What are your communication goals?

Providing factual information

Changing attitudes

Changing behaviors
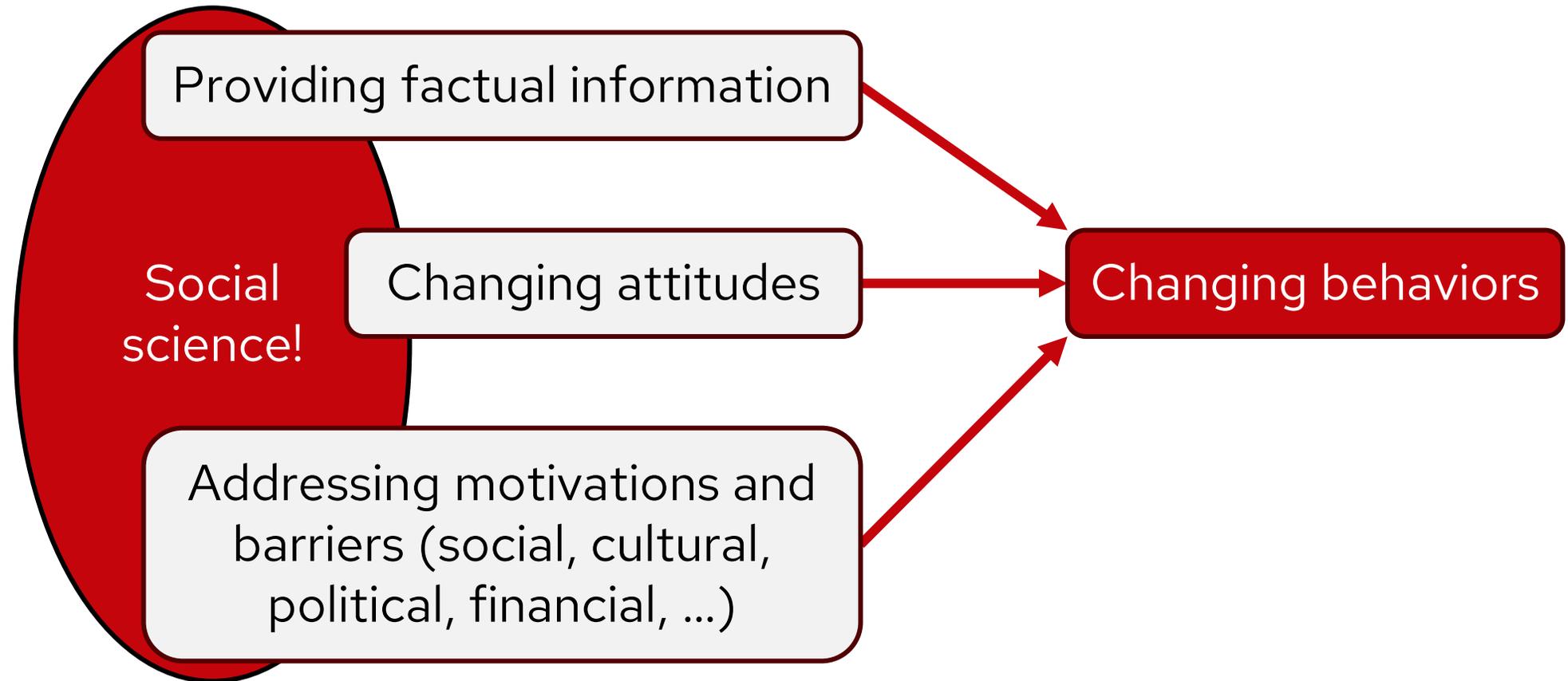
Ballew et al., 2024

What are your communication goals?

Providing factual information

Social science!

Changing attitudes

Addressing motivations and barriers (social, cultural, political, financial, …)

Changing behaviors

Ballew et al., 2024

Who is the right messenger?
What communication channels will you use?

Audience Segmentation

The "general public" does not exist

Where do they get their information?

Who do they trust?

What is their background knowledge?
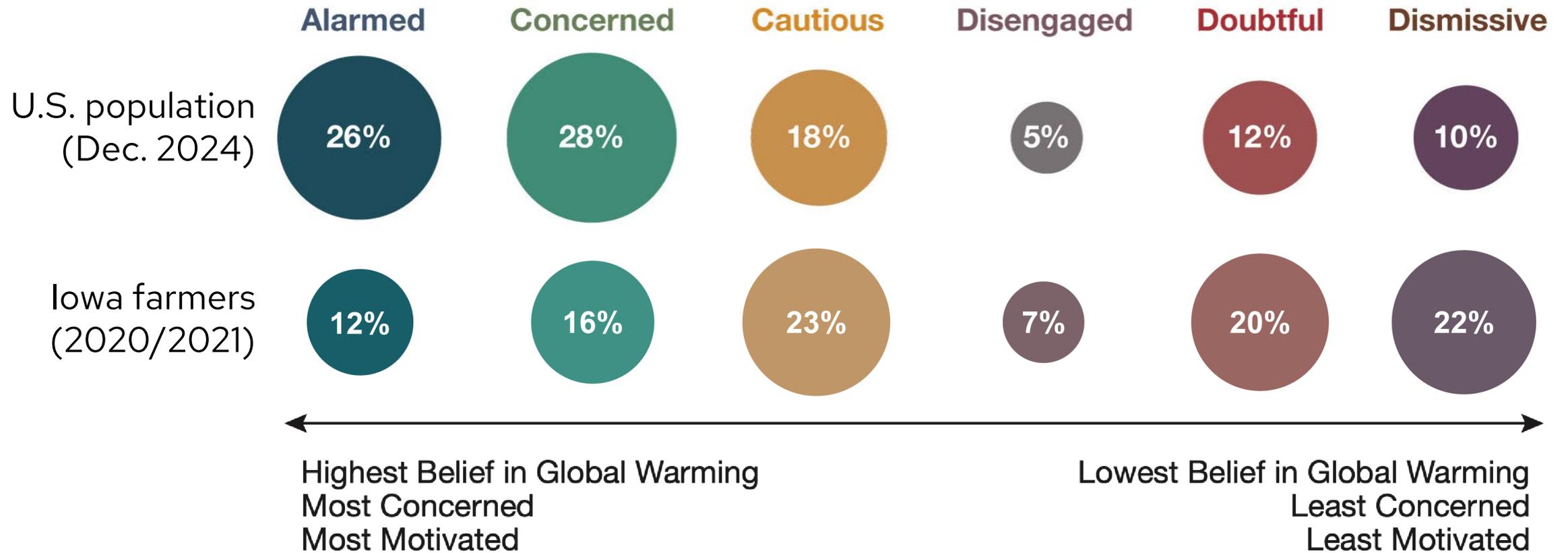
What do they value?

What metaphors or cultural references will they understand?

What resources do they have access to?

Image: mododeolhar

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Global Warming's Six Americas

	Alarmed	Concerned	Cautious	Disengaged	Doubtful	Dismissive
U.S. population (Dec. 2024)	26%	28%	18%	5%	12%	10%
Iowa farmers (2020/2021)	12%	16%	23%	7%	20%	22%

Highest Belief in Global Warming
Most Concerned
Most Motivated

Lowest Belief in Global Warming
Least Concerned
Least Motivated

Chryst et al., 2018; Leiserowitz et al., 2025; Nowatzke & Arbuckle, 2024
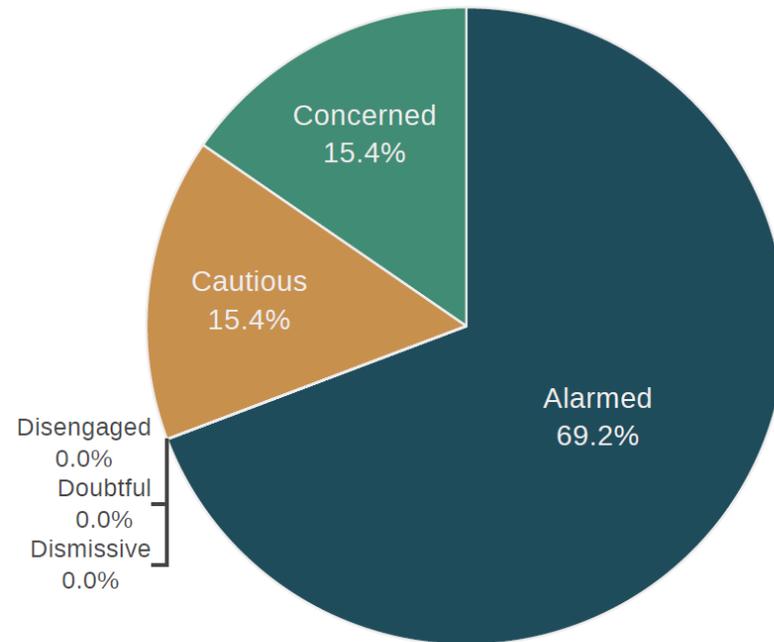
Audience segmentation Word choice Values and agency Social norms Misinformation

Global Warming's Six Americas

- Example: 2026 forest resilience course for woodland owners in northeast Wisconsin

9	2	2	0	0	0
ALARMED	CONCERNED	CAUTIOUS	DISENGAGED	DOUBTFUL	DISMISSIVE

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

One size does not fit all

- Three basic audience categories:

Actively want to address climate change

Audience segmentation Word choice Values and agency Social norms Misinformation

One size does not fit all

- Three basic audience categories:

Actively want to address climate change

Acknowledge climate change but don't prioritize it

Hershberger & Newman, in press

One size does not fit all

- Three basic audience categories:

| Actively want to address climate change | Acknowledge climate change but don't prioritize it | Are opposed to the phrase "climate change" |

Audience segmentation Word choice Values and agency Social norms Misinformation

Woodland owner segmentation (WI)

Woodland retreat

37%	14%	32%	17%

• Beauty, lifestyle, recreation

Tools for Engaging Landowners Effectively, 2018

Woodland owner segmentation (WI)

Supplemental income

37%	14%	32%	17%

- Financial asset

Tools for Engaging Landowners Effectively, 2018

Woodland owner segmentation (WI)

Multi-use

37%	14%	32%	17%

- Balancing amenities and finances

Tools for Engaging Landowners Effectively, 2018

Woodland owner segmentation (WI)

Uninvolved

37%	14%	32%	17%

- Not motivated by nature nor finances

Tools for Engaging Landowners Effectively, 2018

Choose your scope strategically

	Audience size		Usefulness to audience	
Broad scope	Large	👤👤👤👤	Low	☆☆★
Narrow scope	Small	👤	High	★★★

Pick your specific **audience segment** and desired **behavioral outcome**

The elephant and donkey in the room

- Political ideology is the strongest demographic predictor of climate change attitudes

- People engage in *motivated reasoning*–facts are not enough!

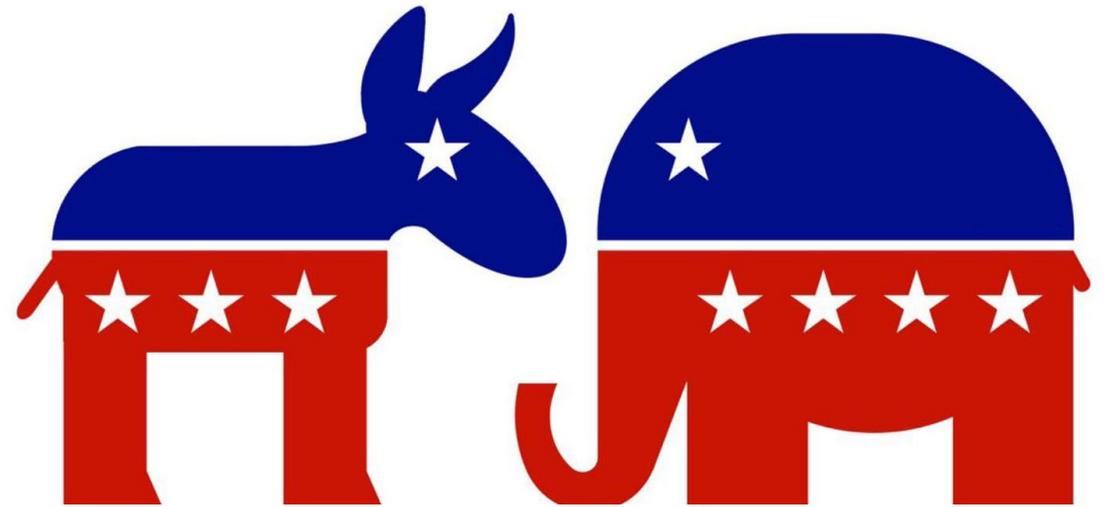- BUT be careful to not stereotype or overgeneralize

Image: CNN
Hornsey et al., 2016; Kahan et al., 2012

Overcoming polarization

"Climate change" ✗

" The words are what they object to, not necessarily to the activities that are being done under those words. "

—UW–Madison Extension Community Economic Development educator

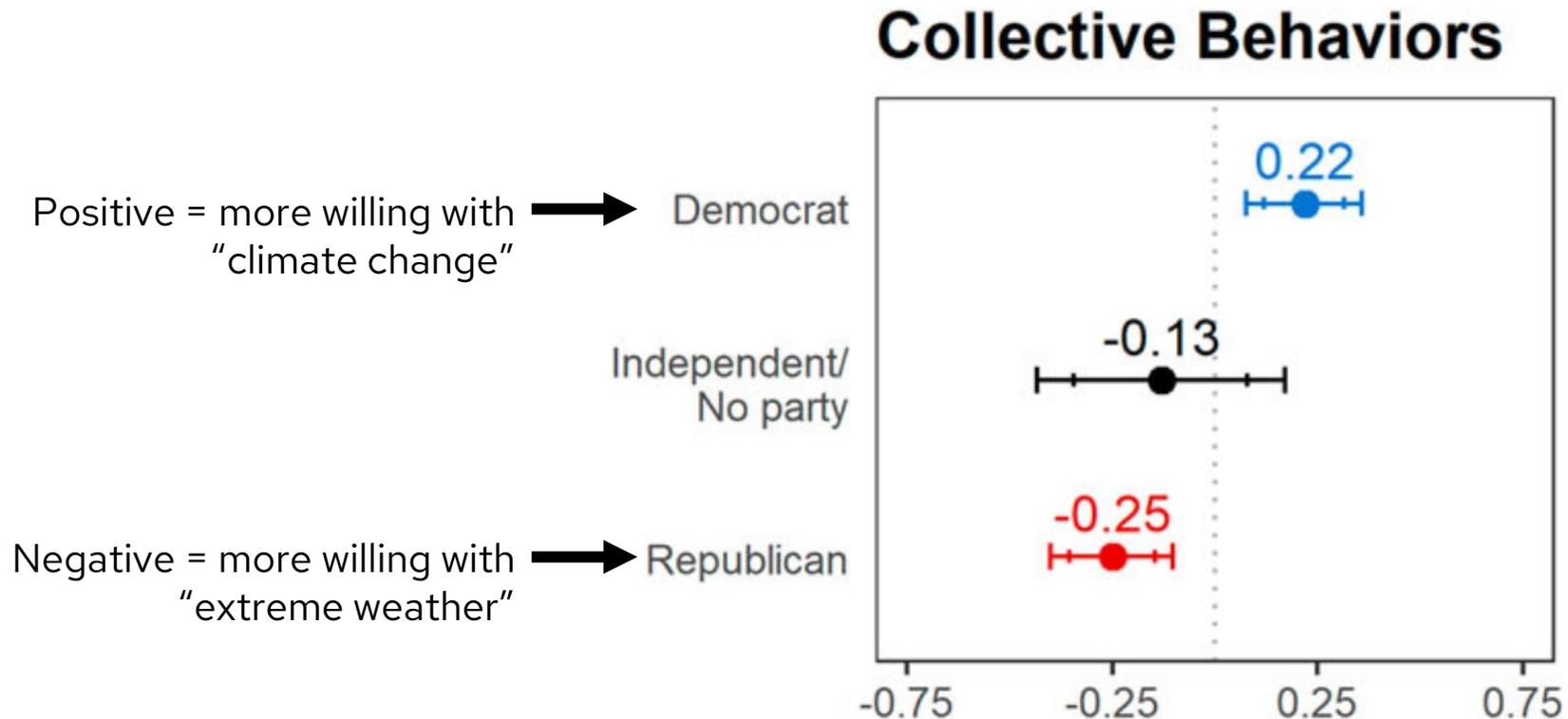"Changing weather patterns" ✓   "Changing climate" ✓

"Climate variability" ✓   "Extreme weather" ✓   "Carbon dioxide pollution" ✓

Commerçon et al., 2023; Hershberger & Newman, in press

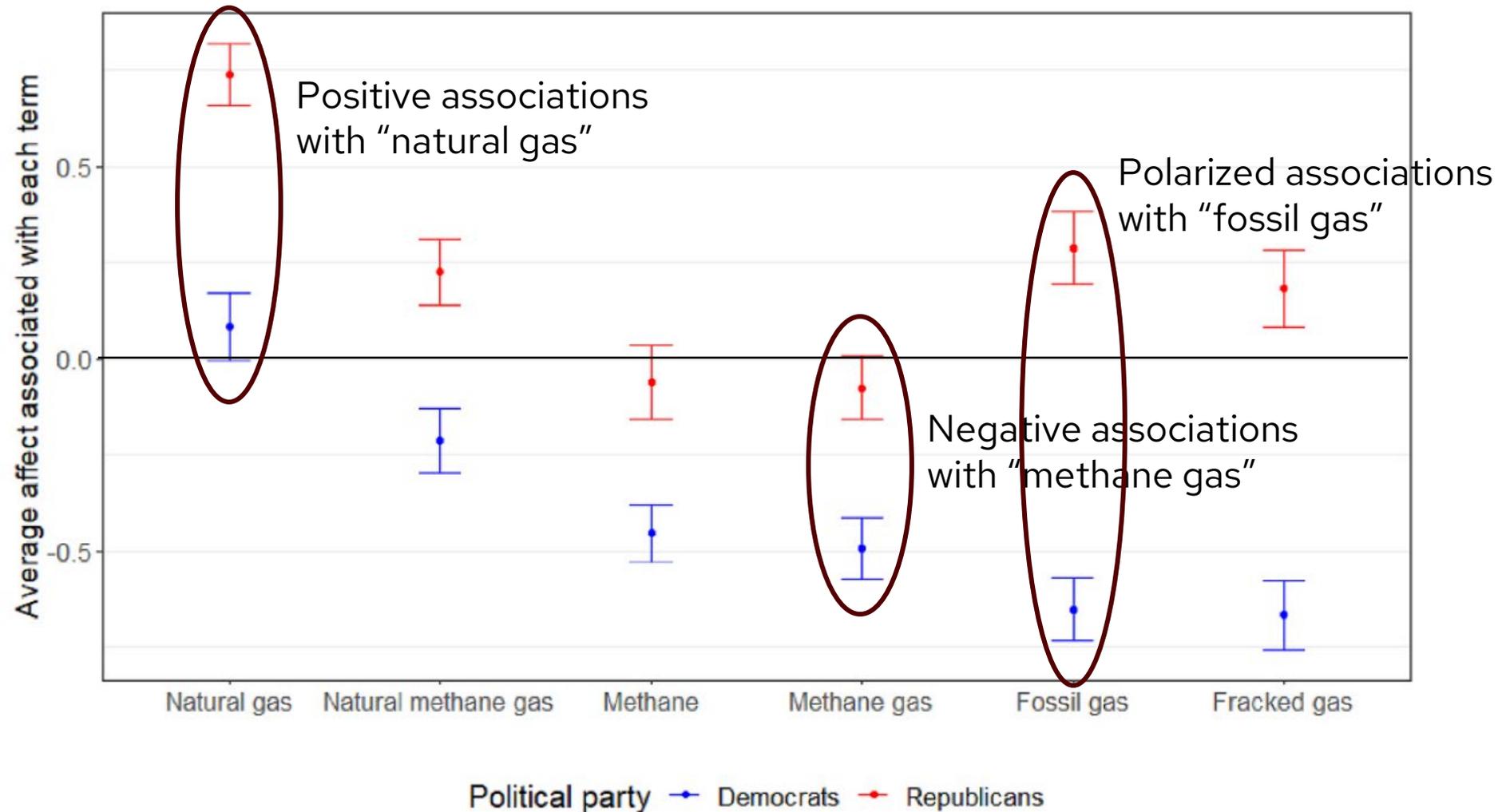Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

"Climate change" vs "extreme weather"

- "How willing or unwilling are you to do each of the following to help your local community prepare for the impacts of [extreme weather/climate change]?" (graph shows average of 8 items)

Collective Behaviors

Positive = more willing with "climate change"

Negative = more willing with "extreme weather"

Democrat — 0.22

Independent/No party — -0.13

Republican — -0.25

-0.75   -0.25   0.25   0.75

Carman et al., 2022

"Natural gas" vs "methane gas"

Lacroix et al., 2021
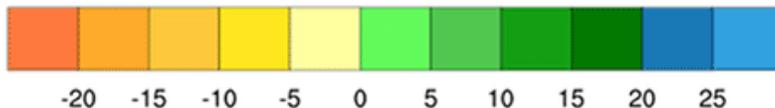
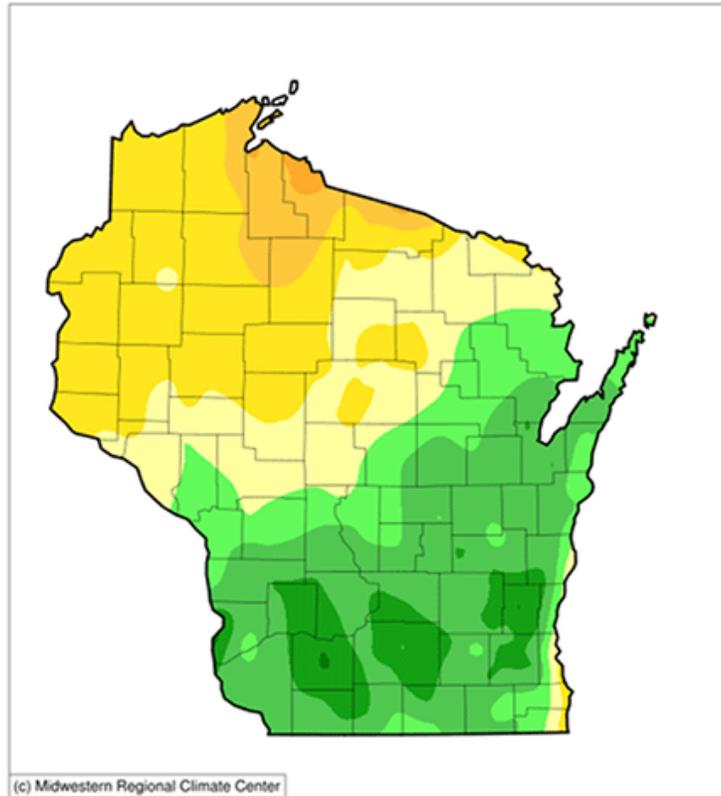# What if my audience is mixed?

- **DON'T** unnecessarily activate partisan identities

- **DO** activate shared identities

- Emphasize specific, local, & relatable aspects of climate change

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Be specific, local, and relatable

Accumulated Snowfall (in): Departure from 1991-2020 Normals
January 01, 2024 to January 31, 2024

(c) Midwestern Regional Climate Center

-20 -15 -10 -5 0 5 10 15 20 25

Map: Wisconsin State Climatology Office

Climate change → Very little snowfall in northern Wisconsin

Cultural impact → Poor season for snowmobiling and skiing

Economic impact → Less income for seasonal workers

Actionable solution → Long-term financial planning

Hershberger & Newman, in press

Audience segmentation · **Word choice** · Values and agency · Social norms · Misinformation

Be specific, local, and relatable

Climate change

Warmer winters & longer growing seasons

Environmental impact

Range expansion of invasive species

Economic/cultural impact

Lower-quality recreation

Loss of culturally important beings

Lower timber value

Actionable solution

Proactive prevention, monitoring, & reporting

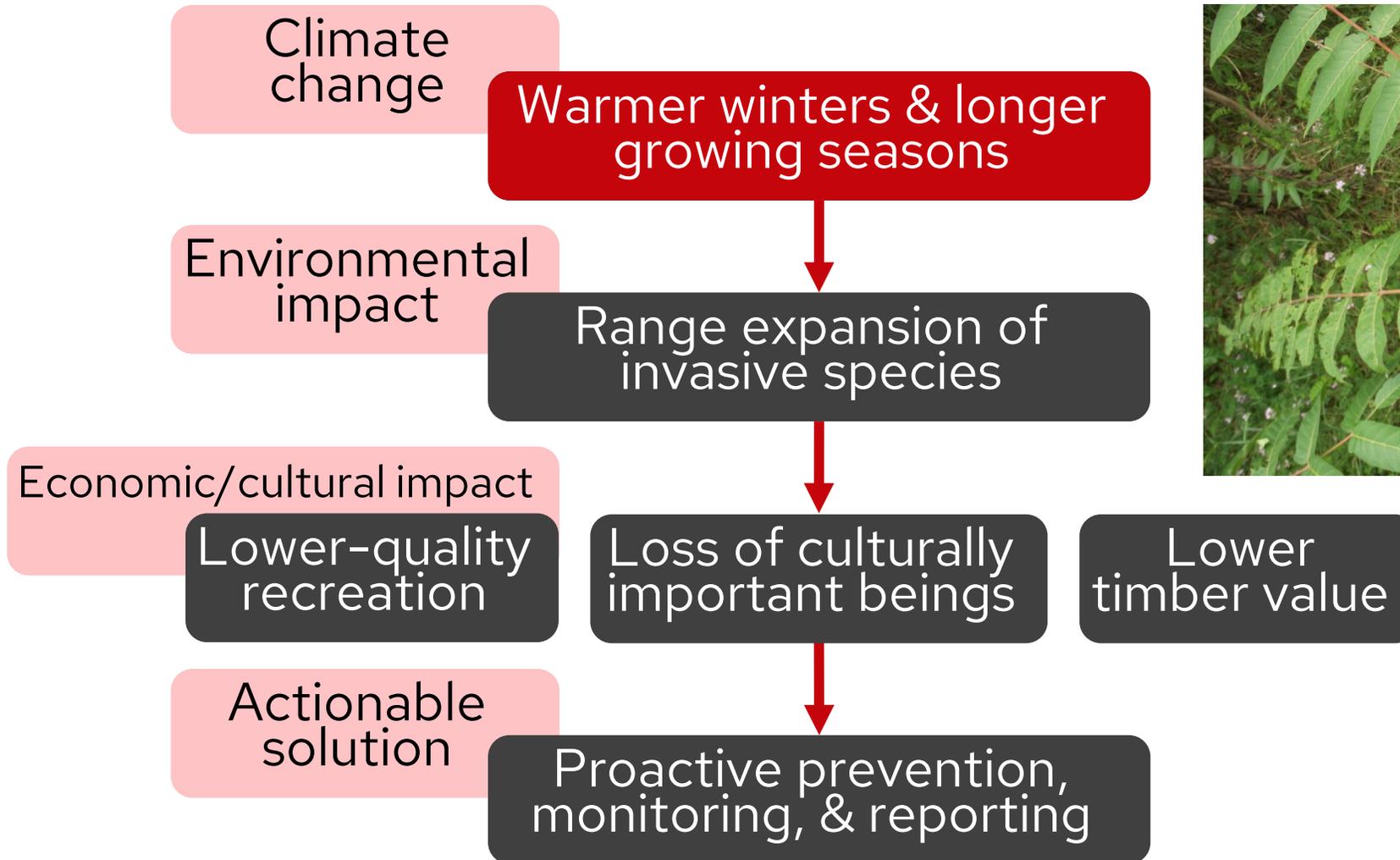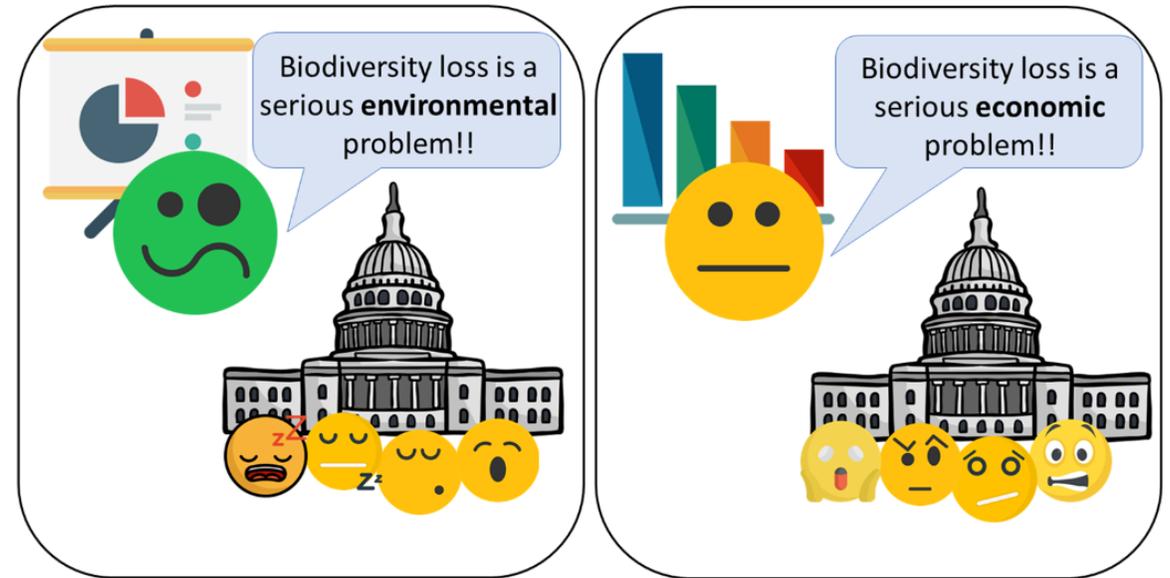*Image: Richard Gardner, Bugwood.org*

How will you refer to the concept of climate change?

Value-focused messaging and cultivating a sense of agency

Message framing

- Draw attention to one aspect of a topic while deemphasizing other aspects

- Both text and visuals matter

Biodiversity loss is a serious **environmental** problem!!

Biodiversity loss is a serious **economic** problem!!

Guenther et al., 2023
Images: USDA; Kusmanoff et al., 2020

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Message framing

- News media overuses "fun in the sun" visuals when reporting on heat waves

- Negative imagery is more likely to increase:
  - Worry about heat waves
  - Belief that climate change is making heat waves worse
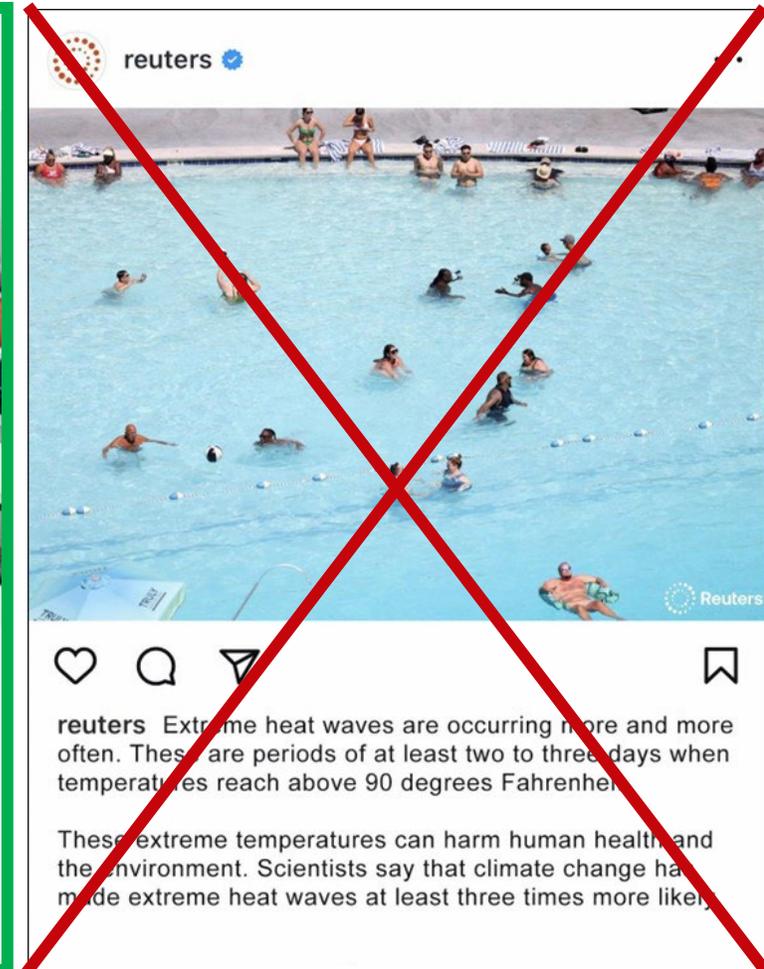
Mosallaei et al., 2026; O'Neill et al., 2023

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Message framing

- Emphasize "do more good," not "do less bad"

"Ban" ❌

"Mandate" ❌

"Phaseout" ❌

"Decrease your use of single-use products that are often thrown away" ❌

"Upgrading" ✅

"Setting standards" ✅

"Making solutions accessible" ✅

"Increase your use of reusable products that last a long time" ✅

Marshall et al., 2023; Radke et al., 2026

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Example: Tribal Adaptation Menu

- Respect for all beings
- Reciprocity
- Building relationships
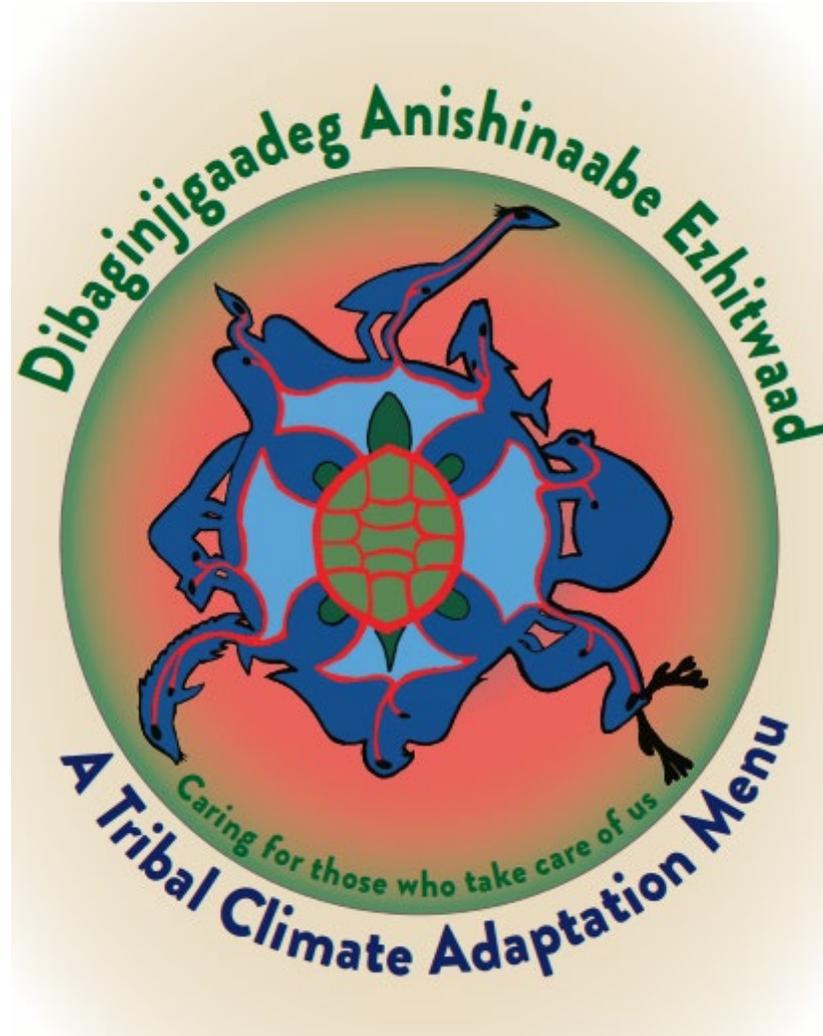
Tribal Adaptation Menu Team, 2019

Example: Rotary Club Four-Way Test

Rotary THE FOUR-WAY TEST
Of the things we think, say or do:

first Is it the **TRUTH**?

second Is it **FAIR** to all concerned?

third Will it build **GOODWILL** and **BETTER FRIENDSHIPS**?

fourth Will it be **BENEFICIAL** to all concerned?

"I never thought too much of this whole global warming thing, but it passed the Four-Way Test."

–*Texas businessman*

Hayhoe, 2021

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Example: "New Climate Voices" ads

- One-month online video ad campaign in Missouri-02 and Georgia-07

is completely consistent with our values as Christians.

We need to protect ourselves from these risks.

https://www.newclimatevoices.org/

Goldberg et al., 2021

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Efficacy: an active form of hope

"Here's the big problem the *world* faces."

"Here's the big problem *you* face, and **here's what you can do about it.**"

Images: Pixabay; Anastasia Shuraeva
Coleman et al., 2024; Lamm et al., 2022

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Types of efficacy

- *Self-efficacy*
  "I can take action"

- *Response efficacy*
  "If I take action, it will have
   the desired effect"

- *Collective efficacy*
  "If we all take action, our
  collective action will make
  a difference"

Jugert et al., 2016; Sinclair et al., 2025

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

Example: invasive stiltgrass outreach campaign

Stiltgrass: building efficacy

"Take photos and send them to forestry@extension.wisc.edu or Invasive.Species@Wisconsin.gov"

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

Stiltgrass: building efficacy

jrkoyen 2w
What does it look like when it's flowering??
♡ 1
Reply   Hide

hehujaro 2w
Why wouldn't you show pics of its flowering ears/seeds? That would make it a lot easier for people to recognize. Especially since you say flowering season is now for this plant.
♡ 9
Reply   Hide

sammuldoon 3d
Just show a photo of the flowers already! Everyone is asking for it - FYI social media 101: make it easy on people to do what you want. Asking us to go to the website is just another step. More importantly, when I go to the website, the photos of the flowers doesn't show up on a mobile application. 🙄
♡
Reply   Message   Hide

go.wisc.edu/stiltgrass-id

your help searching for it.

♡ 6,884
💬 164
🔁 234
➤ 3,411

wiscextforestry
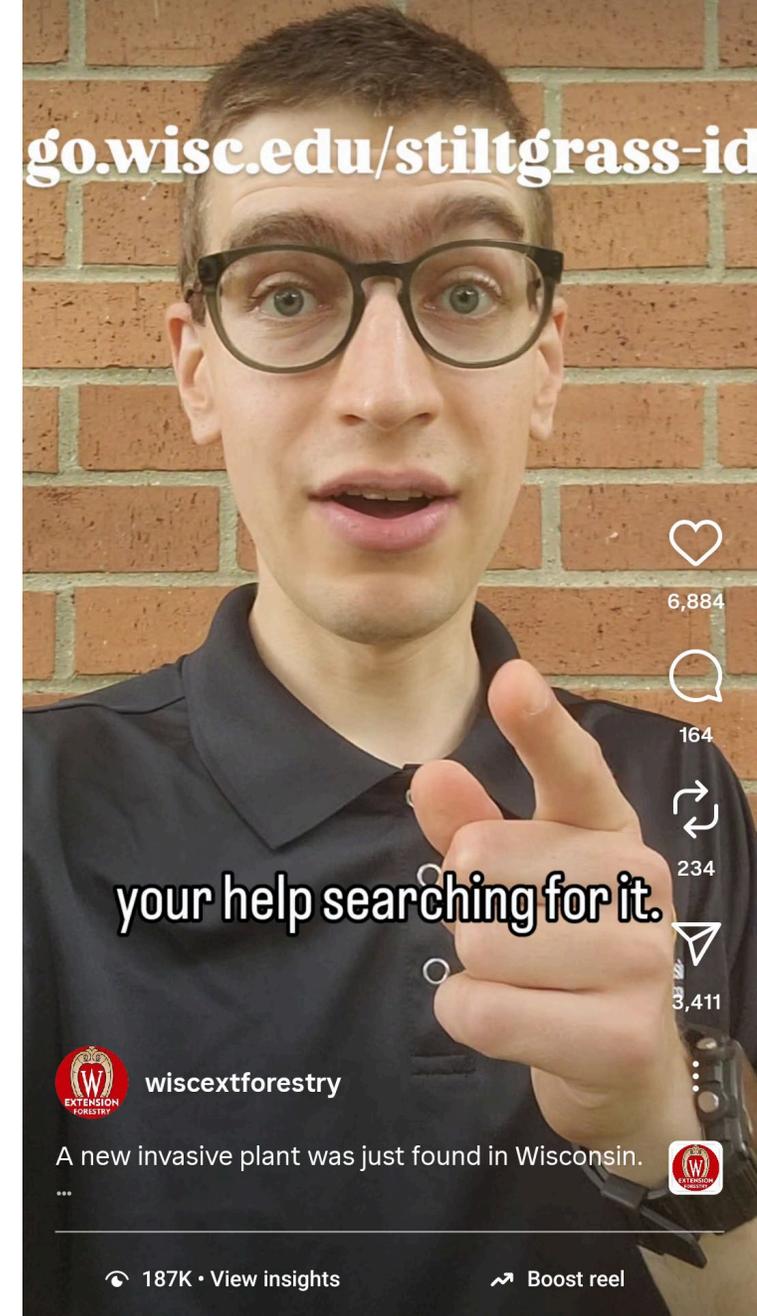A new invasive plant was just found in Wisconsin.
...

👁 187K • View insights   ↗ Boost reel

Audience segmentation   Word choice   **Values and agency**   Social norms   Misinformation

Stiltgrass: real-world outcomes

- 3 more infestations found within 3 weeks
  - 2 are small and likely to be eliminated!

> **Donna Witt Laughlin** · 2d
>
> I'm so glad I posted when I saw this information . Someone found it and had it confirmed because of my post and another was thinking they also found some. Sharing definitely makes a difference.
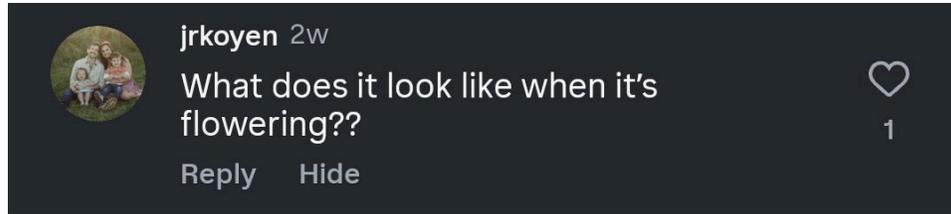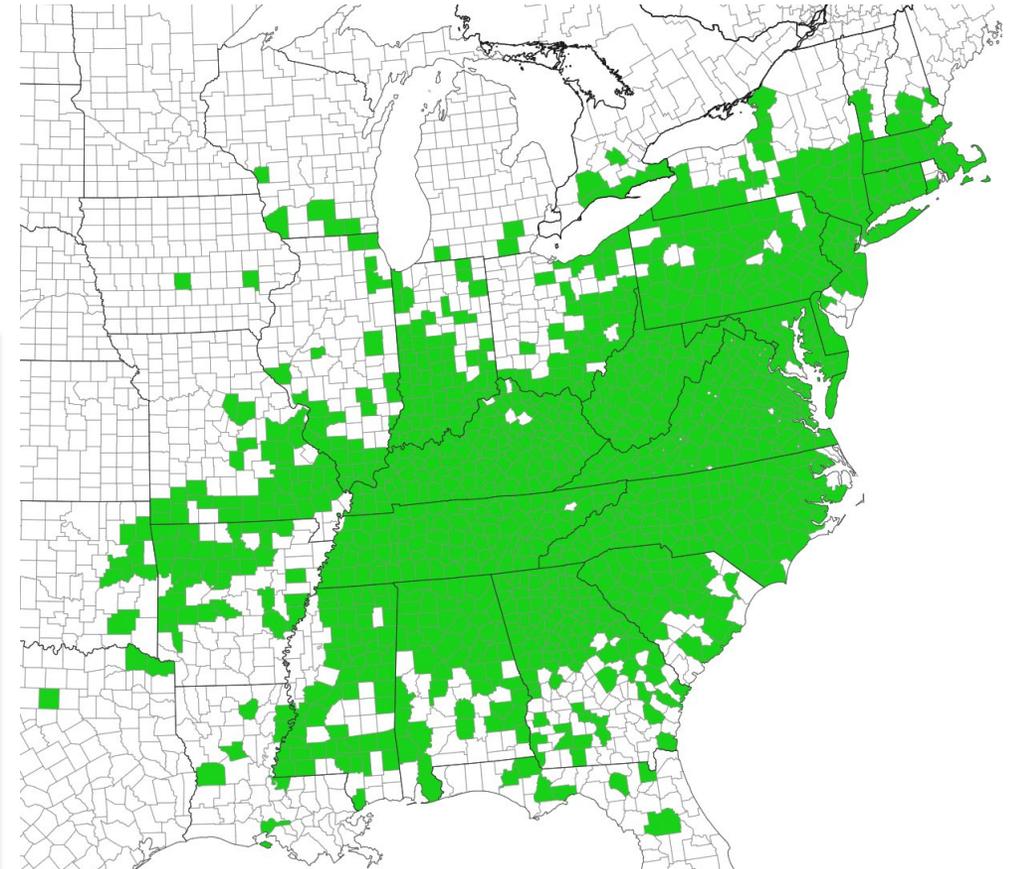>
> Reply   👍 5

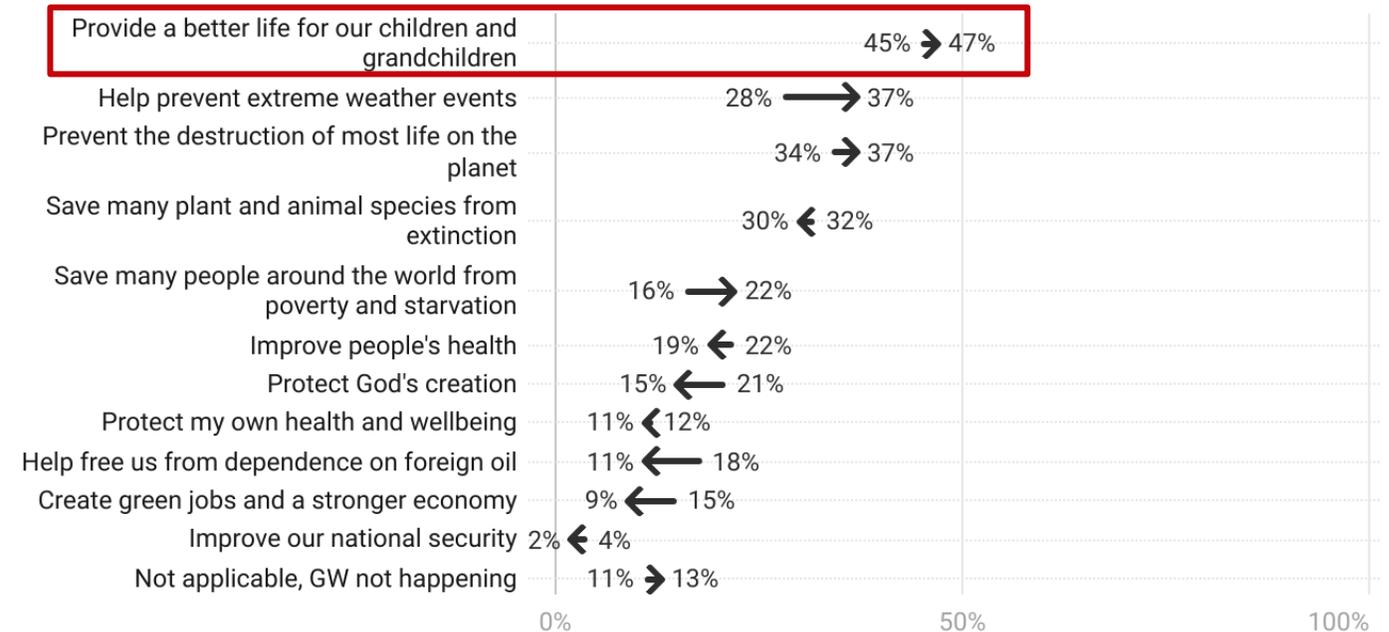*Map: EDDMapS reported stiltgrass locations as of September 2025*

Audience segmentation   Word choice   **Values and agency**   Social norms   Misinformation

What if my audience is mixed?

- Emphasize the value of providing a better life for future generations

Image: Pixabay

Changes in U.S. registered voters' views of the most important reasons to reduce global warming, 2017 → 2024

% selecting as a top 3 "most important" reason

Provide a better life for our children and grandchildren	45% → 47%
Help prevent extreme weather events	28% → 37%
Prevent the destruction of most life on the planet	34% → 37%
Save many plant and animal species from extinction	30% ← 32%
Save many people around the world from poverty and starvation	16% → 22%
Improve people's health	19% ← 22%
Protect God's creation	15% ← 21%
Protect my own health and wellbeing	11% ← 12%
Help free us from dependence on foreign oil	11% ← 18%
Create green jobs and a stronger economy	9% ← 15%
Improve our national security	2% ← 4%
Not applicable, GW not happening	11% → 13%

0%   50%   100%

Which of the following reasons to reduce global warming, if any, are most important to you? Please select up to three reasons.

May 2017 - April 2024.
Base: U.S. registered voters in May 2017 (n = 1070) and April 2024 (n = 896).

Carman et al, 2024; Marshall et al., 2023; Syropoulos et al., 2023; Syropoulos & Markowitz, 2024

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

What does your audience **value?**
How can you increase **efficacy?**

Leveraging social norms to spur behavior change

Two types of social norms

Descriptive

- What do other people do?

- "Annually, more than 500 volunteers and an estimated 2,000 supervised students monitor 600+ stream locations throughout the state." (Water Action Volunteers)

Injunctive

- What do other people think is the right thing to do?

- "Most Madison residents think highly of their friends who bike to work."

Constantino et al., 2022; Miller & Prentice, 2016

Two types of social norms

Descriptive

- "Annually, more than 500 volunteers and an estimated 2,000 supervised students monitor 600+ stream locations throughout the state."

Injunctive

- "Most Madison residents think highly of their friends who bike to work."

Close reference group

↓

More powerful norms

Constantino et al., 2022; Miller & Prentice, 2016

Perceptions might not match reality

- Across many reference groups, people systematically underestimate how many people:
  - **Accept** that human-caused climate change is happening
  - **Are concerned** about climate change
  - Support individual climate-friendly **behaviors**
  - Support climate-friendly **policies**

Images: Edward Kimmel, CC BY-SA 2.0; Fibonacci Blue, CC BY 2.0
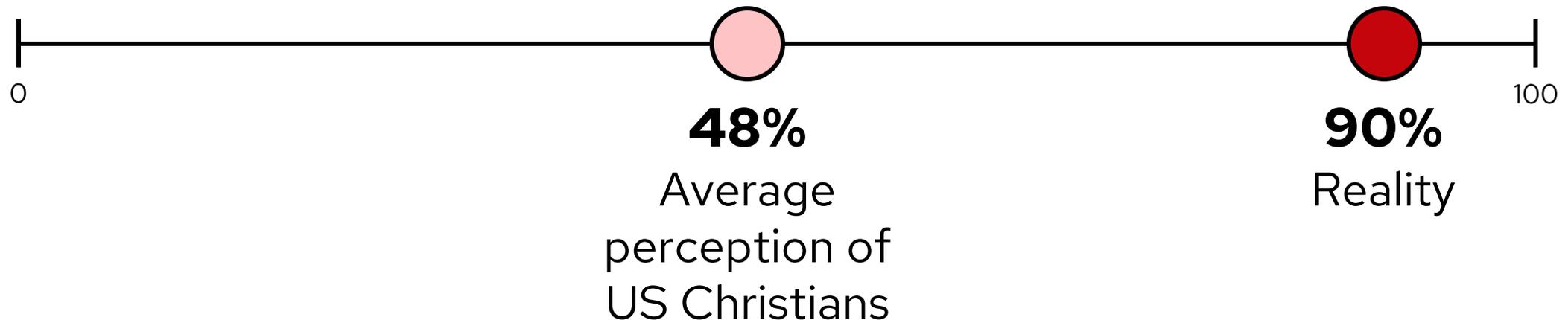
Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Pluralistic ignorance: acceptance

Proportion of US Christian religious leaders who accept that human-caused climate change is happening

0   100

48%
Average
perception of
US Christians

90%
Reality

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Pluralistic ignorance: concern

Most Americans underestimate how worried the American public is about global warming

Underestimated ■ Correct ■ Overestimated ■ Don't know enough to say

The true percentage is 64%
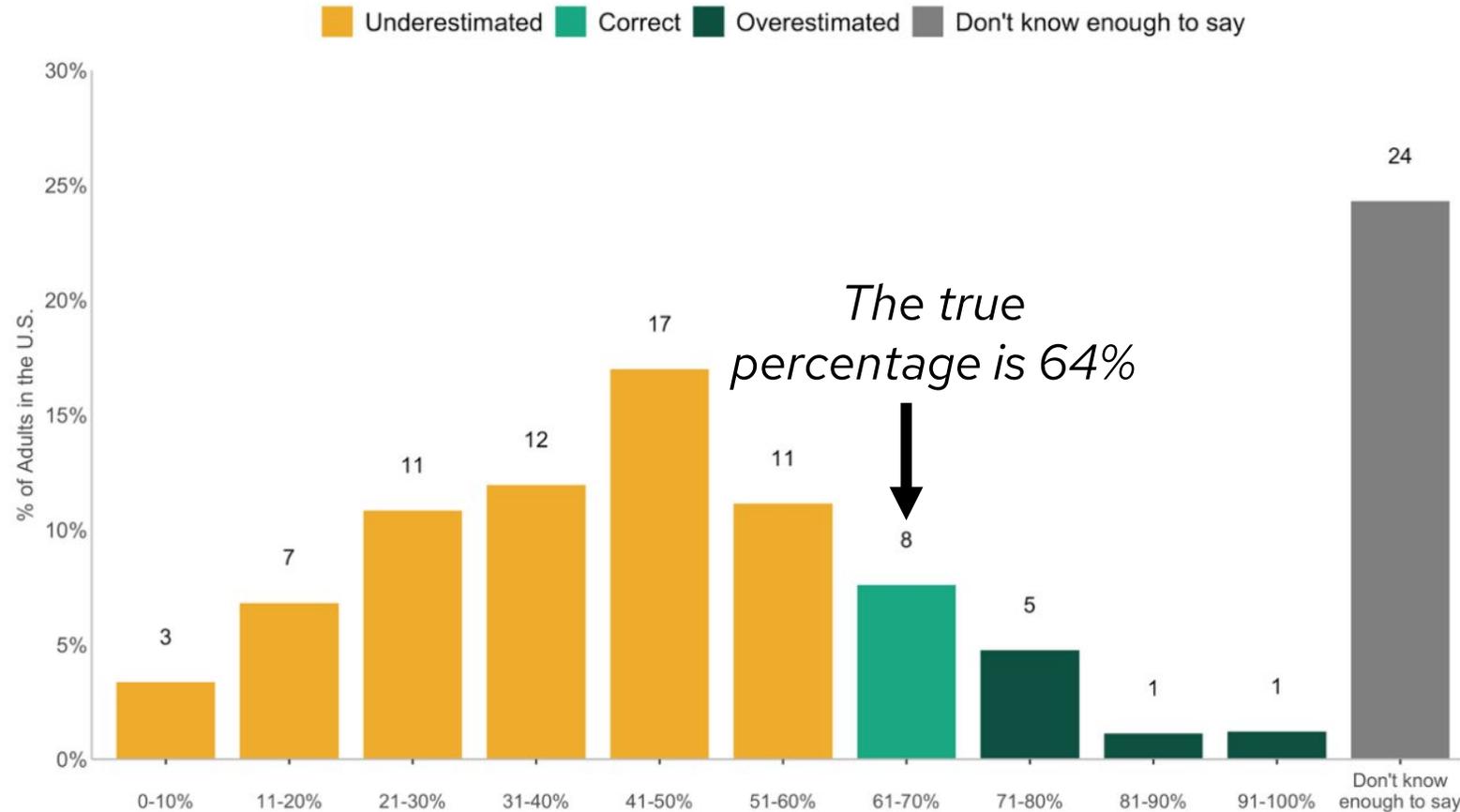
To the best of your knowledge, what percentage of adults in the United States (18 years or older) are worried about global warming?
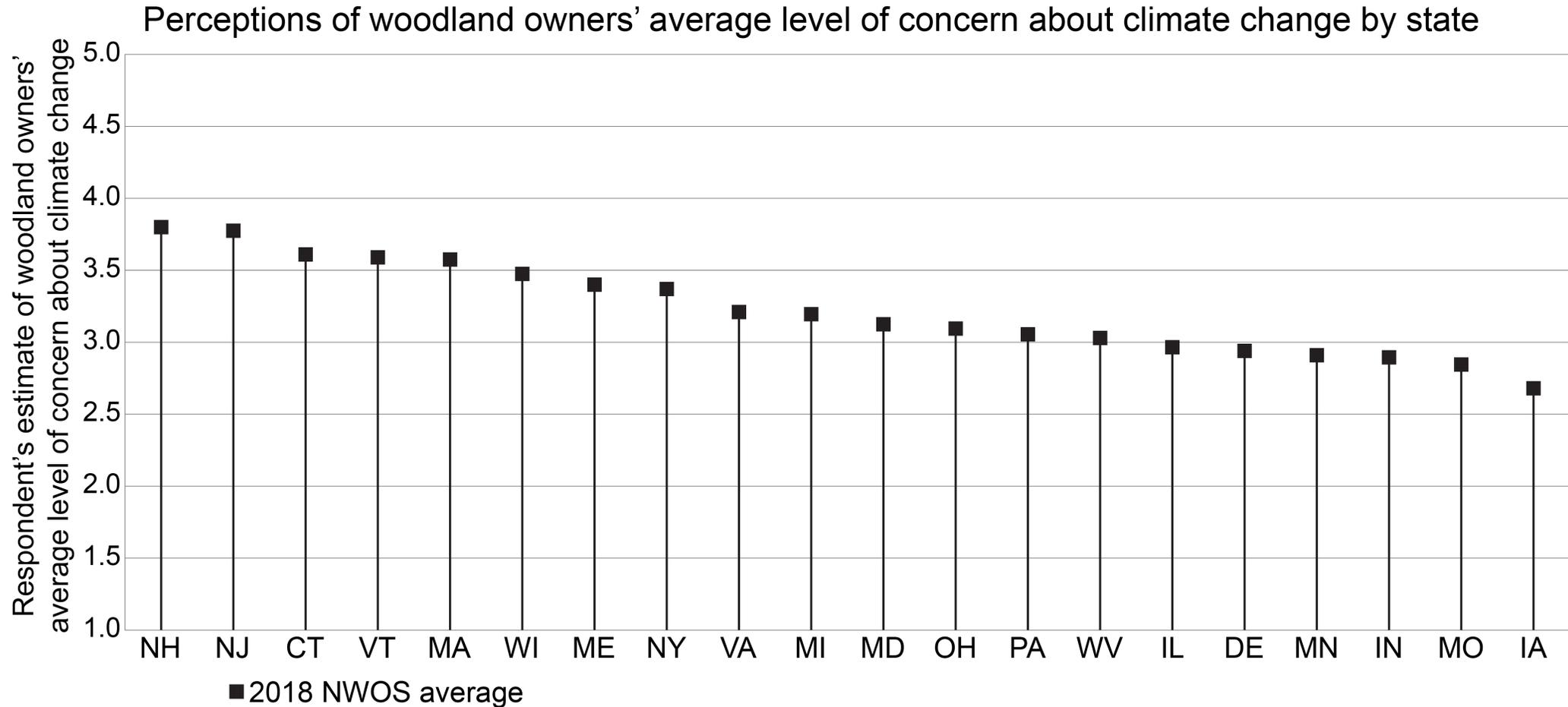
Leiserowitz et al., 2026

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Pluralistic ignorance: concern

Perceptions of woodland owners' average level of concern about climate change by state

■ 2018 NWOS average

Desprez et al., 2025

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Pluralistic ignorance: concern

Perceptions of woodland owners' average level of concern about climate change by state

- ■ 2018 NWOS average
- ● Overestimate

Desprez et al., 2025

Pluralistic ignorance: concern

Perceptions of woodland owners' average level of concern about climate change by state

■ 2018 NWOS average   ● Underestimate   ● Overestimate

Desprez et al., 2025

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation
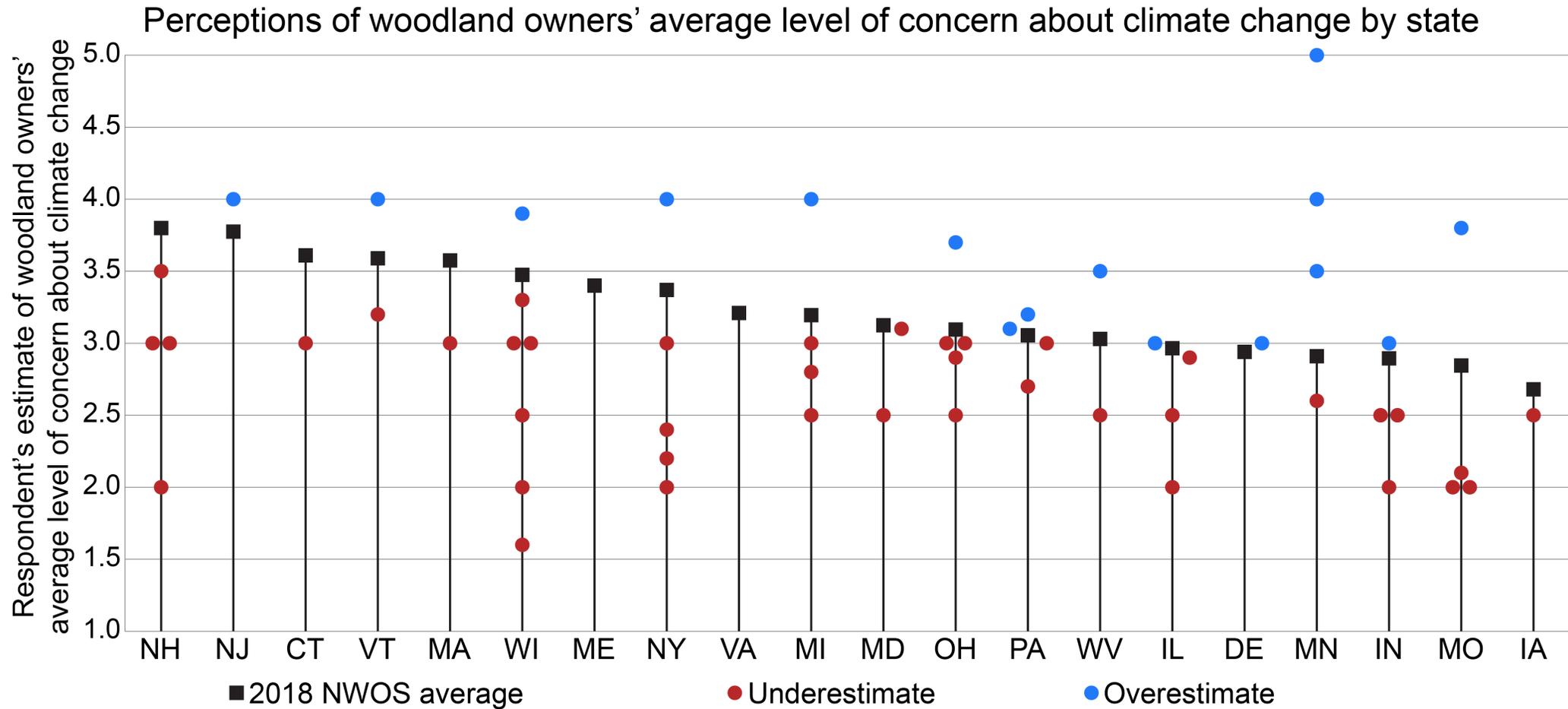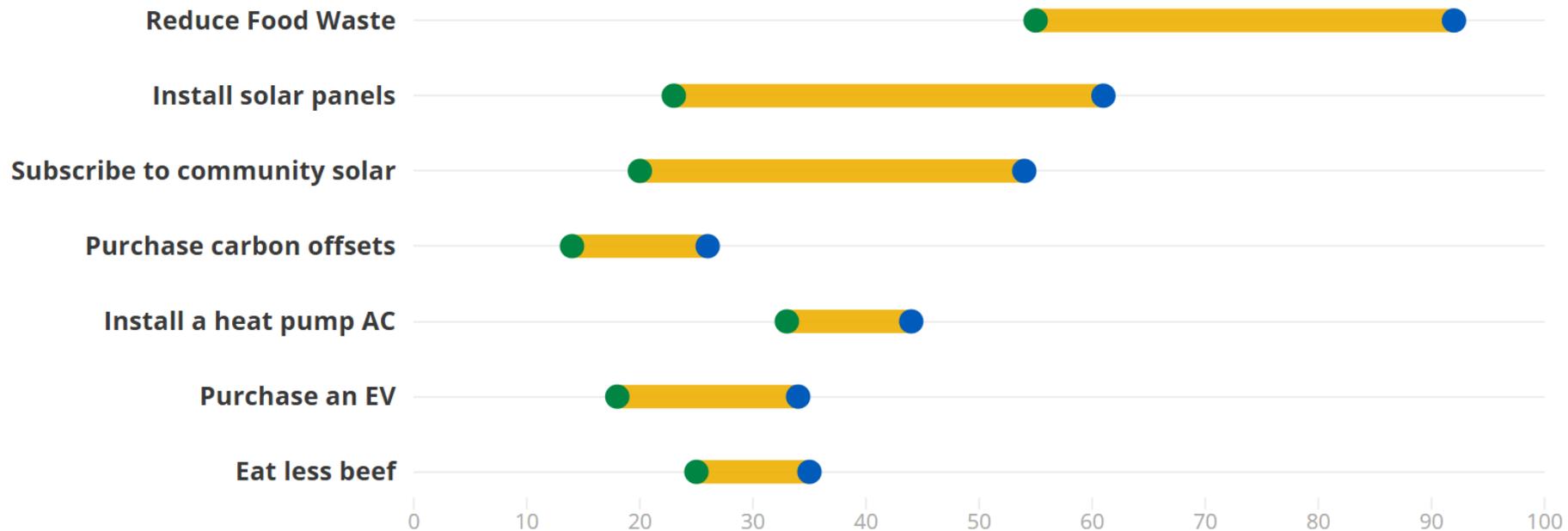
Pluralistic ignorance: individual behaviors

There is a sizable gap when people are asked if they support adoption of behaviors vs their impression if others also support adoption

Across all the behaviors, there is a "normative bubble" around behavior adoption waiting to be popped: Americans support adoption of these behaviors, but they don't realize others believe the same

● Do you support adoption?   ● Do you think others support adoption?
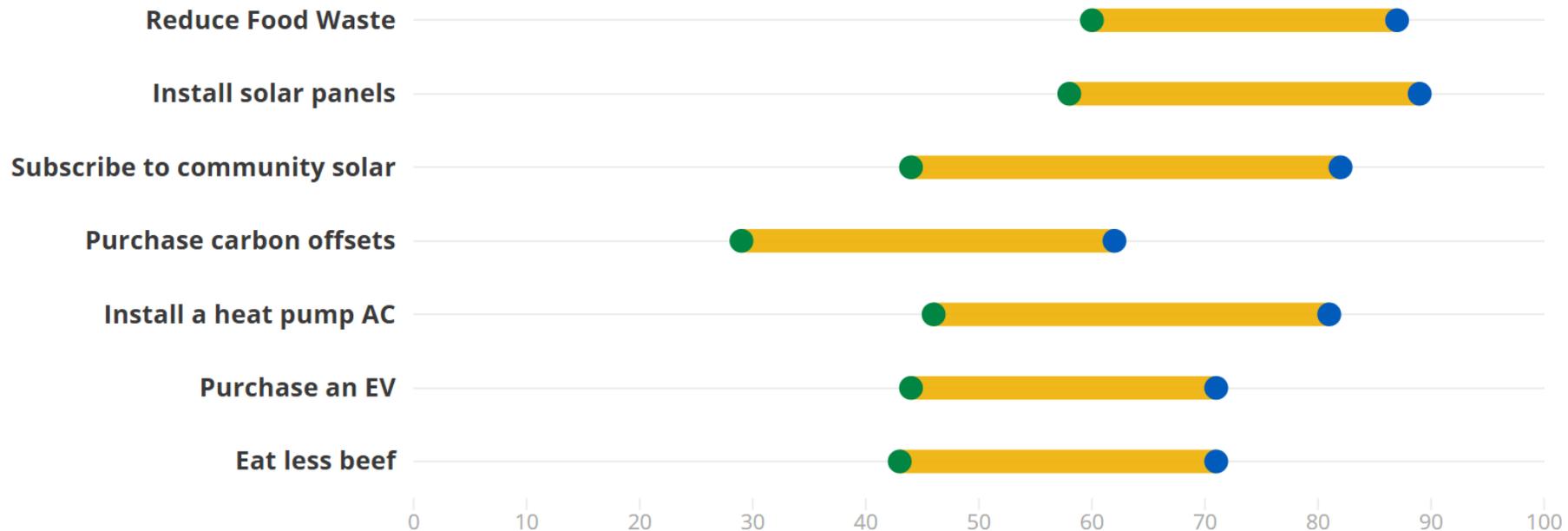
Source: Rare "Climate Culture Index 2024"

Rare, 2024

Pluralistic ignorance: policy support

There is a sizable gap when people are asked if they support policies vs their impression if others also support such policies.

Across all the behaviors, there is a "normative bubble" around policy support waiting to be popped: Americans support potential policies, but they don't realize others believe the same

● Do you support policies?   ● Do you think others support policies?

Source: Rare "Climate Culture Index 2024"

Rare, 2024

Pluralistic ignorance: within party

% Agree ● Democrats' estimate (of their own party) ● Democrats' actual views

I am worried about how climate change will harm the US economy. — 53 / 83

The US should be a world leader in developing clean energy. — 57 / 93

We should seize the moment now to speed up our action on climate change, even if there are short-term costs. — 53 / 88

Humans should work together to solve the problem of climate change, regardless of its causes. — 59 / 93
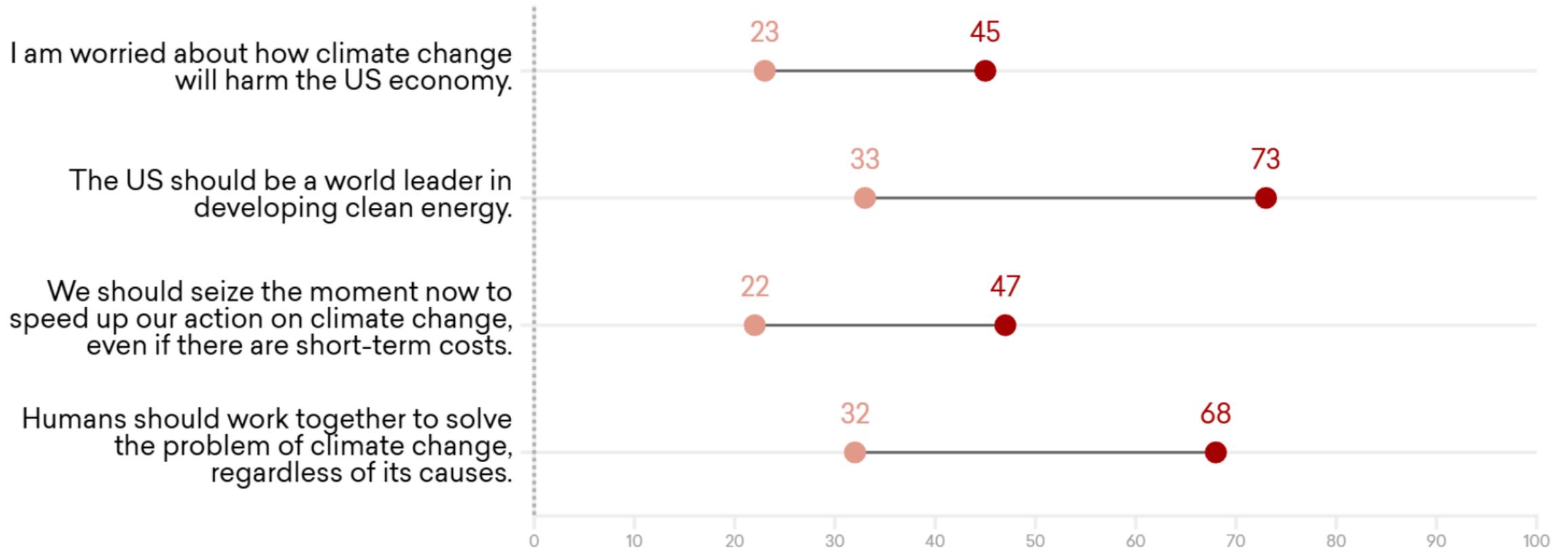
More in Common US, 2025

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

Perceived social norms matter

Learning the true norms

Stronger
- Acceptance of climate change
- Worry about climate change
- Support for pro-climate policies

Goldberg et al., 2020; Mildenberger & Tingley, 2019; Sparkman et al., 2022; Syropoulos & Sparkman, 2025

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Example: home energy conservation

Last month neighbour comparison

Efficient neighbours: 488

YOU: 939

All neighbours: 1,101

How you're doing:

Great ☺ ☺

▶ **GOOD** ☺

More than average
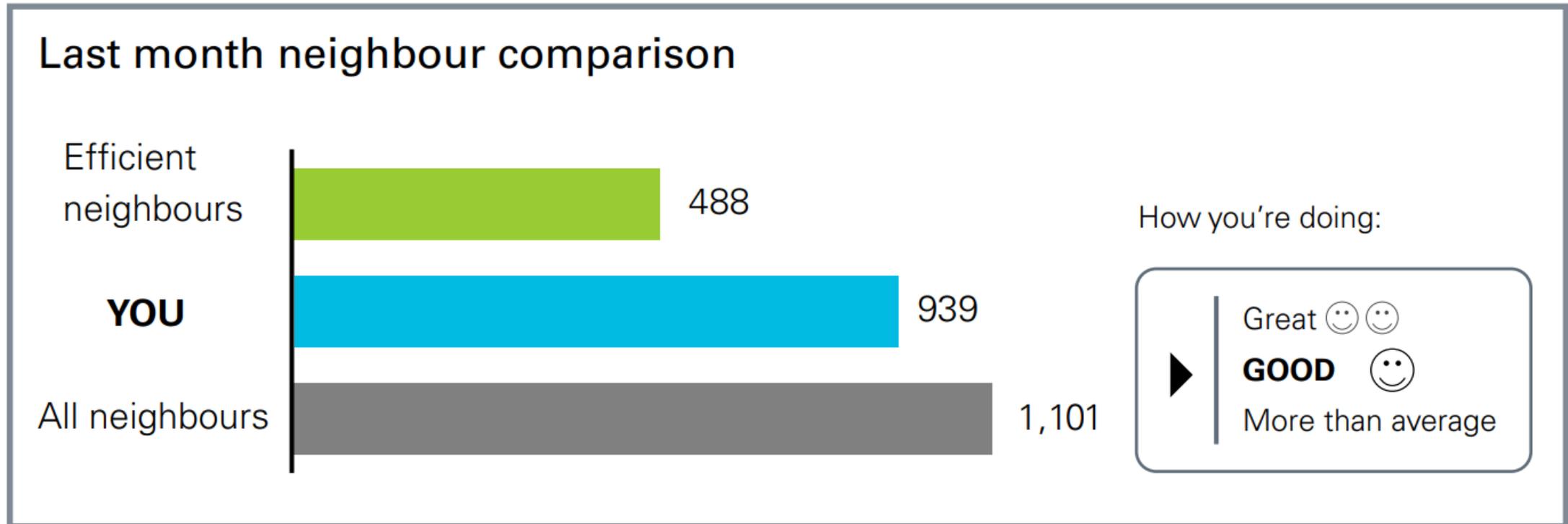
- Customers typically save 1.5%-2.5% on energy bills in first 2 years
- Since 2007: $2 billion in customer savings

Allcott, 2011; Rare, 2020

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Example: food waste at Google

A 2023 survey found:

97% OF GOOGLERS

think Googlers should do what they can to avoid wasting food

HERE'S THE DEAL

Less food waste = healthier planet

Join in to stop food waste! Take what you'll eat.

A 2023 survey found:

96% OF GOOGLERS

care about being environmentally friendly

HERE'S THE DEAL

Less food waste = healthier planet

Join in to stop food waste! Take what you'll eat.

- Signage reduced food waste in Google cafeterias by 31%

Daker et al., 2025

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

Make invisible norms visible

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Example: Monroe Street Santas

- 2022: 5 Santas
- 2025 (videos): 56+ Santas

"We've been sending a couple messages to neighbors trying to get them to join in."

"I think it's just to bring a sense of community to this area."

Don't highlight an undesirable norm

"Only 17% of Wisconsin woodland owners have a forest management plan." ✗

"Since 2018, more than 21,000 Wisconsin woodland owners have received a property visit from a DNR forester." ✓

Dynamic norm

Butler et al., 2021; Constantino et al., 2022; Sparkman & Walton, 2017

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

What **social norms** can you highlight? If you don't know the true norms, how can you find out?

How to handle misinformation and disinformation

Definitions

Misinformation

False and misleading information

Disinformation

Spread intentionally

Altay et al., 2023

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Types of misinformation

FIRSTDRAFT

7 TYPES OF MIS- AND DISINFORMATION

SATIRE OR PARODY
No intention to cause harm but has potential to fool

MISLEADING CONTENT
Misleading use of information to frame an issue or individual

IMPOSTER CONTENT
When genuine sources are impersonated

FABRICATED CONTENT
New content is 100% false, designed to deceive and do harm

FALSE CONNECTION
When headlines, visuals or captions don't support the content

FALSE CONTEXT
When genuine content is shared with false contextual information

MANIPULATED CONTENT
When genuine information or imagery is manipulated to deceive

Wardle, 2017

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

Types of climate misinformation

Truth

Misinformation

It's real ———— It's not real

It's us ———— It's natural

Experts agree ———— The science is uncertain

Badullovich et al., 2025; Törnberg & Törnberg, 2025

Audience segmentation | Word choice | Values and agency | Social norms | **Misinformation**

Types of climate misinformation

Truth

Misinformation

It's bad ———— The costs of addressing it outweigh the benefits

Others care ———— Only [environmentalists/ Democrats/elites] care

There's hope ———— [Climate solution] wouldn't work

[Polluting activity] is a solution (greenwashing)

Badullovich et al., 2025; Törnberg & Törnberg, 2025

Audience segmentation · Word choice · Values and agency · Social norms · **Misinformation**
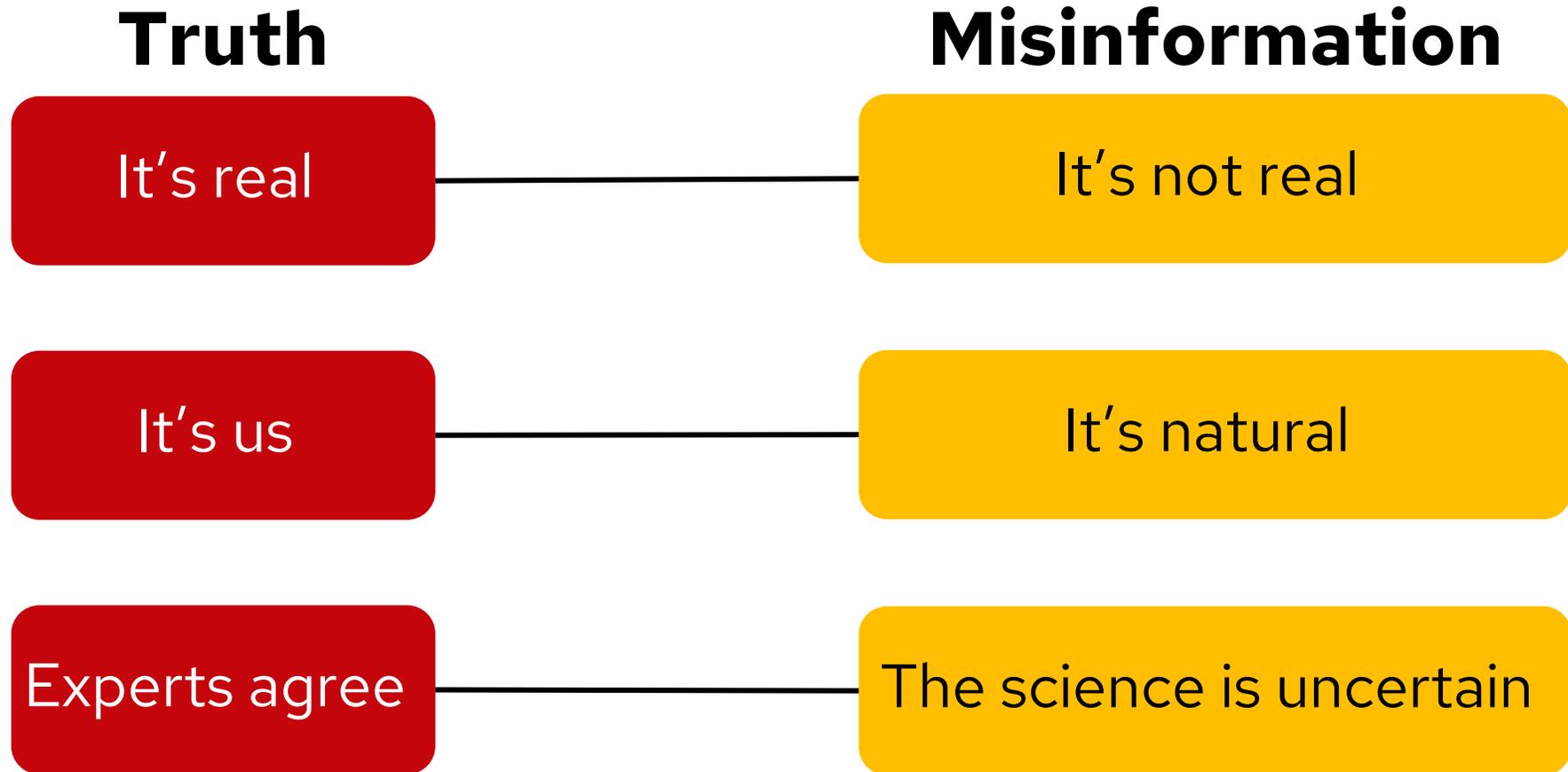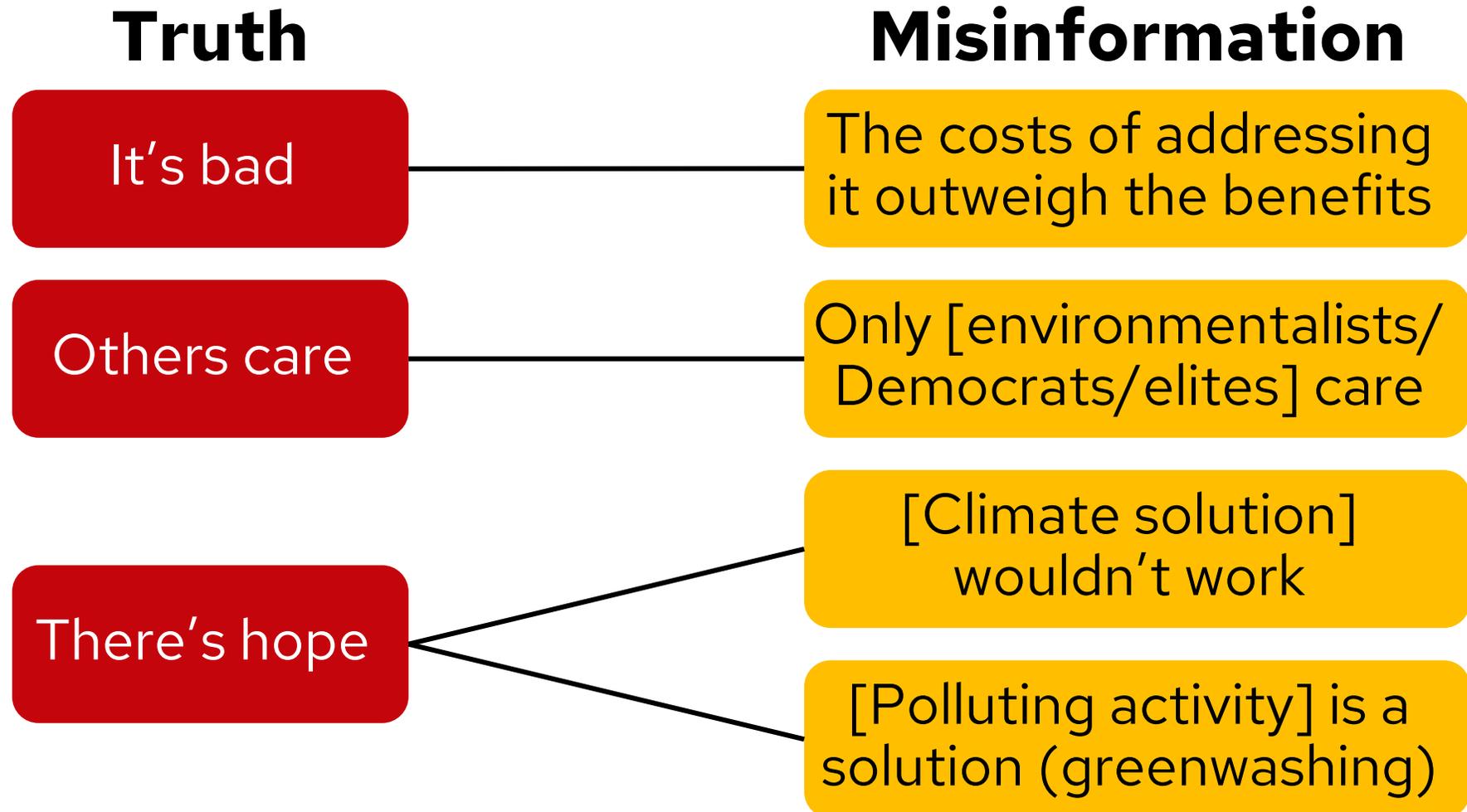
Where climate misinformation comes from

Most climate change misinformation originates as

DISINFORMATION

funded by the fossil fuel industry (or allies)

TOP-DOWN,

often trying to appear grassroots

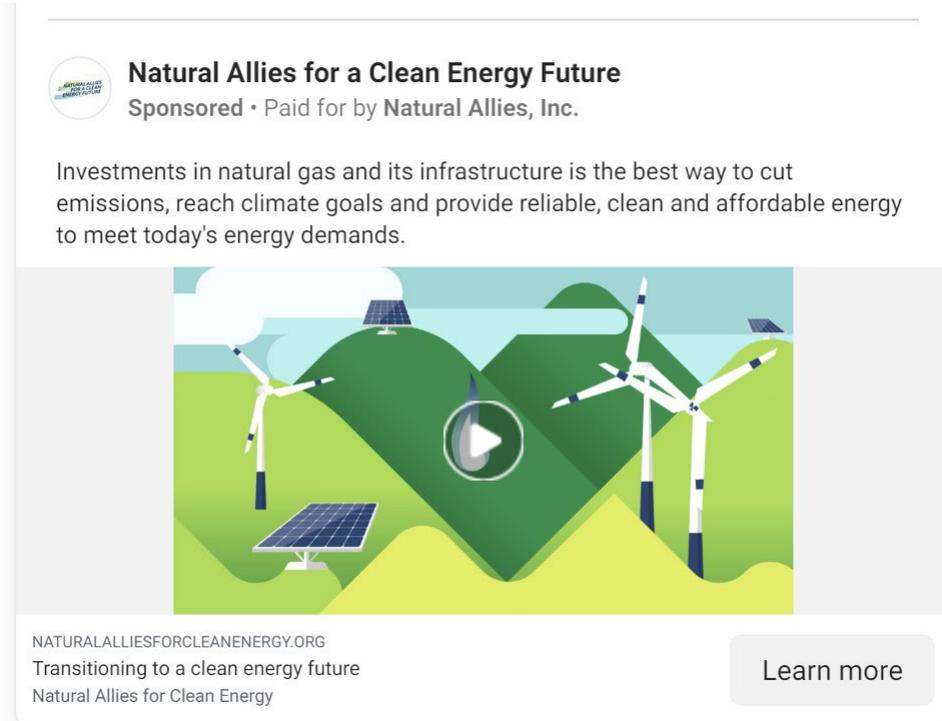*Dunlap & McCright, 2011; Roberts et al., 2025; Williams et al., 2022*

Where climate misinformation comes from

Funded by 7+ pipeline & utility companies, targeting young Black & Latino Democrats

Funded by the American Gas Association and American Public Gas Association

Brown, 2022; King, 2023; Leber, 2020

Audience segmentation   Word choice   Values and agency   Social norms   **Misinformation**

Where climate misinformation comes from

Funded by the Beef Checkoff
(appeared in *The New York Times* in 2021)

Funded by the Dairy Checkoff
(seen >1 million times in 2 weeks)

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BEEFING UP SUSTAINABILITY

If all U.S. livestock were eliminated and every American followed a vegan diet, greenhouse gas emissions would only be reduced by 2%, or 0.36% *globally*.

BEEF
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Undeniably Dairy
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Library ID: 1200076227379411

We're doing our part to tackle GHGs. See how the dairy community is reducing methane emissions while ensuring the well-being of our cows.

ARE ALL GHG EMISSIONS CREATED EQUAL?

*Hermann, 2023;
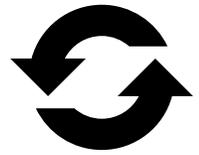Werthman, 2023*

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

Why do people believe misinformation?

Familiarity → increased belief (illusory truth effect)

Easy-to-follow narratives

Aligns with preexisting identities or worldviews

Triggers strong emotions

Ecker et al., 2022; Udry & Barber, 2024

Before exposure: inoculation

- Convey the threat of misinformation

- Explain the truth and the fallacy
    - False facts and/or flawed arguments

Most common types of flawed arguments in climate denial

Cook, 2020; Ecker et al., 2022; Traberg et al., 2022

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

After exposure: effective correction

Use a source the audience trusts

Validate their underlying concern

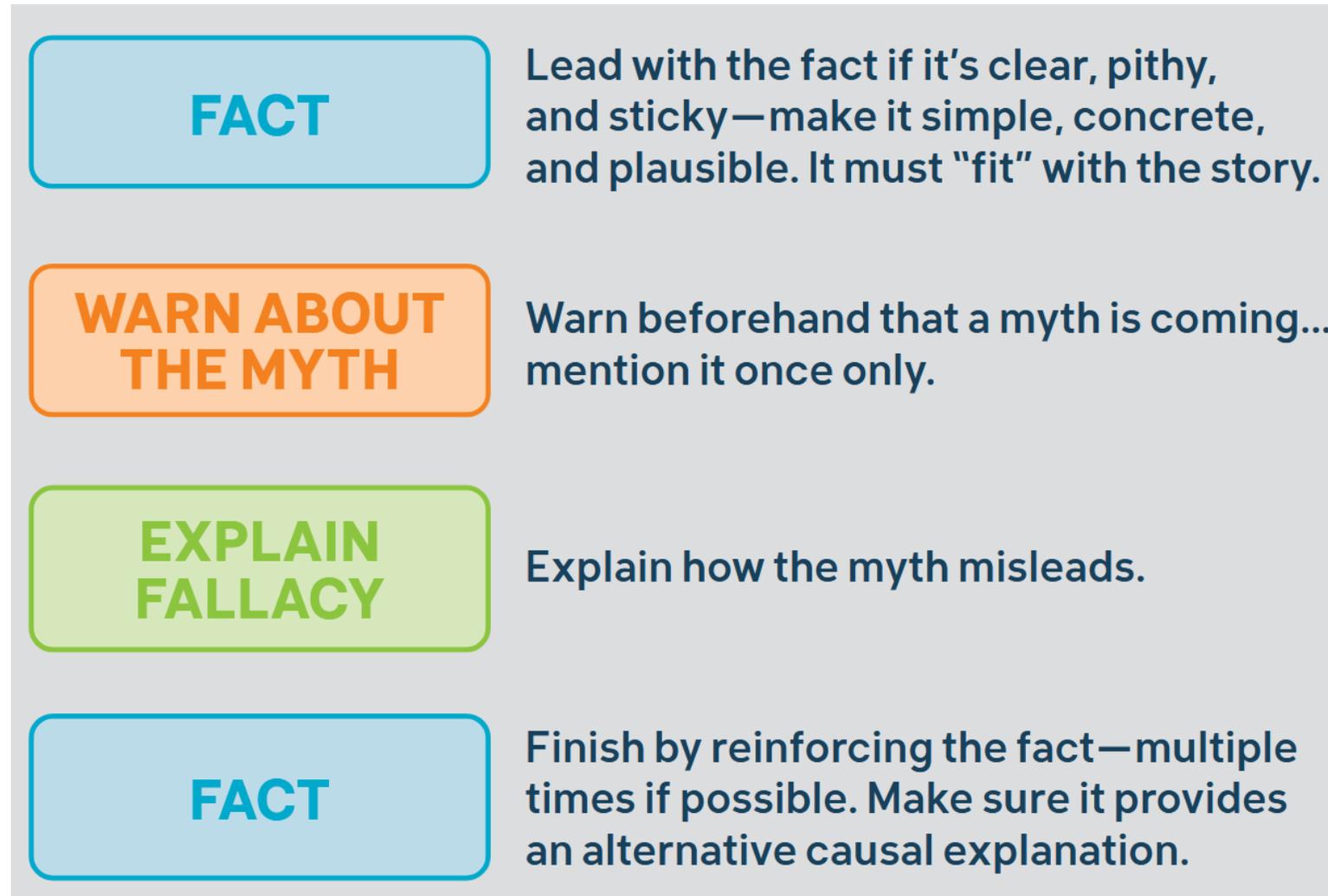Convey empathy and do not condescend

Provide an alternative (true) explanation

Repeat the correction over time

Ecker et al., 2022; Prike & Ecker, 2023; McRaney, 2022

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

One template: "fact sandwich"

FACT — Lead with the fact if it's clear, pithy, and sticky—make it simple, concrete, and plausible. It must "fit" with the story.

WARN ABOUT THE MYTH — Warn beforehand that a myth is coming... mention it once only.

EXPLAIN FALLACY — Explain how the myth misleads.

FACT — Finish by reinforcing the fact—multiple times if possible. Make sure it provides an alternative causal explanation.

Lewandowsky et al., 2020

Audience segmentation | Word choice | Values and agency | Social norms | Misinformation

Example: timber harvests

FACT

To make our forests more resilient to stresses like droughts and extreme rainfall, we need to actively steward them by conducting sustainable timber harvests.

WARN ABOUT THE MYTH

Contrary to what you might assume, "letting nature run its course" is not the best approach for most forests today.

EXPLAIN FALLACY

Your woodland was already dramatically changed by humans during the cutover. Now, most of the trees are the same age, and the next generation of oaks is struggling to grow.

FACT

Thinning your woods will allow more light to reach the ground so that new oaks will thrive and the ecosystem will become healthier.

Lewandowsky et al., 2020

Audience segmentation   Word choice   Values and agency   Social norms   Misinformation

Example: timber harvests

Use a source the audience trusts

Peer woodland owner

Validate their underlying concern

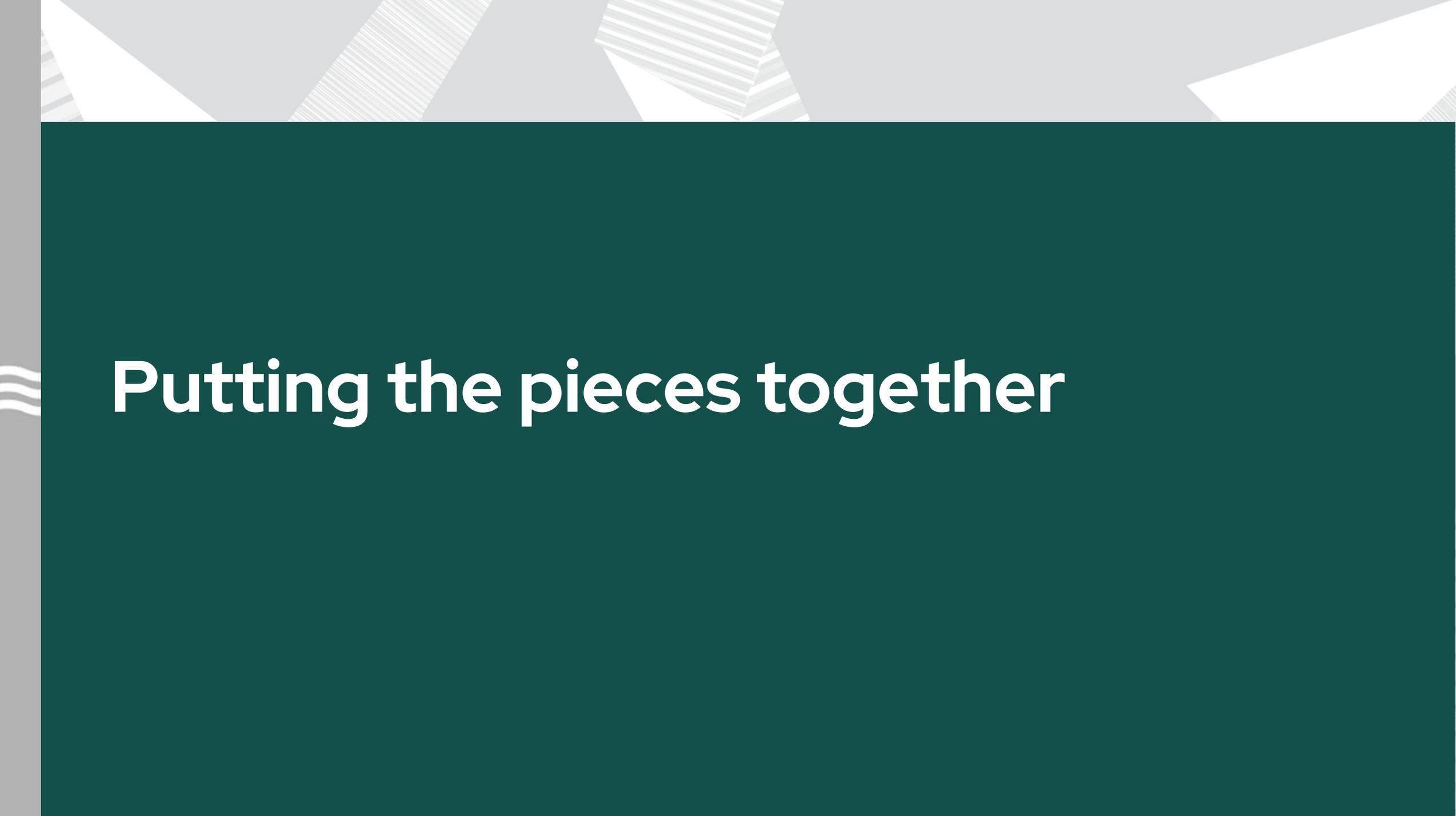Timber harvests CAN be done unsustainably

Convey empathy and do not condescend

It's understandable to not want your woods to change

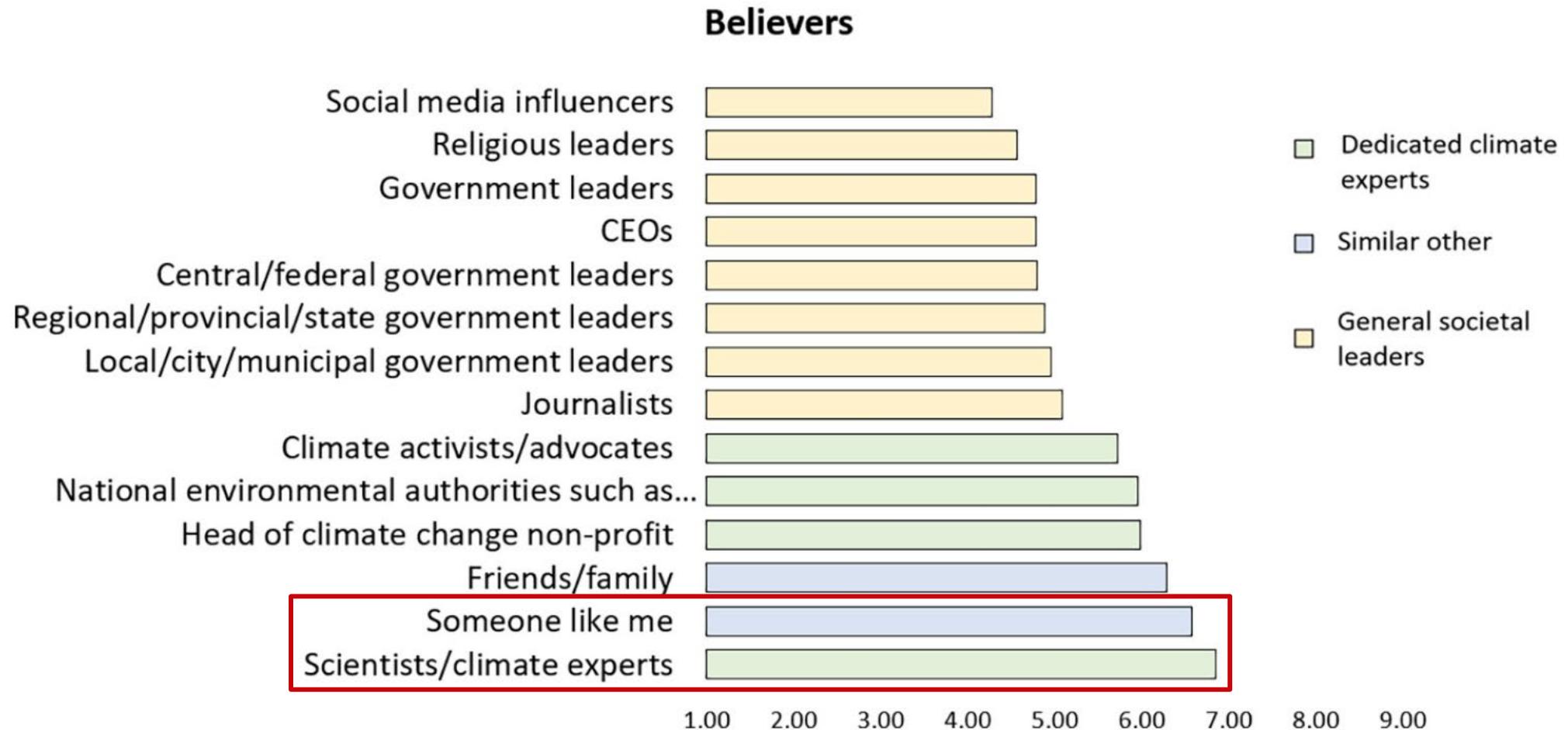*Ecker et al., 2022; McRaney, 2022; Prike & Ecker, 2024*

| Audience segmentation | Word choice | Values and agency | Social norms | Misinformation |

What **mis/disinformation** is your audience exposed to? How will you address it?

Putting the pieces together

Who does your audience trust on climate?

Believers

Social media influencers	
Religious leaders	
Government leaders	
CEOs	
Central/federal government leaders	
Regional/provincial/state government leaders	
Local/city/municipal government leaders	
Journalists	
Climate activists/advocates	
National environmental authorities such as…	
Head of climate change non-profit	
Friends/family	
Someone like me	
Scientists/climate experts	

☐ Dedicated climate experts

☐ Similar other

☐ General societal leaders

1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00

"Please indicate how much you trust that group of people to tell you the truth about climate change and about what our country should be doing to help prevent its worst consequences."   *MacInnes et al., 2026*
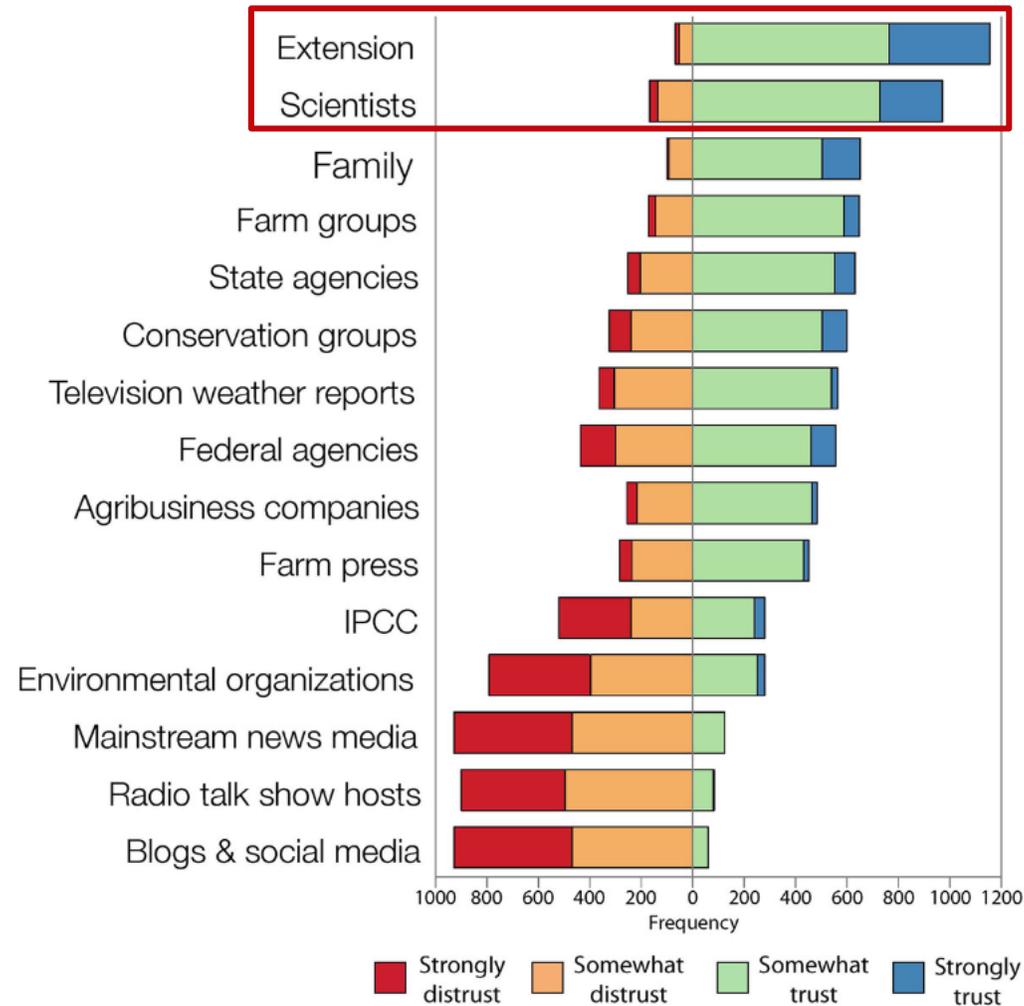
Who does your audience trust on climate?

Skeptics

Legend:
- Dedicated climate experts (green)
- Similar other (blue)
- General societal leaders (yellow)

Chart categories (top to bottom):
- Climate activists/advocates
- Social media influencers
- Central/federal government leaders
- Journalists
- Government leaders
- Head of climate change non-profit
- Religious leaders
- Regional/provincial/state government leaders
- CEOs
- Local/city/municipal government leaders
- National environmental authorities such as...
- Scientists/climate experts
- Friends/family
- Someone like me

X-axis: 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00

"Please indicate how much you trust that group of people to tell you the truth about climate change and about what our country should be doing to help prevent its worst consequences."   *MacInnes et al., 2026*

Who does your audience trust on climate?

Agricultural advisors' trust in information sources about climate change
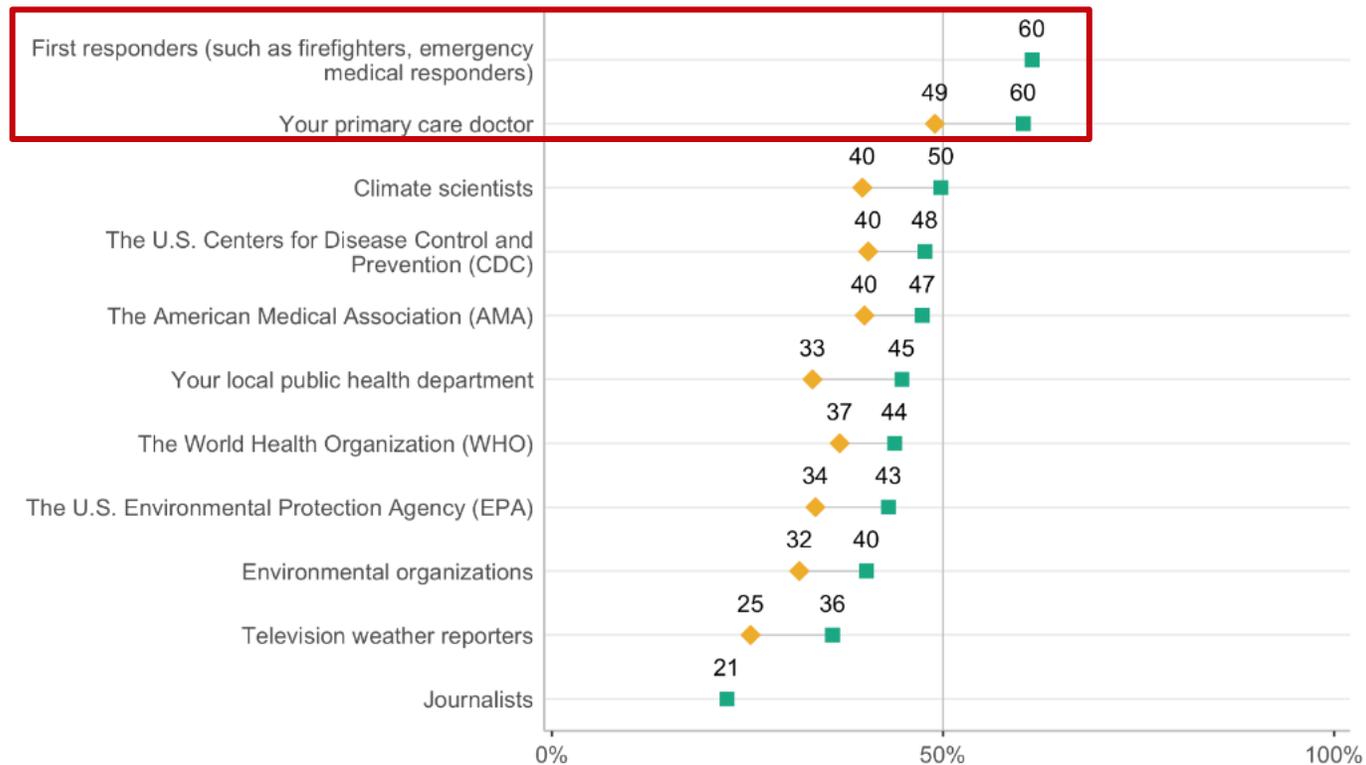

Prokopy et al., 2015

Who does your audience trust on climate?

Trust in various information sources about the health harms of global warming has increased
- % "strongly" or "moderately" trust -

Fine et al., 2025

Adapting to Changes in Your Sugarbush

Going in the back door

Social norms

Long-term trend

Audience's values

Resilience

Maple syrup producers across the Midwest have noticed changes in their sugarbushes in recent years, such as earlier tapping seasons and the arrival of new invasive and competing plant species and forest pests. We expect these and other changes to continue in the coming decades. By being flexible and adaptable, you can be a good steward of the land, ensuring that your sugarbush thrives for many years into the future.

maple.extension.wisc.edu/adaptation-menu/

Specific & relatable

Lower Sap Sugar Content

Problem

Summers now tend to be hotter than in the past. After a particularly hot summer, the sugar content of the following season's sap may be lower than usual.

Solutions & efficacy

What you can do:

- Take an **energy self-assessment** to determine how you can make your operation more energy-efficient, which will lessen the financial impact of lower sap sugar content on your operation.
- Use reverse osmosis to increase the sugar concentration of your sap before boiling it.
- Use a pre-heater or a more energy-efficient evaporator to save on fuel costs and boiling time.
- **Contact your local USDA Natural Resources Conservation Service** office to learn about their **Environmental Quality Incentives Program On-Farm Energy Initiative**, which might provide you financial assistance to purchase reverse osmosis or upgrade your equipment.
- In consultation with a forester, **thin your stand** to give your trees space to grow deep, wide crowns. Trees with more vigorous crowns and wider trunks typically yield a higher sap sugar content and sap volume, though you will still see variability from tree to tree and even from day to day.

- Practice **good sanitation habits** to get a higher yield. Use new, sterile spouts each year (or use sterilizable stainless steel spouts).
- If you use gravity tubing, upgrade to a vacuum tubing system, which can double your sap yield.
- Tap more trees to increase your overall yield of syrup.
- **Tap red maples** in addition to sugar maples. Red maples with deep, wide crowns can be just as good for sugarmaking as sugar maples. This is true even though red maples sometimes bud out earlier in the spring than sugar maples.
- Make **value-added products** like maple cream or maple candy in addition to syrup. **Product diversification** allows you to make more income per unit of sap, which will help your finances in low-yield years.

Trusted messenger

Stories from Wisconsin maple syrup producers

Who is your messenger?
Which communication channels will you use?
Jot down an outline of your message.

Open discussion

Let's stay in touch!

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in scott-hershberger-scicomm

🌲 go.wisc.edu/forestry-newsletter

Scan for sources & these slides

go.wisc.edu/mcrc-climate-comm

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