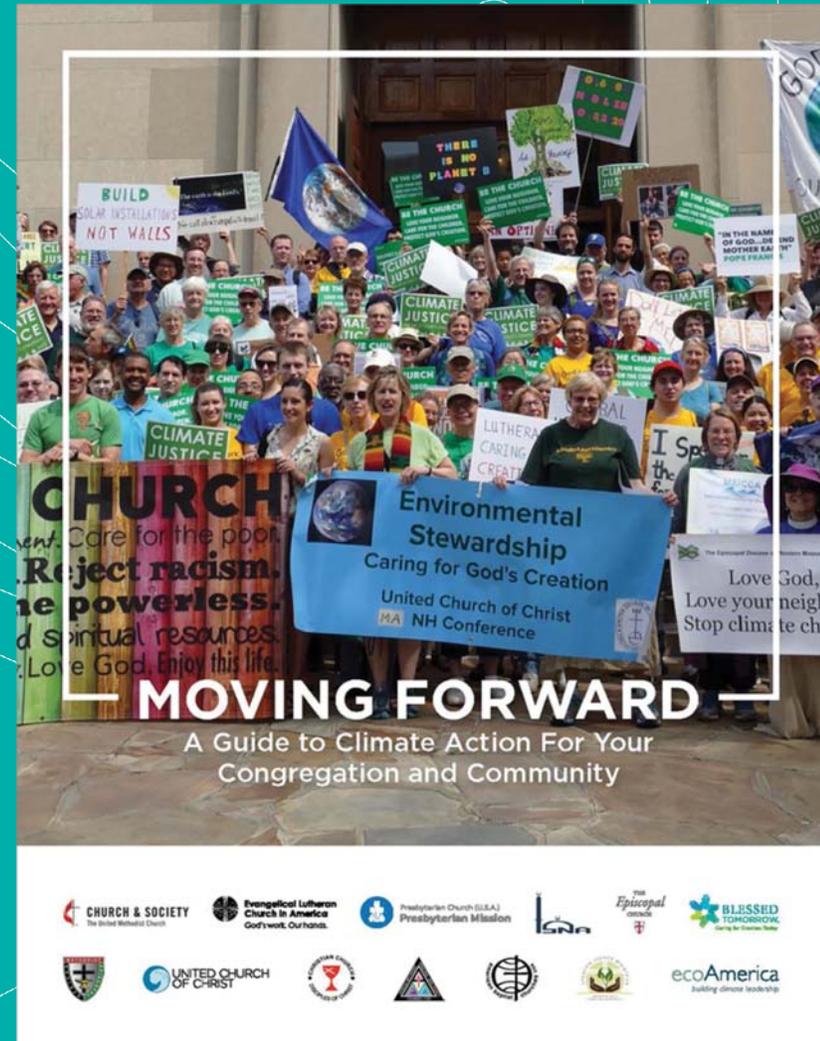
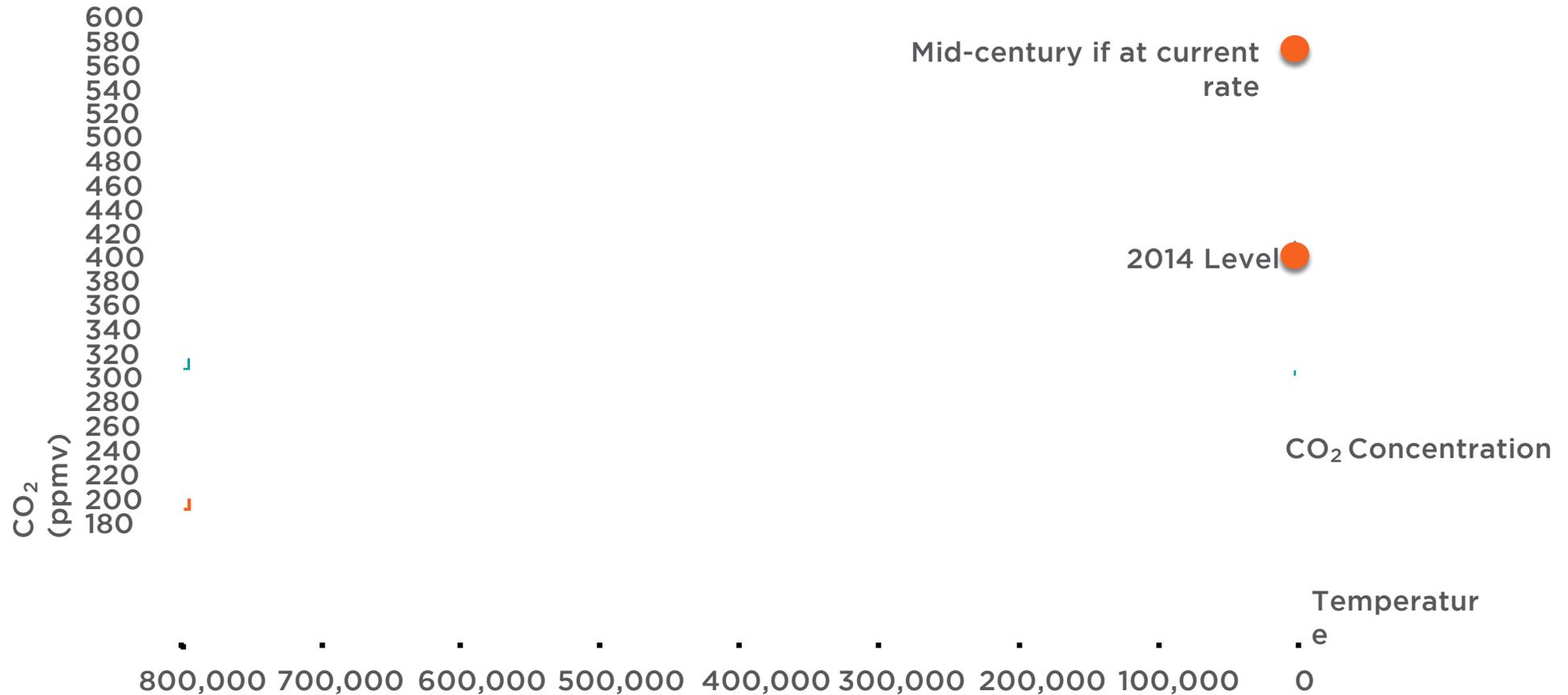


What We Need To Know



How Our Climate is Changing

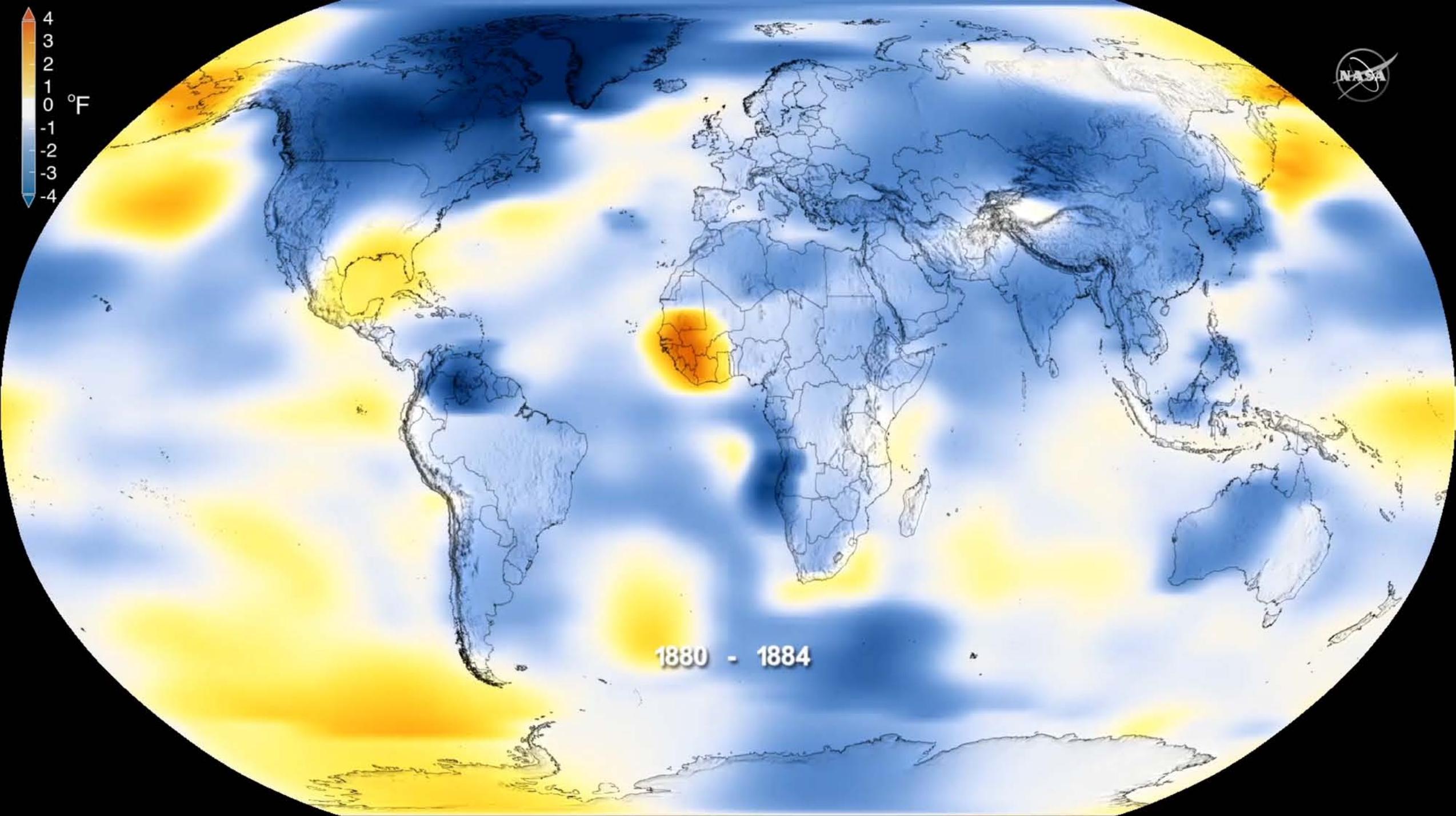


Source: NASA, Graphic: The relentless rise of carbon dioxide”



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1880 - 1884

Drivers of Our Changing Climate

29%
Transportation

22% Industry

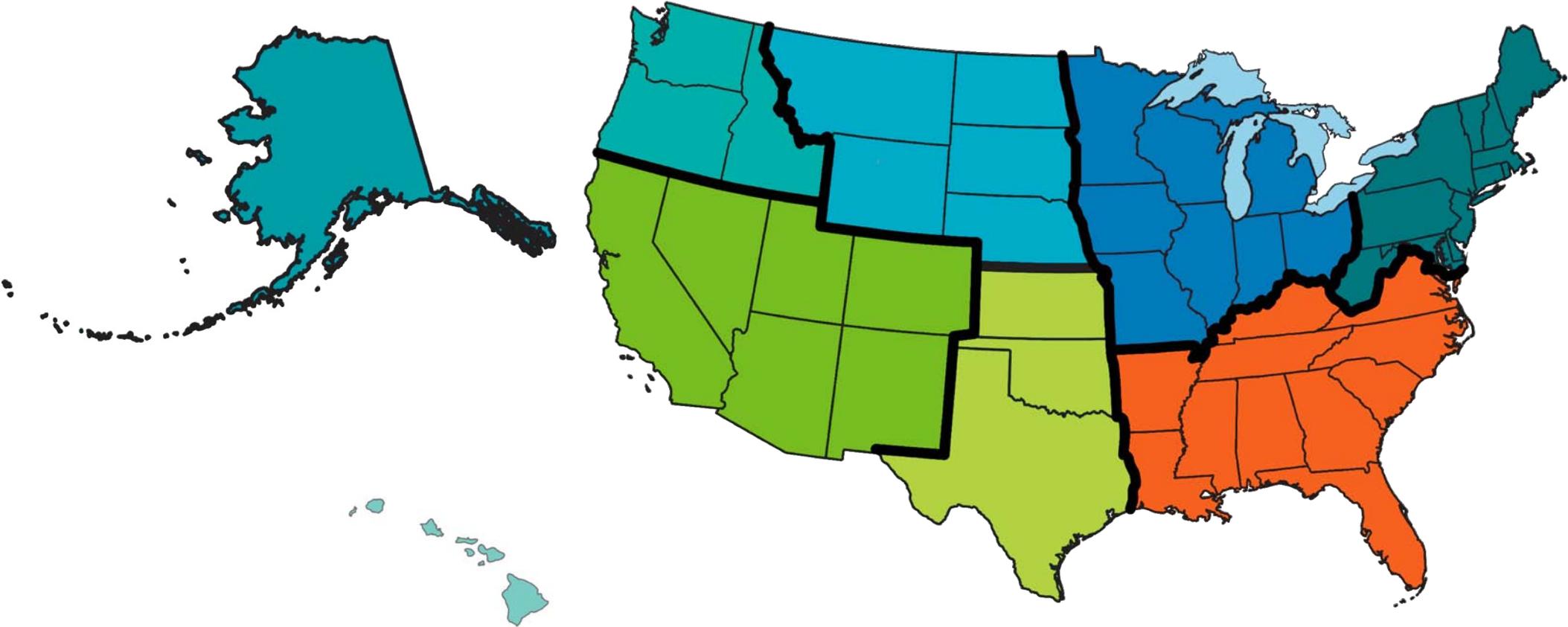
12% Commercial &
Residential

28% Electricity
Production

9% Agriculture

Source: US EPA 2019

Regional Climate Impacts



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Creating Climate Refuge: Framework

- Climate change increases the **frequency and intensity** of weather-related disasters.
- Climate change **intensifies** the impact and long-term damage of drought and sea-level rise.



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Regional Climate Impacts



Northeast

Extreme weather, warmer temperatures, lower air and water quality, rising sea level



Midwest

Increases in summer humidity and precipitation, poor air quality, extreme temperature, heavy rain



Southeast

Heat, flooding, disease, heavy rain, rising sea level



Northern Great Plains

Rising temperature, extreme weather, changes in rainfall patterns



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Regional Climate Impacts



Southern Great Plains

Sea level rise, increasing temperature, extreme precipitation



Northwest

Flooding, landslides, drought, wildfire, and heat waves



Southwest

Drought, wildfire, rising temperatures, heat waves, poor air quality, disease



Alaska

Declining sea ice, rising temperatures, ocean acidification, permafrost thaw, erosion, wildfire, glacier melt



Hawaii & U.S. Islands

Temperature rise, sea level rise, changing rainfall, extreme drought, flooding

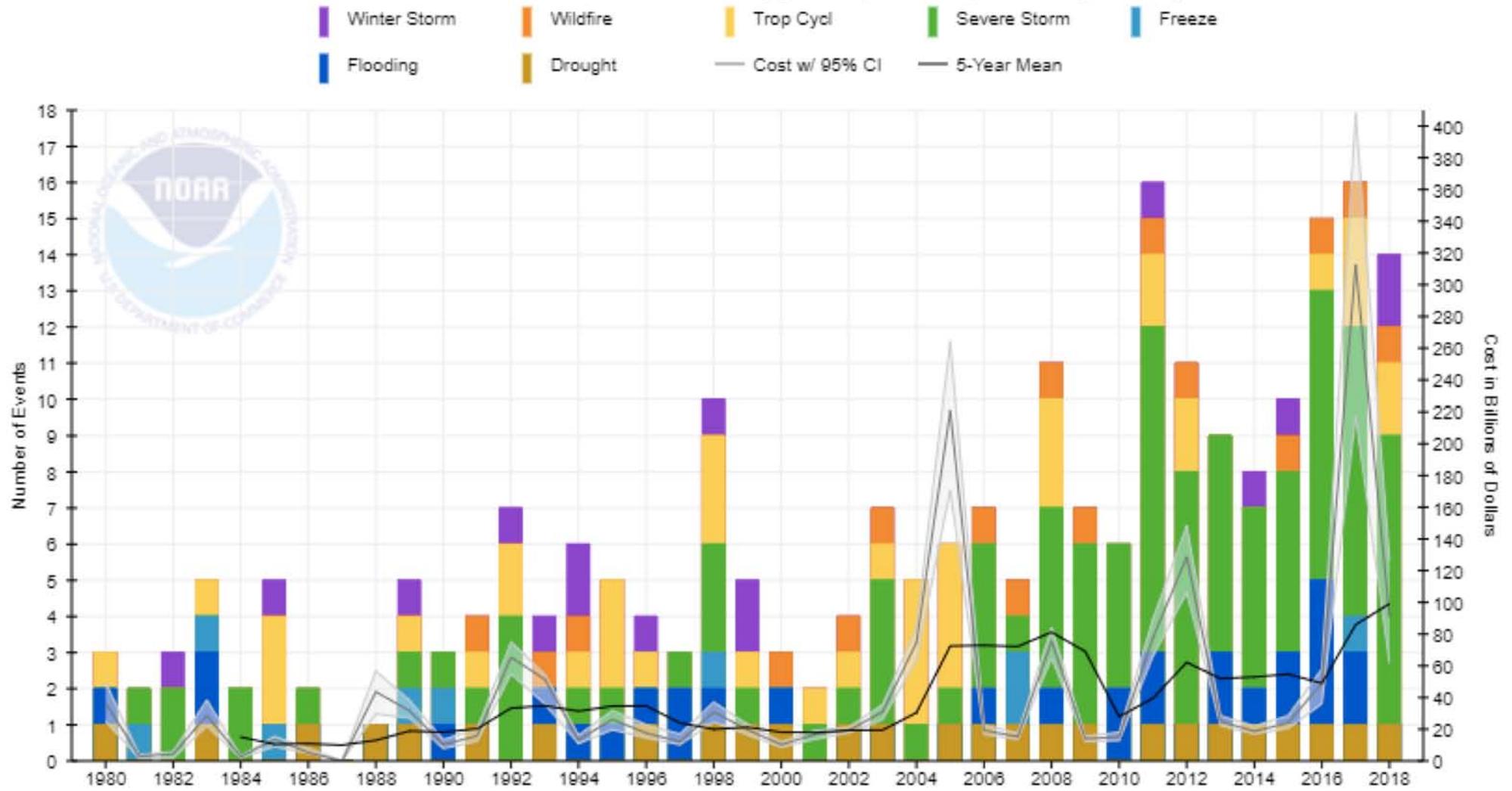


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New Extremes

Billion Dollar Weather Events, 1980-2018



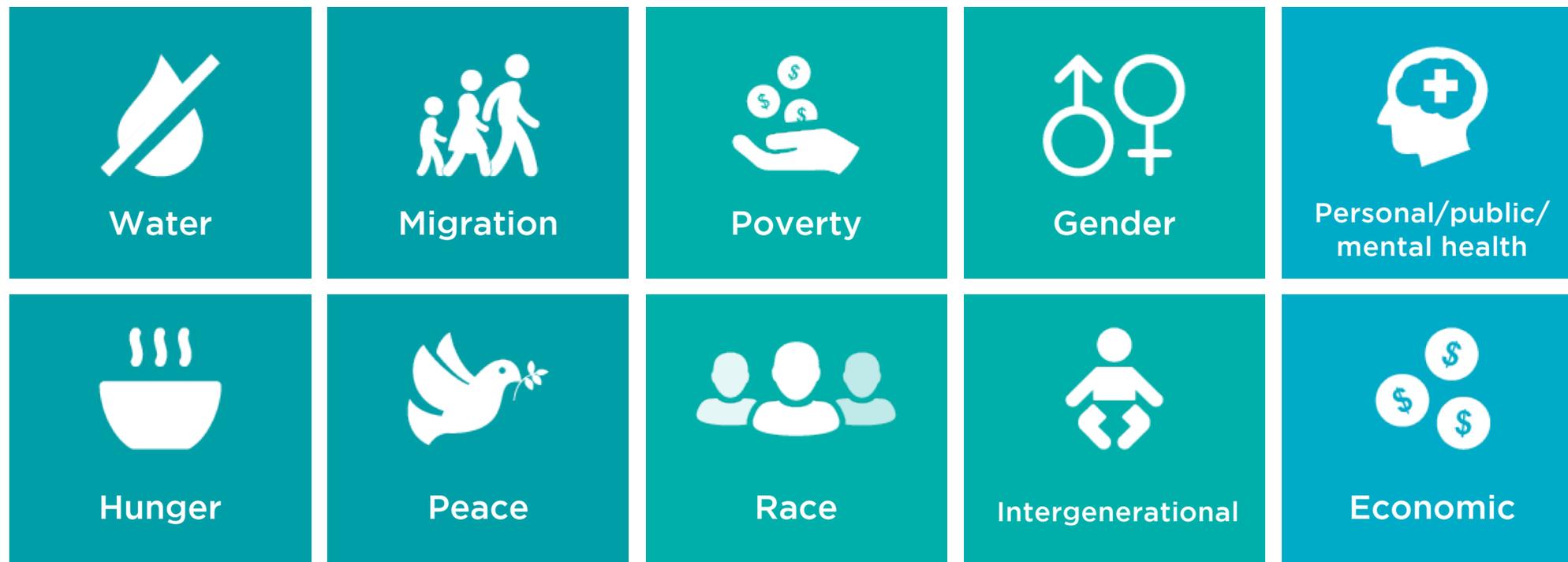
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How Climate Impacts Our Ministries



Impacts by Ministry



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Water

- Extreme heat leads to droughts, which lead to dehydration and smaller crop yields
- Flooding increases as a result of extreme weather events
- Water-borne disease increases



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Hunger

- Climate change leads to overall decline in food quantity and quality
- Rising CO2 levels decrease the nutritional value of food, including decreases in protein, iron, and calcium
- Exacerbating food deserts – less nutritious food available to those already in need



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Migration

- As extreme weather events occur, individuals and families are forced to relocate.
- More people in an area can result in insufficient resources.
- Decreased sense of social cohesion, disrupted sense of continuity and belonging drives mental health concerns



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Peace, Conflict, & Climate Change

- Competition for resources and jobs may lead to violence
- Formerly separate groups brought together can lead to cultural tension
- Strain on social institutions increases the probability of criminal behavior
- Trauma and stress strain social relationships and a sense of community well-being



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Personal, Public, and Mental Health

- Diseases carried by animals and insects
- Hunger and water-borne illness
- Asthma and seasonal allergies
- Trauma and shock
- PTSD
- Compounded stress
- Strains on social relationships



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Vulnerable Populations

- Demographics, socioeconomic status, and physical location can impact climate vulnerability
- Climate change exacerbates existing inequities

While climate change impacts all of us, children, low-income communities, communities of color, the elderly, and those with limited language proficiency are some of the most vulnerable.



Sources: US Global Research Program Climate and Health Assessment "Vulnerable Populations"



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Poverty

- Income inequality is exacerbated
- Unemployment increases
- Resiliency is income-dependent



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Environmental Racism

- Climate impacts like air pollution disproportionately affect communities of color
 - Hispanic children are 2x as likely to die from asthma vs. non-Hispanic Whites
 - 50% of Latinos live in counties that frequently violate air quality standards
 - Black children are 4x as likely to die from asthma as White children
 - Black adults were 3x as likely to die from asthma related causes as White adults
 - African American Women have the highest rate of asthma, and more have died from asthma than any other group



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Intergenerational

- Americans, in high majorities, resonate with their family and the wellbeing of future generations.
- Displacement of communities is disruptive to every stage of life: birth rates, child development and parenting, education, ability to work, and end-of-life care are all negatively affected by extreme weather events and forced migration.



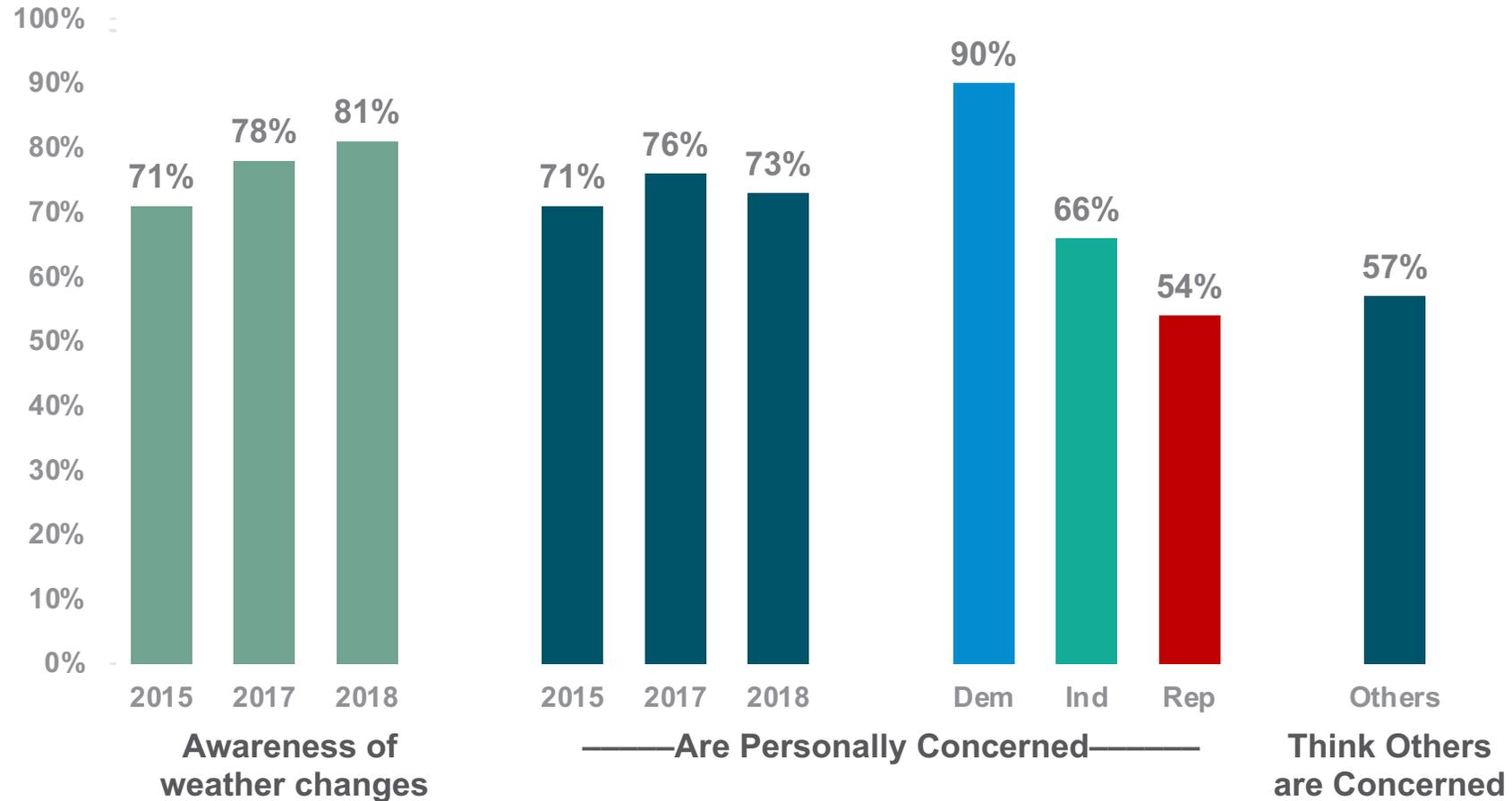
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People of Faith and Solutions



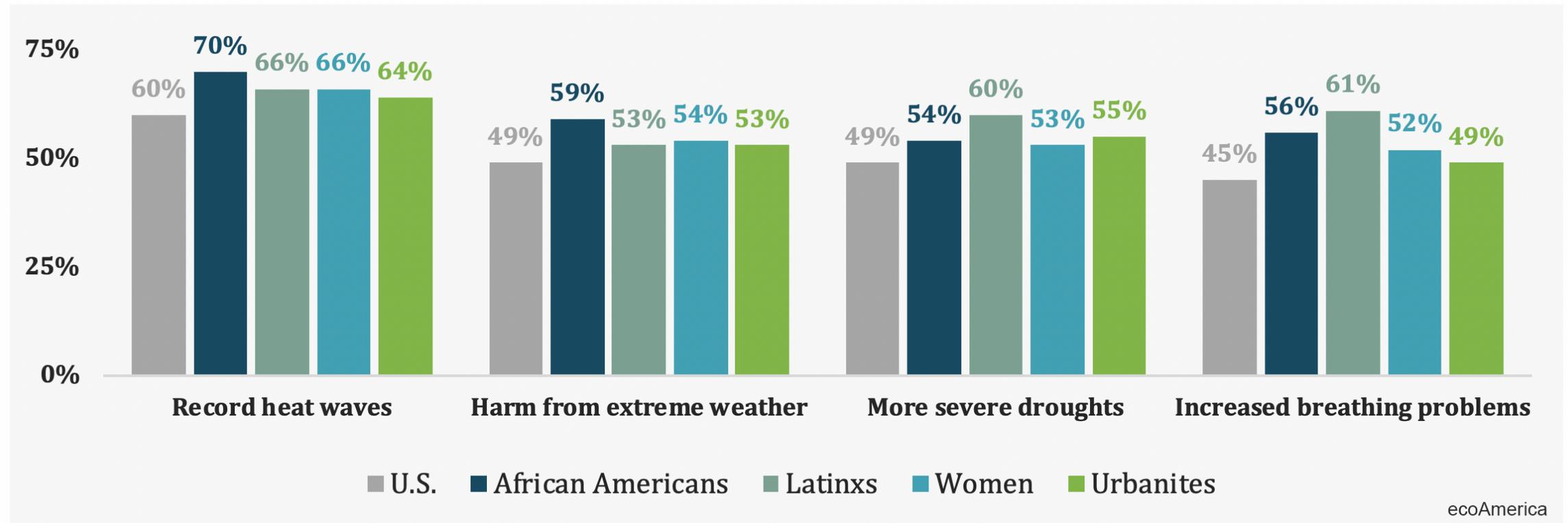
Americans are Feeling Climate Change



Often-Marginalized Communities

For each of the following issues, please indicate how much they are personally affecting you?

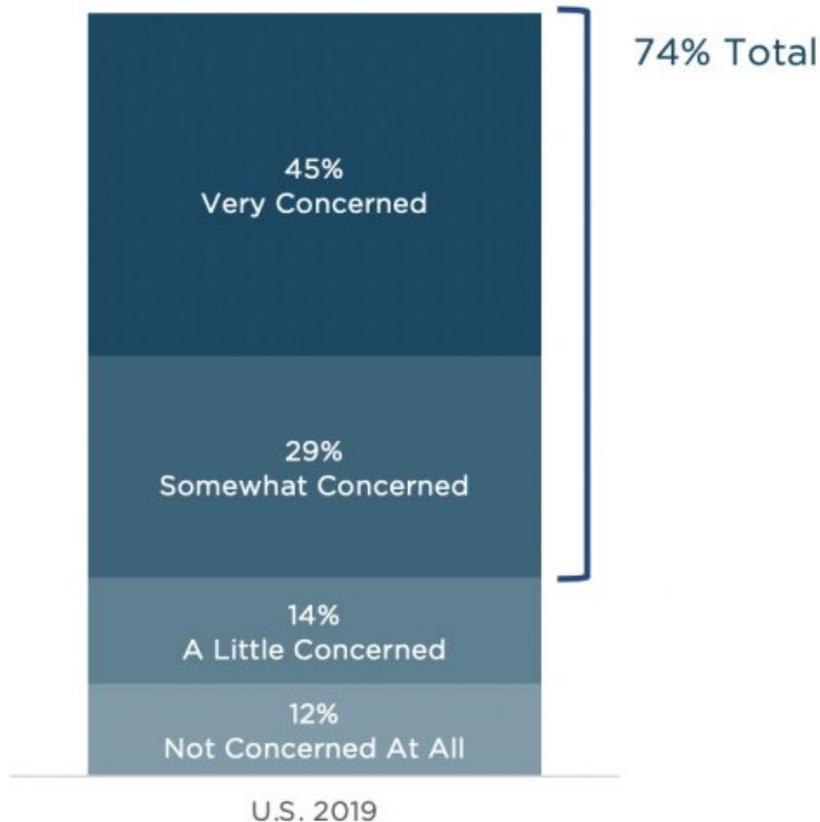
800 national respondents, % "A lot" and "Some"



Americans May Feel Isolated In Their Concern

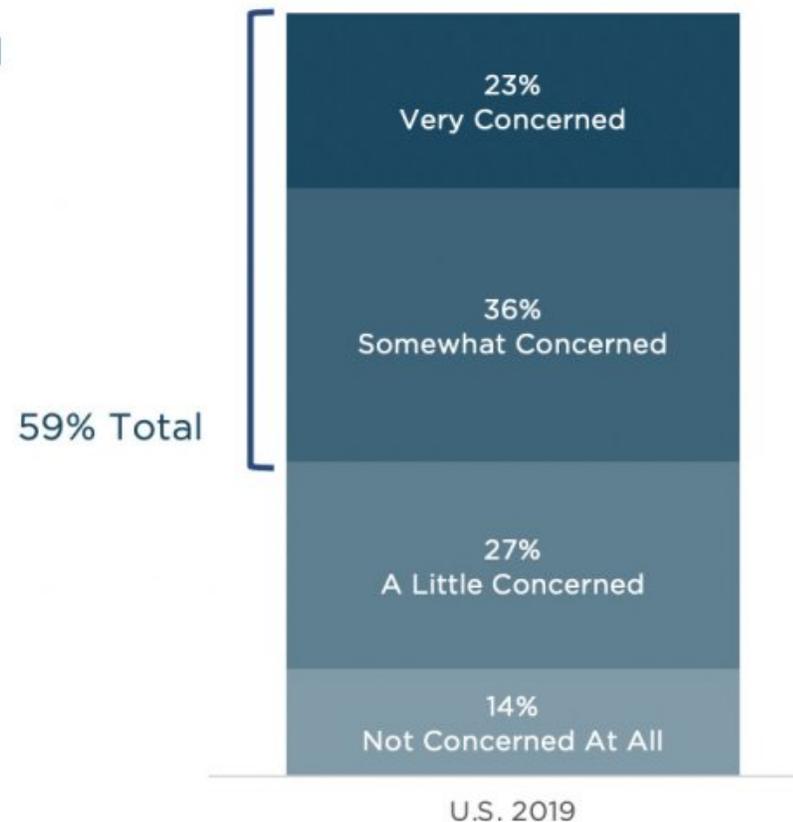
How *personally concerned* are you about climate change?

1,000 respondents nationally

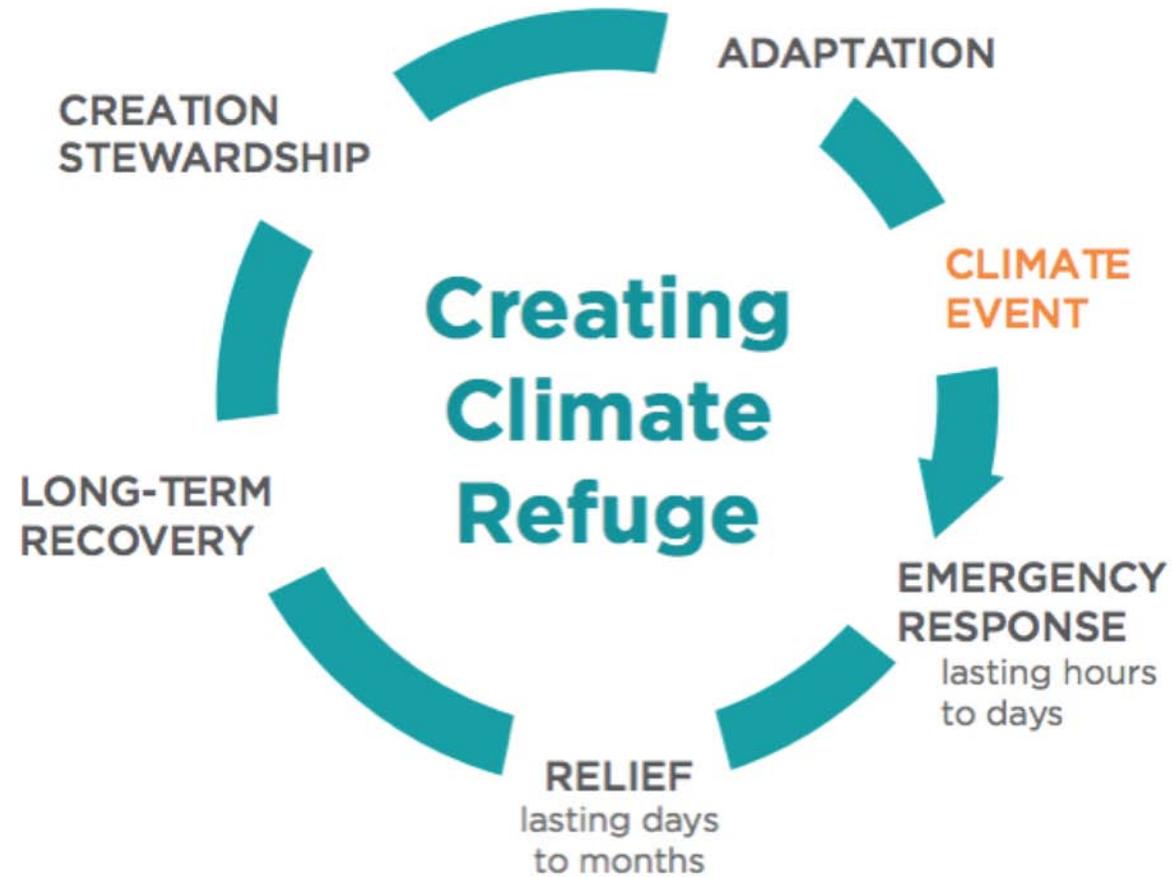


How concerned *do you think other people around you* are about climate change?

1,000 respondents nationally



Creating Refuge: Adaptation & Resilience



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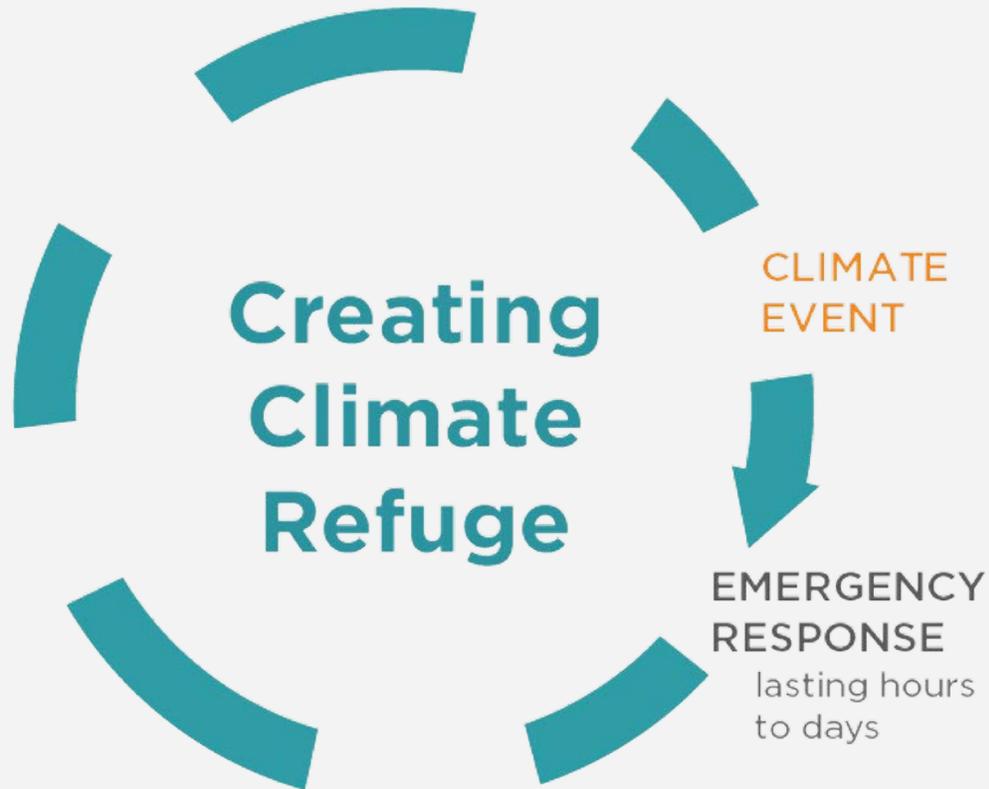
Creating Climate Refuge: Climate Event

- Climate change increases the **frequency and intensity** of weather-related disasters.
- Climate change **intensifies** the impact and long-term damage of drought and sea-level rise.



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Creating Climate Refuge: Emergency Response

- Implementation of emergency protocol and responses
- Most urgent needs served first
- Communities of faith can serve as temporary housing, temporary medical or reunification centers, and supplies distributors



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Creating Climate Refuge: Relief

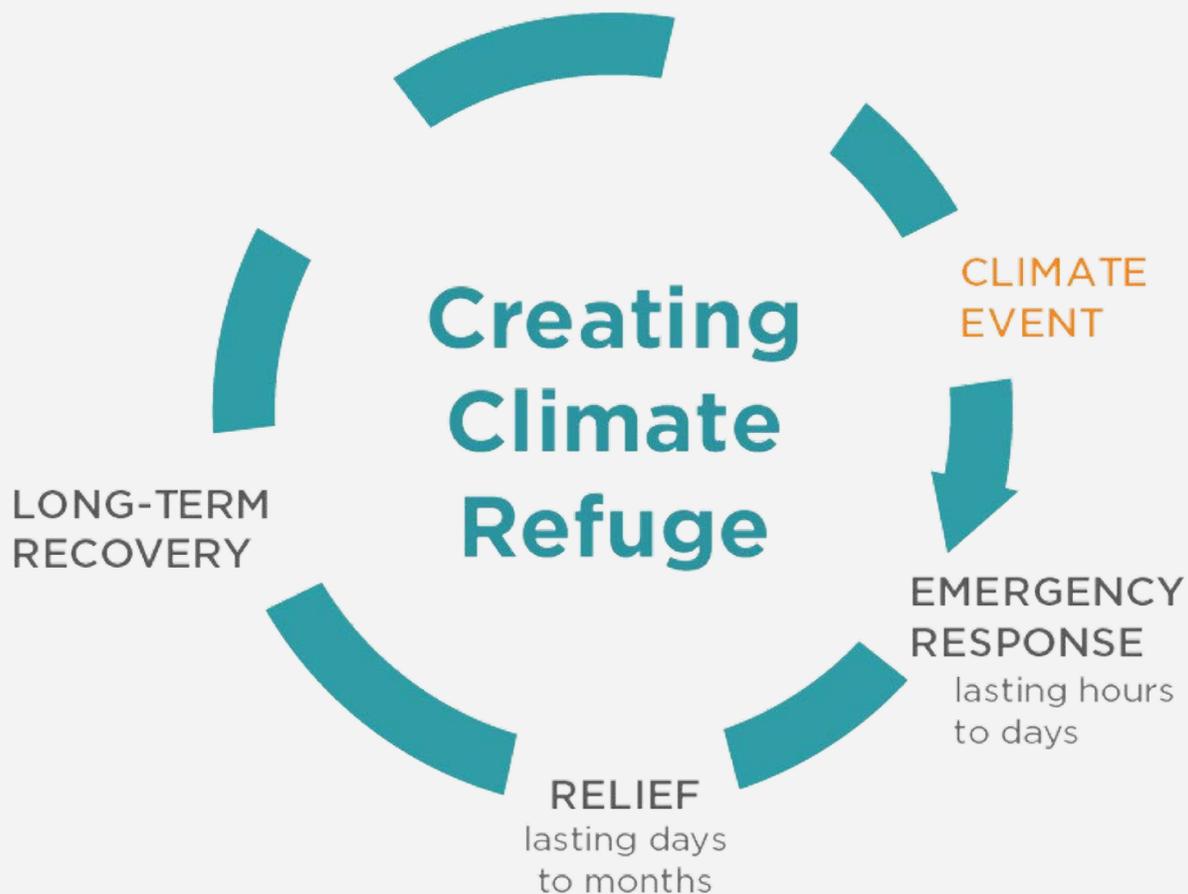
- After immediate threats have been addressed, relief can begin
- Communities of faith can lead non-emergency projects: debris clean-ups, food distribution, and extended temporary housing



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Creating Climate Refuge: Long-Term Recovery



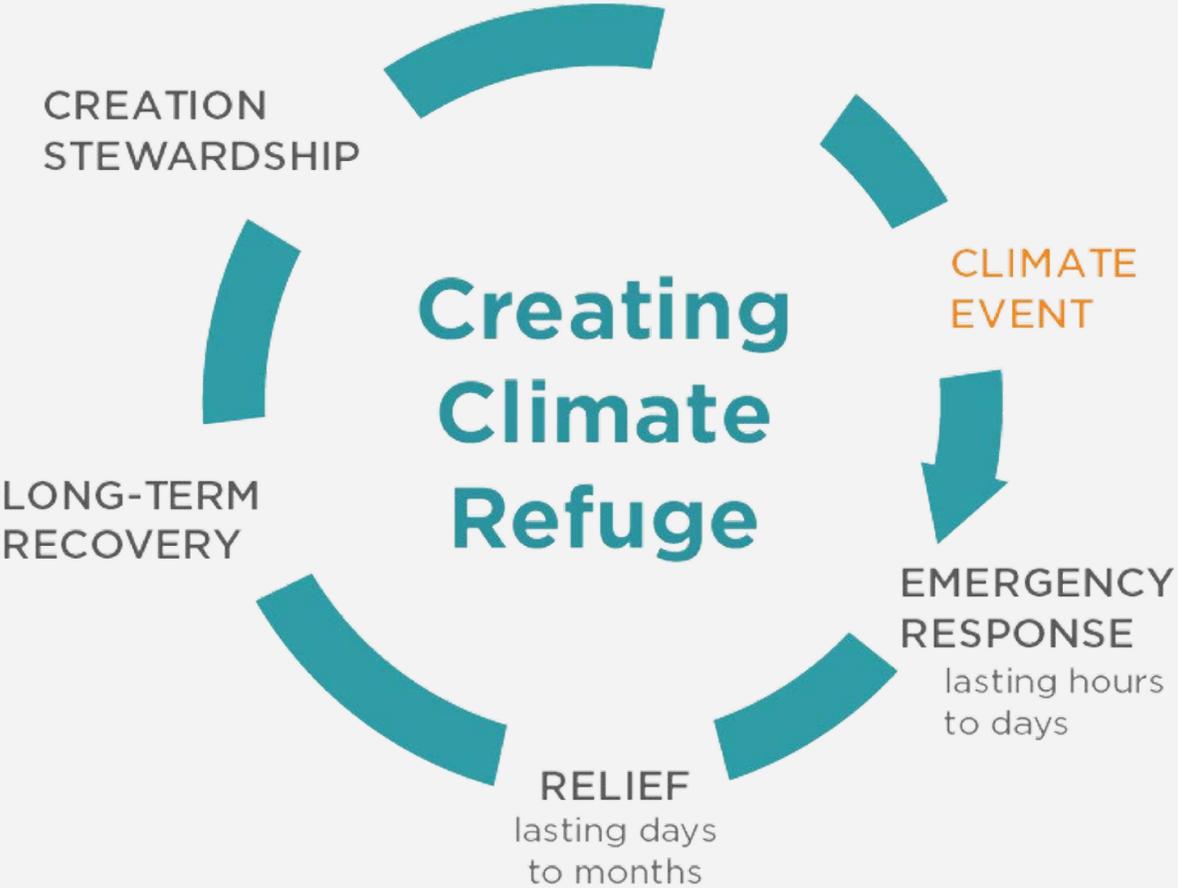
- Long-term recovery will look different depending on the region and the extent of the damage
- Community members may need help finding new permanent housing, rebuilding their businesses, or restocking emergency supplies



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Creating Climate Refuge: Creation Stewardship



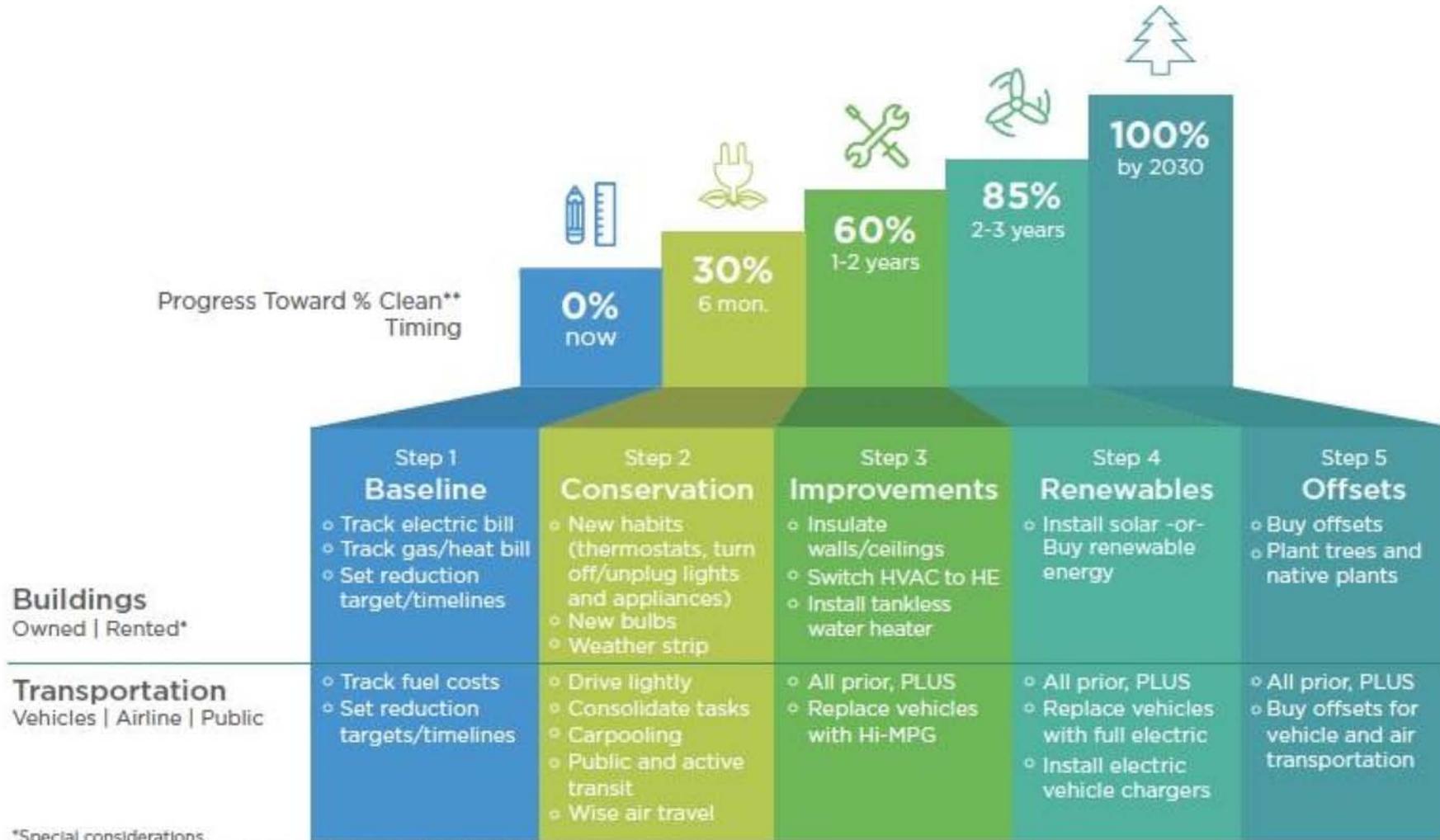
- Communities of faith can lead new creation stewardship projects, especially energy efficiency and use of clean energy
- Replanting vegetation, testing water quality, ensuring recovery efforts also consider the welfare of local wildlife, disposing of debris properly



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Creation Stewardship: Mitigation



*Special considerations

** Percentages may vary by location. Guidance given are national average estimates.

PCUSA's Climate Care Challenge

Personal steps climate care

- **Walk/bicycle**, take public transportation, carpool, drive more efficiently, and avoid air travel.
- **Eat** a (more) plant-based diet or grow your own food.
- **Plant** a tree or help restore a wetland. www.arborday.org
- **Reduce** your energy use: replace your lightbulbs with LEDs, add insulation, air dry clothes or do an energy audit.
- **Reduce** waste: recycle, compost, and buy less.
- **Purchase** renewable energy or carbon offsets.
- **Talk** about why you care about climate change to your friends and family. bit.ly/btletstalk

Outward steps climate care

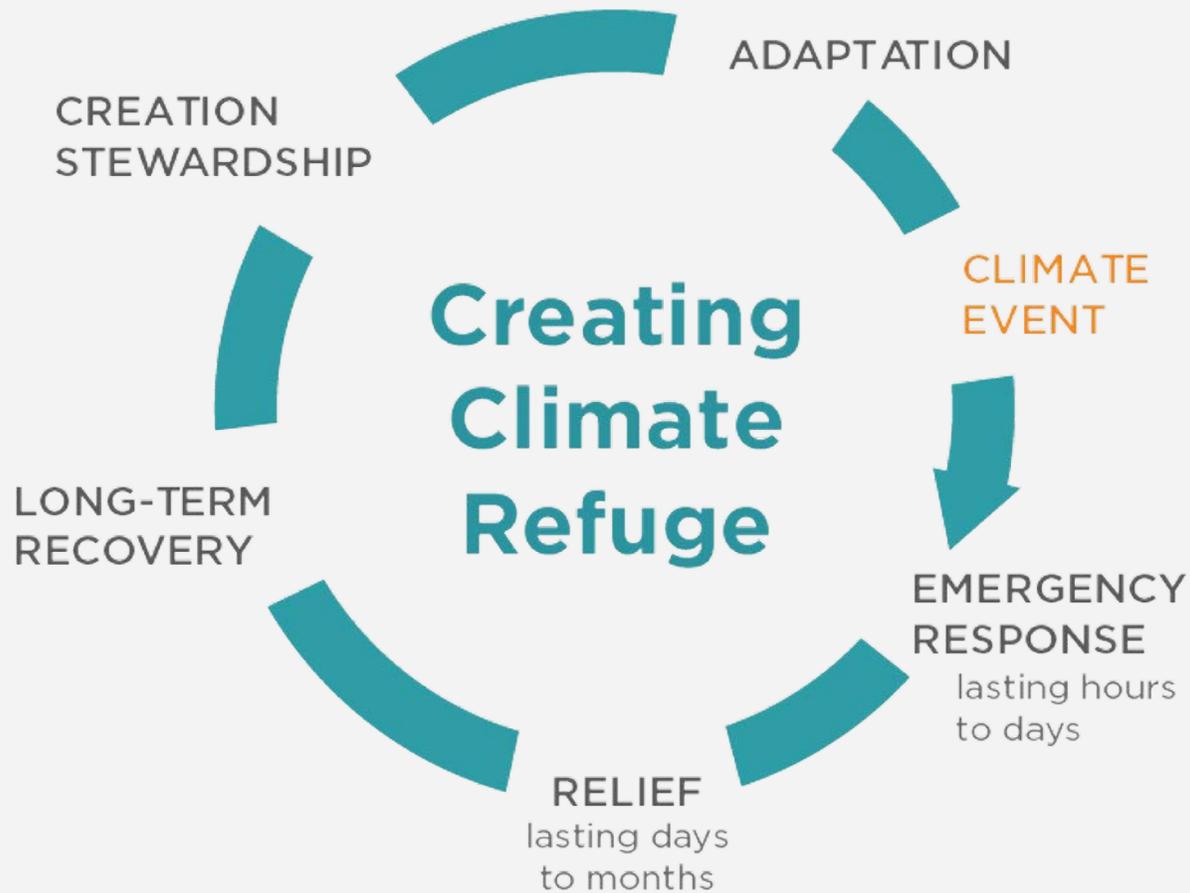
- **Host an Earth Day Sunday worship** or become an Earth Care Congregation. (www.pcusa.org/earthday and www.pcusa.org/earthcarecongregations)
- **Learn about and support** groups and communities working for environmental justice. bit.ly/ourpowercommunities and bit.ly/e-racism
- **Make energy efficient** renovations, transition to more renewable energy at your church, school, or workplace.
- **Use your voice!** Advocate for strong climate action on local, national, and international levels. (capwiz.com/pcusa)
- **Follow, learn from, and participate** in global conversations about climate change—from the UN climate talks to global partner stories (usclimatenetwork.org and www.presbyterianmission.org/together-justice/category/climate-change)
- **Challenge** your school, workplace, church or other institutions to set a goal, such as going 100% renewable energy or carbon neutral by 2030.
- **Help move** investments and pension funds to climate-supportive options and challenge climate-harming practices. (bit.ly/TIAAact and bit.ly/ffpension and bit.ly/invest-green)

For more resources and to accept the challenge go to:
pcusa.org/climatecarechallenge



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Creating Climate Refuge: Adaptation

- Communities of faith can review their emergency response protocol and adjust to better serve communities next time
- By addressing climate change, we decrease the rate and severity of extreme climate events
- All rebuilding and planning should address inequities that create economic vulnerability and institutional racism.



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Resources for Creation Stewardship

PCUSA's Climate Resources at
pcusa.org/climate

Presbyterians for Earth Care

Interfaith Power and Light's Cool
Congregations Program:

- Support system for faith communities
- Guides communities to reducing their own carbon footprint

EPA Energy Star Action Workbook for
Congregations and Portfolio Master:

- Track your energy use, sources, and progress

Creation Justice Ministries Earth Day
Sunday Resources:

- Resources for individuals or groups to celebrate and protect God's Creation.

GreenFaith Living the Change:

- International, interfaith sustainable living initiative

Blessed Tomorrow Carbon Offset
Program

- Offset your carbon emissions today



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Resources for Building Climate Refuge

Here are resources that can help you determine your risks and create climate refuge in your house of worship:

- **Presbyterian Disaster Assistance**
 - Planning, worship resources, opportunities to take action and educational materials
- **Blessed Tomorrow**
 - Blog, newsletter, and free educational materials
- **Ready.Gov**
 - For more information on developing resiliency against the effects of climate change
- **Fourth National Climate Assessment Volume II**
 - For more detail on the specific regional impacts of climate change, current and projected



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Why Faith Voices Matter

- Faith leaders are consistently identified as trusted messengers
- Your faith tradition supports you
- With an advocacy plan, you can connect on climate with successful messages



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The Spectrum of Advocacy and Engagement



Becoming
climate literate



Relate climate
to faith



Elevate your
voice within your
faith community



Be vocal with
leaders within
your community



Take your voice
national



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Resources for Advocacy

- PCUSA Office of Public Witness
- IRS Tax Guide for Religious Organizations
- Let's Talk Faith and Climate (Blessed Tomorrow)
- Moving Forward Guide (Blessed Tomorrow)
- GreenFaith
- Creation Justice Ministries
- Interfaith Power & Light



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THANK YOU FOR JOINING US!

- For More Information Please contact:
 - The Presbyterian Hunger Program
 - jessica.maudlin@pcusa.org
 - pcusa.org/climate
 - Presbyterian Disaster Assistance
 - pda@pcusa.org



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