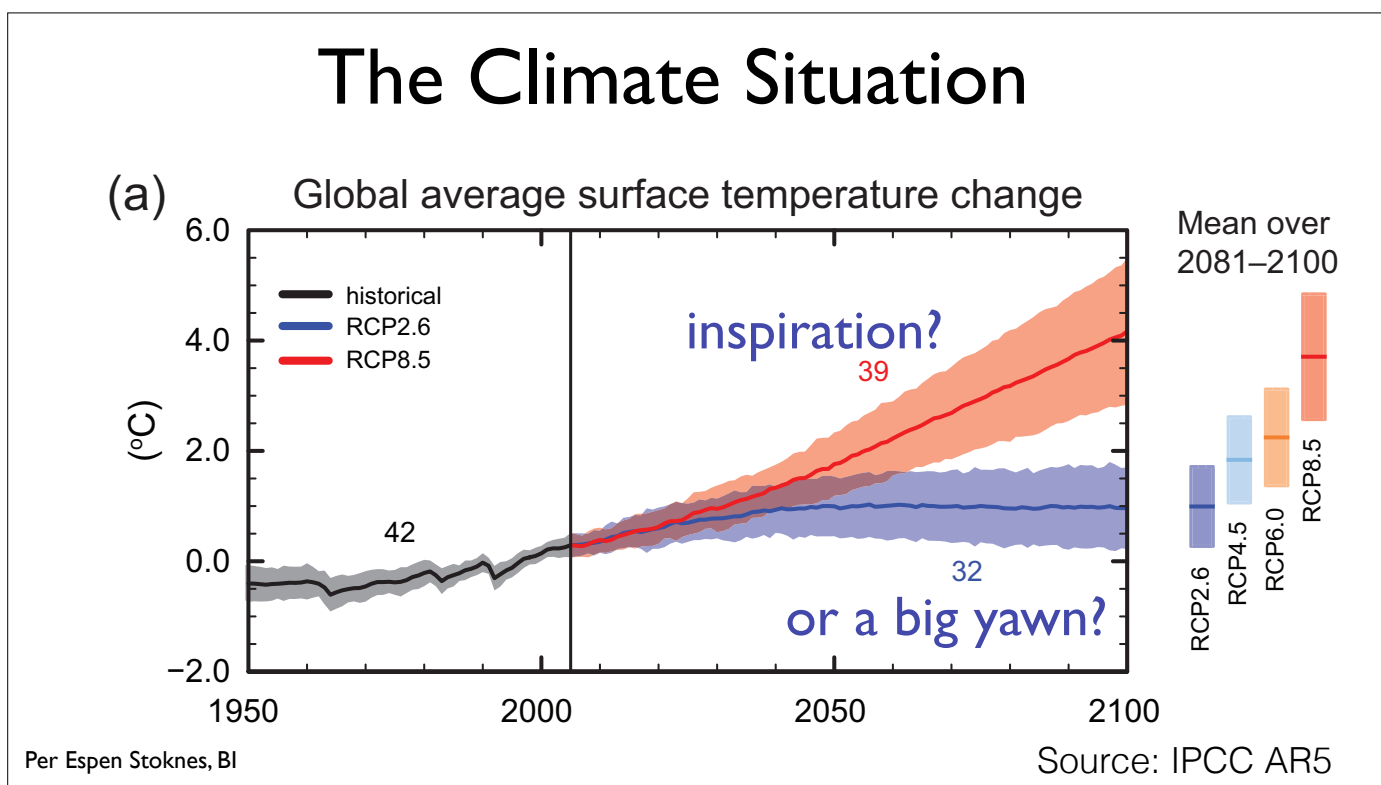
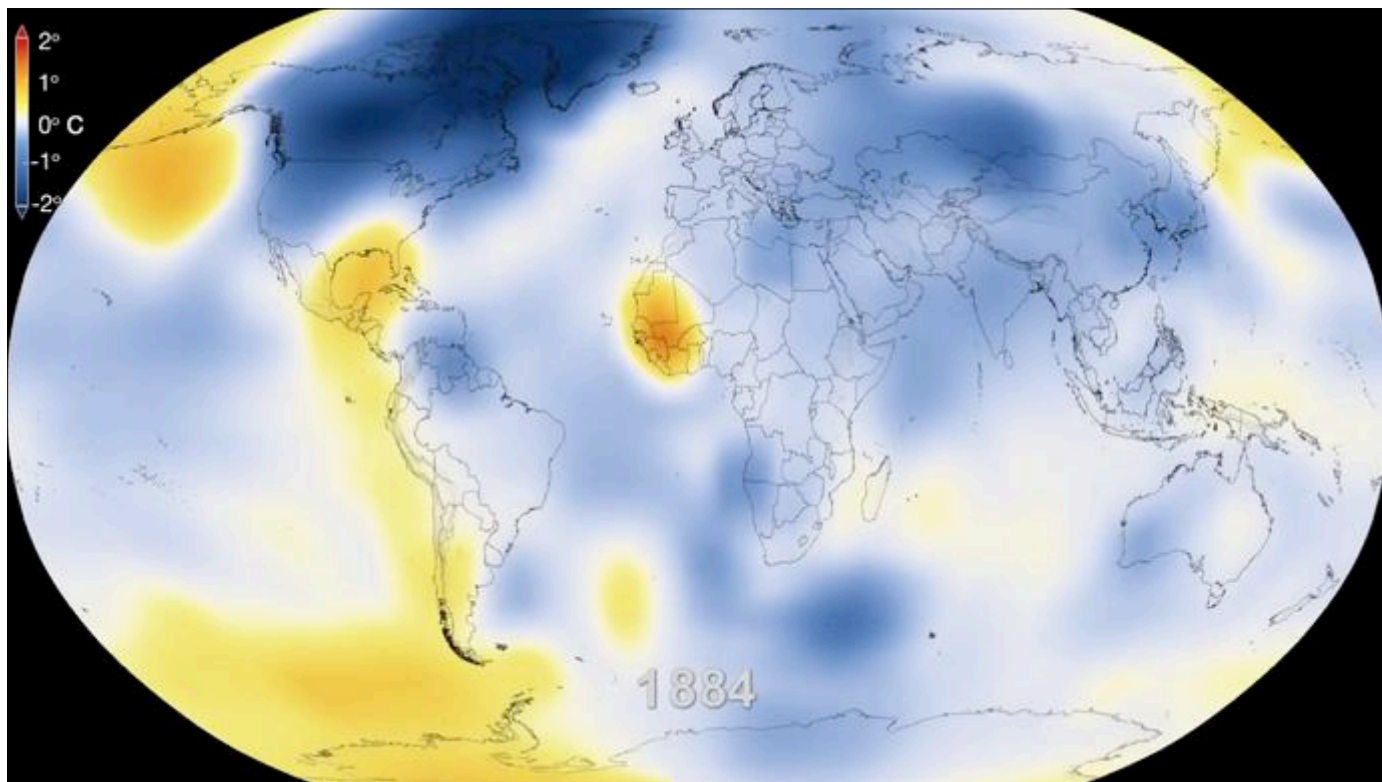


**What We Think About**  
When We Try Not To Think About  
**Global Warming**  
Toward a **NEW PSYCHOLOGY** of Climate Action  
Per Espen Stoknes  
Foreword by Jorgen Randers

# How (not) To Build Support for Climate Policy?

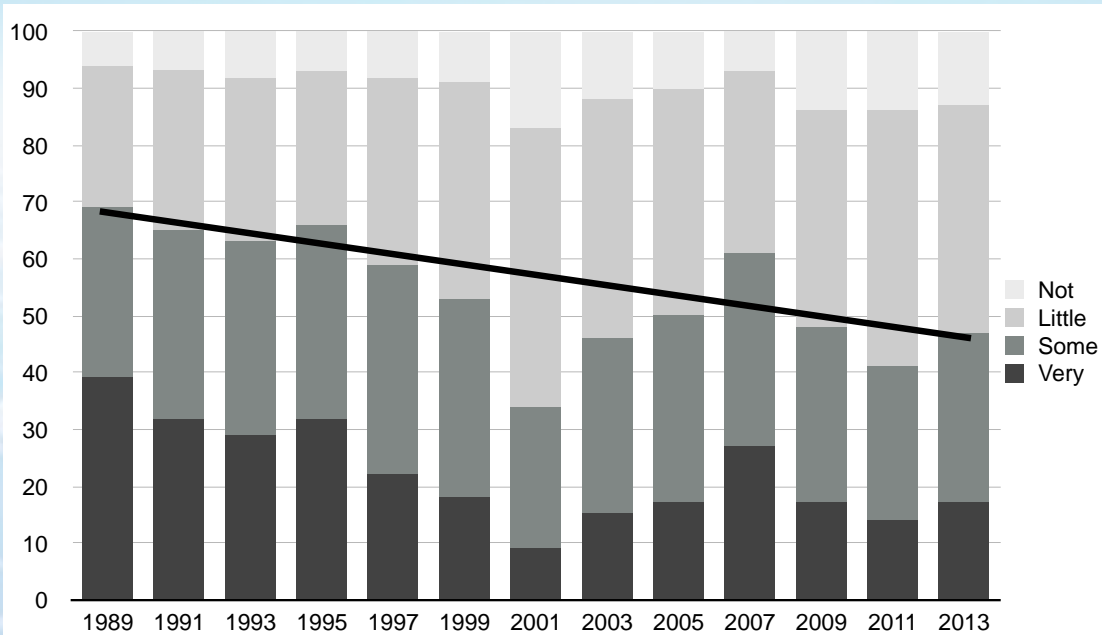
Per Espen Stoknes  
Director  
Center for Green Growth  
Norwegian Business School  
on twitter: [@estoknes](#)





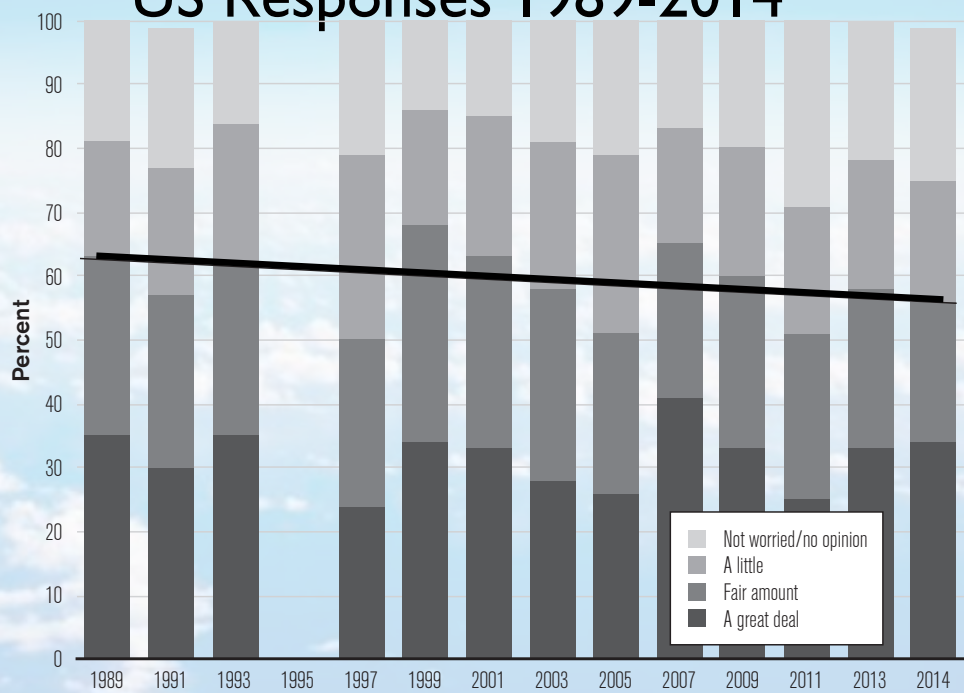
## Norwegian Responses 1989-2013

“How concerned are you for greenhouse effects and climate change?”



“How much do you personally worry about the greenhouse effect or global warming?”

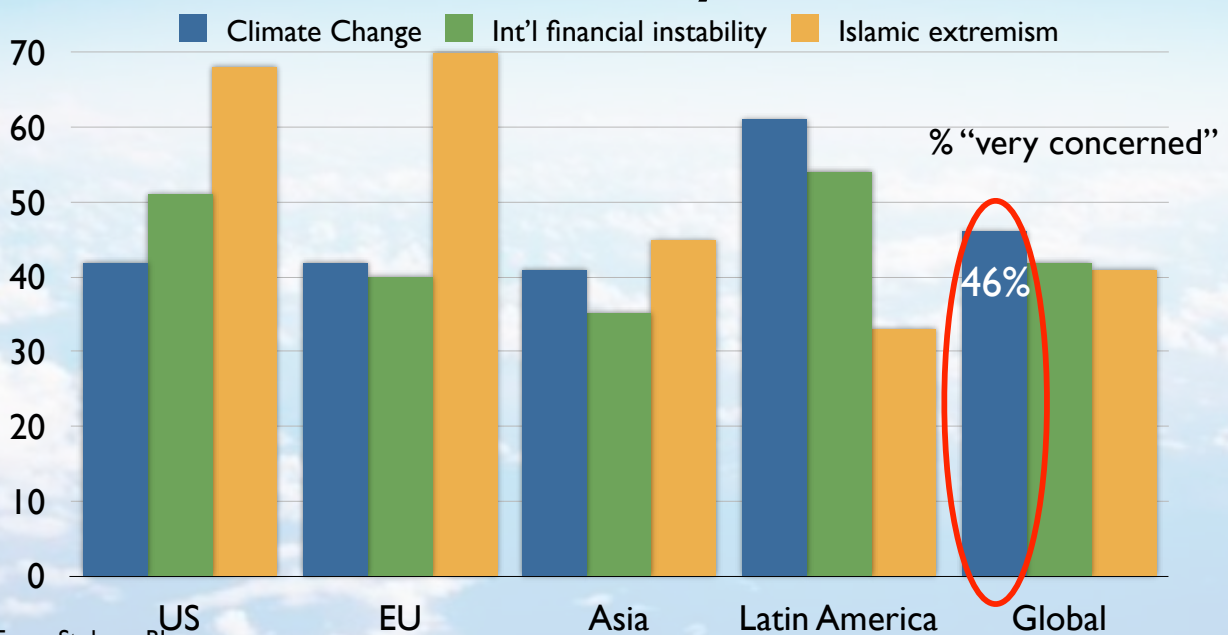
## US Responses 1989-2014



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Source: Gallup, 2014.

## How concerned are you about...

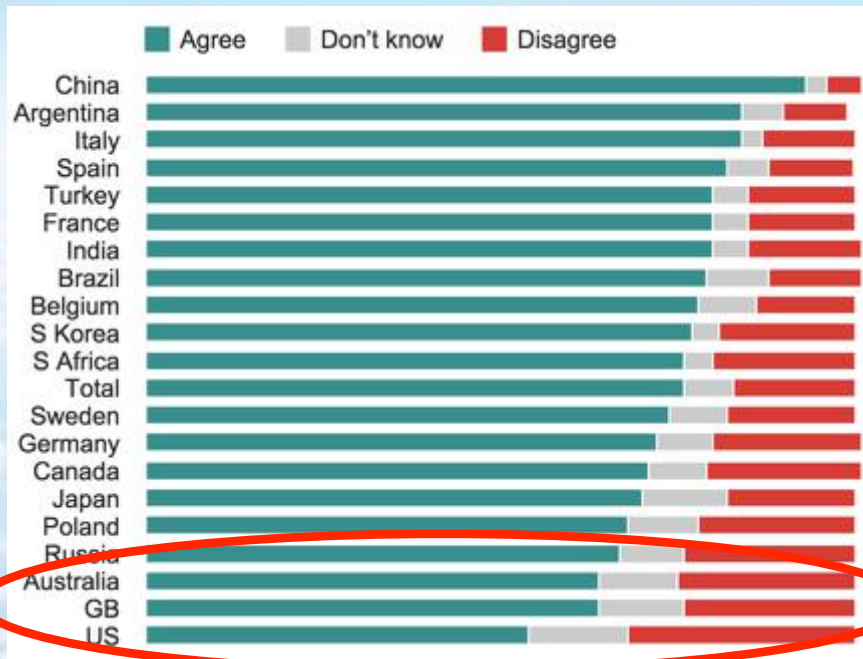


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Source: Pew Research Centre, Climate Change and Financial Instability Seen as Top Global Threats, June 24, 2013

## International Responses 2014

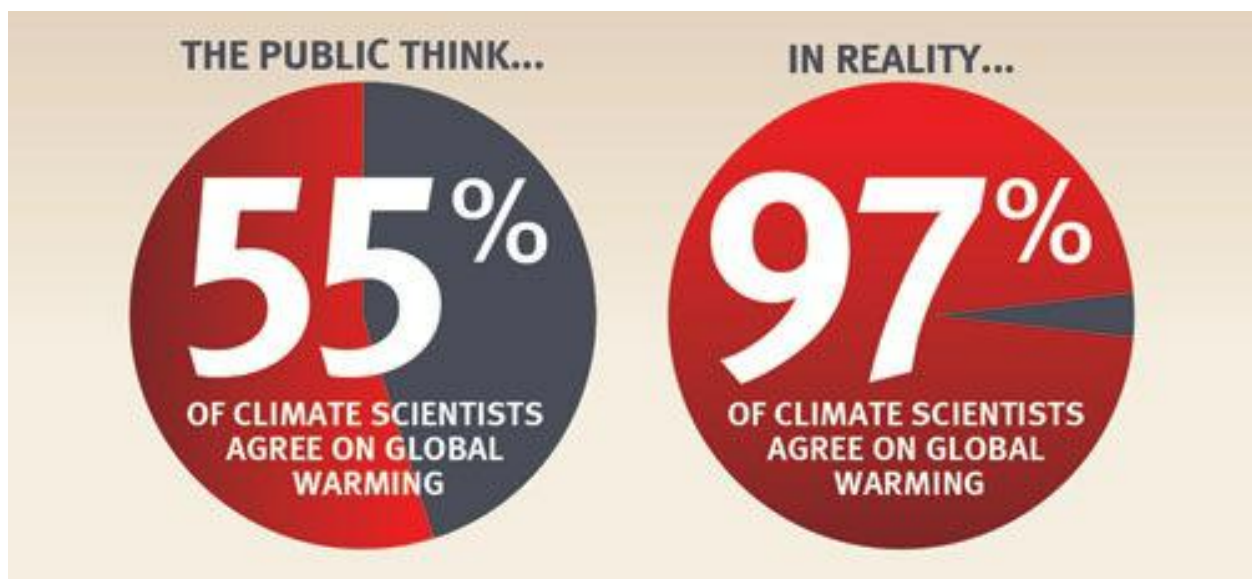
“The climate change we’re currently seeing is largely the result of human activity.”



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Source: Ipsos MORI Global Trends, 2014

## the climate paradox



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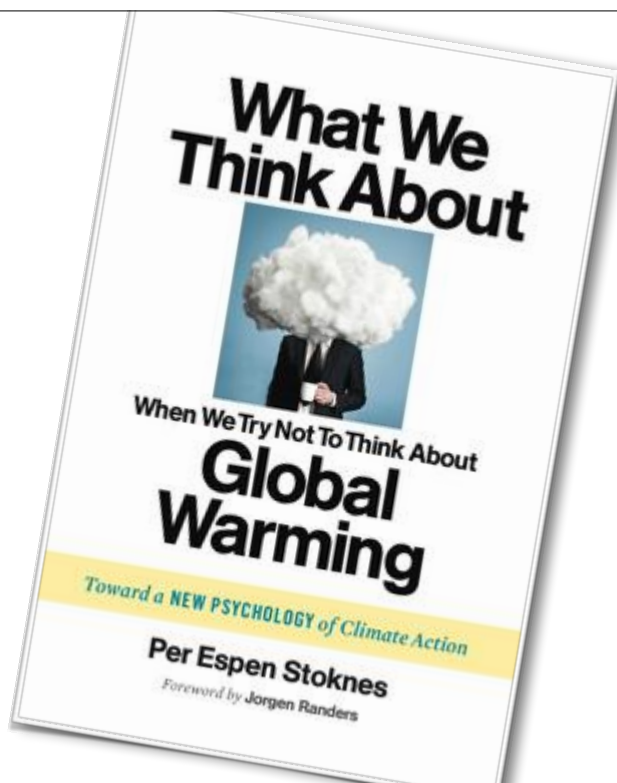
Source: Cook et al 2013, <http://www.skepticalscience.com/>  
Leiserowitz, Maibach et al (2015). Climate change in the American mind: March, 2015.



# Why?



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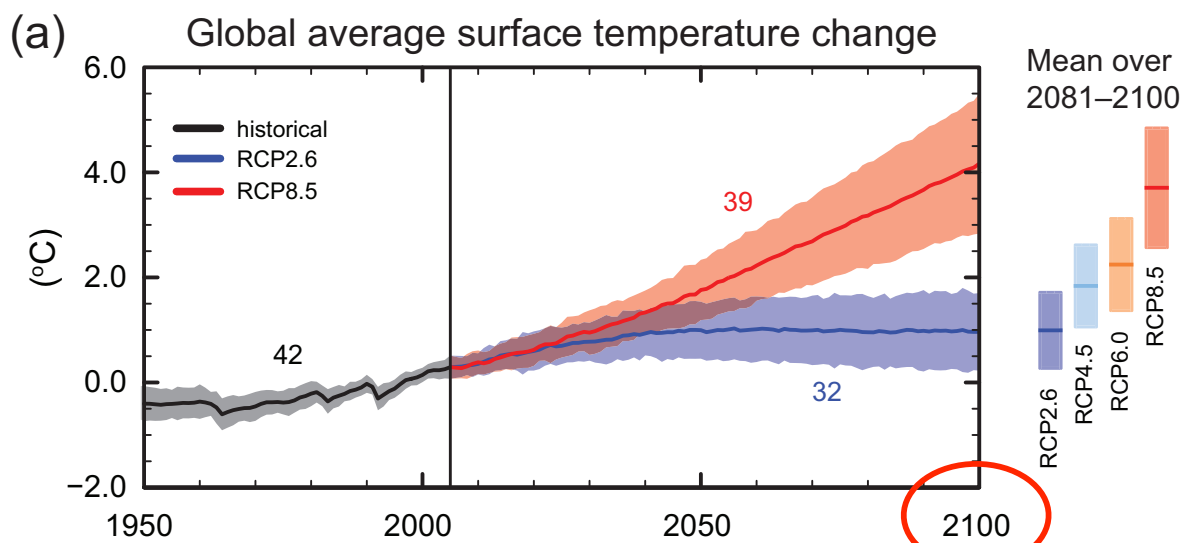


➡ 5 Defenses

➡ 5 Solutions



## Distant in time ...



in space ...

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Distant socially...



Credit: <http://inapcache.boston.com/>



in responsibility ...



## *Psychological distancing*

- ➡ low feeling of personal risk
- ➡ reduces sense of urgency
- ➡ low issue priority

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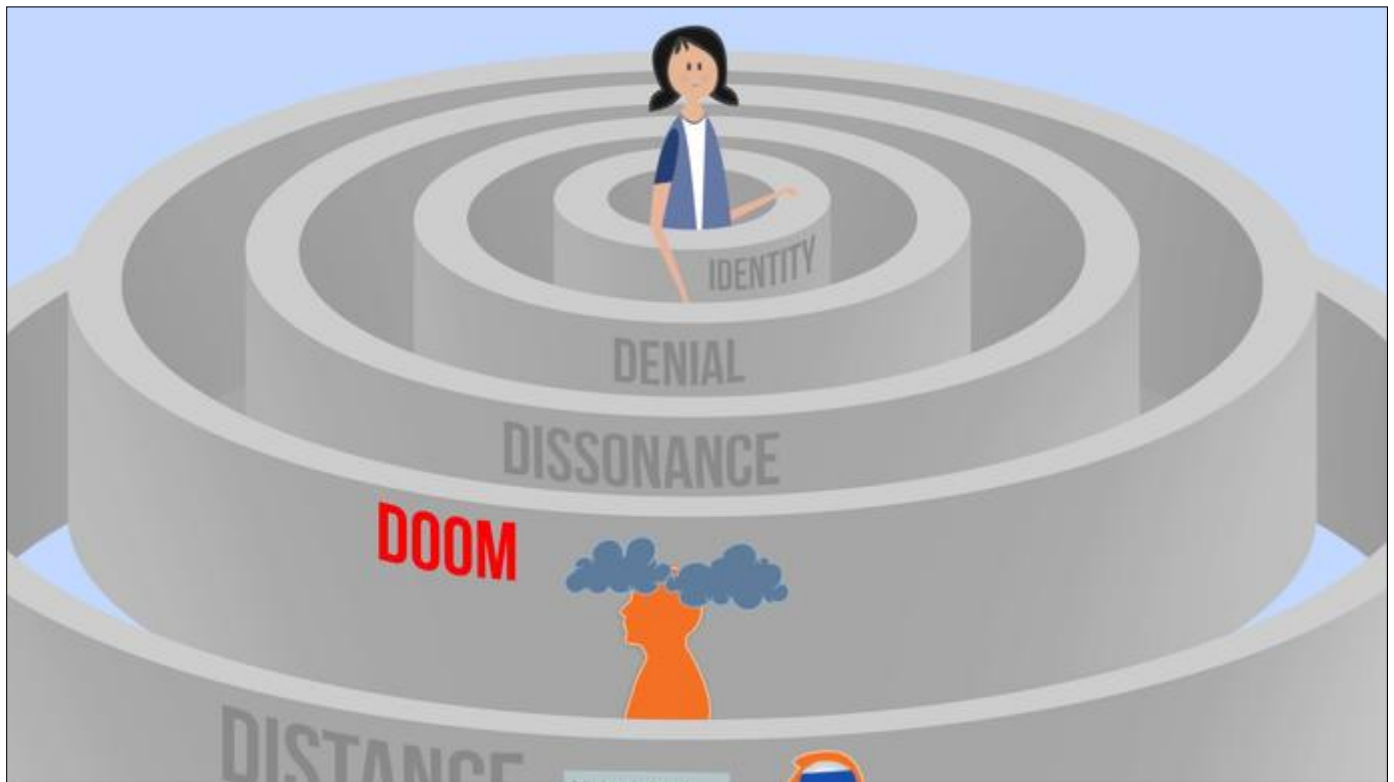
Sources:

Leiserowitz, 2005, "American Risk Perceptions: Is Climate Change Dangerous?", *Risk Analysis*, 25(6), 1433–1442. <http://doi.org/10.1111/j.1540-6261.2005.00690.x>

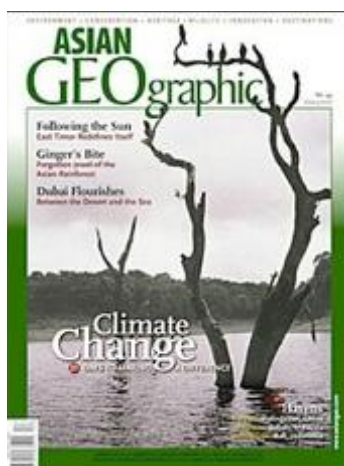
Spence and Pidgeon, 2010, "Framing and communicating climate change: The effects of distance and outcome frame manipulations," *Global Environmental Change*, vol. 20, no. 4, pp. 656–667, Oct..

Spence, Poortinga, and Pidgeon, 2012, "The Psychological Distance of Climate Change: Psychological Distance of Climate Change," *Risk Analysis*, vol. 32, no. 6, pp. 957–972..





## Too much doom?

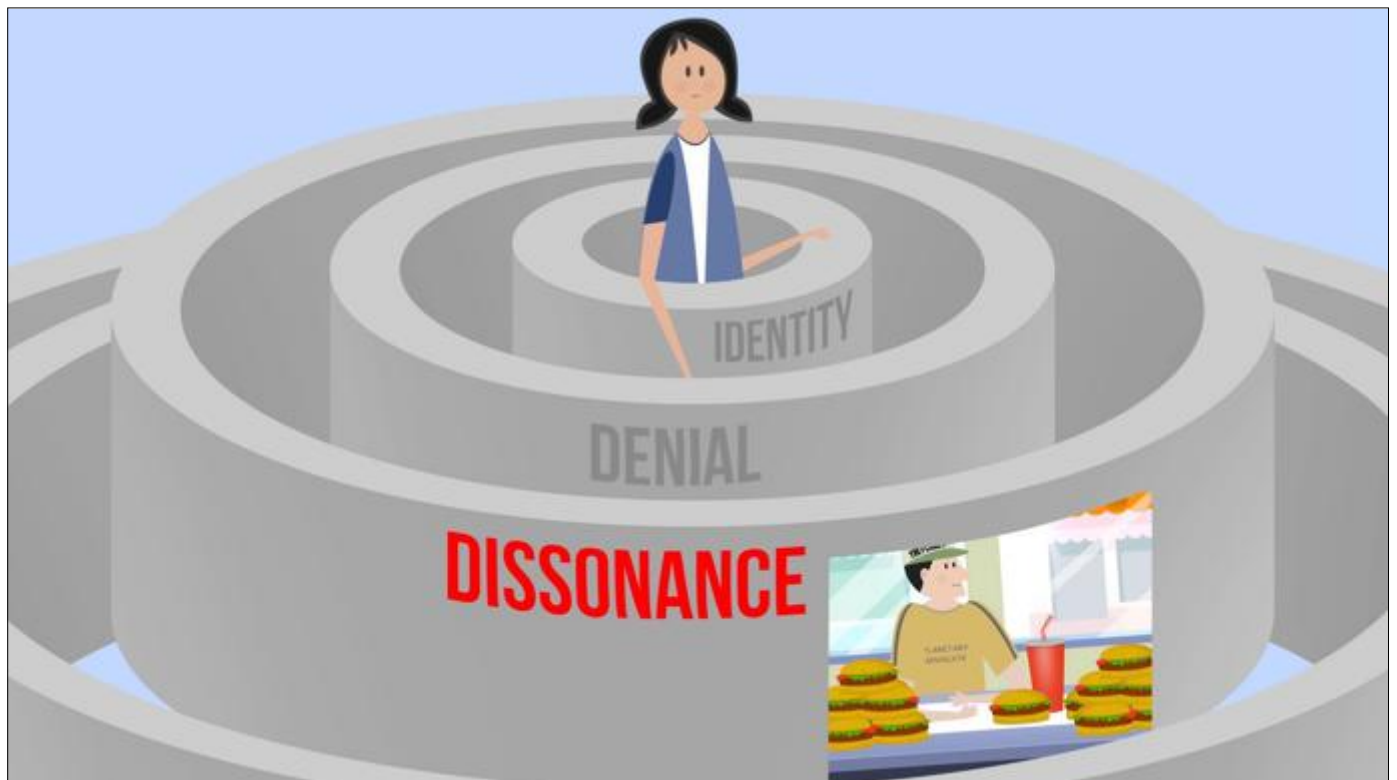


leads to habituation, avoidance & stereotyping



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Credit: [www.AuthenticSustainability.com](http://www.AuthenticSustainability.com) 19



# Dissonance when actions conflict with knowledge

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

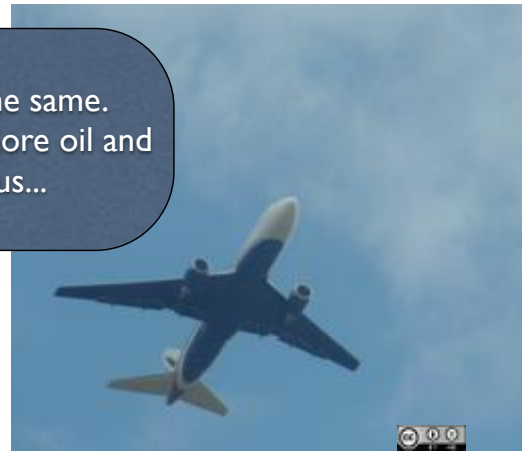
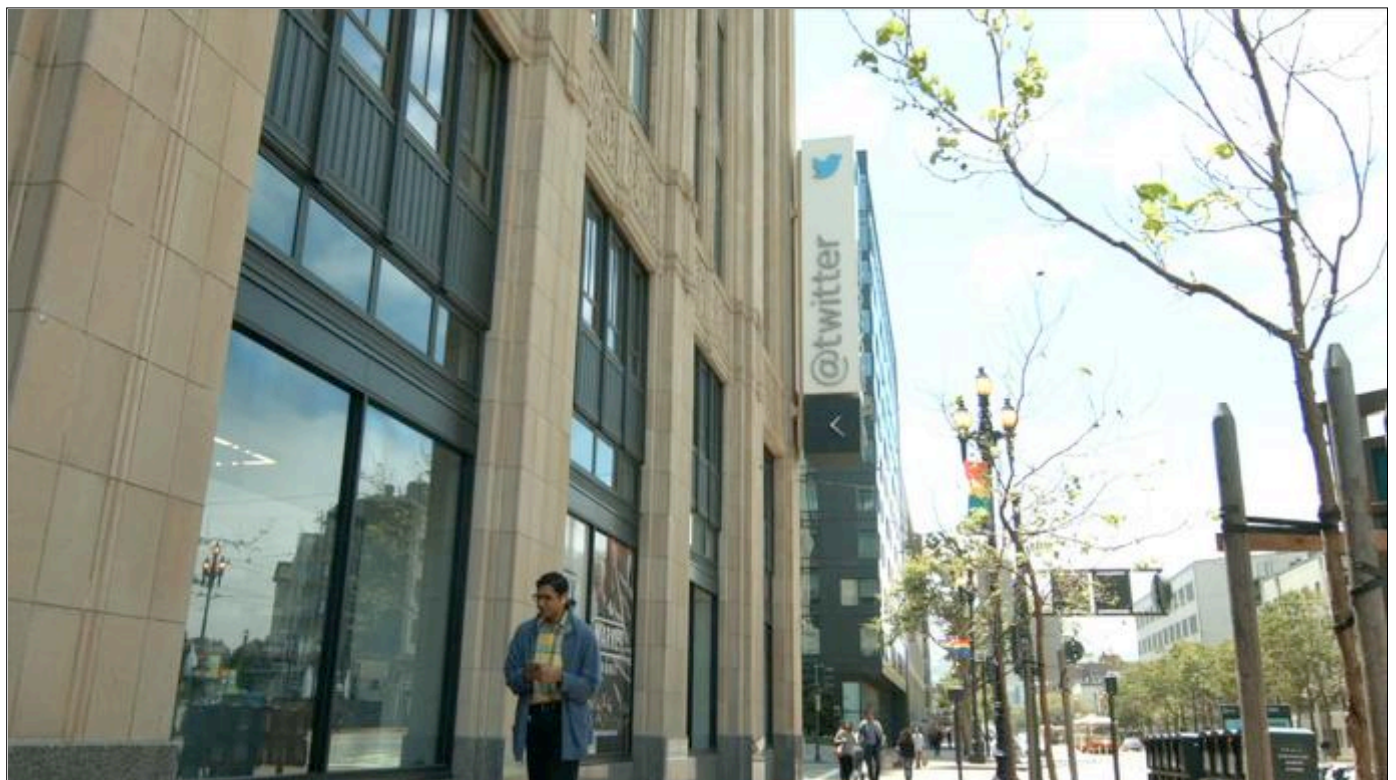


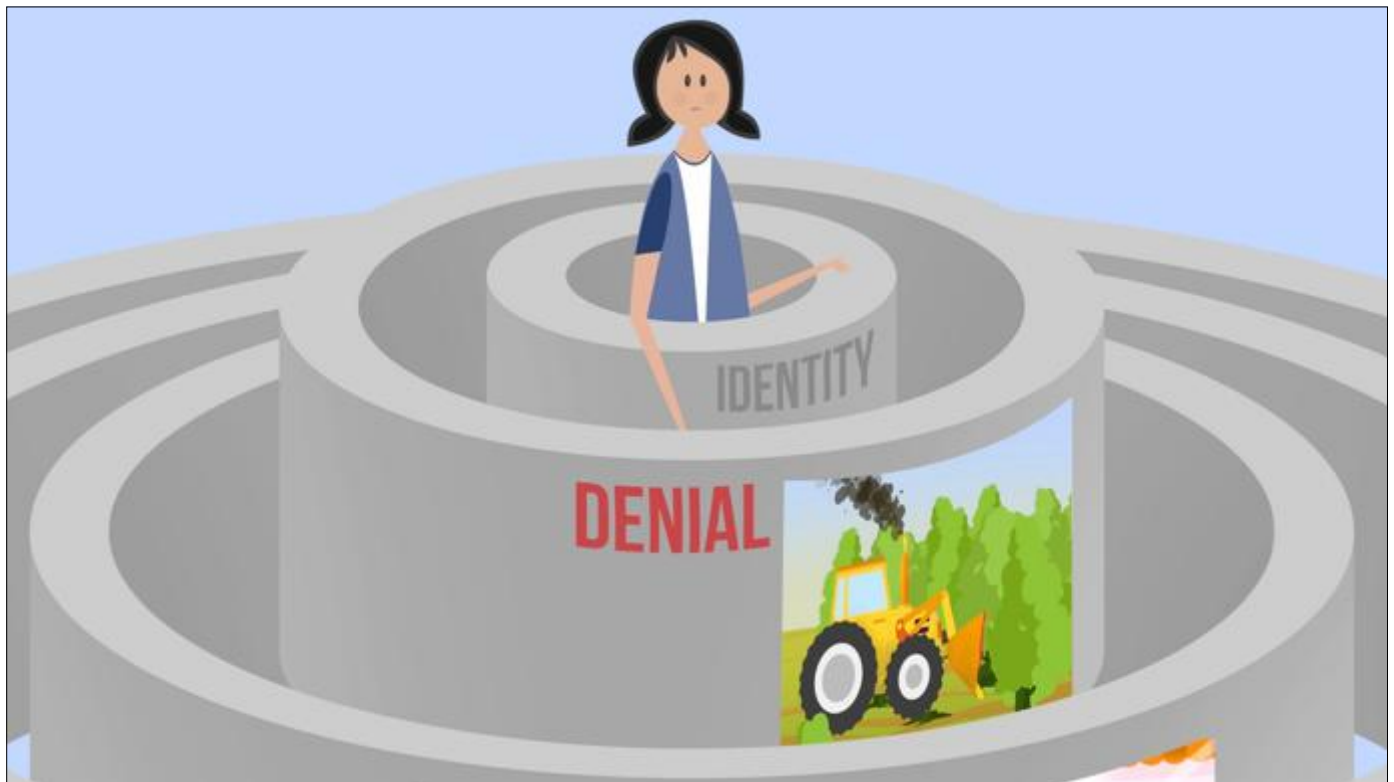
Photo Credit: [planetbeingagency](#)







behavior  attitudes



“The alarmists on  
global warming got  
a problem because  
the science doesn't  
back them up.”  
Ted Cruz

Photo Credit: <http://i.huffpost.com/gen/1305857/images/o-TED-CRUZ-facebook.jpg>  
Quote: "Late Night with Seth Meyers" interview, March 17, 2015

# Denial

a “social contract”

both to know  
*and* not-to-know

better: “resistance”?

Norgaard, 2011, Living in Denial





## Cars - express identity



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## “Rollin’ Coal”: identity-protective cognition



Per Espen Stoknes, BI

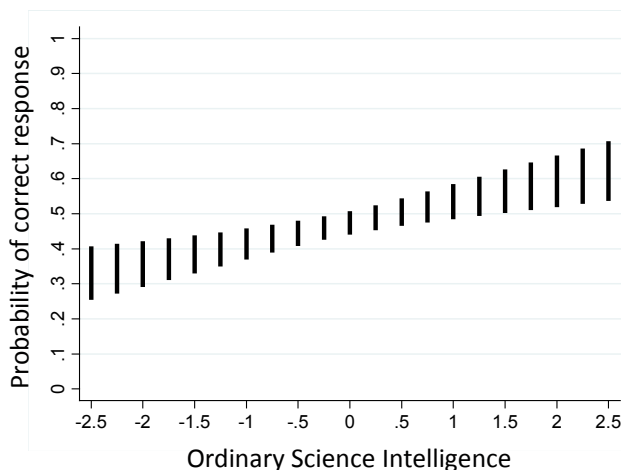
Source: <https://www.youtube.com/watch?v=hsC0kLNSLAQ>

# defending one's identity

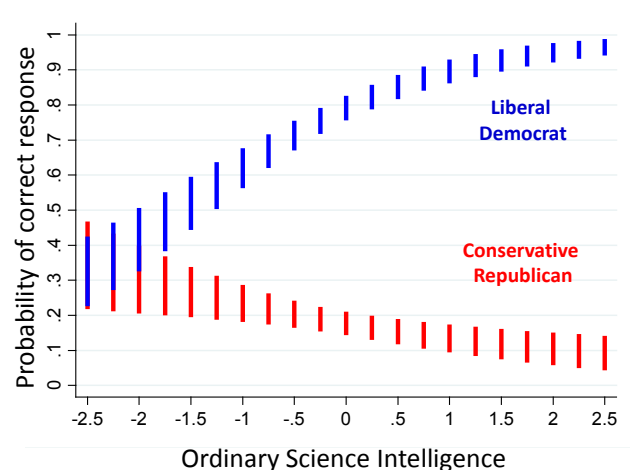


# identity overrides knowledge

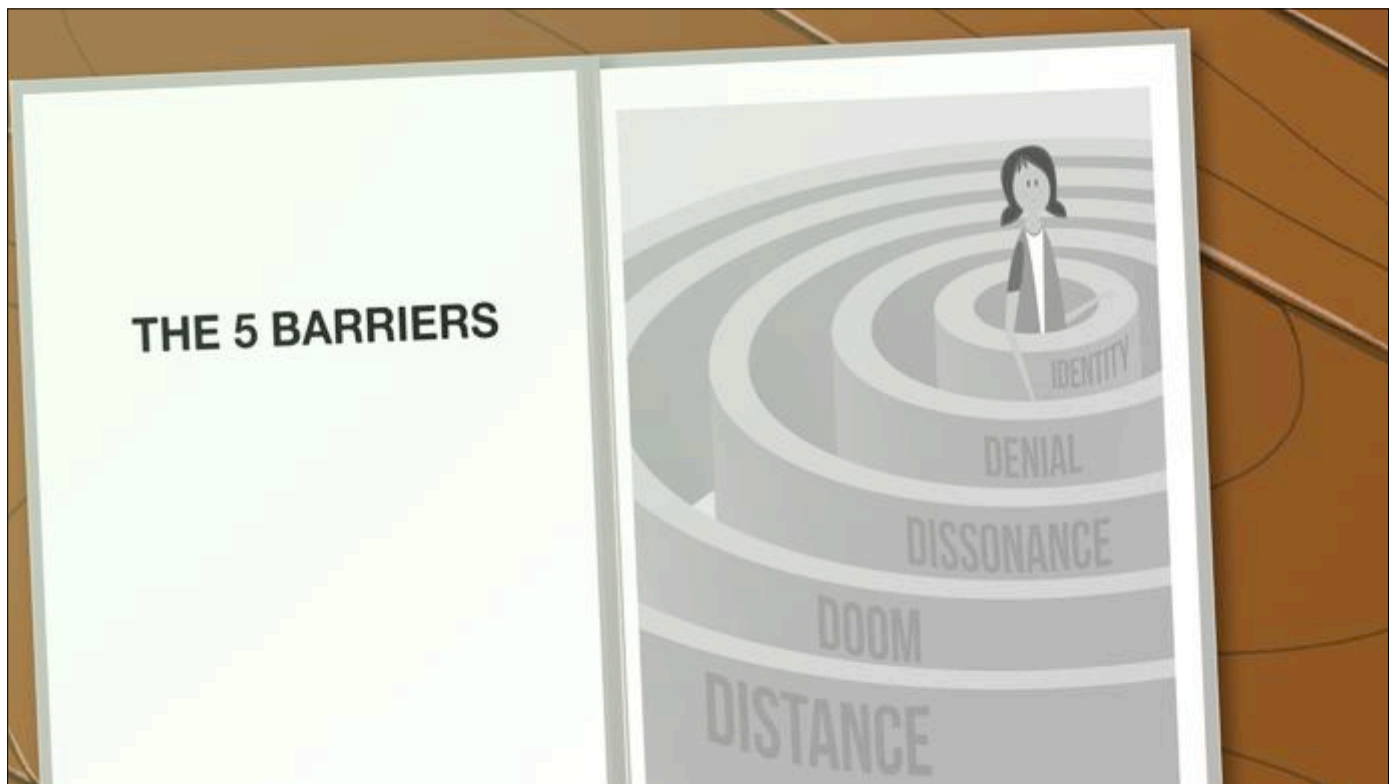
*"[Is the earth] getting warmer (a) mostly because of human activity such as burning fossil fuels or (b) mostly because of natural patterns in the earth's environment?"*



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D. M. Kahan, 2014 "Climate Science Communication and the Measurement Problem," *Advances in Political Psychology*, vol. in press.



How to break through  
the barriers ?

or maybe by-pass them?



# We've enough reports

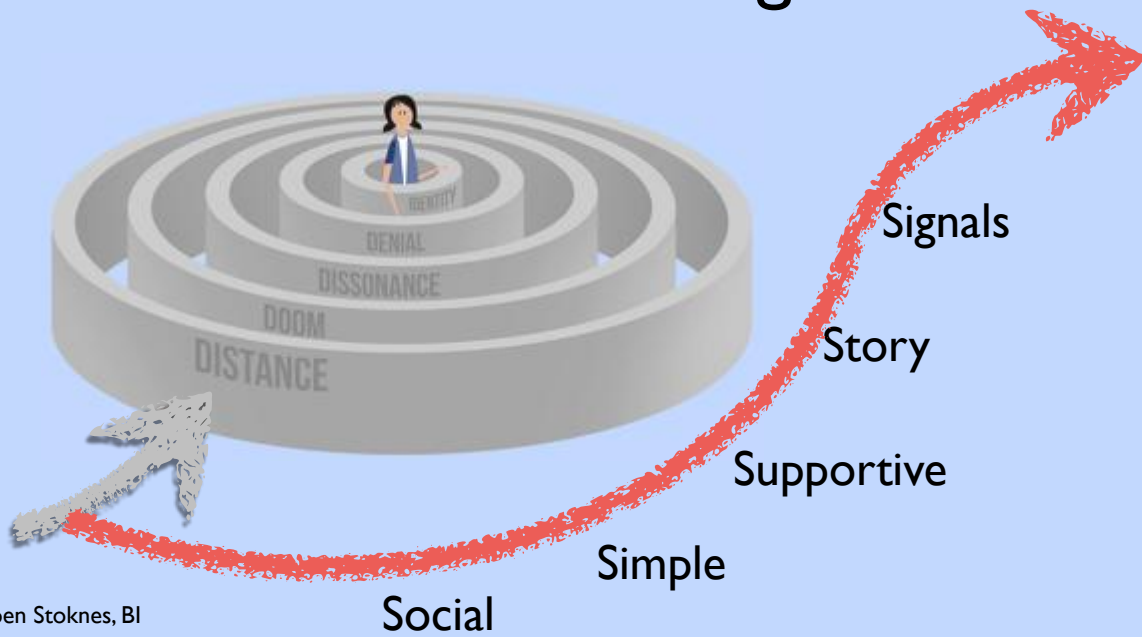


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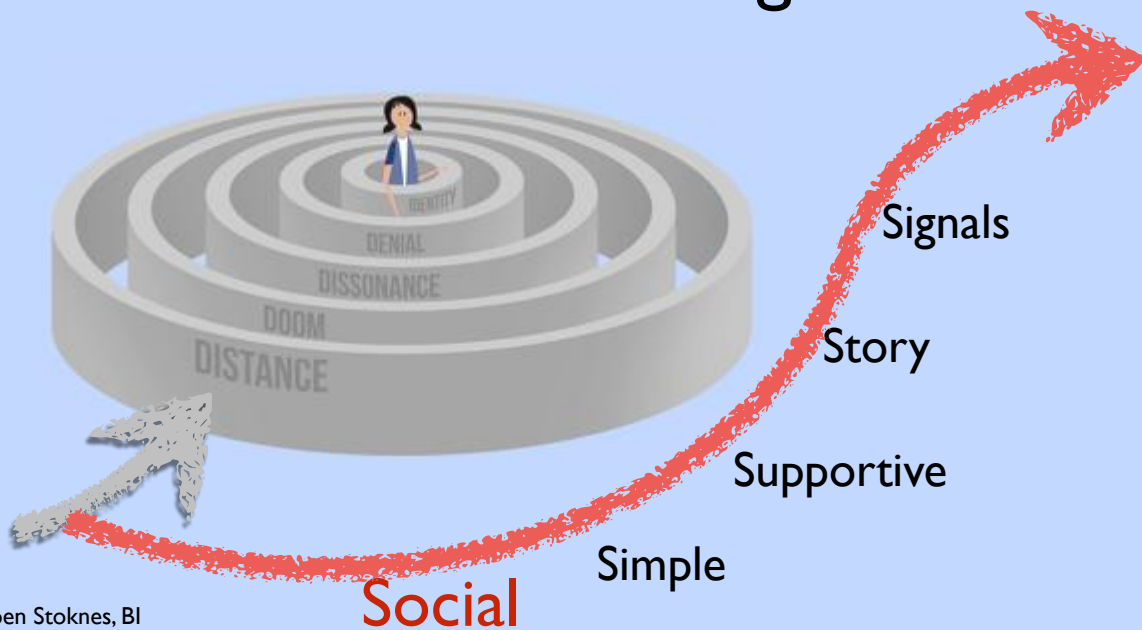


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# Five new strategies



# Five new strategies

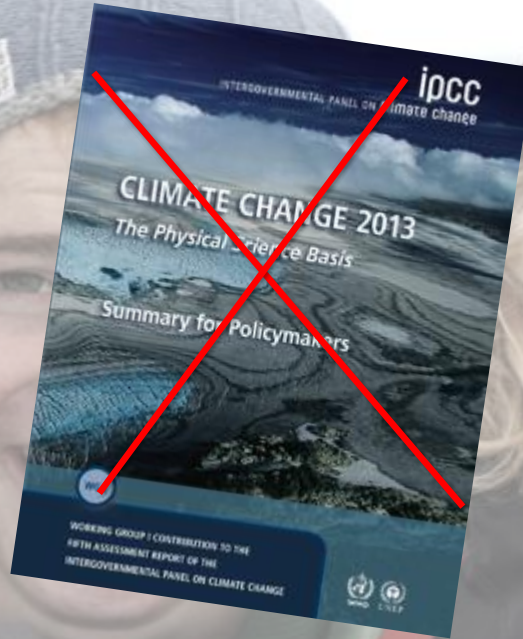


# Make it social and local!

Use:

- Social norms
- Social media
- Local issues
- Flow & glow

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## I. Use Power of Social Networks:

rooftop solar is contagious

Sources: Graziano, M., & Gillingham, K. (2014). Spatial patterns of solar photovoltaic system adoption: the influence of neighbors and the built environment. *Journal of Economic Geography*. <http://doi.org/10.1093/jeg/lbu036>



# I. Use Power of 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

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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. Use Power of Social Norms



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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

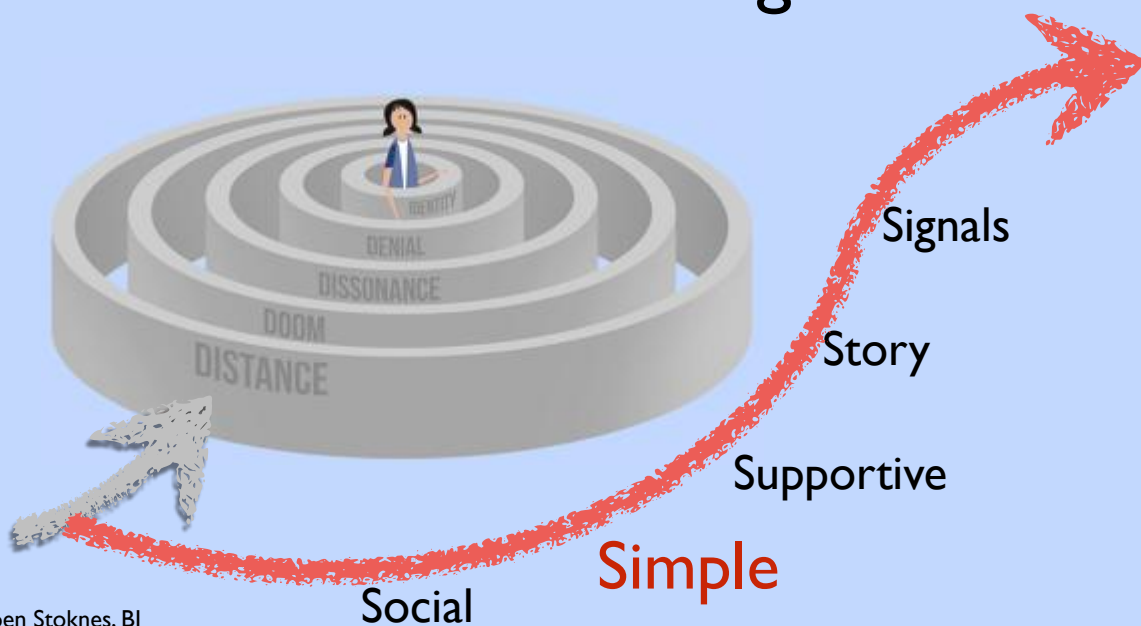


## Green Sports Alliance

- More peer messengers
- Use local-patriotism: LA vs SF, Texas vs California
- Make eco-teams out of existing groups and networks

Photo by Annie Marie Musselman

## Five new strategies



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## 2. Simple to choose climate friendly



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- **Default two-sided printing:**  
15% less paper
- **If applied to all US offices**  
800 ktCO<sub>2</sub>e/year  
equivalent to 150.000 cars

Sources: Egebark and M. Ekström, "Can Indifference Make the World Greener?," IFN Working Paper No. 975, 2013.  
Pichert and Katsikopoulos, "Green defaults: Information presentation and pro-environmental behaviour," *J. of Environmental Psychology*, vol. 28, no. 1, pp. 63–73, Mar. 2008

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→ Fri., 8 May., 2015   Seattle, WA (SEA) to San Francisco, CA (SFO)				
Depart: 07:42 Fri., 8 May., 2015 Seattle, WA (SEA)	Arrive: 09:52 Fri., 8 May., 2015 San Francisco, CA (SFO)	Travel Time: 2 hr 10 mn	Flight distance: 678 m	Flight: UA294 Aircraft: Airbus A320 Fare Class: United Economy (K) Meal: None No Special Meal Offered.

← Tue., 12 May., 2015   San Francisco, CA (SFO) to Seattle, WA (SEA)				
Depart: 18:00 Tue., 12 May., 2015 San Francisco, CA (SFO)	Arrive: 20:07 Tue., 12 May., 2015 Seattle, WA (SEA)	Travel Time: 2 hr 7 mn	Flight distance: 678 m	Flight: UA560 Aircraft: Airbus A320 Fare Class: United Economy (H) Meal: None No Special Meal Offered.

Traveler(s): Dr. Per Espen Stoknes  
[Edit traveler\(s\)](#)

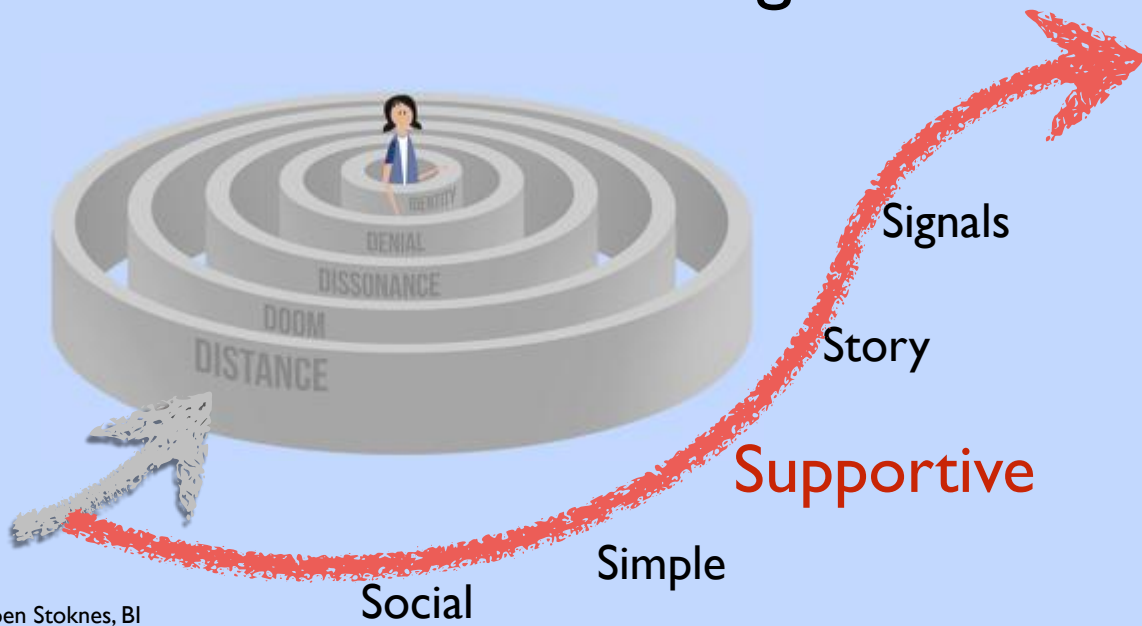
### Recommended Add-ons

Take the fast track through the airport

☒ Check to not pay carbon credits

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## Five new strategies

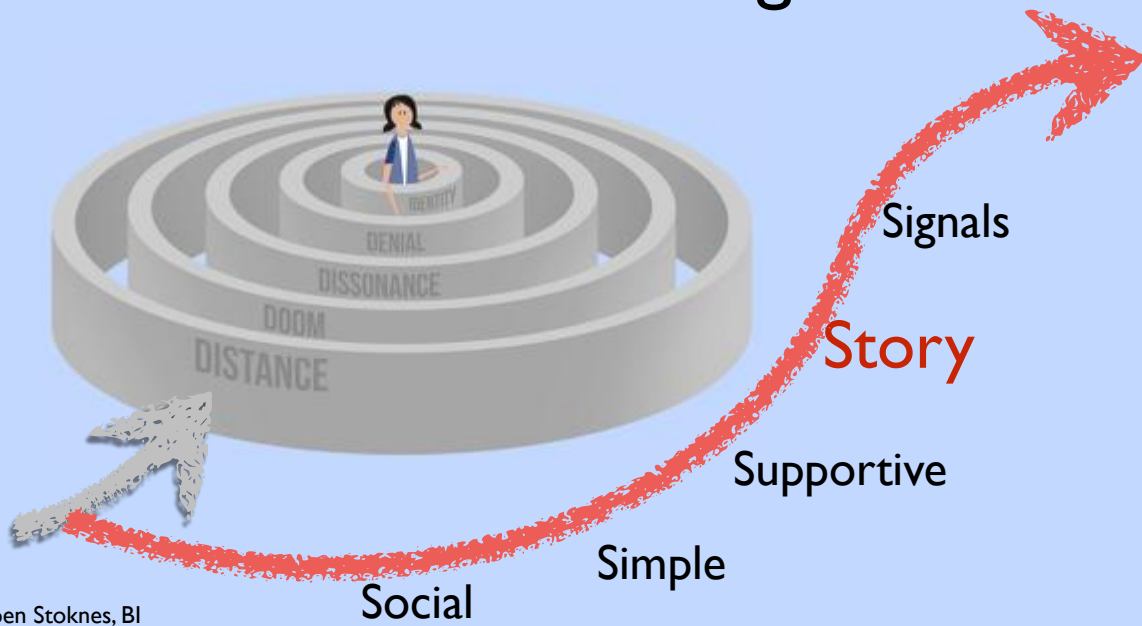




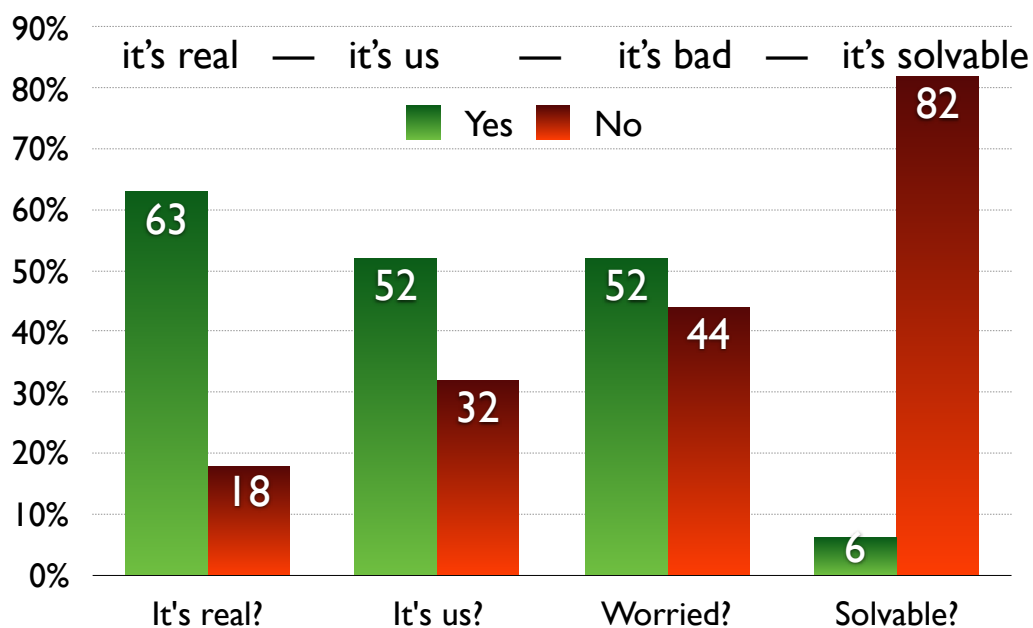




# Five new strategies



## The 'Big 4' Climate Beliefs



Source: Leiserowitz & al, [Yale PCCC](#), Mar 2015, N=1,263, p. 27, 29, 30, 39

When faced with hell,  
we sell the dream



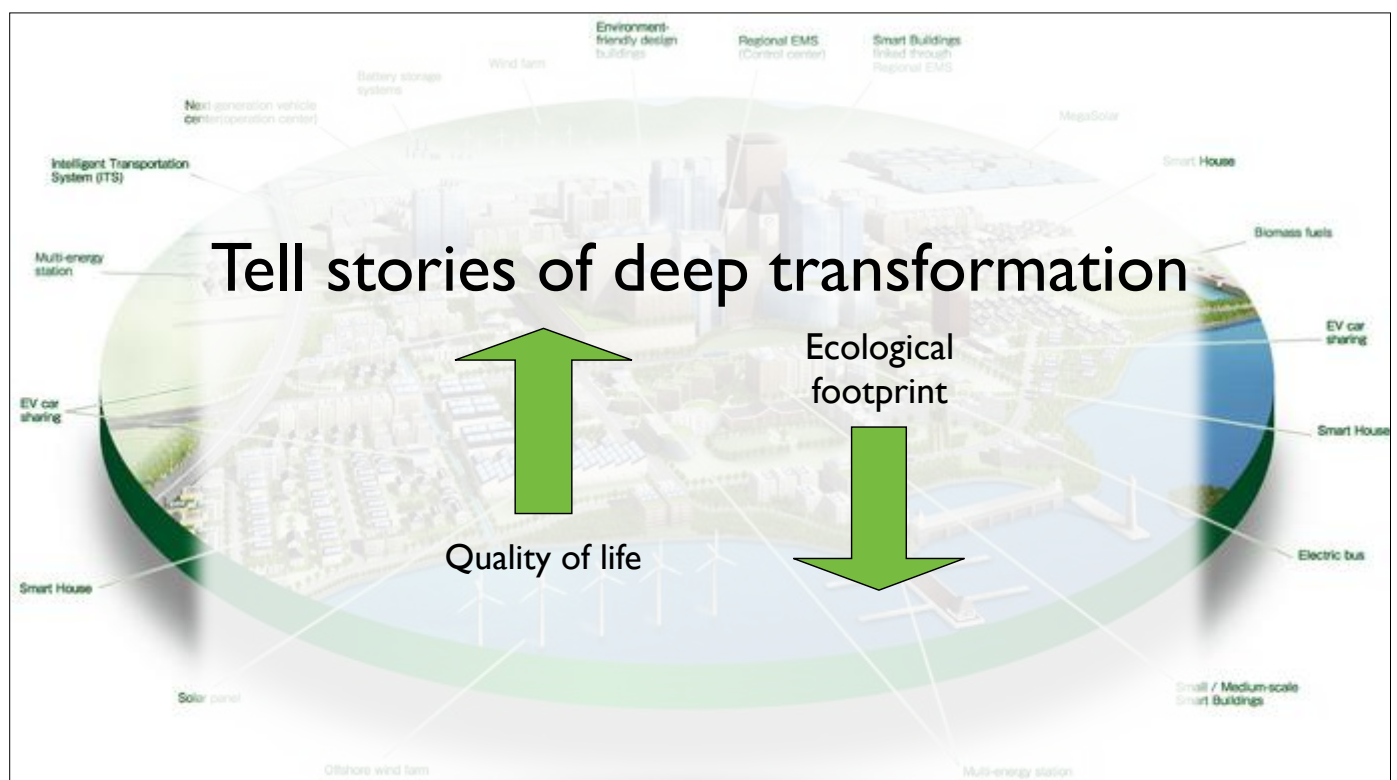
*green growth*  
is smart!



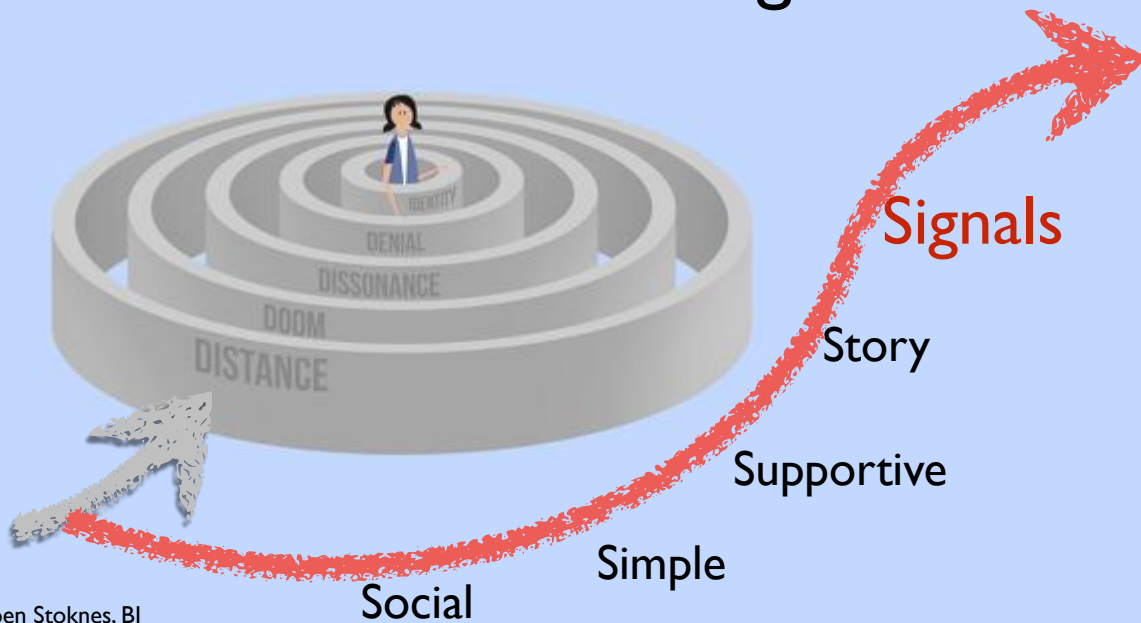
# Why smart, green growth?



- Because it's profitable
- Because it's more expensive to continue as today
- The stone age didn't end because of lack of stones
- The petroleum age won't end because of lack of oil, but...
- "Thank you, oil - It's been good."



# Five new strategies

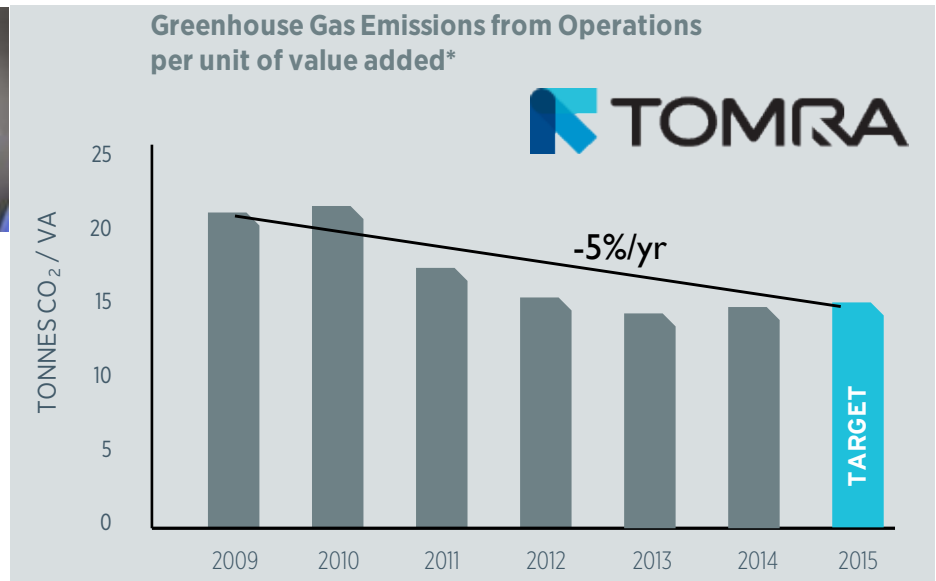


## CO<sub>2</sub> footprint in the bank statement?





# Companies doing their fair share

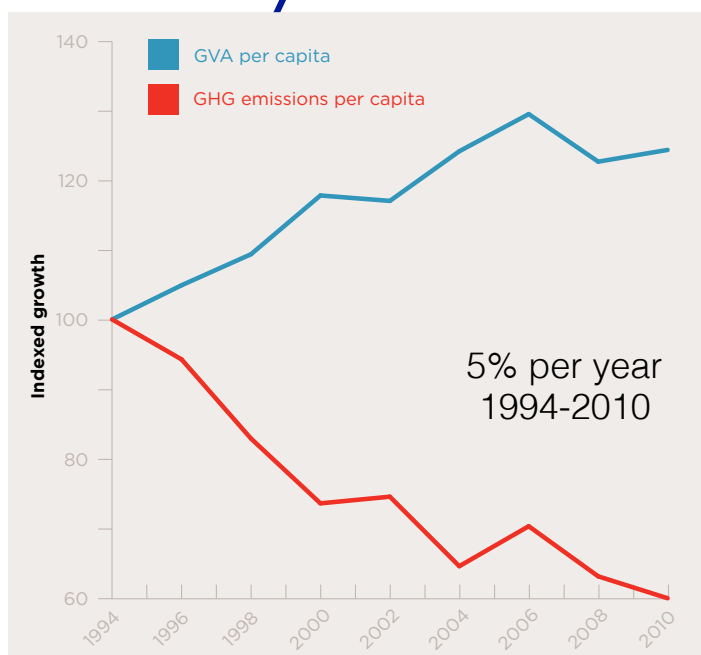


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59

Source: Tomra Corporate Responsibility report, 2012

## Smart City Green Growth



Copenhagen  
Denmark

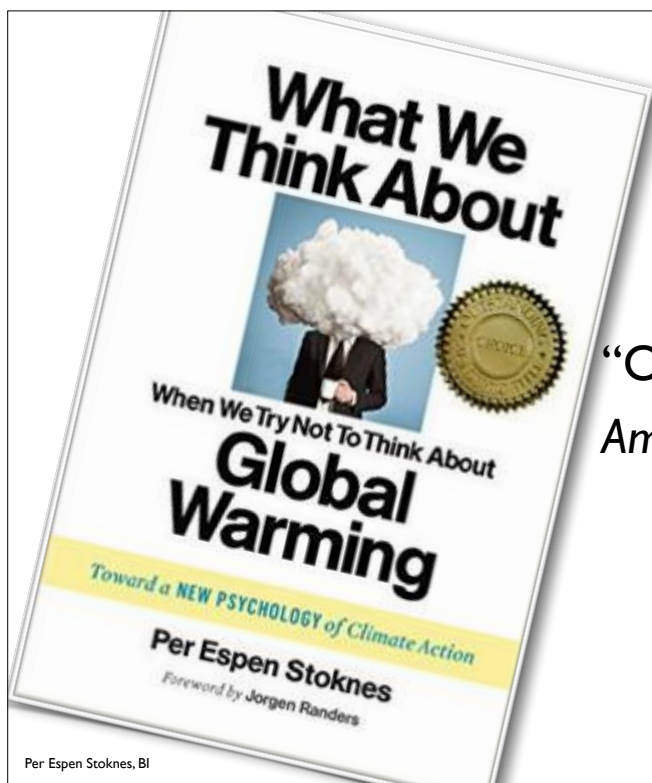
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Source: The New Climate Economy Report, 2015 60

# Conclusions:

## Are humans inevitably short-term?

1. Rational facts are insufficient to create lasting engagement
2. Humans will act for the long-term when conducive conditions are in place: social norms, supportive frames, simple actions, stories and signals
3. Individual actions do *not* solve the climate problem, but *do* build bottom-up support for structural change



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