

# The War on Science

Meeting 7 December 2011

## Principles and Actions

### Discussion outcomes:

While there is not an actual war on science –there are clearly **strategic attacks** against science in **some areas** that should be **defended against**.

### Key Question:

Are we overly concentrating on the **messages** of anti-science advocates rather than looking at their **impacts**?

### Defining the Problem:

- The ‘War on Science’ is a war of **values** and world views, seeking to influence a majority of the public. But it’s being fought with sneaky tactics by those who believe they have the right to spin public opinion to their preferred point of view.

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- And **public sanction** is needed for new science and technologies, but public sanction needs to be based on **fair and balanced information** and **discussion**.

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- Yet the spaces where public debates, information and discussions are held now, are **too easily** open to **manipulation**.

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- And while social media spaces are a growing area for information and discussion, there are **problems** with a tendency to support **confirmation bias**.

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- So we need **new spaces** for debates, or **new debates** in existing spaces.

### Principles to understand:

- When **information is complex**, people are pressed for time, or are afraid, they tend to make decisions based on their **values and beliefs**.
- People seek **affirmation** of these positions – no matter **how fringe** – and will tend to **reject information** or evidence that is **counter** to their beliefs.
- Attitudes that were not **formed by logic** and facts are **not influenced** by **logical and factual arguments**.
- Public **concerns** about contentious science or technologies are almost **never about the science** – and scientific information therefore does little to influence those concerns.
- People **most trust** those whose **values mirror** their own.

## Considerations:

- Science is **not the only source of knowledge**, but ‘sounds like science’ is not the same as ‘sound science’.
- Science needs to admit its **failings and risks** – which are often not addressed well because there is not funding to study these.
- Science should consider what **values and interests influence** science, and to better understand its position in society.

We need to break down:

- Science elites and power elites
- Tribalism: Us & Them
- Expecting scientist to be the only ones able to respond to misinformation

## Actions:

We are a democracy. We should use **democratic processes** to find ways to filter misinformation and encourage better quality scientific information, but **respect differences**. And **engage in the battles** over public opinion when needed, using these types of effective and proven tactics.

### **Engagement**

- **Disempower** interest group domination of issues, by encouraging multiple stakeholder discussions, including the public.
- Listen to what is driving **public opinion** and **behaviours**, to gain better understandings of them.
- Find members of the public who have **not formed strong attitudes** and engage with them to discover more about what **influences** their **attitudes** and **behaviours**.
- Allow for **different views** and respect them. Don't expect 100% support.
- Understand **multiple channels** are needed to reach **diverse audiences**.
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### **Framing**

- Don't attack other values, languages and cultures. Allow them to exist and **work with them**, not against them, with different framings that **align with differing values**.
- Know that science and technologies are better understood and supported when they are framed as **applications** and **outcomes**, rather than processes.
- Accept that people have the **sense** to hear both risks and benefits and will make reasonably **intelligent decisions**.

### **Trust**

- Occupy **new spaces** such as social media, arts and deliberative democracies, and use **key influencers** to reach the public who are otherwise disinterested
- Use **spokespeople** your target audience **trust**.

## Messages

- Don't debate the science with those who have values-based anti-science positions, look for the values that underline your audiences' positions and debate on those values, **framing messages that align with those values.**
- Use **pictures** and **graphs** over text explanations.
- Ensure that key messages are as **simple**, if not **simpler**, than anti-science messages.
- Before any mention of an anti-science story, text or visual **cues** should **flag it** as **not scientifically supported.**
- Do not **give credence** to anti-science stories, and **counter** them with **core facts** that provide **alternative explanations** to the anti-science story.

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