



RUTGERS
THE STATE UNIVERSITY
OF NEW JERSEY

Communicating About Climate Change:

Targeting

Understanding, Emotions, and Actions

Establishing Your Goals for Communicating

- What do you hope to accomplish?
 - Education
 - Providing information so people can Make their own decisions



Establishing Your Goals

- What do you hope to accomplish?
 - Education
 - Providing information so people can Make their own decisions
 - Persuasion
 - Providing information to Change beliefs, attitudes, or behaviors



Establishing Your Goals

- What do you hope to accomplish?
 - Education
 - Providing information so people can Make their own decisions
 - Persuasion
 - Providing information to Change beliefs, attitudes, or behaviors
 - Dialogue/Partnerships for Decision-Making
 - Engaging with stakeholders to **understand their needs/concerns and to discuss information** that will lead to better collective decisions



Assumed Roles Differ



- Who has information, values, or viewpoints worth sharing?
- Who should be part of the process of deciding what should be done?
- Conflict occurs when these assumptions are not mutually shared.

“Explaining the Facts” is not Persuasion

- If your intent is to persuade, say so.
- And, say why you are trying to persuade.
 - Who benefits?



Drivers of Beliefs, Attitudes, Intentions, and Behaviors

- **Cognition**

- Understanding:
 - The mechanics of climate change
 - Its consequences
 - The social contexts surrounding climate change
 - Potential actions and their effectiveness

- **Affect**

- Fear
- Anger
- Anxiety
- Frustration
- Mistrust
- Helplessness
- Resignation
- Protectiveness
- Others. . .



Which Comes First Cognition or Affect?



- Many believe that we think first and then feel...

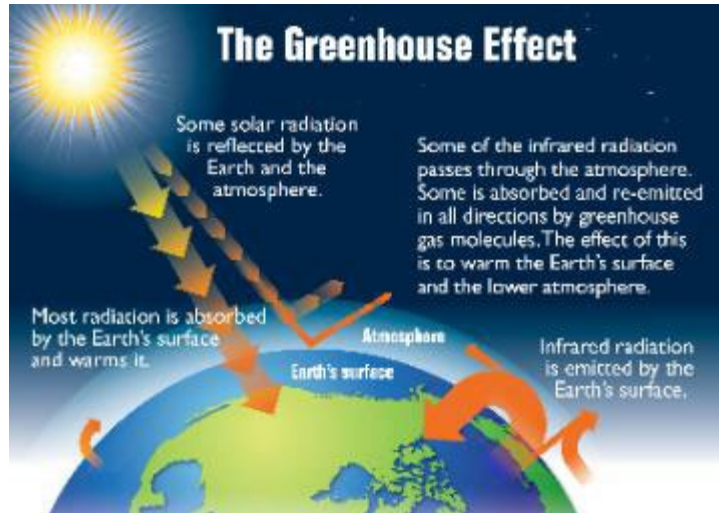
Which Comes First Cognition or Affect?

- But emotions often come *first*.
 - *We then try to explain why we feel the way we do.*

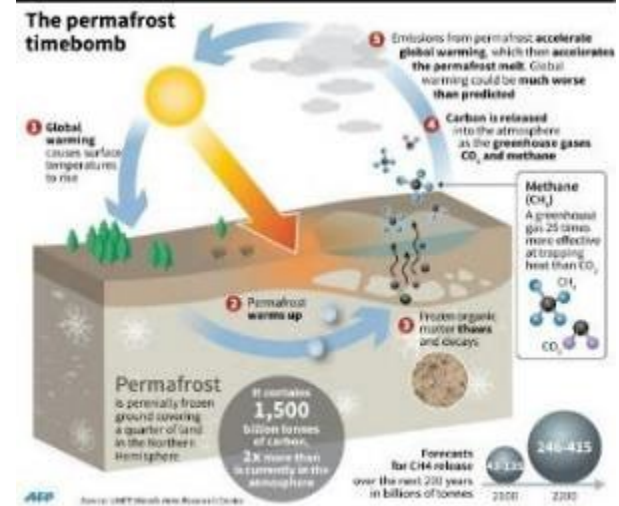


Climate Change Education Relies on Cognition

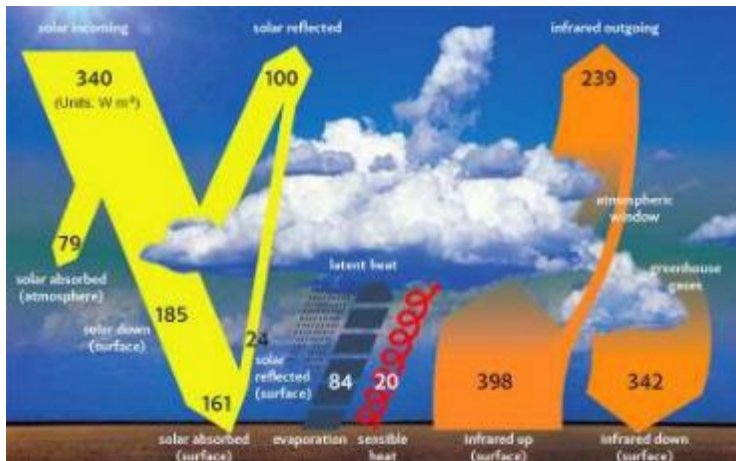
Connected to Mechanisms



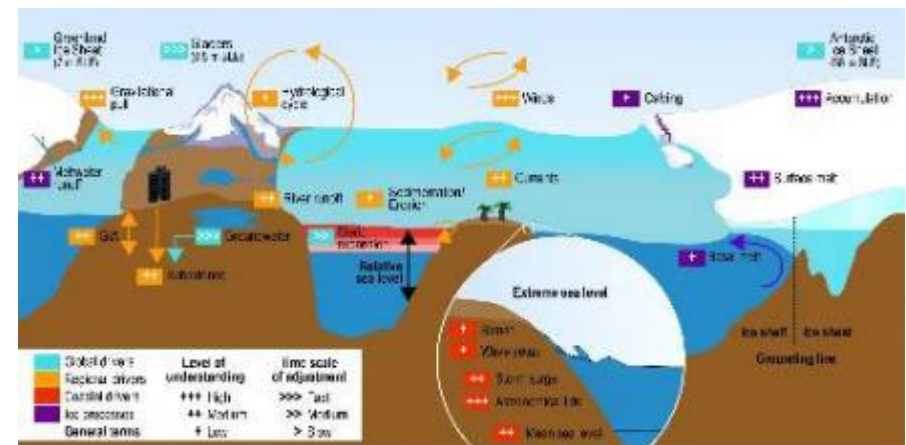
<https://envirn.org/what-is-climate-change/>



<https://phys.org/news/2015-10-climate-state-emissions-pledges.html>



<https://coastadapt.com.au/causes-of-climate-change-and-sea-level-rise>



<https://www.ipcc.ch/srocc/chapter/chapter-4-sea-level-rise-and-implications-for-low-lying-islands-coasts-and-communities/>

Advocates Messages Often Rely on Affect

Connected to Consequences

Polar Bears at Risk of Starvation as Arctic Ice Sheets Melt, Scientists Warn



<https://earth.org/polar-bears-at-risk-of-starvation-as-arctic-ice-sheets-melt-scientists-warn/>

Activists Messages Often Rely on Affect

Connected to Values



<https://www.e-ir.info/2023/02/13/taking-climate-change-seriously-the-values-approach/>

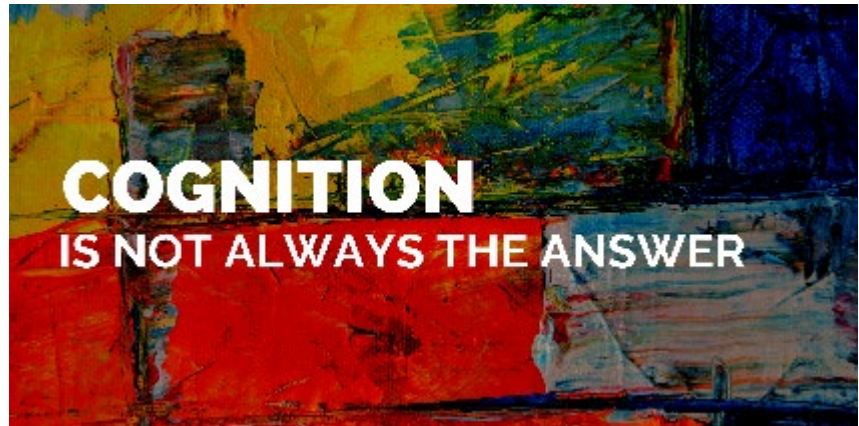


<https://togetherband.org/blogs/news/young-climate-activists>

Key Mistake

Explaining the facts is important, but . . .

- Addressing *Both* Cognition and Affect are often necessary to Persuade and to Motivate
 - The tendency for many scientists/academics is to just stick to the facts, excluding *any* emotional content
 - And expecting the facts to be persuasive on their own.



Cognition + Emotion



- How can you use appropriately use emotion to help motivate?
 - Stories, photographs, videos, metaphors, analogies, that:
 - Highlight the threat.
 - Illustrate the consequences.
 - Personalize those who are/will be affected.
 - Enables the audience to see themselves in the story.
 - Connect with shared values.

Key Mistakes - Emotions

- Failing to recognize and acknowledge emotions.
 - Many experience “climate anxiety.”
 - Adaptive / motivating
 - Maladaptive / debilitating



Key Mistakes - Emotions

- Some “climate anxiety” is exacerbated by framing climate change and its consequences as a “crisis,” “looming disaster,” or “inevitable catastrophe”.
 - Increasing anxiety without offering a way to relieve it.
 - Generating helplessness and hopelessness.



“If nothing I can do will fundamentally avert the catastrophe, why do anything to mitigate it?”

“If I can’t do *everything* possible to mitigate my climate impacts, why do *anything*?”

Key Mistakes - Emotions

- Viewing emotional responses to climate change as fundamentally pathological.
 - Some are directly related to personal experiences.
 - Destruction of property
 - Loss of life or health
 - Financial difficulties
 - Some are caused by realistic warnings of climate-related threats.



Cognition: Mental Models Matter

Mental Models Matter

- It is important to understand what people:
 - Think they *know* about climate change
 - *Want* to know about climate change
- More important to understand how people *think* about it.
- Important to understand what they see as “the big picture” and the basis for that view.



Mental Models Matter

- We can't know everything
- We often have incomplete mental models of how things work or why
- We will fill in our mental models with available information (and misinformation) that is **plausible**



Keys to Plausibility

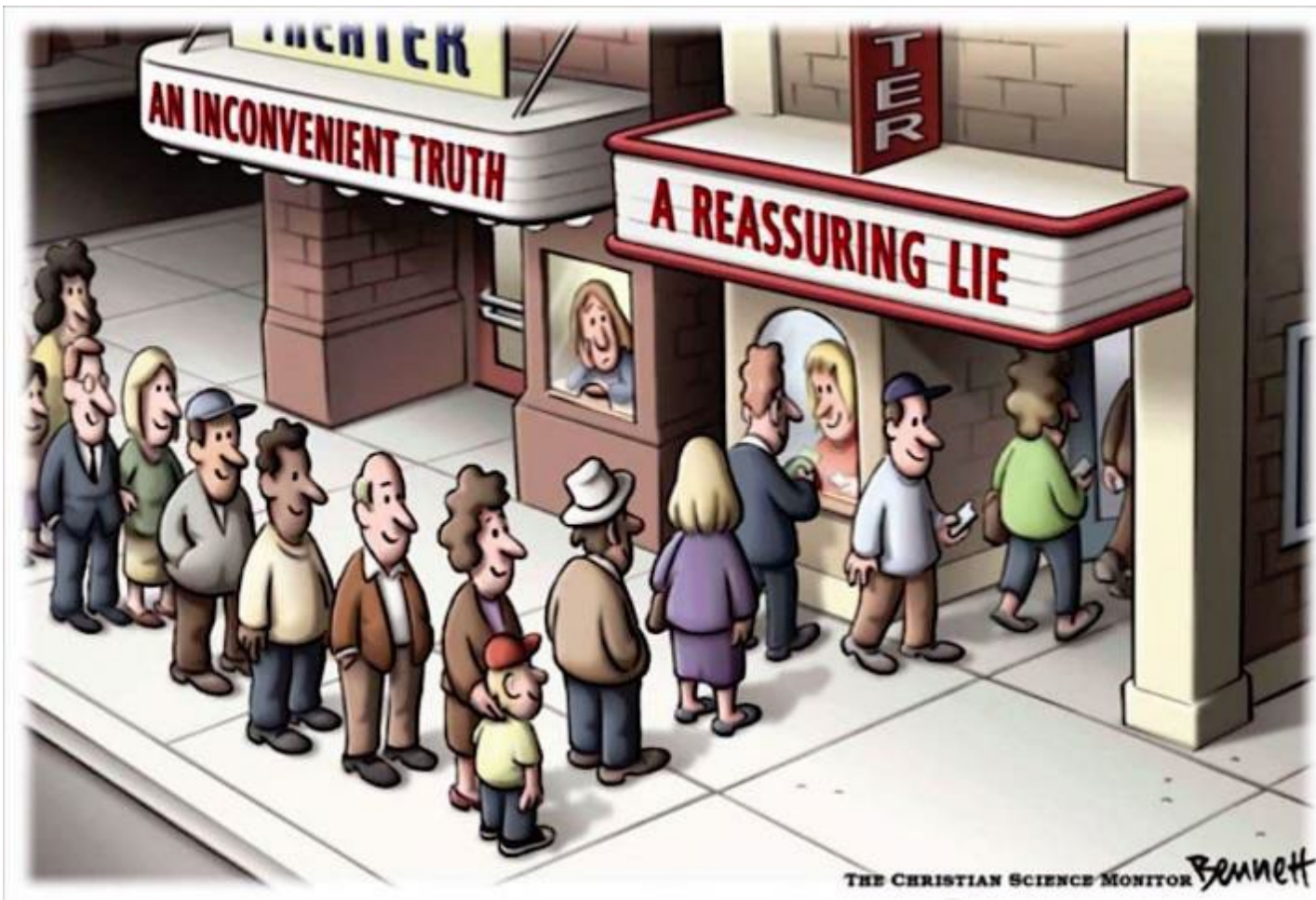
- The information:
 - Fits with (or confirms)
 - What you already know or believe.
 - Who you believe you are.
 - Offers a simple explanation for a complex phenomenon.
 - Provides a mechanism for an association you already believe exists.
 - Connects metaphorically or analogously to a mechanism or relationship you already believe exists.



Motivated Reasoning

- Once we have decided something, we:
 - *Look* for new information consistent with our beliefs
 - *Reject* information inconsistent with our beliefs
 - *Twist* information we cannot reject to fit with what we already believe
 - We reject/resent those who try to “correct” us





Social Pressure to Conform – Social Norms



Identity Politics



About this item

- Polyester
- Machine Wash
- Soft fabric, stretchy, lightweight and breathable.
- Short sleeve, crew neck, casual trendy.
- Perfect for any casual occasions. Good for work, daily, office, travel, running, home wear.

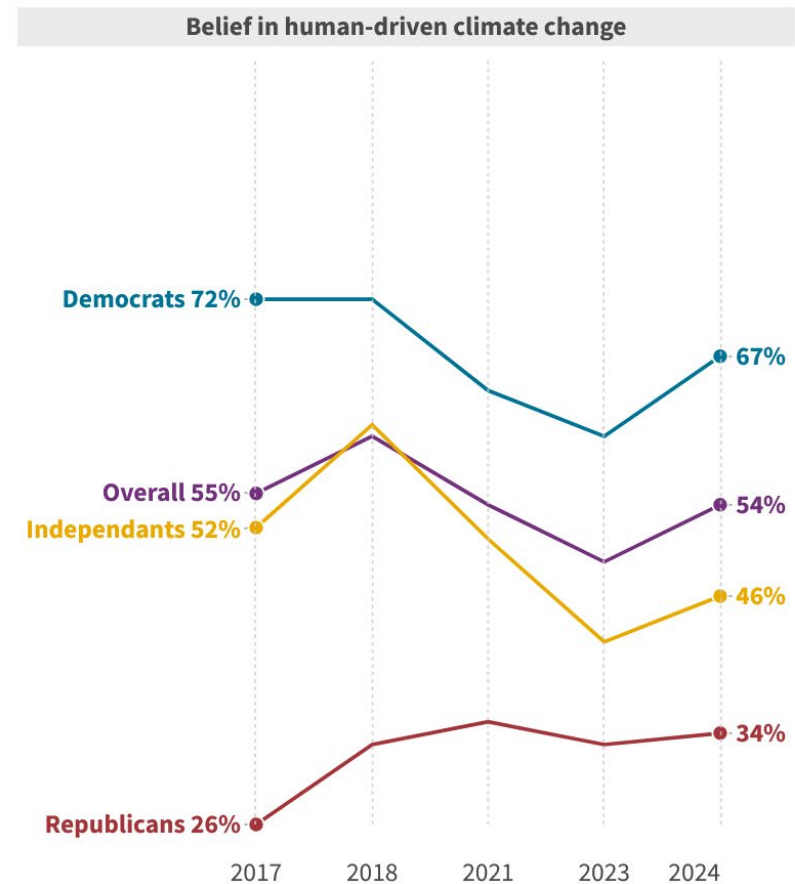
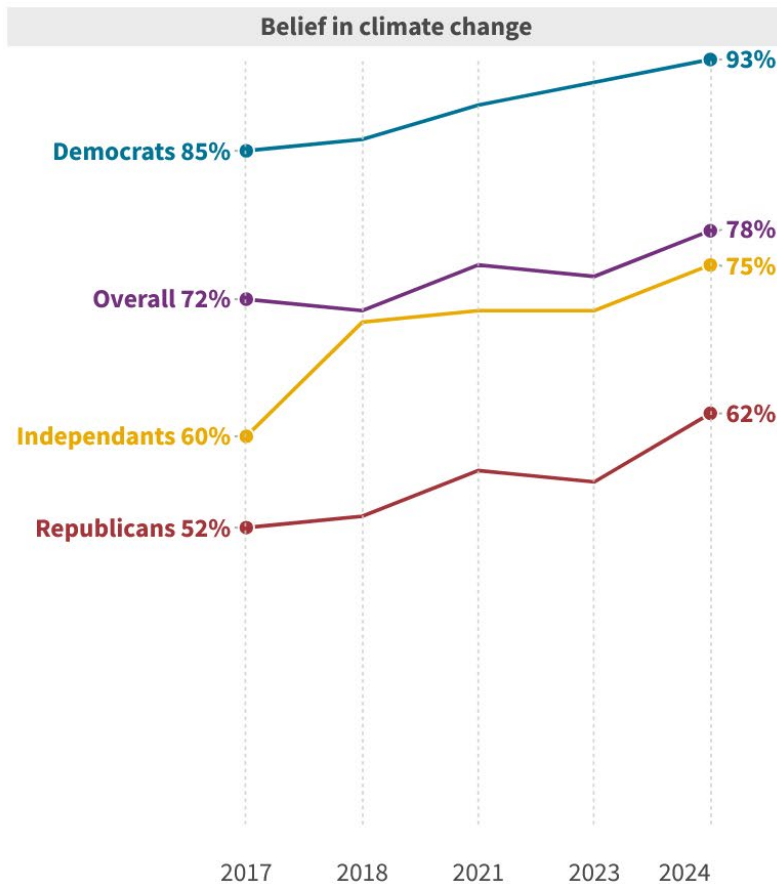
Motivated Reasoning and Social Media

- Algorithms used to deliver targeted information
 - Based on our demographics, previous searches, likes, and sharing behaviors
- Social media filters information through our friends
 - Highlighting views and opinions with which we agree
- Most users are connected to a small number of like-minded others.
 - Creating echo chambers



Belief in Climate Change, But Not Human-Caused

Climate attitudes over the years



Source: EPIC-AP/NORC Public Opinion Poll • Note: "Belief in human-driven climate change" refers to respondents saying they believe climate change is caused entirely or mostly by human activities. Due to a small sample size, the difference between the beliefs of young and old Republicans could only be reported in certain years where there was statistical significance.

Challenge:
Getting People to Act Regardless of Belief in
Human-Caused Climate Change

Changing Behavior

- People must be convinced that:
 - They or someone, or something they value is vulnerable.
 - The consequences of the threat are worth avoiding.
 - They know what to do and when.
 - They have the skills, equipment, and other resources to do it.
 - Their efforts will be effective and meaningful.
 - Their new behaviors are considered “normal” and practiced by others.



What are the Logical Interventions?

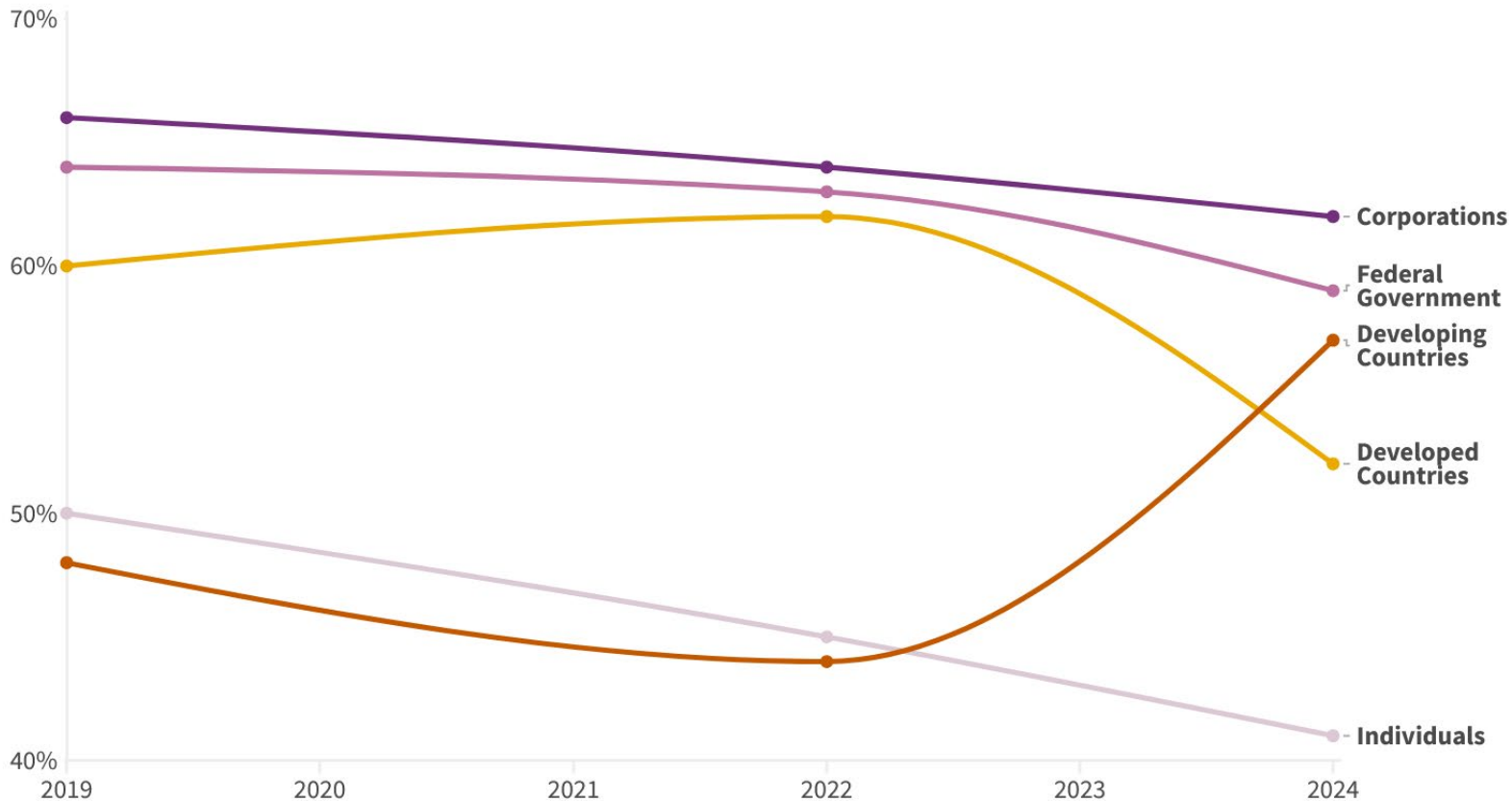
- What needs to change to be effective?
 - Technologies?
 - Policies?
 - Incentives?
 - Behaviors?
 - Culture?
- At what level?
 - Individual?
 - Corporate?
 - Market?
 - Local
 - State?
 - Regional?
 - National?
 - International?
- What roles do we need individuals to play to make these changes happen?



Barriers to Effective Individual Actions

Individuals are Seen as Bearing Least Responsibility

Responsibility to act on climate change



Source: EPIC-AP/NORC Public Opinion Poll • Note: While this poll asked specifically about "rapidly developing countries like India and China," previous polls asked about "developing countries."

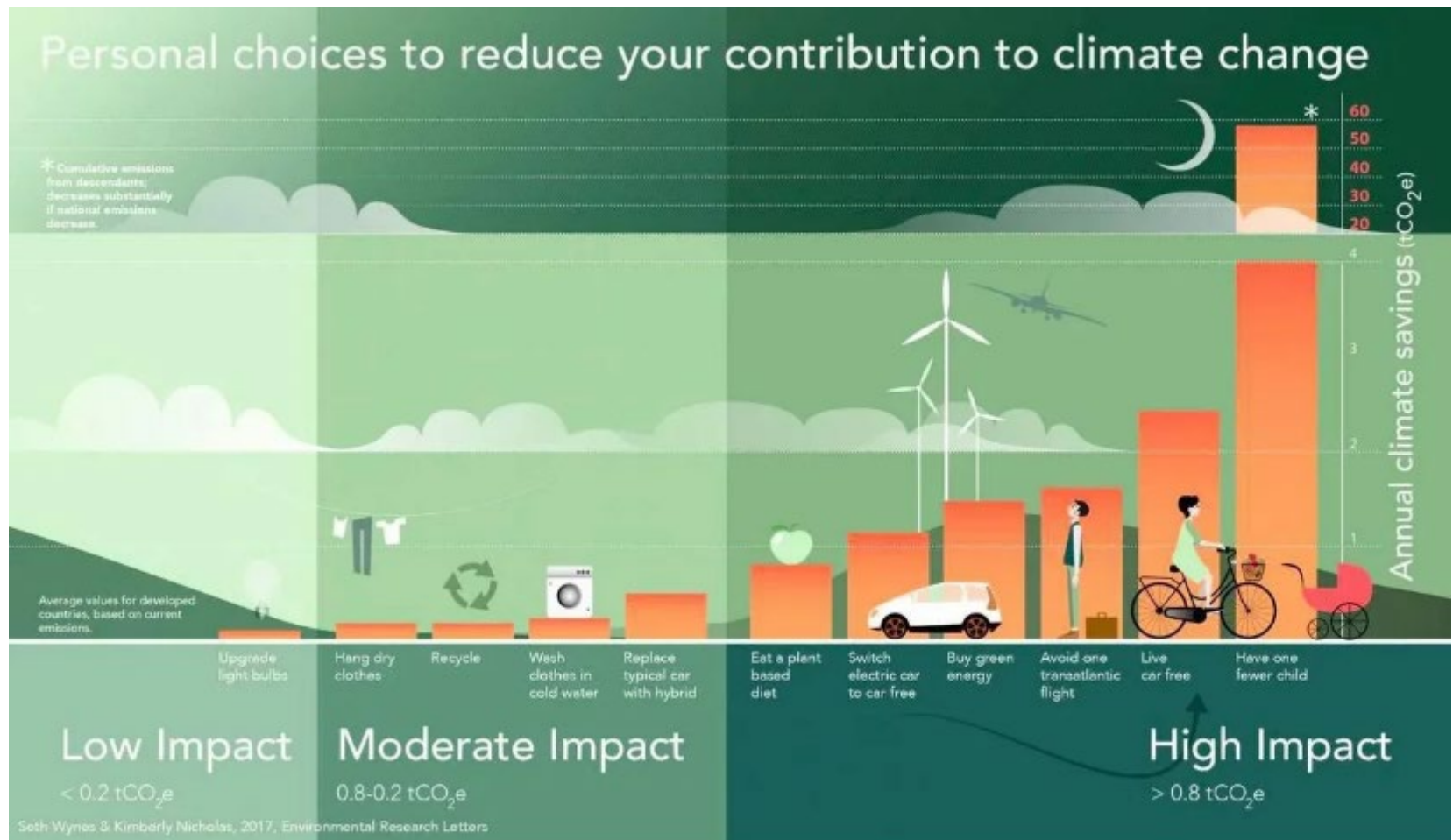
Justifications for Inaction

- “Commons” thinking.
 - “Others have much larger impacts, they should do something first.”
 - “If everyone isn’t making changes, why should I be the only one?”
- Good intentions.
 - “I’m waiting until the technology gets better, cheaper, has all the bugs worked out.”
 - “I’m waiting until there are better incentives available.”
 - “I’ll upgrade to more energy efficient equipment the next time I replace my: roof, car, water heater, stove, etc.”



Sacrifice

- Many recommended actions to “save the planet” are seen as requiring individual sacrifice and deprivation.



Sufficing



Taking my private jet to
COP28 in Dubai . . .

Conference of Parties (Dubai, UAE)



Researchers tracked private jets that travelled to COP28 in Dubai in 2023. (Gossling et. al/CBC News)

Sufficing

Taking my F150 to buy Impossible Burgers . . .



2024 F-150[®] Raptor[®]



Fuel Economy		
Regular Gasoline		
EPA MPG	MPG	
	10	15
	combined	city highway
	8.3 gals/100 miles	

Belief That a Technological Solution Will Save Us

Cost plunges for capturing carbon dioxide from the air

Approach could make it affordable to produce gasoline from air, water, and renewable electricity

7 JUN 2018 • BY ROBERT F. SERVICE



Banks of fans blow air through a carbon dioxide-capturing solution in this rendering of a direct air capture plant. CARBON ENGINEERING

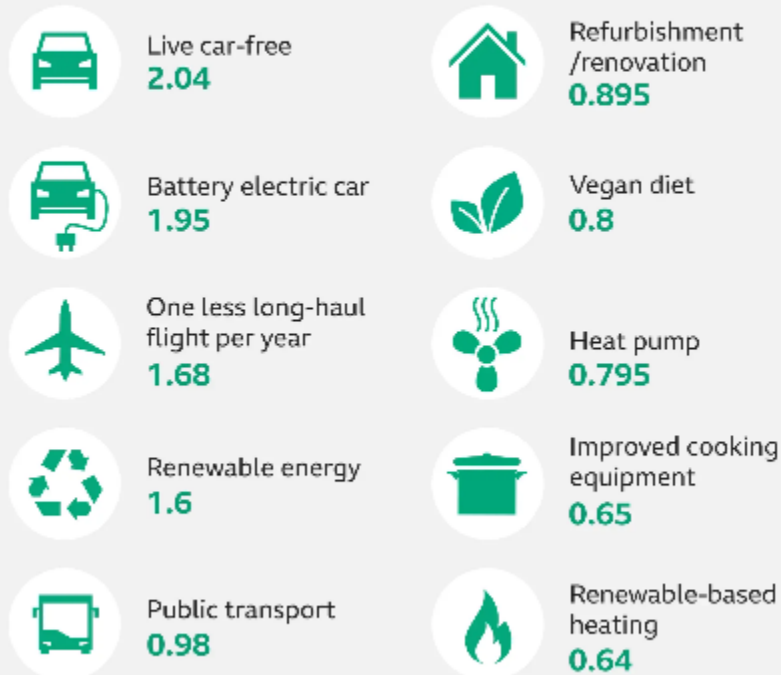
<https://www.science.org/content/article/cost-plunges-capturing-carbon-dioxide-air>

Lack of feedback loops

- People can't connect their individual actions with tangible reductions in climate consequences.

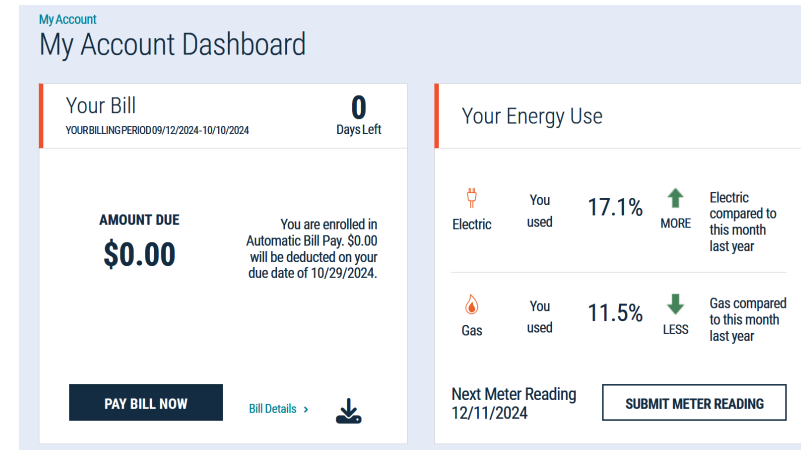
Top options for reducing your carbon footprint

Average reduction per person per year in tonnes of CO2 equivalent



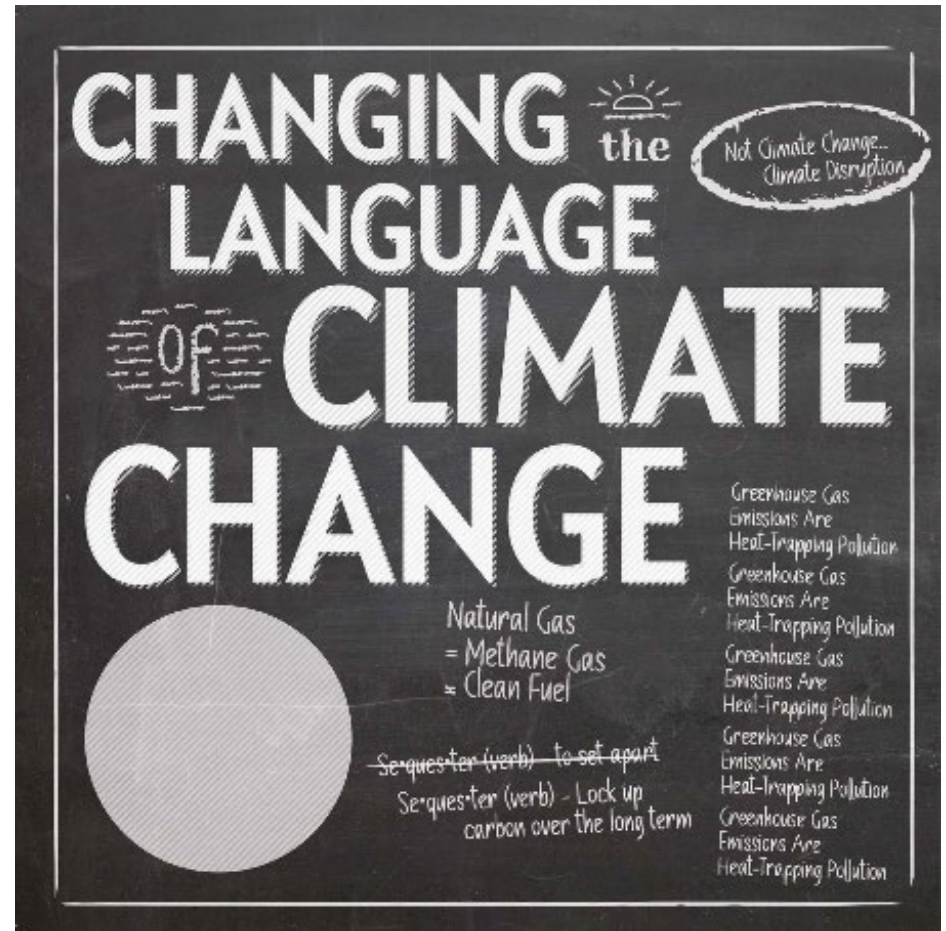
Source: Centre for Research into Energy Demand Solutions

BBC



Encouraging Effective Individual Actions

Using Terms that Better Convey Intuitive Meaning



The Right Words Are Crucial to Solving Climate Change

Speaking to people's priorities can build the will needed to implement climate solutions. *Scientific American*, February 1, 2023.

By [Susan Joy Hassol](#)

<https://www.scientificamerican.com/article/the-right-words-are-crucial-to-solving-climate-change/>

Influencing Social Norms



Marketing the *Other* Benefits of Climate Interventions



HERMONEY
from Jean Chatzky

≡ MENU

EARN

SAVE

INVEST

PROTECT

BORROW

CONNECT

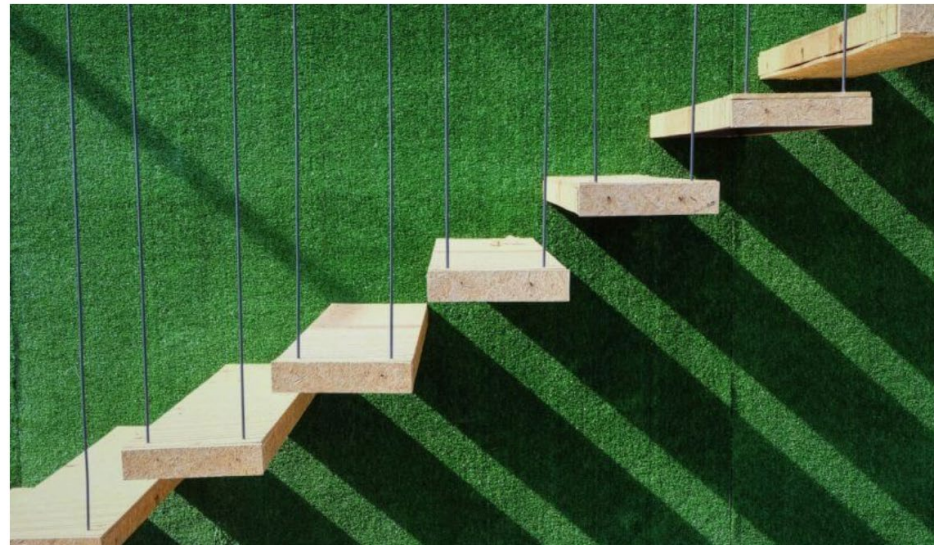
ENJOY

ADVICE & COAC

INVEST FINANCIAL PLANNING

THE 10 THINGS WE CAN DO NOW TO COMBAT CLIMATE CHANGE AND SAVE MONEY

Joanna Nesbit | November 30, 2021



It's time to spearhead social change as we head into 2022... We've got 10 things you can do to help the planet, your health, and your budget.

Framing Targeted to the Priorities of Specific Audiences – Save Energy, Money, or Both?

Tips to Save Energy at Home



GREENMATCH

<https://www.greenmatch.co.uk/blog/2020/03/how-to-save-energy-at-home>

7 SIMPLE THINGS TO SAVE MONEY ON YOUR ELECTRIC BILL



<https://www.wkbw.com/news/7-simple-things-you-can-do-to-save-money-on-your-electric-bill>

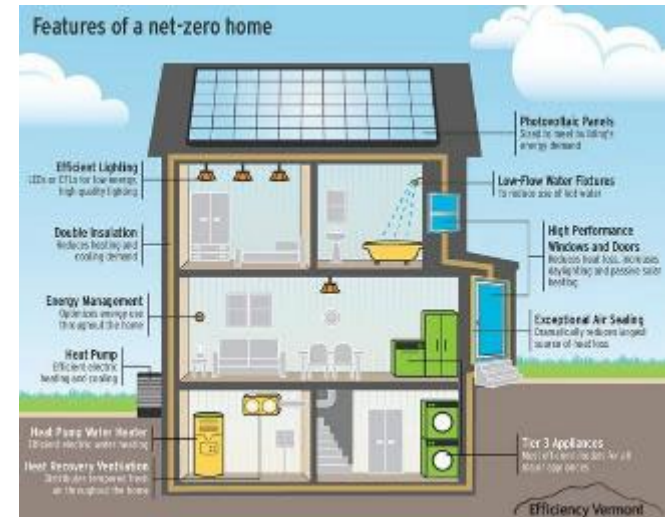


<https://applewoodfixit.com/blog/10-lifhacks-save-money-energy-infographic/>

Being Clear About the Target – Reducing Carbon Footprint, Carbon Neutral, Net-Zero, Greenhouse Gas Negative?



<https://www.considerate-consumer.com/carbon-footprint>



<https://heartlandhomesinc.com/what-is-a-net-zero-home>



https://www.youtube.com/watch?app=desktop&v=6dmcodpaVTE&ab_channel=MoveIQ

WEBINAR RELEASE



Potential for U.S. Agriculture to be Greenhouse Gas Negative

Discover how agriculture can combat climate change and achieve sustainability.



Tuesday, November 12
2 PM to 3:30 PM

Presented by



In partnership with



<https://members.cast-science.org/ap/EmailViewer/LwxKEWAR>

Framing/Marketing to Unsympathetic Audiences

- Framing/marketing these benefits appropriately to coincide with a targeted audience's implicit values may help overcome resistance to being identified as “believing in climate change.”



Donald J. Trump
@realDonaldTrump

We should be focused on clean and beautiful
air-not expensive and business closing
GLOBAL WARMING-a total hoax!

RETWEETS
343

LIKES
228

7:30 AM - 28 Dec 2013



“

I'm an environmentalist. I am. I want
the cleanest water on the planet. I
want the cleanest air anywhere.”

Donald Trump
December 2019

Considering Unintended Consequences - Throwing Soup Has Not Cooled the Planet



<https://www.foxnews.com/world/activists-throw-soup-mona-lisa-louvre-climate-protest>

Throwing Soup at Art Shifted People's Views of Climate Protests—But Maybe Not In The Right Way

Do nonviolent disruptive actions decrease/increase your support
for efforts to address climate change?

Greatly decrease Somewhat decrease Slightly decrease
No effect
Slightly increase Somewhat increase Greatly increase

Decrease 46%



No Effect 40%



Increase 13%



1,031 respondents were surveyed Oct. 21-24, 2022

Source: Annenberg Policy Center

TIME

“Are you more concerned about the
protection of a painting or the protection
of our planet and people?”



For More Information:

William K. Hallman, PhD
Department of Human Ecology
Rutgers University
New Brunswick, NJ 08901-8520
(848) 932-9227
hallman@sebs.rutgers.edu

