

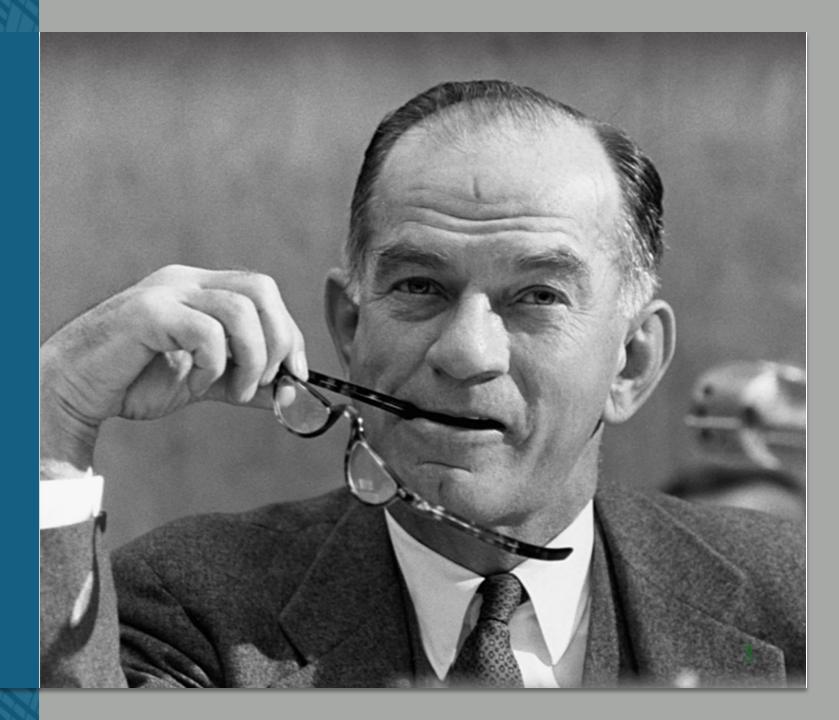




Educational exchange can turn nations into people, contributing as no other form of communication can, to the humanizing of international relations.

To this purpose I believe the Council on International Educational Exchange is dedicated.

– Senator J. William Fulbright









RANNUAL CONFERENCE





THANK YOU SPONSORS!







BOARD OF DIRECTORS





CHAIR SENIOR ADVISOR, BRIDGEBIO

FRANCIS "FRANK" X. TAYLOR



VICE-CHAIR
PRESIDENT AND CEO,
FXTAYLOR ASSOCIATES

JAMES P. PELLOW ED.D.

-



PRESIDENT & CEO

ROSLYN ARTIS, JD. ED.D.



PRESIDENT, BENEDICT COLLEGE

CHERYL DONNELLY

-



VICE PRESIDENT, MERCK & CO., INC.

KATHRYN DUNGY, PH.D.



PROFESSOR, AFRICAN AMERICAN HISTORY, UNIVERSITY OF NEW ORLEANS

DAVID O. KING



SENIOR ADVISOR, DAVID O. KING ADVISORY, LLC

PETER LIGHTE, PH.D.



FOUNDING CHAIRMAN, JPMORGAN CHASE BANK CHINA (RETIRED)

PUNAM ROGERS



PARTNER, CONSTANGY BROOKS, SMITH & PROPHETE LLP

CAROLYN P. SANDERSON



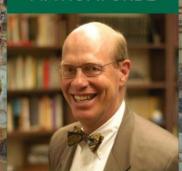
CO-FOUNDER, COPPER BEECH GROUP AT MORGAN STANLEY

KATHLEEN SIDELI, PH.D.



ASSOC. VICE PRESIDENT, OVERSEAS STUDY, INDIANA UNIVERSITY (RETIRED)

REV. CHRISTOPHER M. THOMFORDE



PRESIDENT, MORAVIAN COLLEGE AND MORAVIAN THEOLOGICAL SEMINARY (RETIRED)

MARCELLE M. WAHBA



FORMER U.S. AMBASSADOR AND PRESIDENT OF THE ARAB GULF STATES INSTITUTE

INTERNATIONAL PROGRAM ADVISORY COUNCIL







DOWNLOAD INC **CONFERENCE APP**

AGENDA

- View full conference schedule
- Add sessions to your calendar
- Research speakers and sessions
- Find hotel Wi-Fi, Floorplans, Registration Hours and Event transportation information

CONNECTIONS

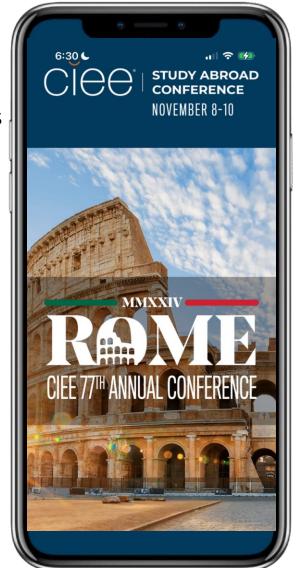
- Message and book appointments with other attendees!
- Engage in discussions about



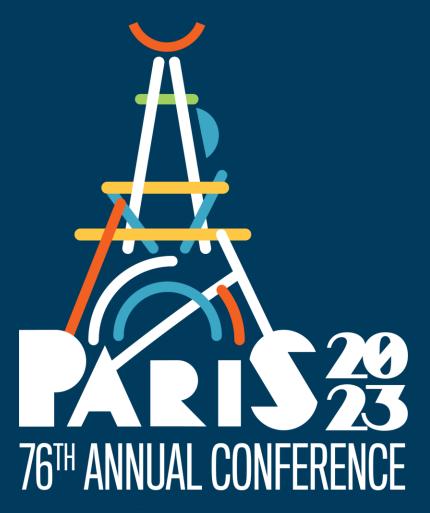








Last Year: Leading Change in Study Abroad













LEADING CHANGE









CONVENING THOUGHT LEADERS











<u>Ciee</u>

INVESTING IN MODEL CHANGE PROGRAMS









LATIN AMERICA













BREAKING DOWN
CURRICULUM BARRIERS







IN A CHANGING CLIMATE

THE SCIENCE OF CLIMATE CHANGE AND THE ART OF TRANSFORMATIVE ACTION





MODERATOR

ACADEMIC AFFAIRS
DIRECTOR - CURRICULUM
CIEE

JOANNA CAREY



PANELIST

ASSOCIATE PROFESSOR
OF EARTH SCIENCE
BABSON COLLEGE

MATTHEW ALFORD



PANELIST

PROFESSOR, SCRIPPS INSTITUTION OF OCEANOGRAPHY

UNIVERSITY OF CALIFORNIA SAN DIEGO

MAX BOYKOFF



PANELIST

PROFESSOR

UNIVERSITY OF COLORADO - BOULDER

RISHI SUGLA



PANELIST

CLIMATE RESILIENCE SCIENTIST WITH CLIMATE IMPACTS GROUP

UNIVERSITY OF WASHINGTON

STEPH TAI



PANELIST

ASSOCIATE DEAD

UNIVERSITY OF WISCONSIN NELSON INSTITUT FOR ENVIRONMENT STUDIES

2024 SPEAKERS

Andreco Studio

Arizona State University

AWETHU School of Organising

Babson College

Basque Culinary Center

Bethune-Cookman University

Borough of Manhattan Community College / CUNY

Brooklyn Technical High School

Choate Rosemary Hall

Colorado State University Pueblo

University of Washington Climate Impacts Group

Columbia University

Conservation International Botswana

Dominican Mission to UN in Rome

Global Solutions 4U

Institute for Advanced Architecture of Catalonia

John Cabot University

Korea University Institute for Sustainability

Miami Dade College

Monmouth University

Northeastern University

Oak Park and River Forest High School

One of Many Studio

Open Arms

Penn State University

Rutgers University

Scripps Institution of Oceanography

Stetson University

Stuyvesant High School

The Food and Agriculture Organization of the United Nations (FAO)

Tulane University

UNESP São Paulo State University

University of Arkansas Rome Center

University of Pittsburgh

University of California, San Diego

University of Colorado Boulder

University of Maryland

University of Strathclyde, Glasgow

University of Wisconsin

Virginia Commonwealth University

West Seattle High School





SUSTAINABILITY CHALLENGE COLLABORATION



TEAM 1







TEAM 2



BETHUNE-COOKMAN UNIVERSITY





TEAM 3











28 Countries
41 Cities
260+ Programs









Semester In 40 Cities









Open Campus 21 Cities



75
ciee.org







Engineering, Technology + Sciences 31 Cities



75
ciee.org

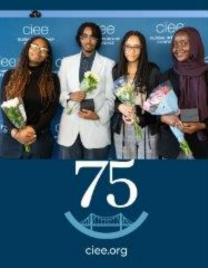






Summer Global Internships

33 Cities









CIEE Climate Programs: Where and What?







THE SCIENCE OF CLIMATE CHANGE AND THE ART OF TRANSFORMATIVE ACTION





MODERATOR

ACADEMIC AFFAIRS
DIRECTOR - CURRICULUM
CIEE

JOANNA CAREY



PANELIST

ASSOCIATE PROFESSOR
OF EARTH SCIENCE
BABSON COLLEGE

MATTHEW ALFORD



PANELIST

PROFESSOR, SCRIPPS INSTITUTION OF OCEANOGRAPHY

UNIVERSITY OF CALIFORNIA SAN DIEGO

MAX BOYKOFF



PANELIST

PROFESSOR

UNIVERSITY OF COLORADO - BOULDER

RISHI SUGLA



PANELIST

CLIMATE RESILIENCE SCIENTIST WITH CLIMATE IMPACTS GROUP

UNIVERSITY OF WASHINGTON

STEPH TAI



PANELIST

ASSOCIATE DEAD

UNIVERSITY OF WISCONSIN NELSON INSTITUT FOR ENVIRONMENT STUDIES



JOANNA CAREY

ASSOCIATE
PROFESSOR OF
EARTH SCIENCE
BABSON COLLEGE

OUR CURRENT CLIMATE CRISIS, THE BIG **PICTURE**



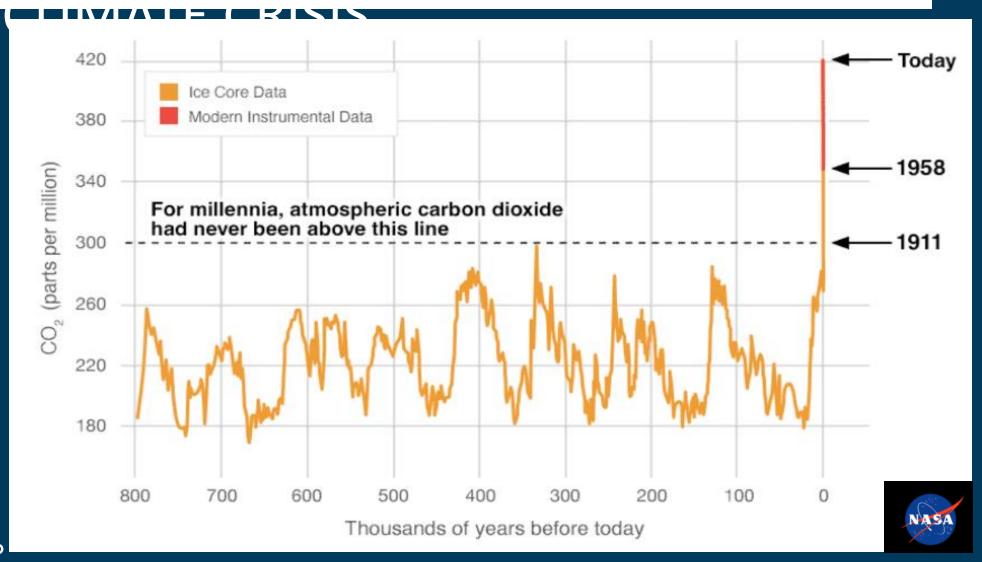
GEOLOGIC DATA PROVIDES CONTEXT FOR

CUKKENT

Notice the cyclical changes in CO2 concentrations over past 800,000 years – compare that to the past 100 years

Rates of change are unprecedented

Typically takes 1000 years for CO2 to change 40 ppm; we just did it in 20 years





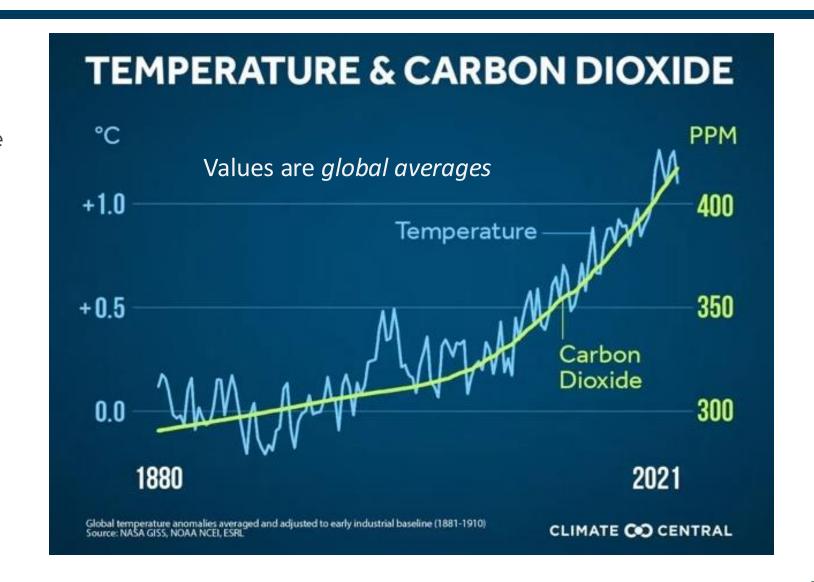
MORE CO₂ in ATMOSPHERE = HIGHER TEMPERATURE

2023 warmest year recorded

 1.5 °C (2.8 °F) above pre-industrial baseline levels.

Past 10 years were the warmest recorded in human history.

Typically **1000** years for Earth's temperature to change 1°C. We just did that in **100** years.





THE GLOBAL CLIMATE REGULATES EARTH'S LIFE-

SUPPUKTING PROCESSES

Planetary Boundaries – framework that

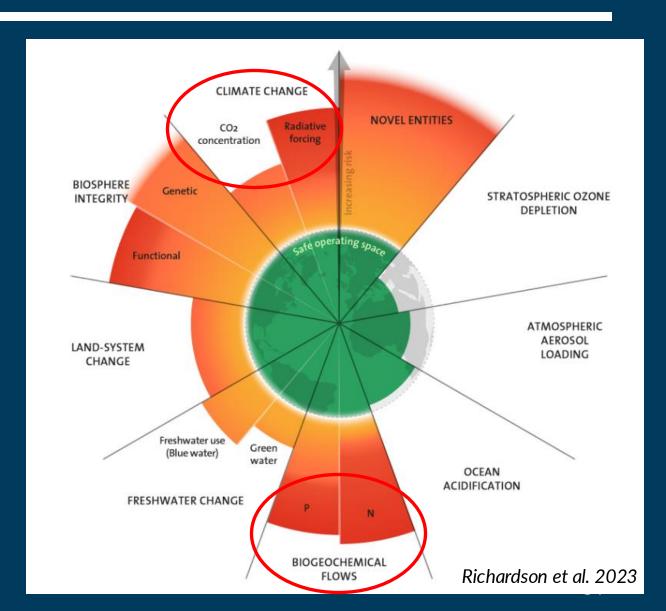
Planetary Boundaries – framework that identifies the *safe limits* for human pressure on critical processes that maintain a stable & resilient Earth system

We have already crossed out of the safe space for 6 out of the 9 boundaries, including climate change

Climate change is a **core boundary** that impacts all others

Crossing boundaries **increases risk** of generating large-scale abrupt or **irreversible** environmental changes





MY RESEARCH – WARMING AND SOIL RESPIRATION

Soils naturally emit CO2 through respiration and decomposition

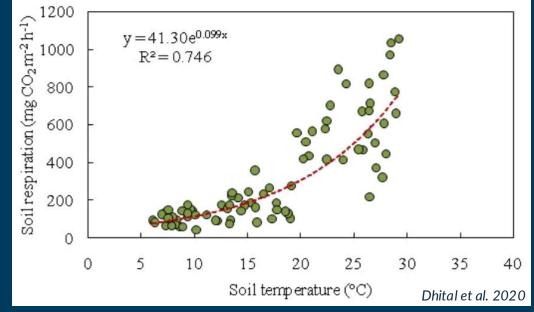
I examine how rates of soil CO2 efflux respond to warming – exponential relationship

Non-linear reinforcing feedback to warming (among others)

Rates of warming will increase moving forward - the past does not dictate the future

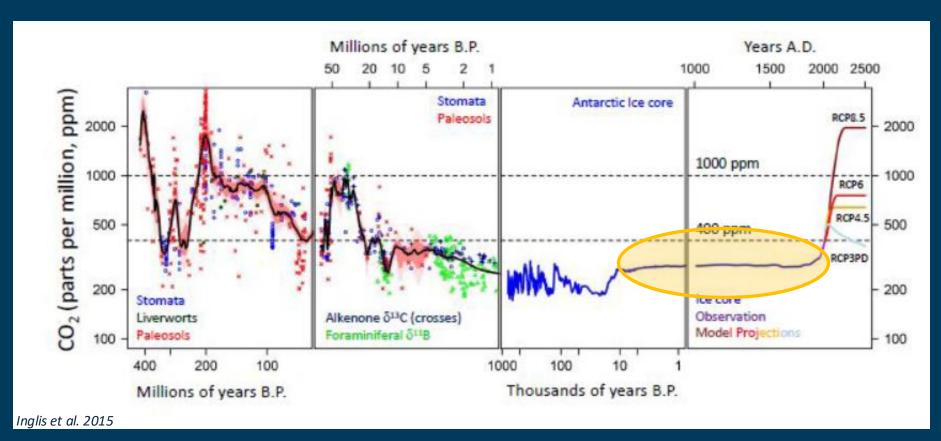
The longer we wait to act, the harder it becomes to fix the problem







CLIMATE STABILITY CORRELATED WITH DEVELOPMENTS IN HUMAN ACTION IN HUMAN CIVILIZATION



Climate has been unusually stable during the past ~11,000 years

This stability correlated with development of agriculture, scientific understanding, and human population growth and improved quality of life

Humans **need** a stable Earth system for survival

Our atmosphere has no boundaries – international cooperation is **paramount** to solving this crisis



MATTHEW ALFORD

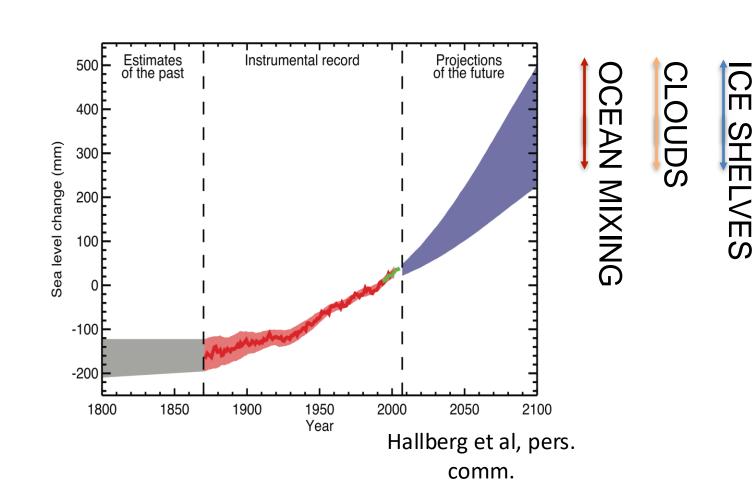
PROFESSOR, SCRIPPS INSTITUTION OF OCEANOGRAPHY

UNIVERSITY OF CALIFORNIA SAN DIEGO THE SCIENTIFIC CASE FOR HUMAN-CAUSED CLIMATE CHANGE



MODELS ARE NOT PERFECT

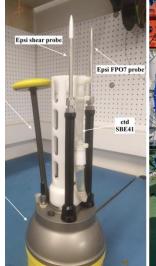
- First, we don't know what people will do about emissions.
- Even if we do, models don't resolve all the ocean's physics.
- That's what I do!
- The key to all of this is error bars.



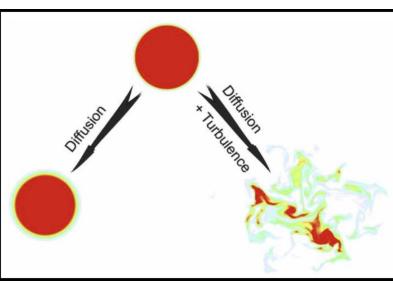


MEASURING OCEAN MIXING









O.3 K temperature range

300 m

Courtesy Gunnar Voet

Wacky gadgets

How turbulence mixes the ocean

Breaking waves 2000 m below the sea

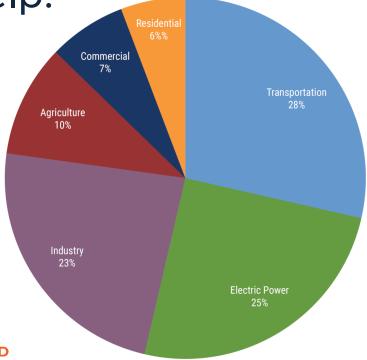


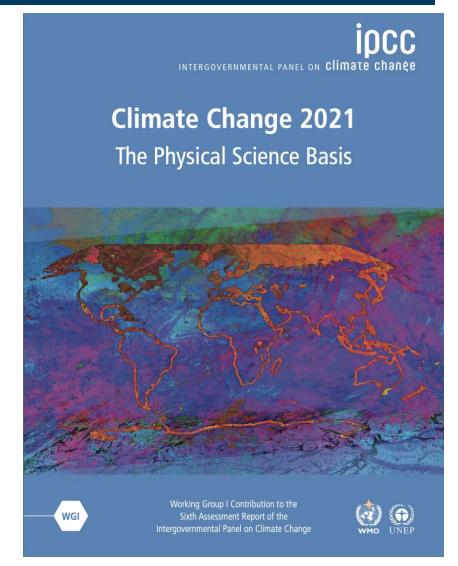
THE SOURCES OF CO₂

 Bad news: fixing one thing won't solve the problem.

Good news: there are lots of

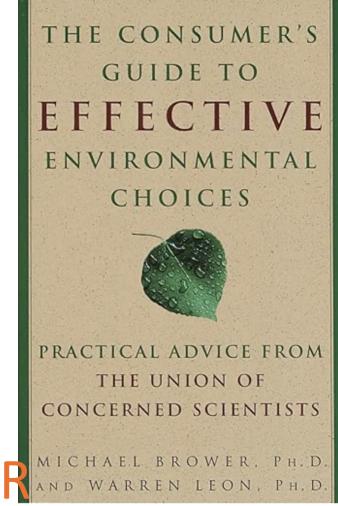
ways to help!





DECARBONIZATION

- Nearly every action we take in the US has a CO2 price tag. Exceptions: walking on the beach, enjoying Nature, being kind to each other.
- Examples: purchases that require manufacturing (does that mean I can't buy the things I want anymore?).
- Food (does that mean I need to be vegan?).
- Transportation (does that mean I can't fly anymore? Do I have to buy an EV?).
- Individual actions versus group change



DRAWDOWN.OR

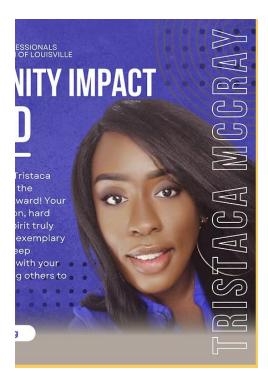


A CASE FOR CLIMATE KINDNESS

- Be kind to each other.
- Be kind to the Earth.
- Use knowledge to help choose actions.
- Be careful of your sources of knowledge.
- Let's never shame anyone.
- Climate change will be unkind, and unfair. We'll get through it together.







Climate Kindness, Ocean Ambassadors Tristaca McCray nerdsruleinc.org



MAX BOYKOFF

PROFESSOR

UNIVERSITY OF COLORADO – BOULDER

ADAPTATION, MITIGATION AND SOCIETAL **TRANSFORMAT** ION



WE ARE THE PROBLEM AND THE SOLUTION

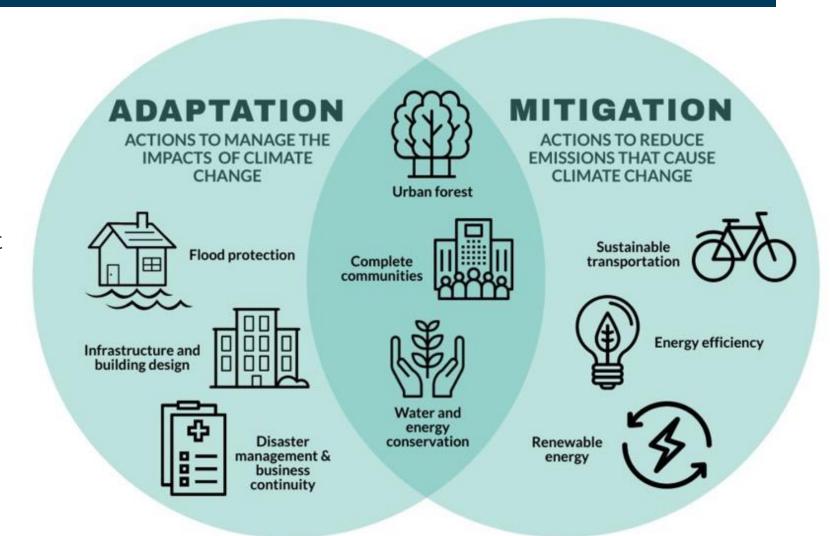
Interventions & solutions include innovations in rules, behaviors, economics, technologies, social norms and more:

- Personal transformations
- Societal transformations
- Global transformations

adaptation = adjustments to suit
 changing conditions

mitigation = actions to reduce GHG emissions and remove GHGs

education = ways learning,
 knowing & acting, literacies &
 competencies





INDIVIDUALS EMBEDDED IN SYSTEMS

- Climate change creates intersecting sets of challenges – threat multipliers – that weave through related issues
- Contributions are made by individuals, and also corporations, governments etc.
- Human-caused climate change is a collective action problem and requires collective solutions
- We live with many climate change-related contradictions, yet we work to support & empower culturally-aware future leaders & positive change makers







DOMINANT SCIENTIFIC PATHWAYS OF KNOWING



"providing information and filling knowledge gaps is at best necessary but rarely sufficient to create active behavioral engagement." ~ Susanne Moser



MY RESEARCH: EXPANDING PATHWAYS OF AWARENESS AND ENGAGEMENT ON CLIMATE CHANGE



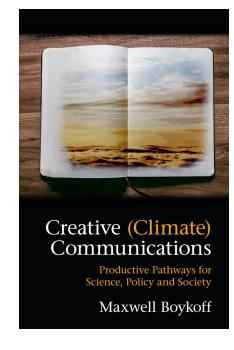
4 DOLLS MADE FROM RECYCLED PLASTIC*



"Facts are, by themselves, voiceless" - Rush Holt

be authentic be aware be accurate be imaginative be bold

meeting each other where we are and enacting positive change







find common ground emphasize here and now focus on benefits of engagement creatively empower people smarten up

RISHI SUGLA

Climate Resilience Scientist with Climate Impacts Group University of Washington

CLIMATE ADAPTATION, SOCIAL IMPACTS, AND THE ROLE OF CULTURE



CLIMATE IMPACTS ON COMMUNITIES



Warming and extreme heat



Increasing risk of fire



Less snow and precipitation in key seasons



Ocean acidification and sea level rise



Species range shift



Ongoing natural variability

UNDERLYING DRIVERS



Access to local foods



Age and health care



Fighting polluting industries

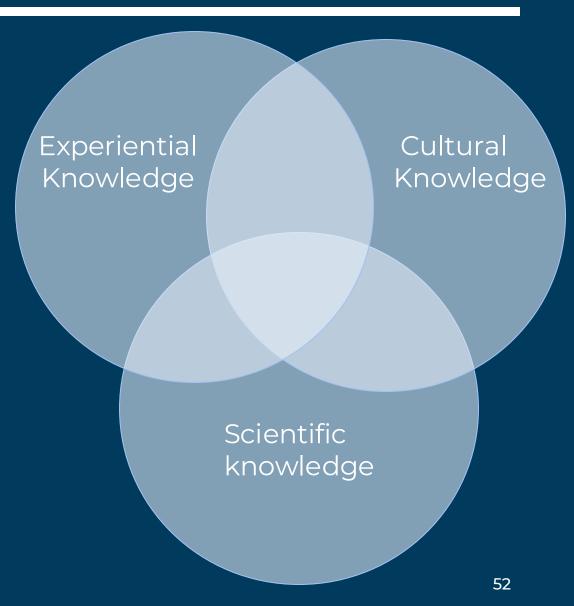


BRINGING TOGETHER DIVERSE

KNOWLEDGE

 Frontline communities are critical knowledge and solution holders in our efforts to address impacts of climate change

 The best solutions are found when we equitably bring together different types of knowledge and expertise in search of solutions







STORYTELLING TO CO-DESIGN:











Digital media libraries owned by local communities

Stewardship and Sustainability Initiatives Intergenerational Connections

Identify synergies across activism, research, and practice

Research questions and directions



STEPH TAI

ASSOCIATE DEAN

UNIVERSITY OF WISCONSIN-MADISON LAW SCHOOL

NELSON INSTITUTE FOR ENVIRONMENTAL STUDIES

LEGAL AND **POLICY** RESPONSES TO CLIMATE **IMPACTS**



REGULATORY INSTRUMENTS FOR CLIMATE

ACTION



Command-and-Control Approaches

Mandate specific limits or standards, typically accompanied by penalties for noncompliance.



Emissions Standards Implementation

Setting specific thresholds for emissions to control industries and ensure significant reductions over time.



Regulatory Frameworks

Incorporate effective oversight and regular assessments to adapt to evolving environmental conditions.



MARKET-BASED APPROACHES TO CLIMATE

CHANGE







Carbon Pricing

Assign a cost to carbon emissions, creating an economic incentive to reduce greenhouse gas output.

Cap-and-Trade

Governments cap total emissions and allow industries with low emissions to sell their extra allowances to larger polluters.

Economic Incentives

Subsidies to encourage greener alternatives, while minimizing market distortions and perverse incentives.



AGRICULTURAL ADAPTATION POLICIES

Sustainable Farming Practices: Integrating resilience practices such as crop rotation, conservation tillage, and organic farming.

Subsidies for Climate-Resilient Crops: Reinforce food security and sustain agricultural livelihoods.

Land-Use Policies: To optimize land productivity and improve ecological outcomes, balancing agricultural needs with environmental conservation.

Agroecological Approaches: Fostering biodiversity to enhance ecosystem services and resilience.





HEALTH ADAPTATION POLICIES

Regulatory Frameworks: Address climaterelated risks to safeguard public well-being and environmental integrity.

Access to Healthcare: Ensure timely treatment and support to mitigate climate-induced health risks.

Environmental Health Policies: Reduce vulnerabilities by targeting reductions in pollution and improving living conditions.

Community-Based Health Initiatives: Integrate community knowledge and resources can enhance resilience and empower populations facing climate challenges.



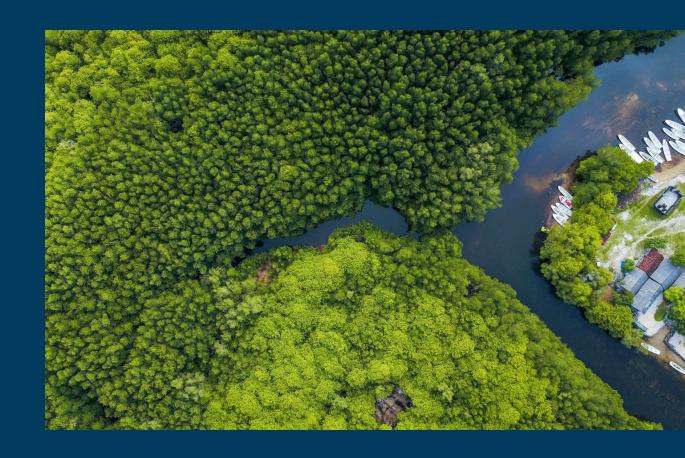


ECOSYSTEM ADAPTATION POLICIES

Protected Areas: Safeguard ecosystems and biodiversity impacted by climate change.

Environmental Impact Assessments: Identify and mitigate potential environmental harms.

Ecosystem-Based Management:
Preserve and enhance ecosystem
services impacted by climate change
while balancing human needs.







QUESTIONS?



