Preference for the status quo
- Differences in capacity
- Aversion to short-term losses in return for long-term gains
- Uncertain social acceptability of some technologies
- Public messaging and perceptions
- Structural issues

Public messaging:



Save the world.
Start at home.

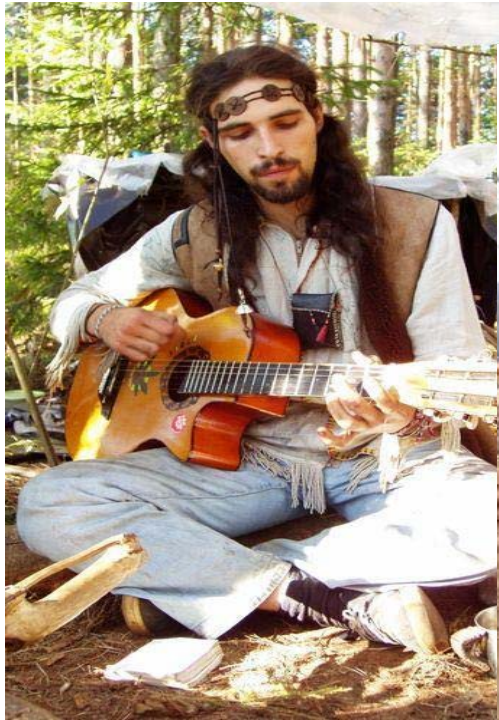
Monday 27th August to Sunday 2nd September

Keep  Australia
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Week

CSIRO. Societal acceptance of energy technologies



An “environmental” issue...



Structural issues

- No retail price signal for peak electricity consumption
- No clear information about total benefits of new technologies
- Confusion over rebates for solar PV

Summary

- Acceptance of renewable energy technology and other mitigation options is strongly linked to reactions to climate change
- Accurate understanding of the issues and options is low, and misperceptions are widespread
- Acceptance can be encouraged by
 - Promotion of public engagement with energy issues
 - Finding and promoting short-term benefits
 - Local working examples of technology options
 - Changes in structures to pass on the benefits of these technologies to those who adopt them

Science in Society

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Thank you

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