

Climate psychology and policy



Presentation 12.Jun. 2013

Cand. Psychol, Dr.Philos. Per Espen Stoknes

Per Espen Stoknes, BI

- ➡ The climate paradox
- ➡ Four psychological barriers
- ➡ New psychological solutions



The paradox

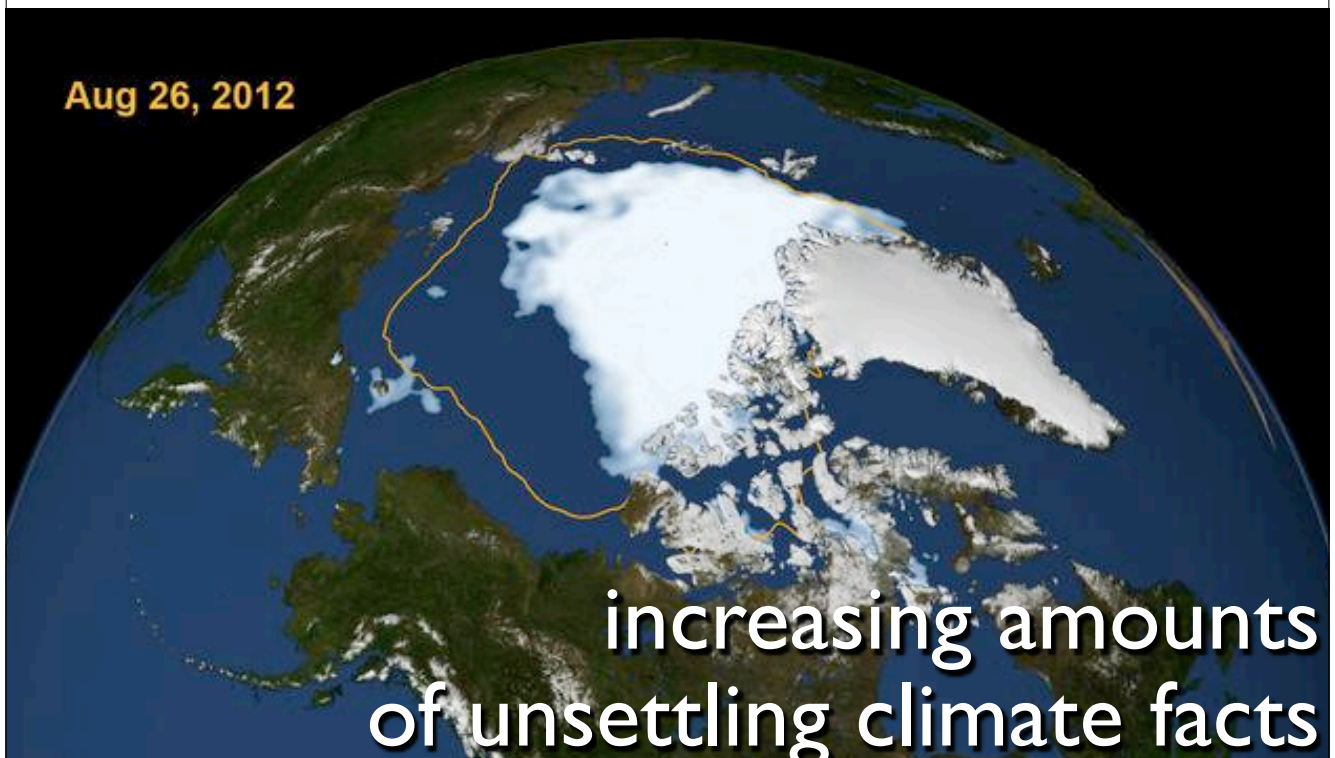
Increasing extreme weather events

In August 2011, people were evacuated from this house with the aid of an excavator bucket in Stange, Norway. Roads and railway were closed. Photo: Jan Erik Heggelund / Scanpix

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The Paradox

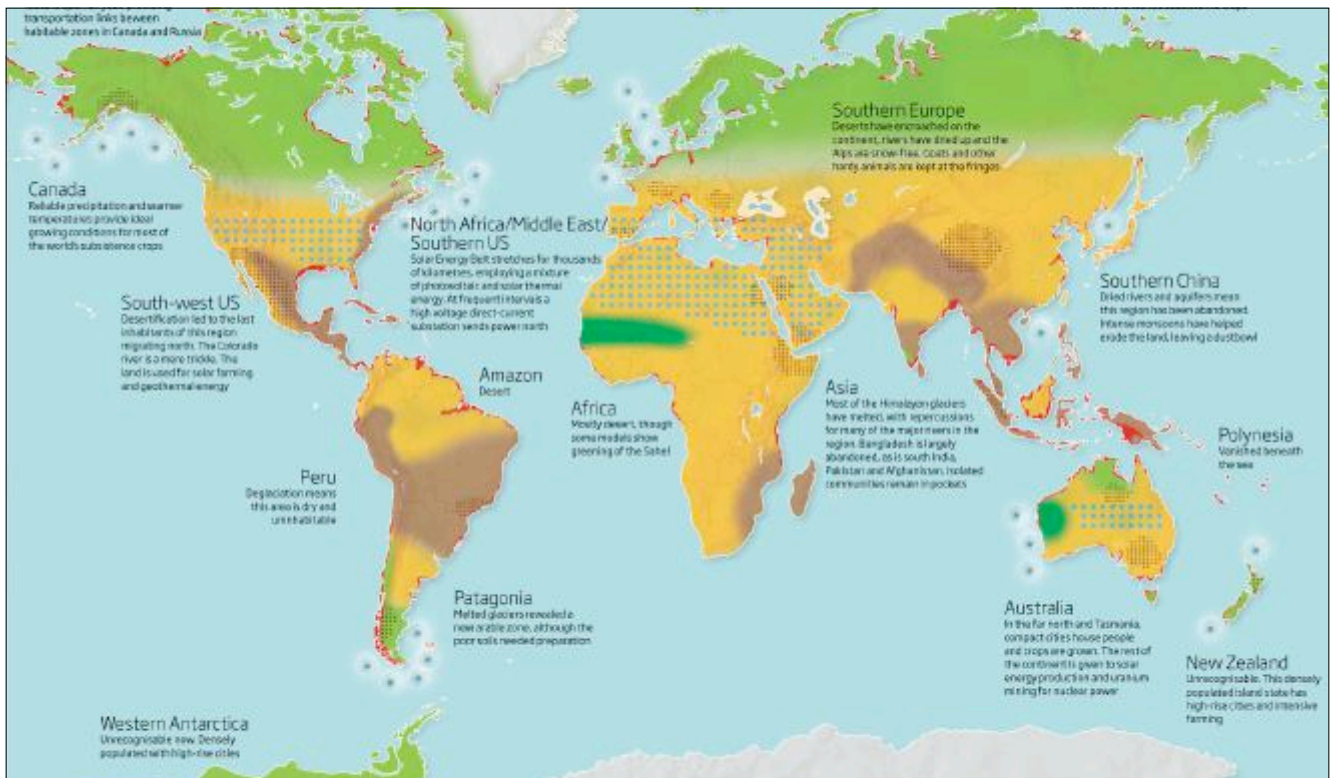
Aug 26, 2012



increasing amounts
of unsettling climate facts

North Pole gone already in 2020?

Geophysical Research
Letters, Feb 2013,
doi: 10.1002/grl.50316



On our way
towards +4 C world

in 2099

NewScientist, 2009, "Surviving in a warmer world".



If so, why aren't "everyone"
in the streets?

C. Hamilton, 2002 "The Social Psychology of Climate Change".

97 out of 100 climate experts agree humans are causing global warming



Doran et al 2009, Anderegg et al 2010

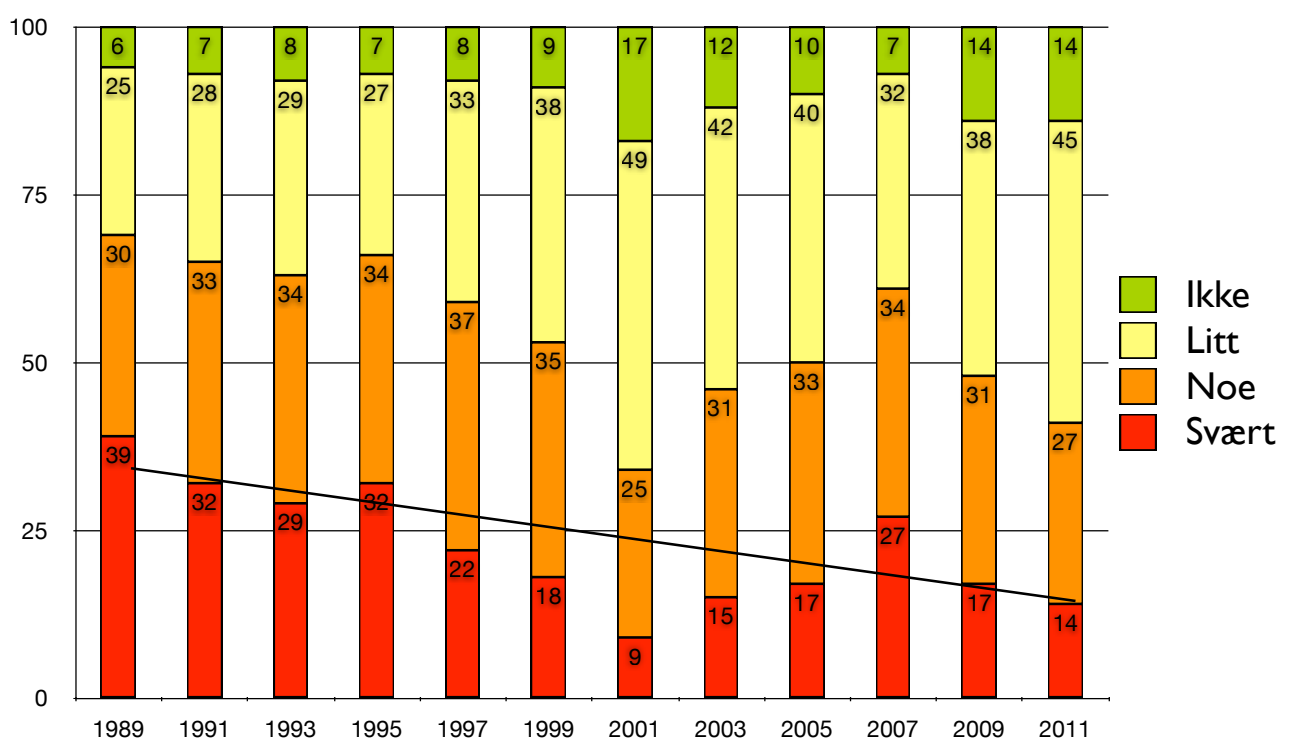
<http://sks.to/consensus>

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But does opinion follow? Norwegian data:

Per Espen Stoknes, BI, 28.sep.2012

Hvor bekymret er du for drivhuseffekt og klimaendringer?



Source: Ottar Hellevik, 2012, Ipsos MMI's undersøkelse Norsk Monitor, 8

Internationally

Top 10 most / least concerned about climate change/global warming

Levels of concern in the markets most worried about climate change are higher than the levels of unconcern in countries least worried about climate change.

Most Concerned			Most Unconcerned		
	Percent Concerned	Percent Unconcerned		Percent Concerned	Percent Unconcerned
Thailand	93%	1%	Estonia	33%	36%
Portugal	93%	2%	Norway	47%	22%
Mexico	93%	2%	New Zealand	50%	22%
Indonesia	92%	1%	United States	48%	21%
Turkey	92%	2%	Latvia	50%	21%
Philippines	91%	4%	Czech Republic	47%	21%
Vietnam	91%	5%	Poland	54%	19%
Colombia	91%	8%	Netherlands	48%	19%
Malaysia	90%	1%	Lithuania	45%	19%
Argentina	90%	5%	Australia	61%	17%

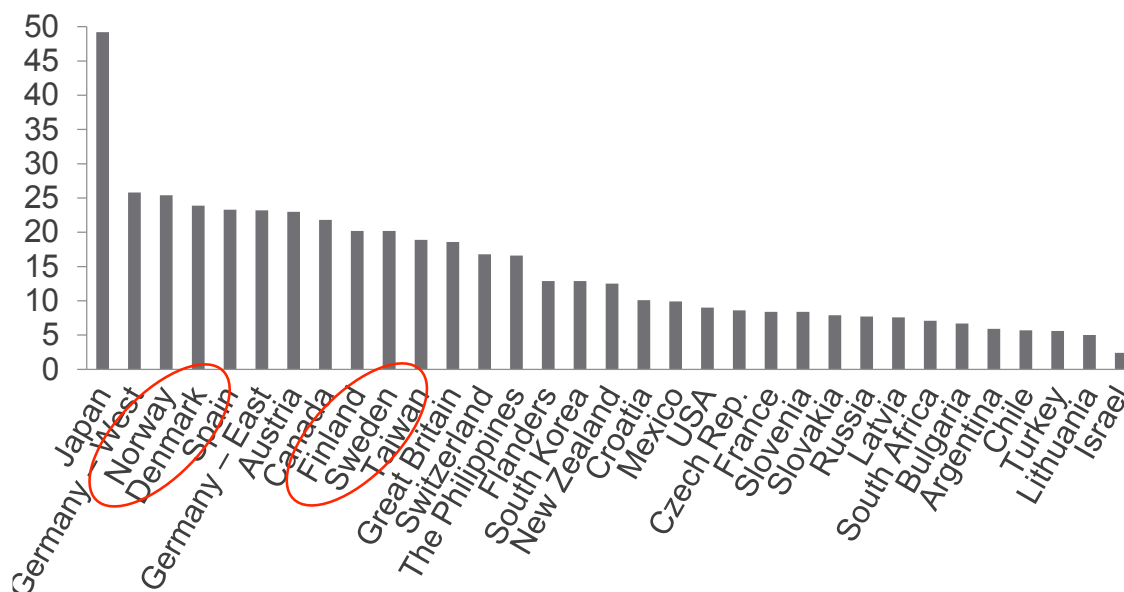
Source: Nielsen, Global Online Survey, Q1 2011.

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Nordic countries

Percent Selecting Climate Change as Most Important Environmental Problem (2010)

NORC
at the UNIVERSITY of CHICAGO



Source: "Public Attitudes towards Climate Change and Other Global Environmental Issues across Time and Countries, 1993-2010,

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Why?

Wrong starting point



Assume that the public is ignorant, empty heads, in need of facts and knowledge

“empty bucket”
the deficit-model

Why don't information campaigns work for climate?



Some psychological contributions:

- Full of mental filters, “confirmation bias”
- Fear and doom fatigue; “hell doesn’t sell”
- Interpreted in cultural categories, “treehuggers”
- Global problem, evokes helplessness
- Attitudes to messenger, “Al Gore”, “leftists”
- Identification with underlying values
- Threatens social identity and self-efficacy

the “full bucket”- problem

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➡ The climate paradox

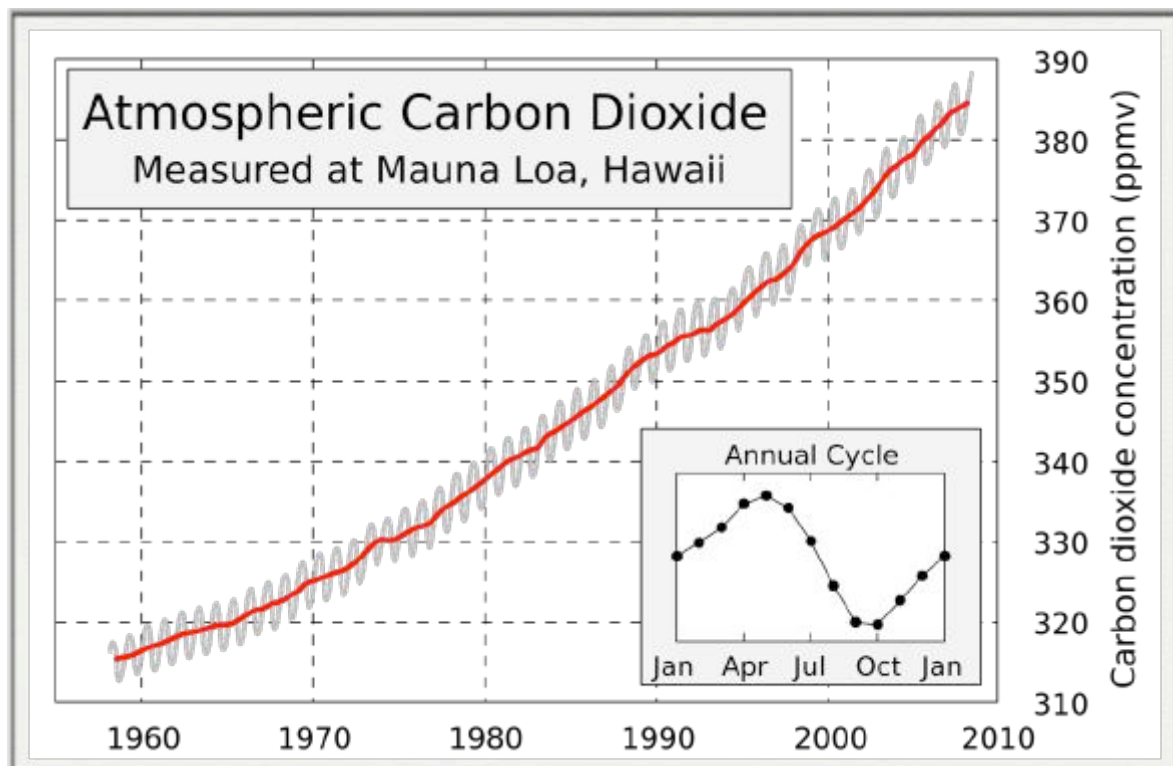
➡ Four psychological barriers

➡ New psychological solutions

Psychological barriers in climate communication:

1. Perceived as **distant**
2. Little action **weakens** attitudes
3. **Dissonance** strengthens denial
4. Framed as **cost & sacrifice**

I. Perceived as distant



Humans are best at perceiving risks that *are...* *but not...*

- | | |
|---------------------------|-------------------------------------|
| • Visible | ➡ Invisible! |
| • Have happened before | ➡ New for moderns |
| • Immediate | ➡ Gradual and slow |
| • Simple causes | ➡ Complex |
| • Clear enemy | ➡ Our selves... |
| • Affects myself & family | ➡ doesn't affect me before long ... |

Psychological barriers in climate communication:

1. Perceived as **distant**
2. Little action **weakens** attitudes
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4. Framed as **cost & sacrifice**

2. Attitudes have three components (ABC)



Affect:

Frightening. Feeling guilt.

Behavior:

I try to drive less...

Cognition:

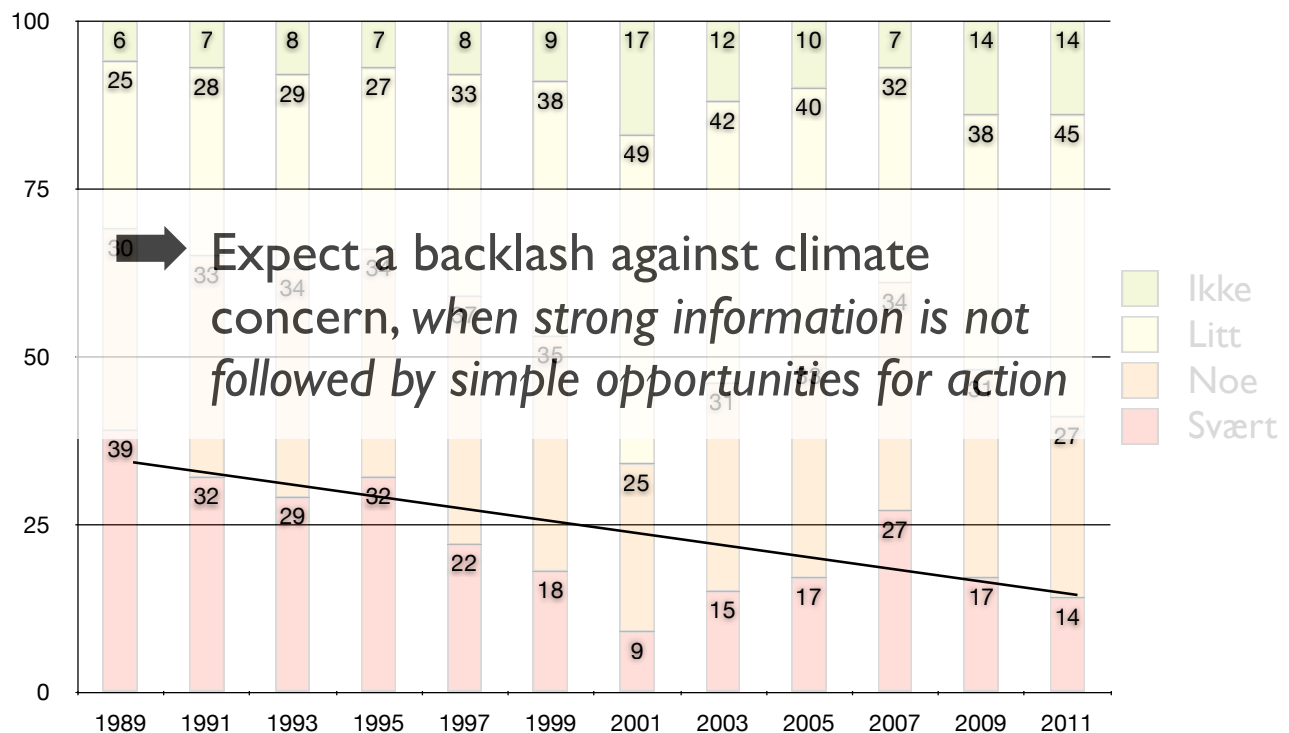
CO₂ makes greenhouse effects

2. When actions clash with cognition, attitudes weaken

I fly and drive, everyone does the same. Our governments want to pump more oil and gas, so it can't be that serious...



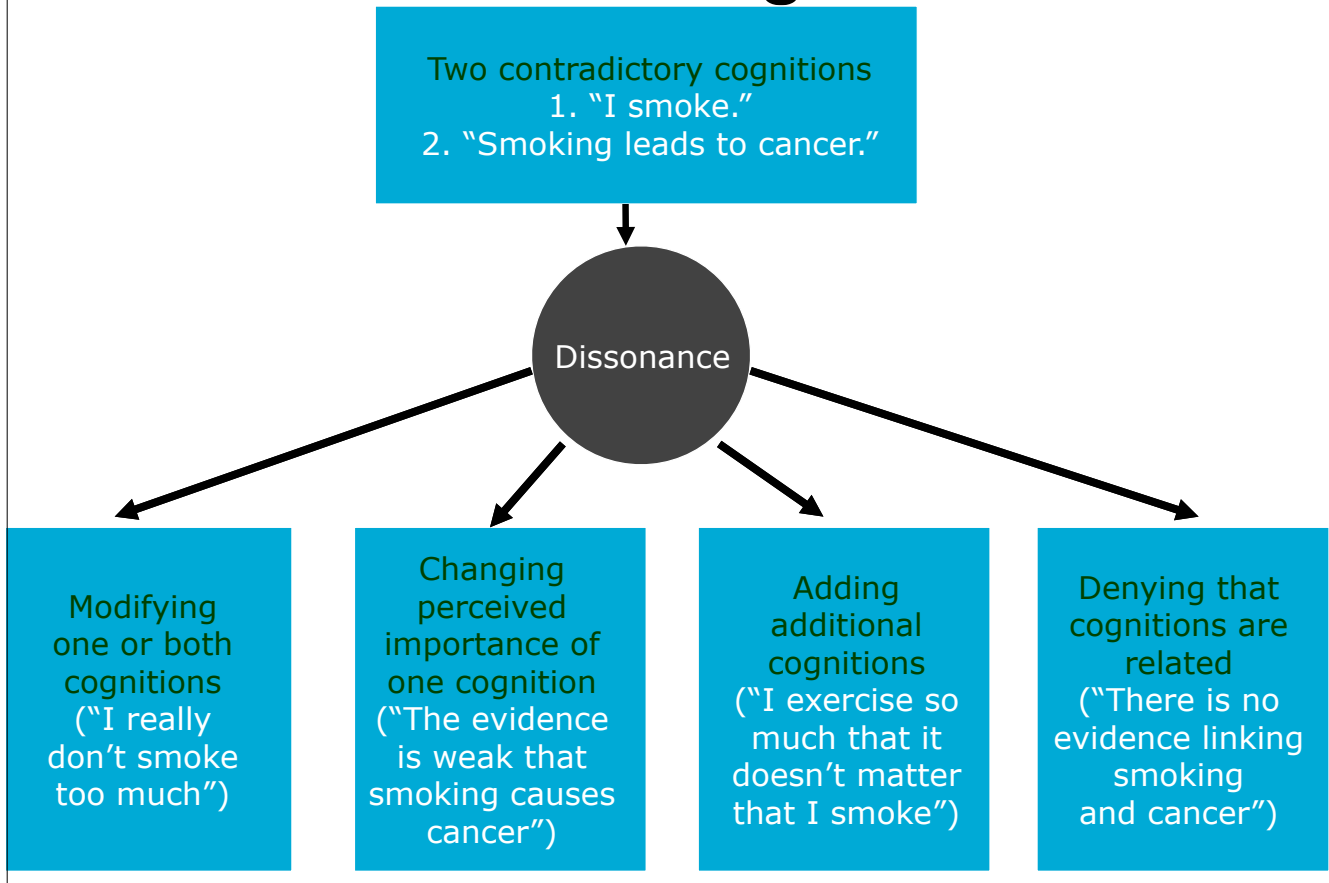
Barrier 2.



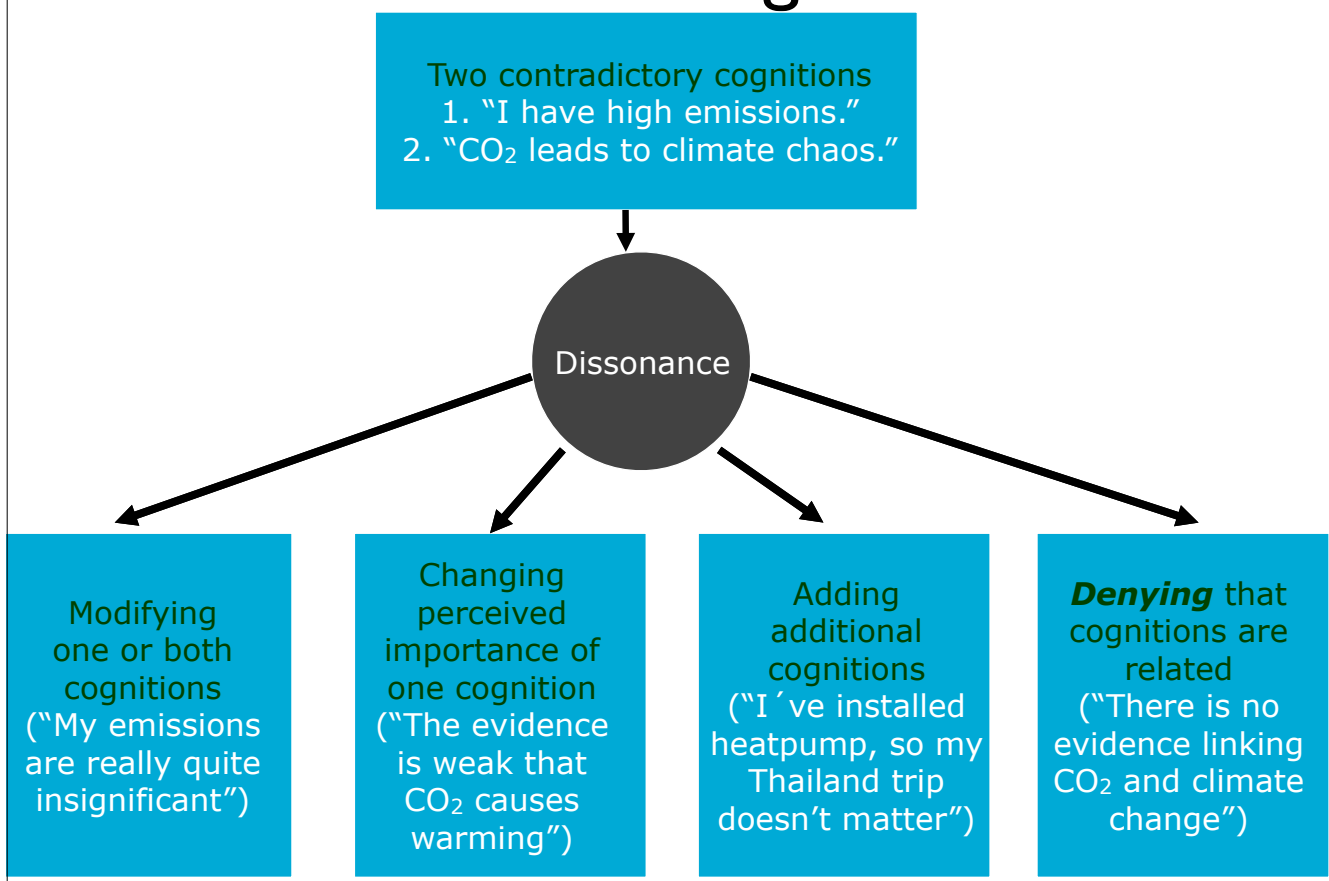
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Psychological barriers in climate communication:

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4. **Cost** and sacrifice



4. **Cost** and sacrifice



The barriers in summary

1. Perceived as **distant**
2. Little action **weakens** attitudes
3. **Dissonance** strengthens denial
4. Framed as **cost & sacrifice**

- ➡ The climate paradox
- ➡ Four psychological barriers
- ➡ **New psychological solutions**

New psychological solutions

1. Use the power of social networks
2. Make it easy to choose right
3. Use the power of stories
4. New framings

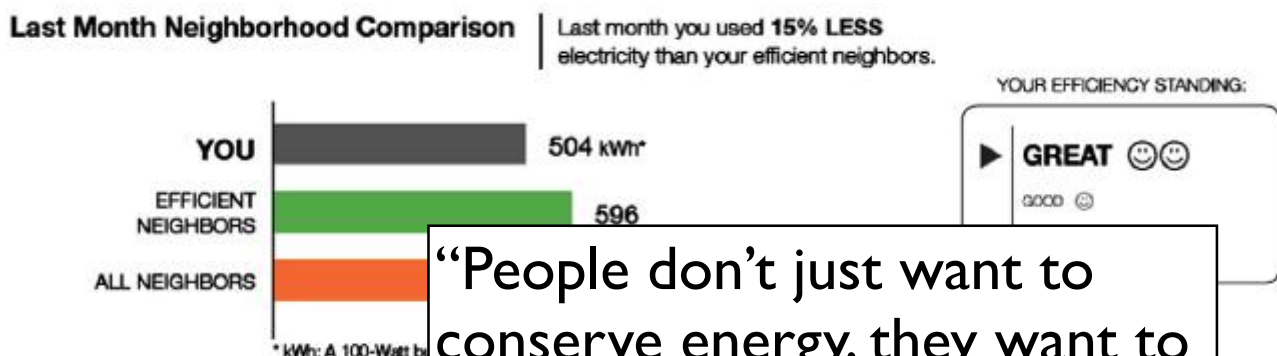
I. Use social networks:

Experimental studies to reduce domestic power consumption by comparing four groups:

1. for the sake of sustainability and the earth
2. for future generations
3. because it is profitable
4. because your neighbours do it

Sources: Using Peer Pressure as a Tool to Promote Greener Choices by Richard Conniff: Yale Environment 360: Allcott, H., Social norms and energy conservation, J. Public Econ. (2011), doi:10.1016/j.jpubeco.2011.03.003

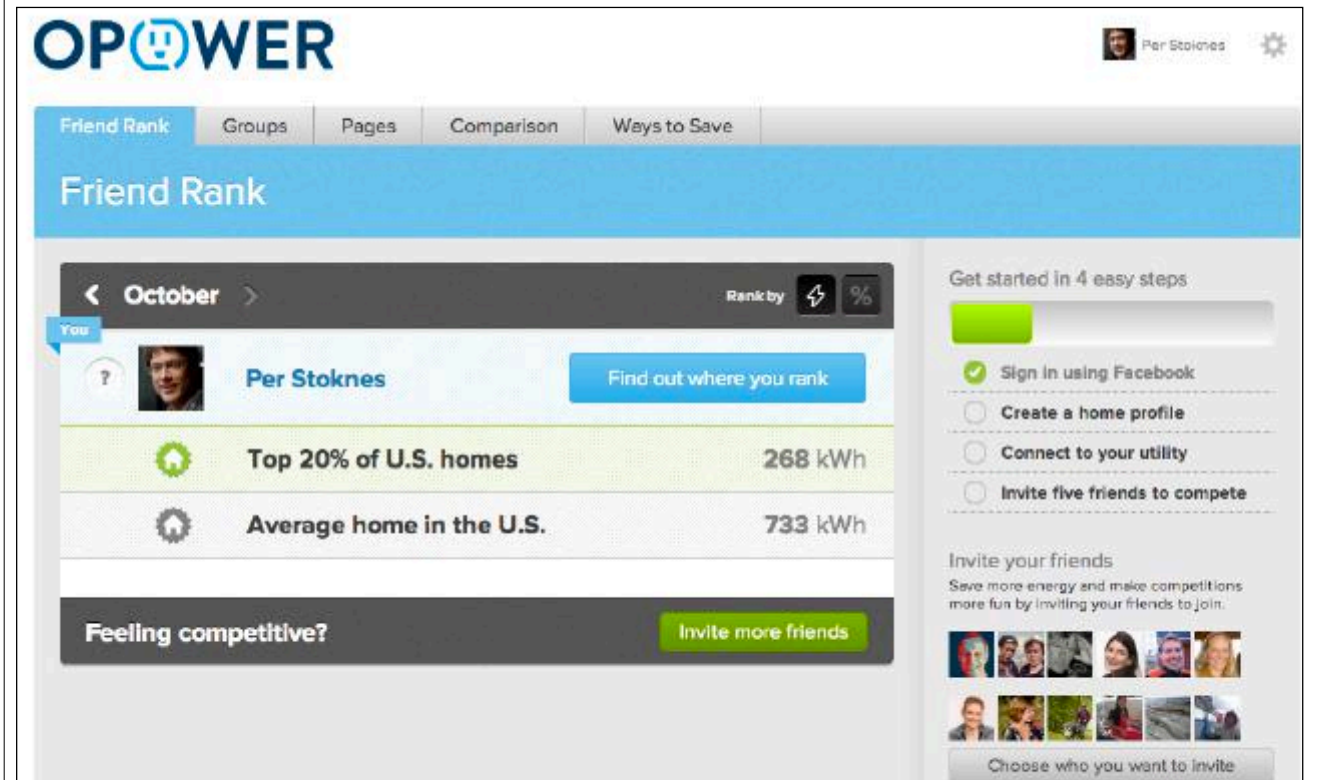
I. Social networks:



“People don’t just want to conserve energy, they want to be *acknowledged* for conserving energy.”
Robert Cialdini, Arizona S.U.

Sources: Using Peer Pressure as a Tool to Promote Greener Choices by Richard Conniff: Yale Environment 360: Allcott, H., Social norms and energy conservation, J. Public Econ. (2011), doi:10.1016/j.jpubeco.2011.03.003

I. Sosiale nettverk:



I. Use the power of social networks

- Use local-patriotism: Copenhagen vs. Oslo
- Use word of mouth
- Make eco-team out of existing groups and networks
- Change the messenger til someone that the target group identifies with.

New psychological solutions

1. Use the power of social networks

2. Make it easy to choose right

3. Use the power of stories

4. New framings

2. *Easy* to choose climate friendly

Nudging examples:

- Energy labels of cars, buildings, foods and appliances is getting in place. Now we must utilise this information psychologically to influence choice design!
- Combine public transport & bikes with limited parking in cities; quicker mobility without car!
- Make it default to include CO₂ prices in all airplane tickets, with opt-out in small fonts



*You should consider that
the electricity cost of this
tumble drier will be*

4522 kr*



*Electricity cost is calculated using the average electricity price through 2010, set to 95 øre per kWh (taxes and grid tariffs included), a fridge freezer lifespan estimated to 15 years, and according to EU guidelines for calculation of electricity consumption.



5 %



500 GWh



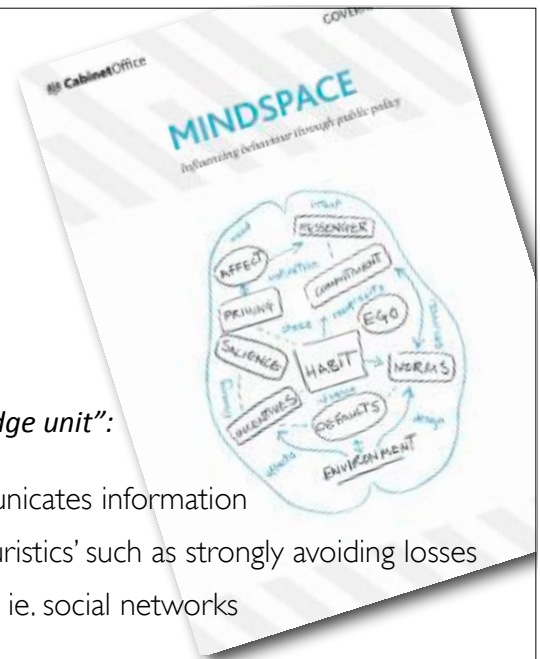
10 Mt CO2



*Electricity cost is calculated using the average electricity price through 2010, set to 95 øre per kWh (taxes and grid tariffs included), a fridge freezer lifespan estimated to 15 years, and according to EU guidelines for calculation of electricity consumption.

“MINDSPACE”

Kilde: UK Gov. “nudge unit”:



Messenger - people are heavily influenced by who communicates information

Incentives - our responses to incentives are shaped by 'heuristics' such as strongly avoiding losses

Norms - we are strongly influenced by what others do, ie. social networks

Defaults - we 'go with the flow' of pre-set options

Salience - our attention is drawn to what is novel and seems rel-evant to us

Priming - our acts are often influenced by subconscious cues

Affect - our emotional associations can powerfully shape our actions;

Commitments - we seek to be consistent with our public promises, and reciprocate acts

Ego - we act in ways that make us feel better about ourselves

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New psychological solutions

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Enthusiastic stories

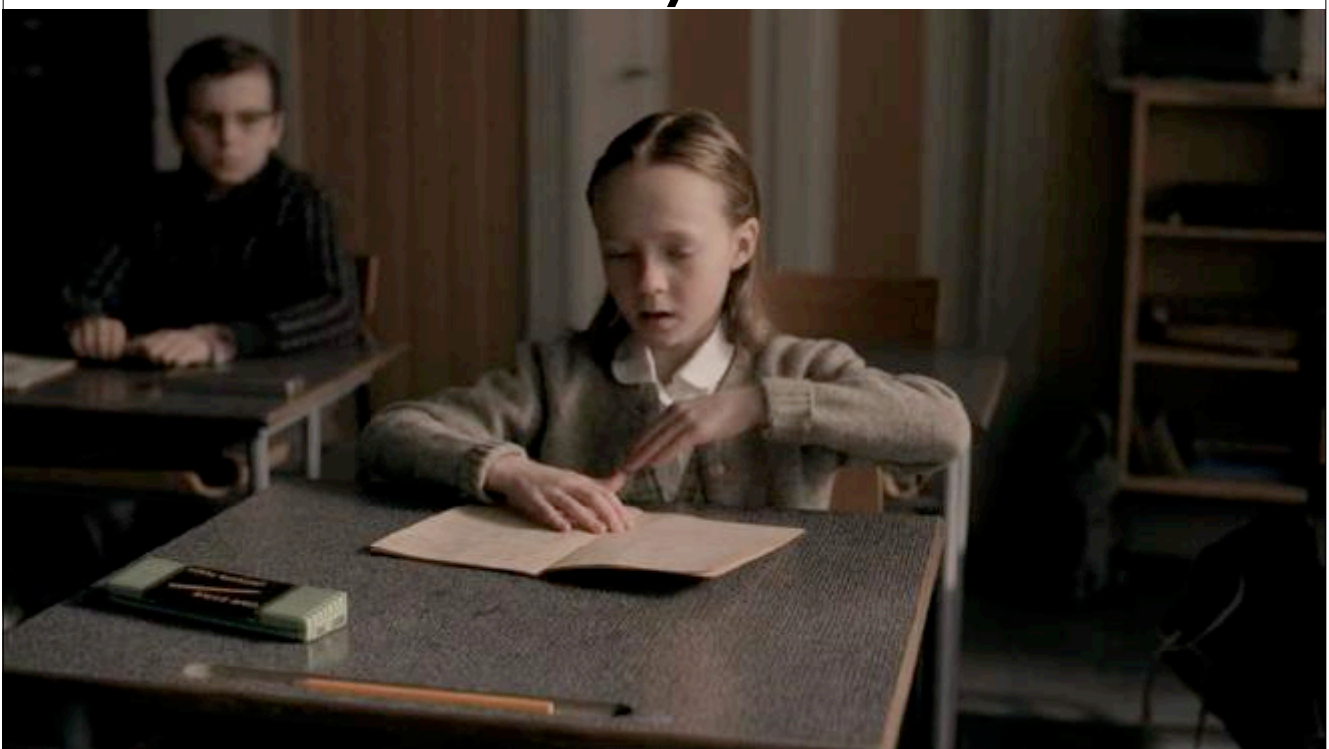
2013 - 2050	Low Biodiversity	High Biodiversity
Low CO2		We made it!
High CO2	Hell	habitat destruction

“This is a positive environmentalism, which envisages the rewilding – the ecological restoration – of large tracts of unproductive land and over-exploited sea. It recognises nature’s remarkable capacity to recover, to re-establish the complex web of ecological relationships through which, so far, we have crudely blundered. Rather than fighting only to arrest destruction, it proposes a better, richer world, a place in which, I hope, you would delight to live.”

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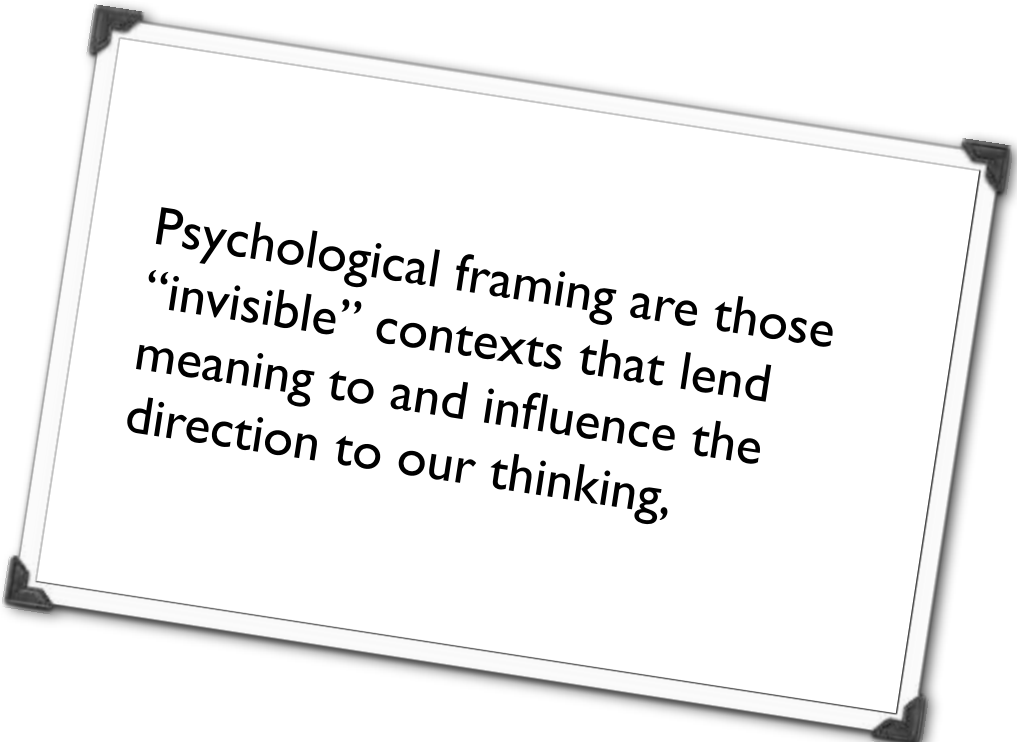
Source: G. Monbiot, <http://www.monbiot.com/2012/04/16/2125/>

If telecom, why not climate?

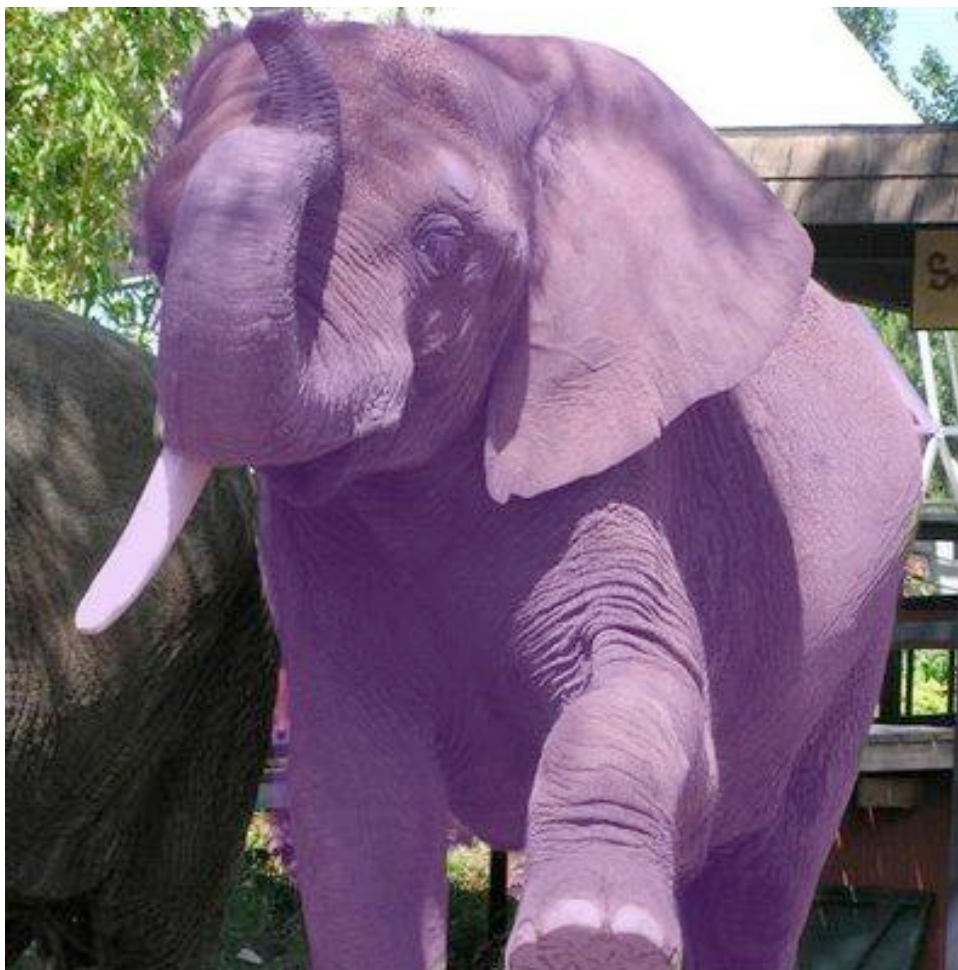


New psychological solutions

1. Use the power of social networks
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4. New framings



Psychological framing are those
“invisible” contexts that lend
meaning to and influence the
direction to our thinking.



Insurance ?



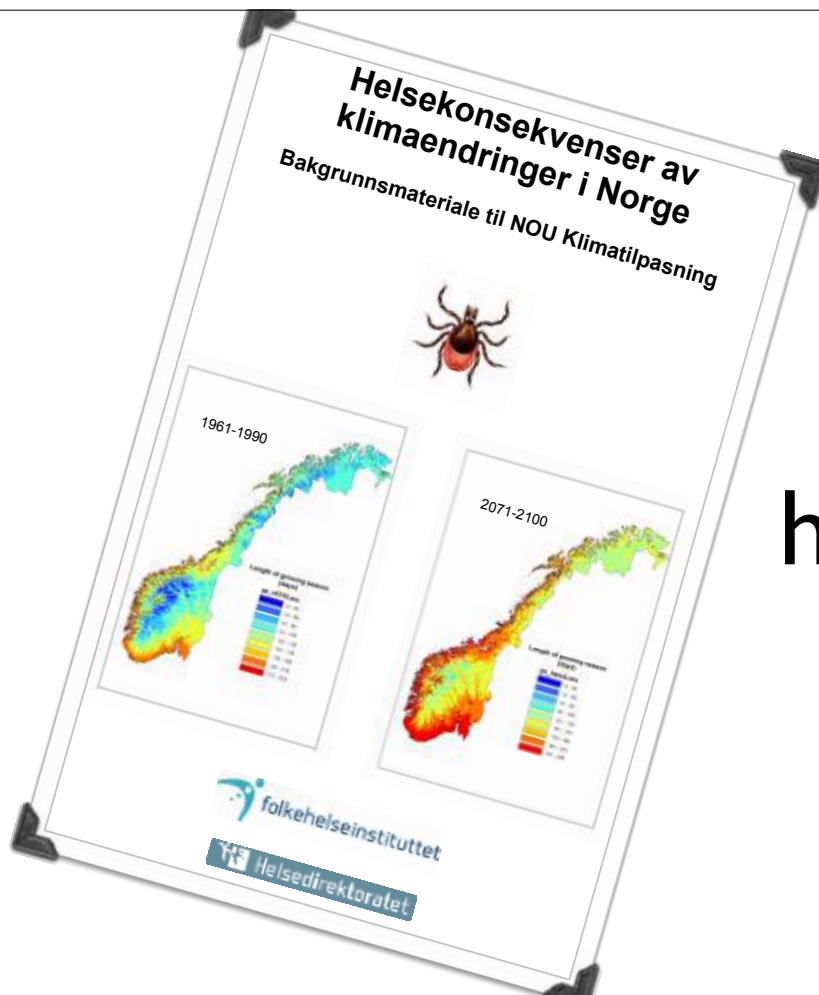
Sandy - the biggest, ever...,
around 50-60 bn\$ damage¹

<http://business.time.com/2012/10/31/hurricane-sandy-estimated-to-cost-60-billion/>

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Mass-migrations and defence



health

Conclusions

1. We have the necessary technologies (BAT) to solve the very serious “climate issue”.
2. The challenge now has more to do with decisionmaking processes and citizen support for solutions in democracies
3. Psychological and behavioral approaches do not solve all problems, but can point to *new approaches* to build support for strong climate measures and policies.

Thank you

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