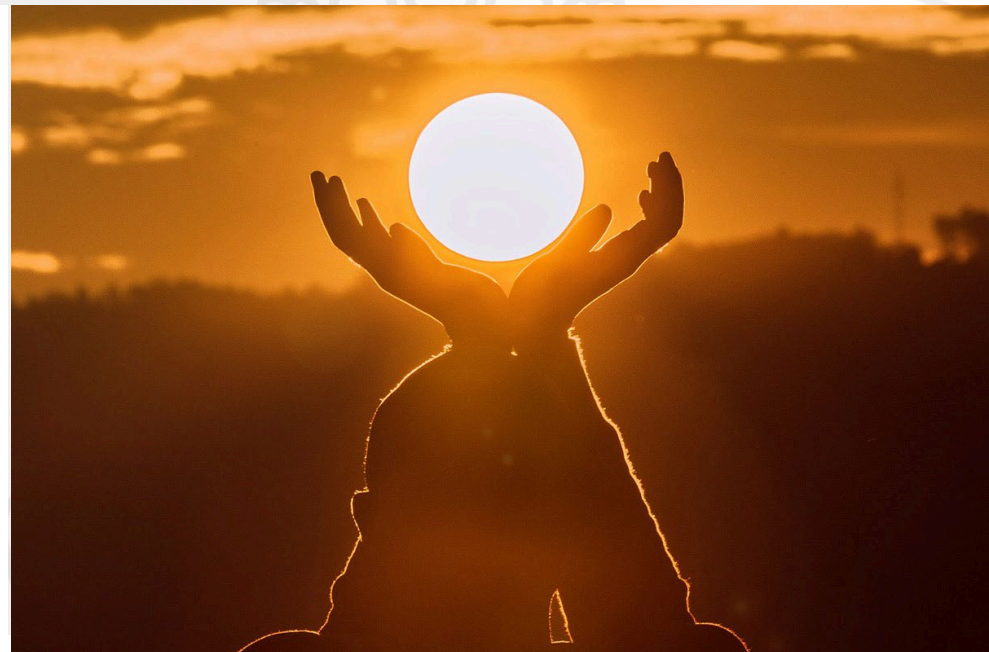


# Finally, some hope ...

Communicating systemic measures to fight climate change



UNIVERSITY OF COPENHAGEN



Jens Astrup, PhD, Natural History Museum of Denmark, University of Copenhagen

Zach Massey, PhD, University of Missouri

Yachao B. Li, PhD, College of New Jersey

Lucy Popova, PhD, Georgia State University

# FOLKEMØDET 2018



# Uffe Elbæk

2011, 2015, 2019 elections: Member of Folketinget (Danish parliament)

2011-2013: Minister of Culture in Denmark

2013: Founded political party the Alternative, with climate-change mitigation as primary focus

2021: Participates in a radio show about how to fight climate change through investments and realizes that

The  
Alternative  
(Alternativet)

Political party



 [alternativet.dk](https://alternativet.dk)

The Alternative is a green political party in Denmark. The party was publicly launched on 27 November 2013 by former Minister of Culture Uffe Elbæk and Josephine Fock; Elbæk had been a parliamentarian for the Social Liberal Party. [Wikipedia](#)

**Founded:** November 27, 2013

HE DOESN'T HAVE A CLUE WHERE HIS  
PENSION FUNDS ARE INVESTED ...

# Symptomatic

It is symptomatic that an experienced politician and founder of a green party for so many years can remain completely ignorant of the opportunity that pension funds offer for fighting climate change

It is symptomatic that he is also seemingly unaware of the relatively limited contribution that lifestyle changes can make to emission reductions

# Blindness to systemic nature of the problem

Even if we as individuals do all the things we know we ought to do, on a society level we would still not achieve even a 50% reduction in emissions



## 2050: THE FIGHT FOR EARTH

IDEAS • CLIMATE CHANGE

# Lifestyle Changes Aren't Enough to Save the Planet. Here's What Could

BY **MICHAEL E. MANN** SEPTEMBER 12, 2019 7:14 AM EDT

Michael E. Mann is distinguished professor of atmospheric science and director of the Earth System Science Center at Penn State University. He is author of the recently released book, *The New Climate War: The Fight to Take Back our Planet*.

IDEAS

The Real Prof. Katharine Hayhoe @KHayhoe

Actually, no. Surveys show that people still think it's about individual actions and personal sacrifices. This is literally why I did my Ted talk and wrote my book, "saving us".

Oversæt Tweet



ted.com

The most important thing you can do to fight climate change: talk about it  
How do you talk to someone who doesn't believe in climate change? Not by rehashing the same data and facts we've been discussing for years, says ...



**UNDP Climate** @UNDPClimate · 11. sep. 2022  
4 Petition your elected officials.

We've all heard that to protect our planet we must eat less meat and dairy, cut back on flying, and reduce our waste. And while all those things are important, they are nowhere near enough. 8/17

3 82 402

**UNDP Climate** @UNDPClimate · 11. sep. 2022  
To avert climate breakdown, we need political solutions. Remember that elected officials and governments are accountable to you and it is your right to demand immediate action from them. 9/17

3 106 462

# NOT PITTING SYSTEMIC VS. LIFESTYLE



Risk Analysis, Vol. 39, No. 10, 2019

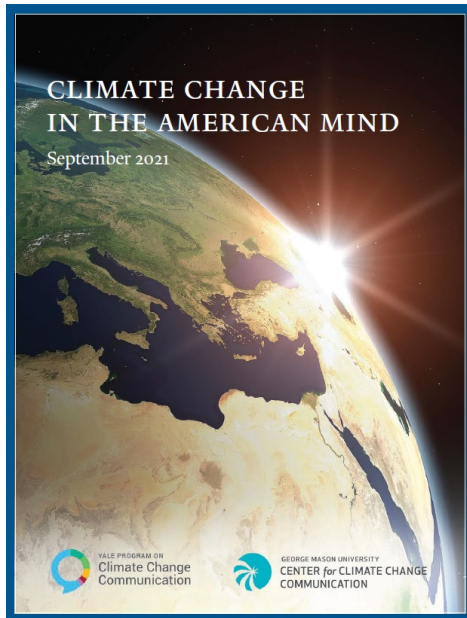
DOI: 10.1111/risa.13334

### Efficacy Foundations for Risk Communication: How People Think About Reducing the Risks of Climate Change

Katherine M. Crosman, Ann Bostrom \* and Adam L. Hayes 



Respondents rated individual actions to have low effect



Four out of ten Americans don't think individual actions matter

Leiserowitz team

# A tragedy of the commons problem

CO2 emissions are all mixed together in the atmosphere, so your action is diluted or canceled if your neighbor doesn't act also, and we all see a lot of neighbors who continue not to act

Even if you act, that action by itself doesn't really lower your personal risk of suffering from the consequences of climate change

In contrast to Covid, where social distancing gave immediate benefits not only on a societal level, but also rewarded you personally with a much lower risk of infection.

# The result ...



# Solution

ELECTRIFICATION

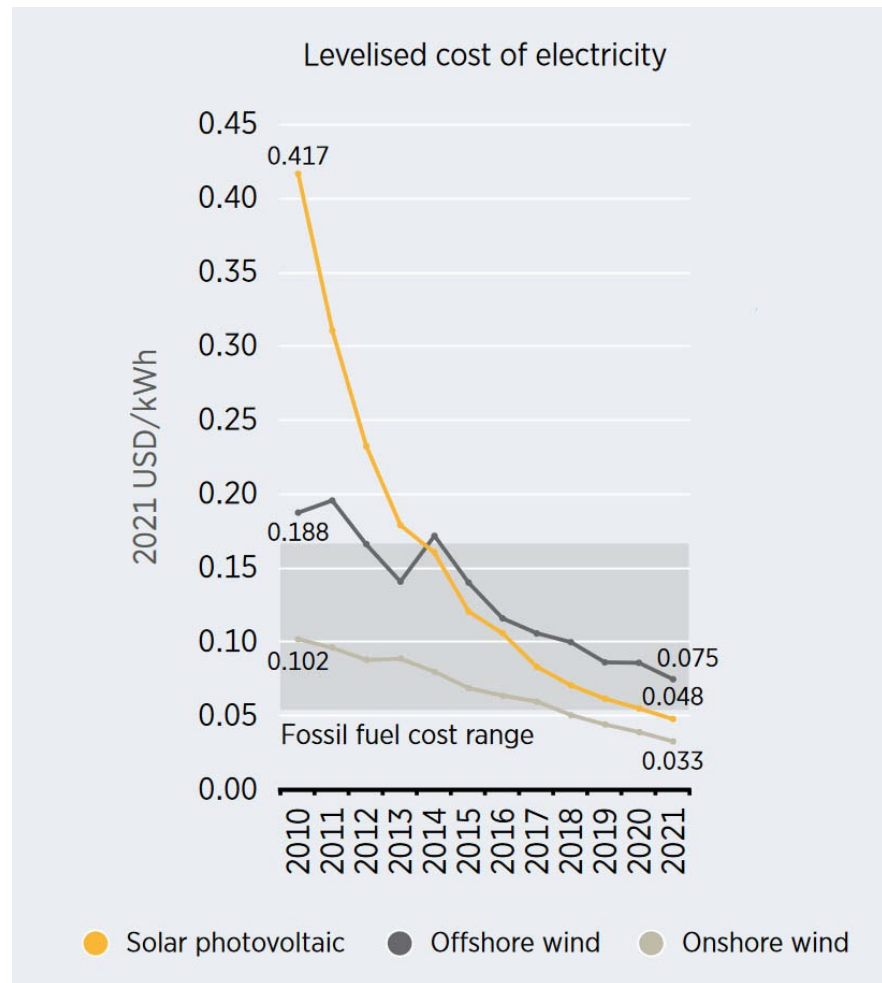
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SHIFT TO RENEWABLE ENERGY

=

RENEWABLE ENERGY TRANSITION

# Very, very good news



# Individual actions to accelerate the renewable energy transition



Mark Morgan Trinidad B, CC BY 2.0.



ota\_photos, CC BY-SA 2.0



HowardLake, CC BY-SA 2.0

# Pilot testing showed that people might not be aware of

To summarize:

Relative importance of the renewable energy transition

Dramatic cost reduction of renewable energy

Individual actions they can do to promote the transition

# Will a systemic message make us want to take action?





# Online survey

Recruitment through SoMe channels of Natural History Museum of Denmark, mainly facebook

353 respondents (typical museum-visitor demographic)

Randomly assigned to one of four messages

Probed emotions and behavioral intentions:

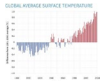
Lifestyle actions: Eat 50% less meat, fly 50% less

Systemic actions: Switch to green power, contact pension fund manager to exit oil, coal, and gas investments

# Four messages



Control (fish ear)



Neutral (history of CO<sub>2</sub>/climate research)



Lifestyle (the well-known lifestyle changes)

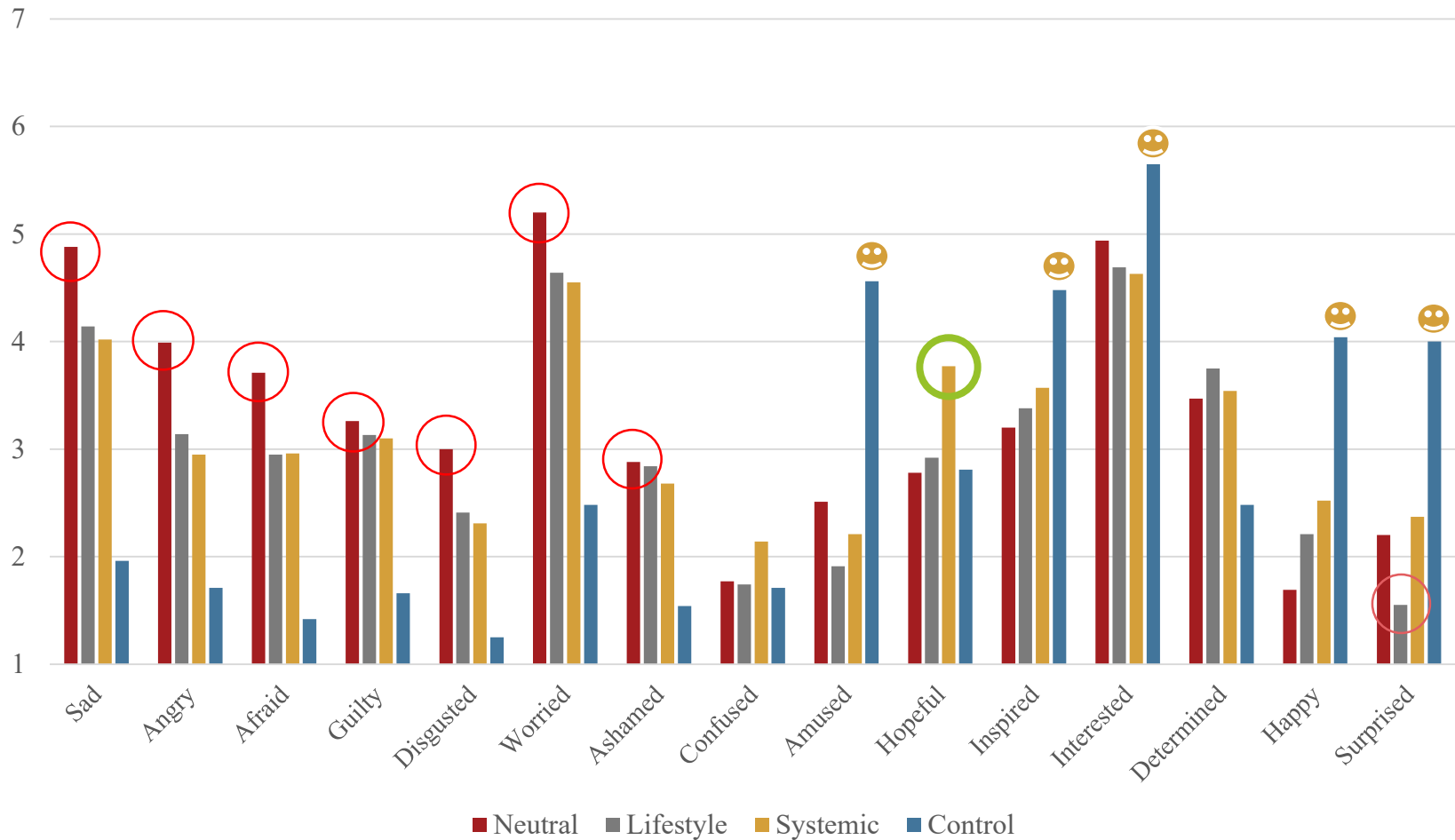


Systemic (importance of RE, cost drop of RE, individual actions to accelerate RE)

~250 words and 4-6 illustrations

PLEASE DON'T POST ON SOCIAL MEDIA

# Emotions



# Mediation analysis

## Bootstrap Analyses of Indirect Effects

Indirect effect	<i>B</i>	<i>SE</i>	$\beta$	95% CI	
				Lower	Upper
<b>Model 1</b>					
Systemic vs. Neutral → Worry → Lifestyle BI (↓)	-0.191	0.083	-.058	-.106	-.010
Systemic vs. Neutral → Worry → Systemic BI	-0.135	0.071	-.030	-.062	.001
Systemic vs. Neutral → Hope → Lifestyle BI (↑)	0.251	0.092	.077	.024	.129
Systemic vs. Neutral → Hope → Systemic BI (↑)	0.316	0.11	.071	.024	.117
<b>Model 2</b>					
Lifestyle vs. Neutral → Worry → Lifestyle BI (↓)	-0.169	0.078	-.054	-.101	-.007
Lifestyle vs. Neutral → Worry → Systemic BI	-0.128	0.068	-.030	-.062	.002
Lifestyle vs. Neutral → Hope → Lifestyle BI	0.033	0.063	.011	-.029	.05
Lifestyle vs. Neutral → Hope → Systemic BI	0.038	0.071	.009	-.024	.042
<b>Model 3</b>					
Systemic vs. Lifestyle → Worry → Lifestyle BI	-0.020	0.064	-.006	-.044	.032
Systemic vs. Lifestyle → Worry → Systemic BI	-0.015	0.048	-.003	-.024	.017
Systemic vs. Lifestyle → Hope → Lifestyle BI (↑)	0.217	0.085	.065	.018	.112
Systemic vs. Lifestyle → Hope → Systemic BI (↑)	0.257	0.097	.056	.016	.097
<i>Note.</i> <i>n</i> = 309 BI = Behavioral intentions.					

# Conclusions

Clear impact on emotions

Communicating the science of climate change isn't perceived as neutral – visitors are left with strong negative emotions

Advocating only lifestyle changes is likely to have the opposite effect (also found by others)

Systemic message gave hope, which mediated systemic AND lifestyle action.

# Recommendations

Point to actions. Convincing actions. And solutions.

Include all three aspects of our systemic message (RE importance, price drop, available actions)

Advocate both systemic and lifestyle actions, but test!

Prioritize systemic if space is limited (but try to fit in that lifestyle actions are a valuable contribution)

Action-pointing messages should always be tested for their effect – you may achieve the opposite of what you intend!

## And Uffe Elbæk?

He got in touch with his bank



Asked them tough questions about how sustainable their sustainable investment options actually were

Led to introspection within the bank and revision of products

Now his pension funds are invested sustainably

# Thank you



EXTRA SLIDES FOR DISCUSSION

OCTOBER 2020

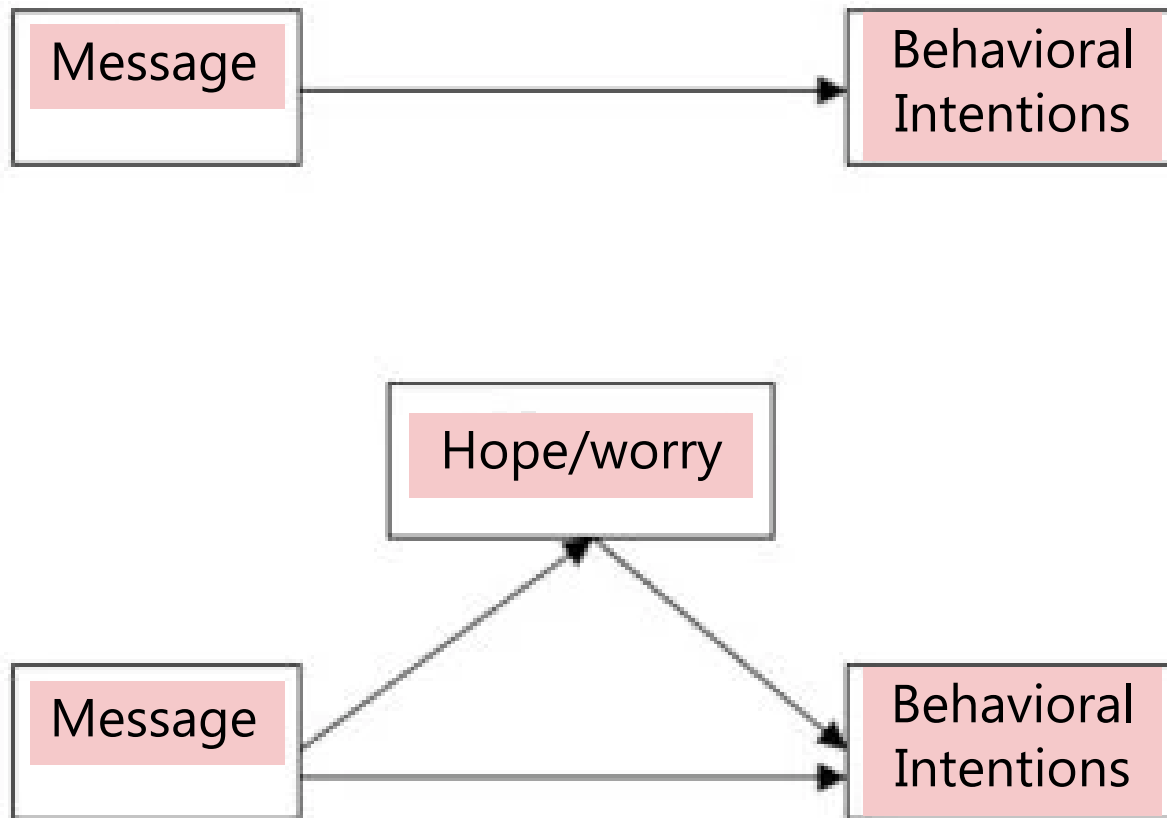
PALM ET AL.

827

**“Don’t Tell Me What to Do”: Resistance to Climate Change Messages Suggesting Behavior Changes**

RISA PALM,<sup>a</sup> TOBY BOLSEN,<sup>b</sup> AND JUSTIN T. KINGSLAND<sup>b</sup>

# Mediation



## We couldn't fit in

... that RE transition will make us all richer and healthier.  
It will be the investment of a lifetime for the world.

Marc Jakobsen: Pay back time of only 5-6 years.



**The Real Prof. Katharine Hayhoe** @KHayhoe · 13. maj

Many believe lack of climate action stems from apathy, suggesting we need to make people more worried. In truth? Most are already worried, but don't know what to do. That's why it's so imp't to share impactful, practical solutions that drive climate action—so the only q left is,



49 243 682 68,7t



**Stuart Cedric** @StuartCedric · 13. maj

I think most know what to do, a lot make changes and try. Recognise this. Whilst I also think some do not do anything. You will never get universal agreement on any subject. Start with yourself, try and lead by example, others may follow, some may not.

1 4 895



**The Real Prof. Katharine Hayhoe**

@KHayhoe

Actually, no. Surveys show that people still think it's about individual actions and personal sacrifices. This is literally why I did my Ted talk and wrote my book, "saving us".

Oversæt Tweet



ted.com

The most important thing you can do to fight climate change: talk about it

How do you talk to someone who doesn't believe in climate change? Not by rehashing the same data and facts we've been discussing for years, says ...

# Protection motivation psychology – Extended Parallel Processes Model (EPPM)



Lifestyle actions are more than a band-aid  
– they are like bandaging.

But when treat a gaping wound, you first  
have to stop the bleeding, and then  
bandaging is a valuable part of the cure