



EESI

Environmental and
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Nature
4Climate

Natural Climate Solutions Briefing Series: What Congress Needs to Know About COP27

Friday, October 28, 2022

About EESI



Non-partisan Educational Resources for Policymakers

A bipartisan Congressional caucus founded EESI in 1984 to provide non-partisan information on environmental, energy, and climate policies



Direct Assistance for Equitable and Inclusive Financing Program

In addition to a full portfolio of federal policy work, EESI provides direct assistance to utilities to develop “on-bill financing” programs



Commitment to Diversity, Equity, Inclusion, and Justice

We recognize that systemic barriers impede fair environmental, energy, and climate policies and limit the full participation of Black, Indigenous, people of color, and legacy and frontline communities in decision-making



Sustainable Solutions

Our mission is to advance science-based solutions for climate change, energy, and environmental challenges in order to achieve our vision of a sustainable, resilient, and equitable world.

Polymaker Education

Briefings and Webcasts



Live, in-person and online public briefings, archived webcasts, and written summaries

Climate Change Solutions



Bi-weekly newsletter with everything policymakers and concerned citizens need to know, including a legislation and hearings tracker

Fact Sheets and Issue Briefs



Timely, objective coverage of environmental, clean energy, and climate change topics

Social Media (@EESIONline)



Active engagement on Twitter, Facebook, LinkedIn, and YouTube





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COP27 – From Ambition to Implementation



John Verdieck – Director,
International Climate Policy

Why have UNFCCC COP27?

- **Climate Change affects the entire globe**
- **No country can solve it alone**
- **Countries must build trust with each other**
 - **Many countries see climate action and economic growth linked**
- **Consensus from 190+ countries is hard**
- **Paris Rulebook is agreed**
 - **But not the means of implementation**

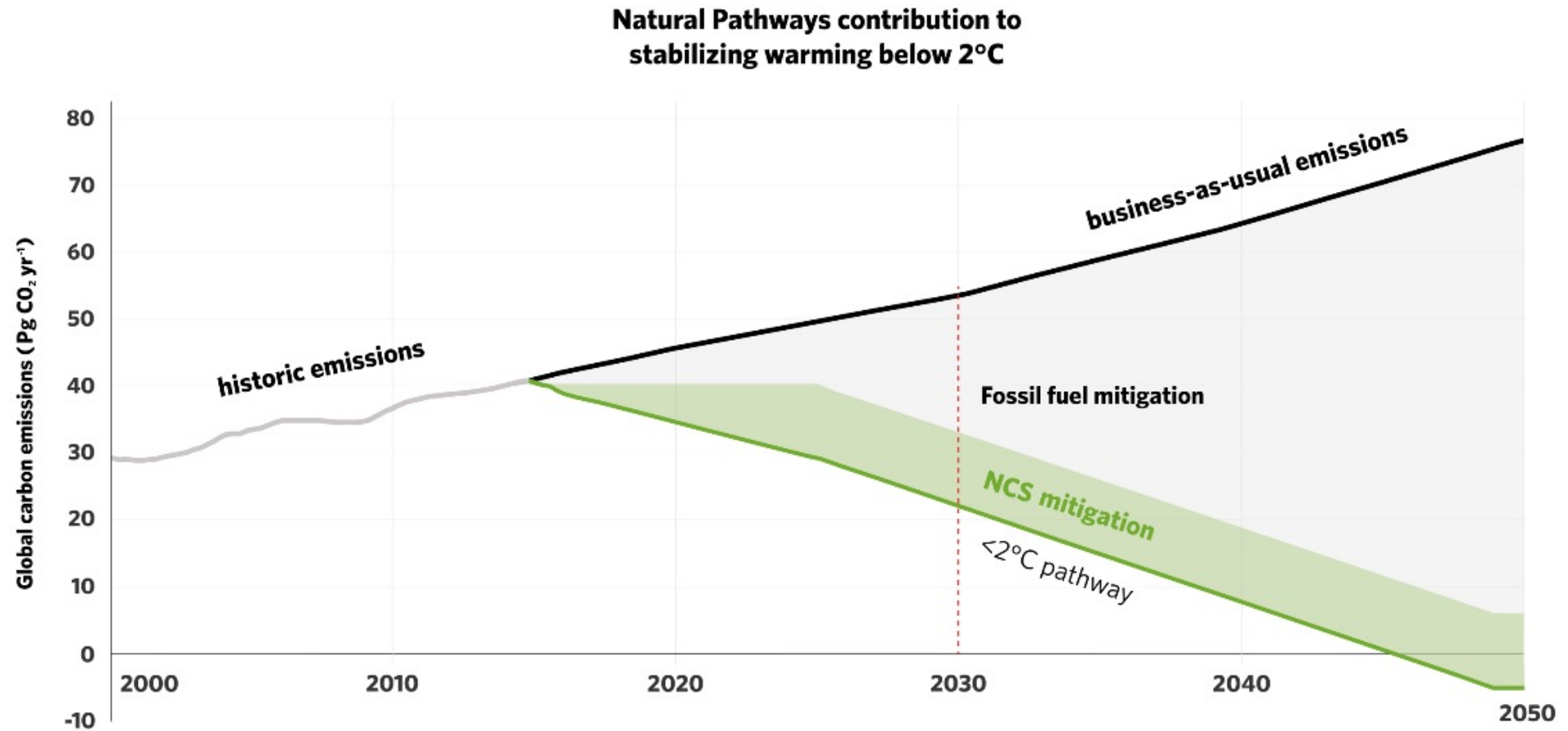


What is in the Paris Rulebook?

- We know the **WHAT**
- Countries must submit a Nationally Determined Contribution (NDC)
- NDCs are based on Greenhouse Gas Inventories
 - All sinks, all sources (Natural Climate Solutions are included)
 - Defined baselines between two years (ie, 2005-2030)
- Countries must transparently report on NDCs
- Repeat: Countries should enhance their NDC each 5 years



How about Natural Climate Solutions?



climate mitigation potential in 2030 (Gt CO₂e yr⁻¹)



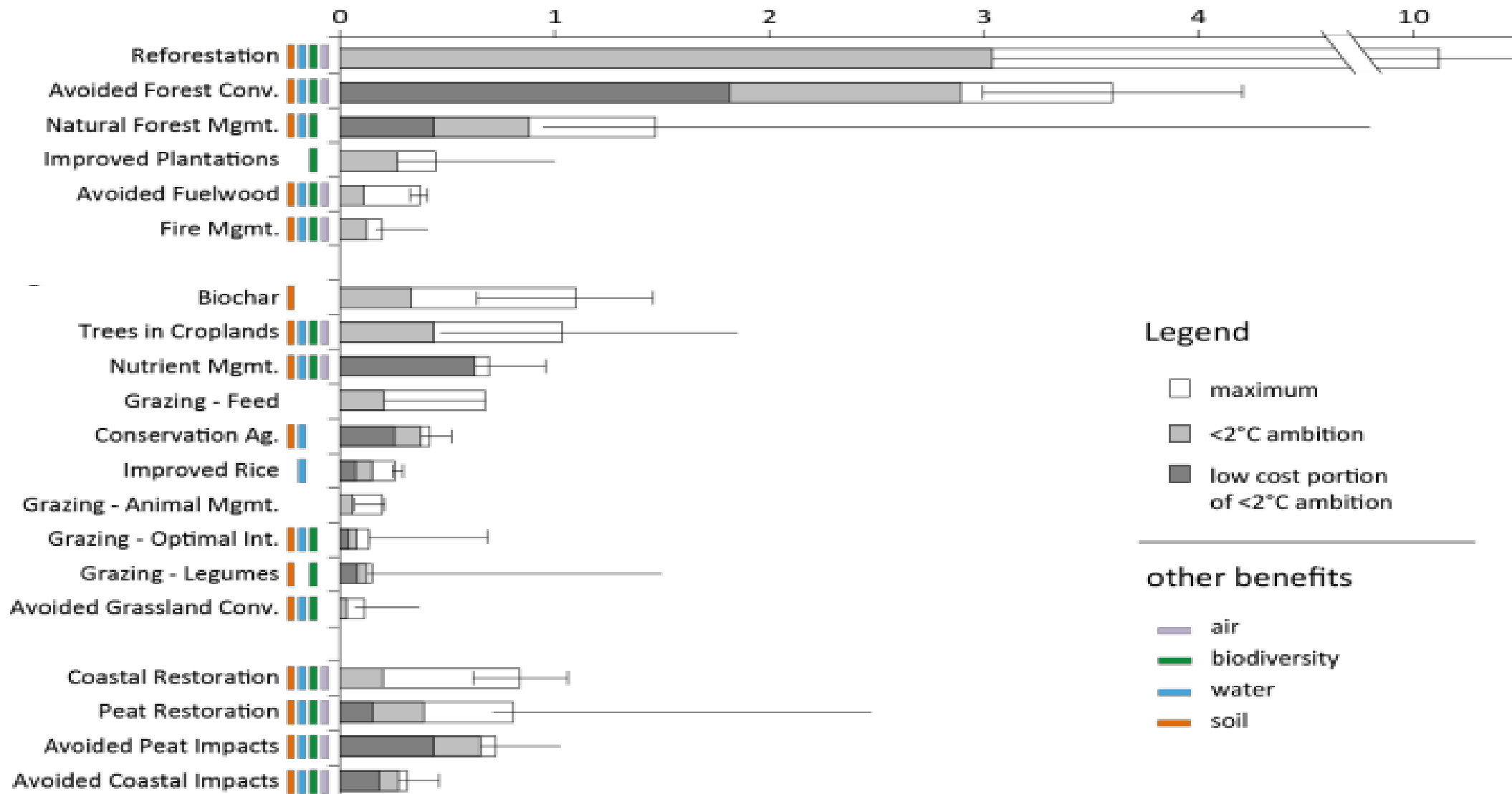
FORESTS



AGRICULTURAL LANDS
& GRASSLANDS



WETLANDS



NCS Atlas

Natural Climate Solutions for the U.S.

National

State

770

Mitigation potential
Million tons CO₂e per year

5,795

2016 net emissions (U.S.)
Million tons CO₂e per year

Mitigation Pathways

Marginal Abatement Cost
\$ per ton of CO₂e

Reforestation Off \$10 \$50 \$100 Max

Avoided Forest Conversion Off \$10 \$50 \$100 Max

Fire Management Off \$10 \$50 \$100 Max

Urban Reforestation Off \$10 \$50 \$100 Max

Avoided Grassland Conversion Off \$10 \$50 \$100 Max

Grassland Restoration Off \$10 \$50 \$100 Max

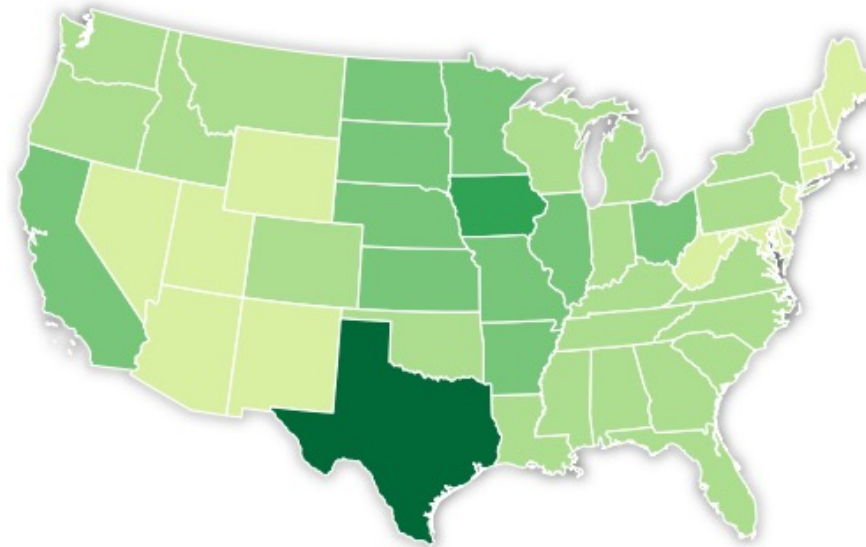
Alley Cropping Off \$10 \$50 \$100 Max

Cover Crops Off \$10 \$50 \$100 Max

Cropland Nutrient Management Off \$10 \$50 \$100 Max

Improved Manure Management Off \$10 \$50 \$100 Max

Improved Rice Cultivation Off \$10 \$50 \$100 Max

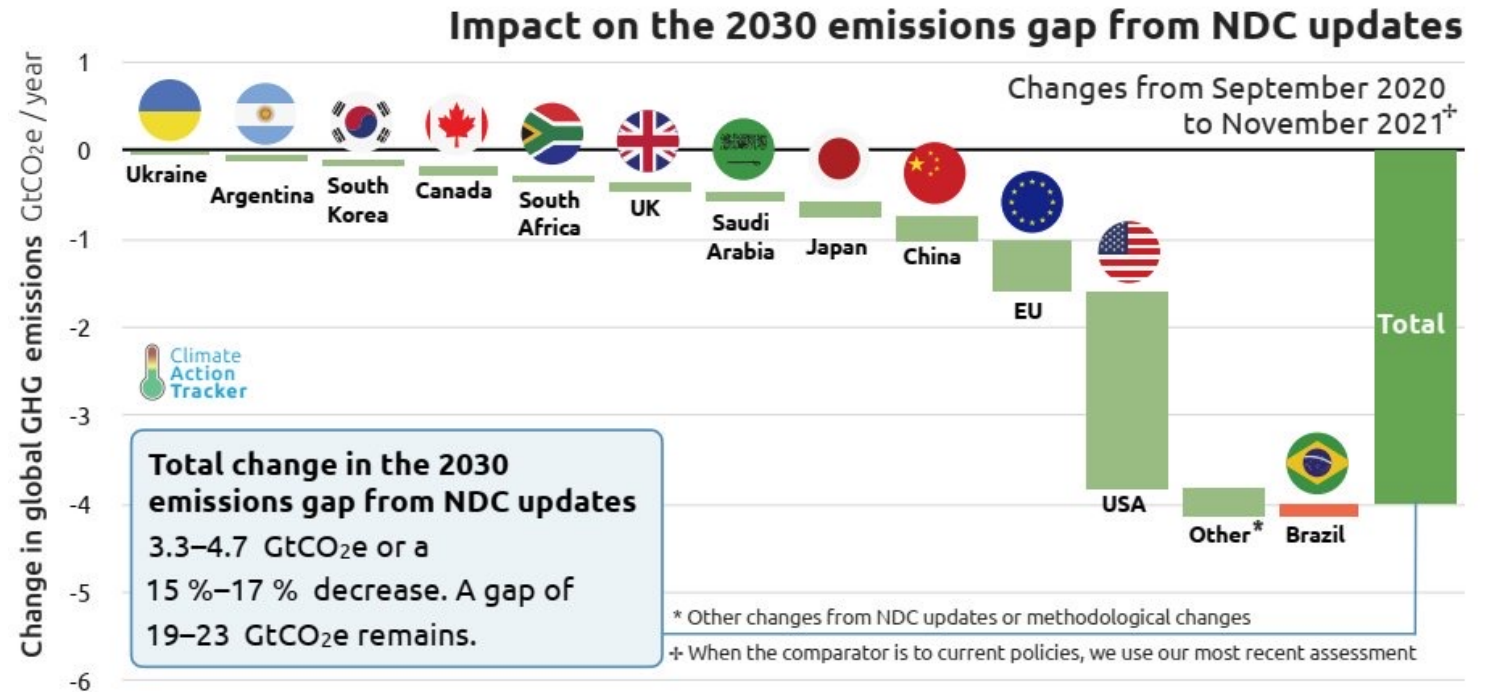


State	NCS Mitigation (Mt CO ₂ per year)	Area Available (million acres)
Texas	52.1	26.1
Iowa	35.1	22.6
South Dakota	33	20.9
Kansas	29.9	21.6
Missouri	29.7	15.8
North Dakota	28.6	20.6
Illinois	28.2	21.3
Minnesota	27.5	19.7
California	26.2	32.2
Ohio	24.7	12.4
Nebraska	24.6	18.5

Before COP26 (Building Trust)

Ambition

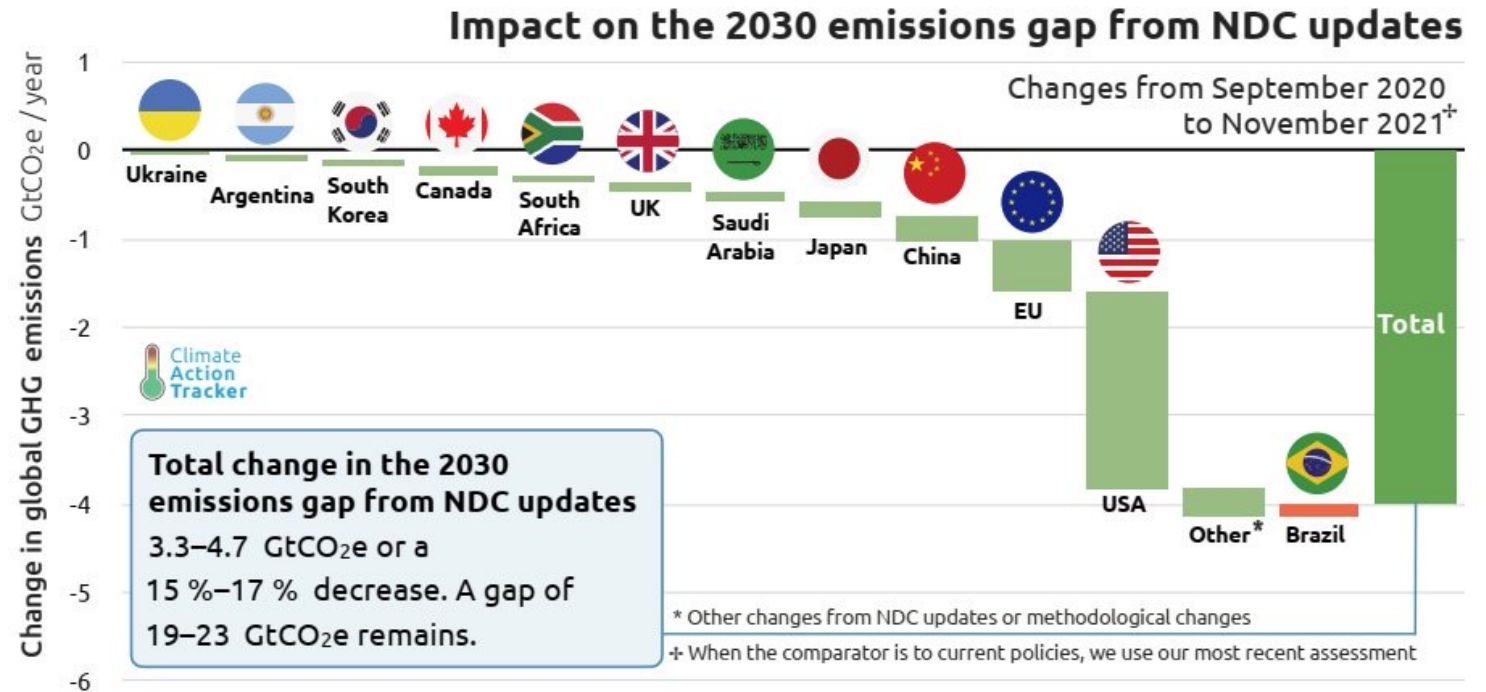
- 151 countries submitted a new or updated NDC including China, US, EU, India, Brazil.
- Increased ambition: some 0.2C off warming, **“if”** new targets are fully implemented.
- Pledges made in Glasgow have the potential to take us down to a 2.4C course, instead of the 3.7C path we were working with in 2015.
- So what if we get MORE pledges and ratchet down emissions?



Before COP27 (Enhancing Trust)

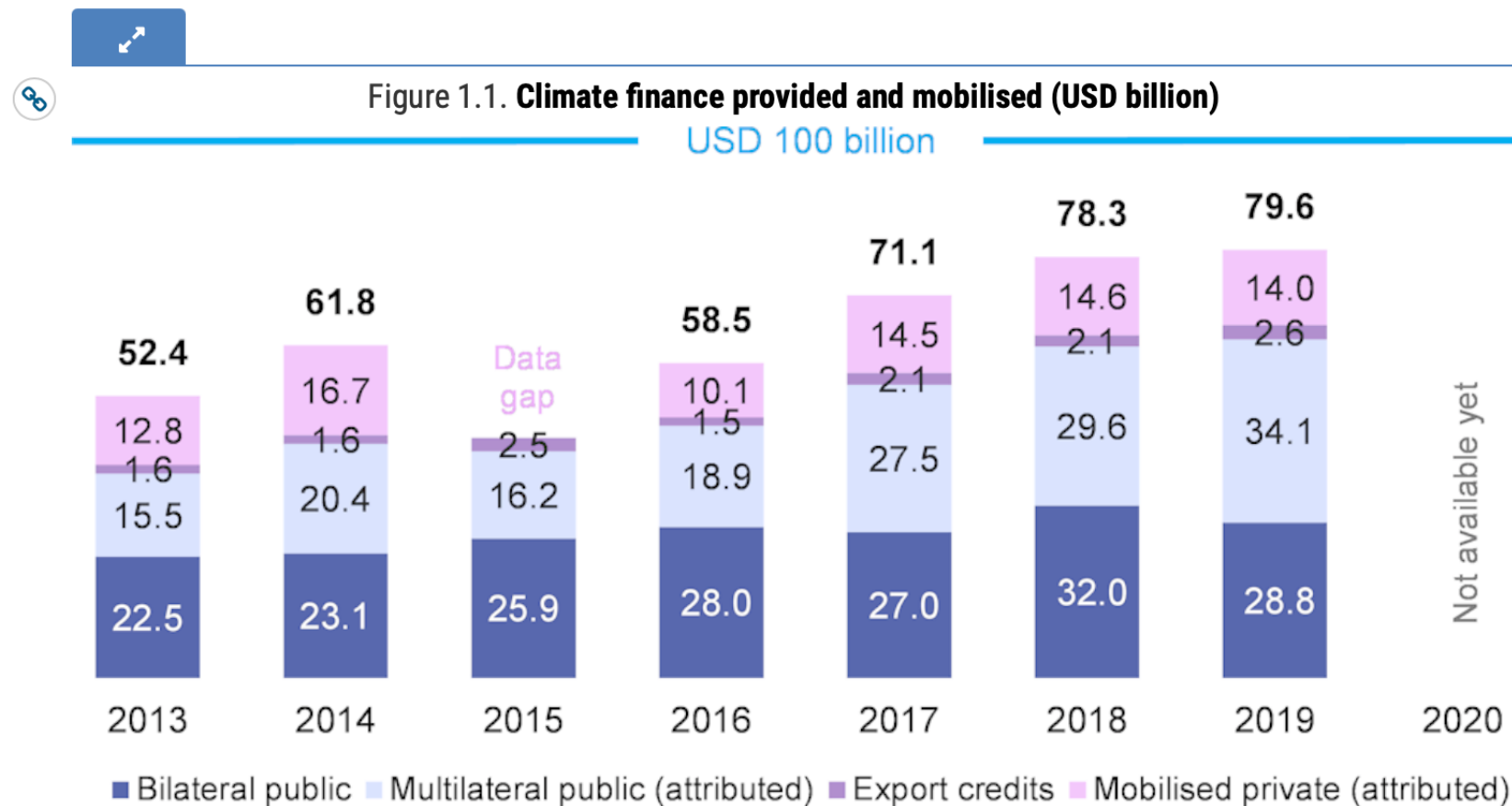
Ambition

- 2021: 130 countries, 70% of global emissions have net zero pledge
- 2022: 140 countries, 90% of global emissions have net zero target
- The U.S. Inflation Reduction Act increases U.S. chance of meeting it's NDC.
- Canada passes budget to implement its NDC.
- Walk forward together to build trust.



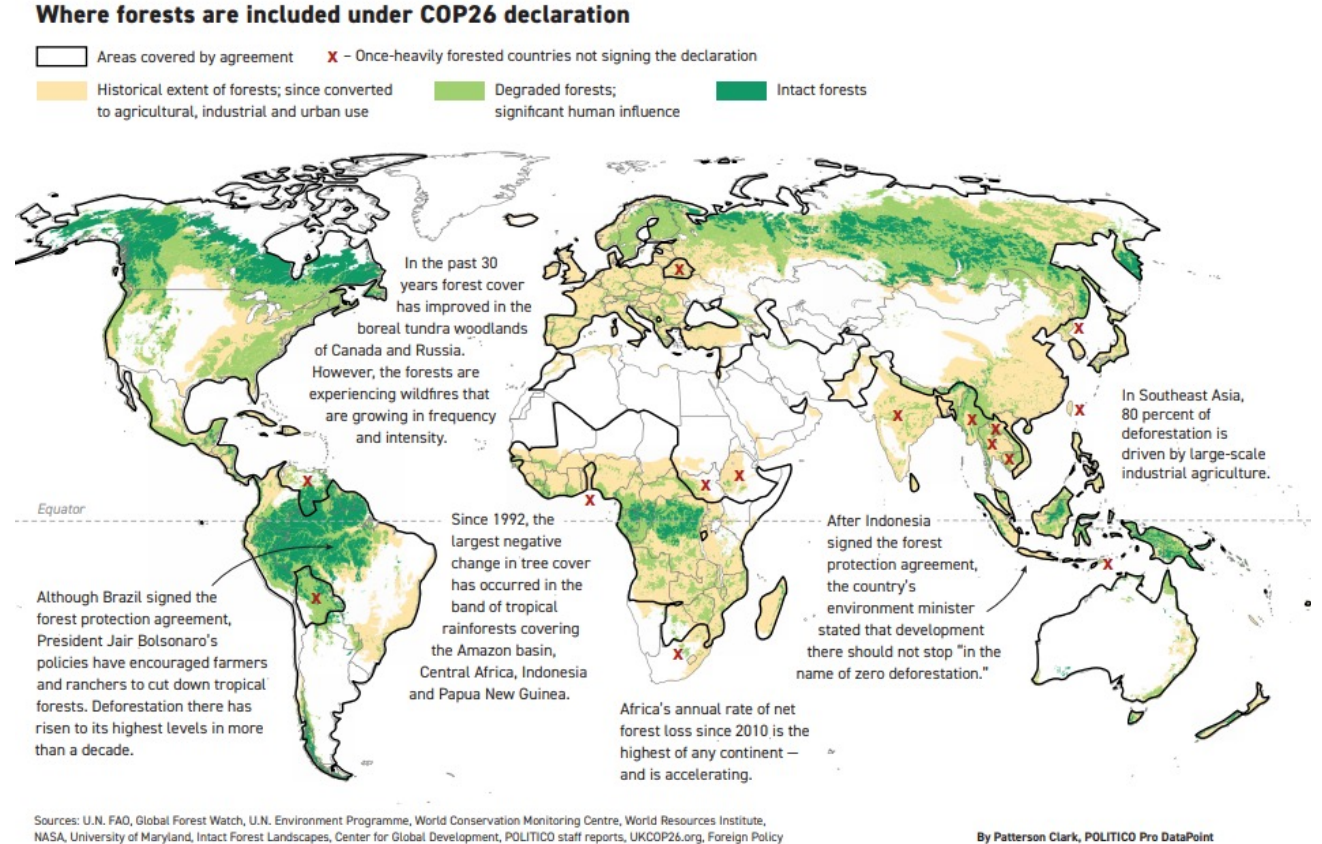
Financial and political pledges

- **COP15:** \$100 billion mobilized per year by 2020 from public and private sources



Financial and political pledges

- **COP26:**
 - **The Glasgow Declaration on Forests and Land Use:** 140 leaders committed to halt forest loss by 2030
 - **The Global Forest Finance Pledge:** \$19.2B to help protect and restore forests globally
 - **IPLC support pledge:** \$1.7B to help finance the key role of IPLCs in reversing forest loss
 - **Adaptation:** developed countries to at least double their 2019 commitment to provide climate finance for adaptation to developing countries by 2025
 - **Glasgow Financial Alliance for Net Zero:** Financial Institutions accelerating the transition to a net-zero global economy.



COP27 – What to Expect

- African leadership with a strong focus on adaptation and the \$100B finance pledge
- 3 questions to focus on:
 - 1) How are we going to pay for this?
 - 2) How can countries and the private sector implement their pledges?
 - 3) How to make climate action more equitable?



An aerial photograph of a dense forest of evergreen trees, viewed from above. The trees are dark green and tightly packed. On the right side of the image, there is a large, stylized number '1' in a light green color. The number has a solid top and a bottom section filled with a grid of small dots.

Forests at COP27

10.28.22

Trey Lord, Senior Technical Manager, 1t.org

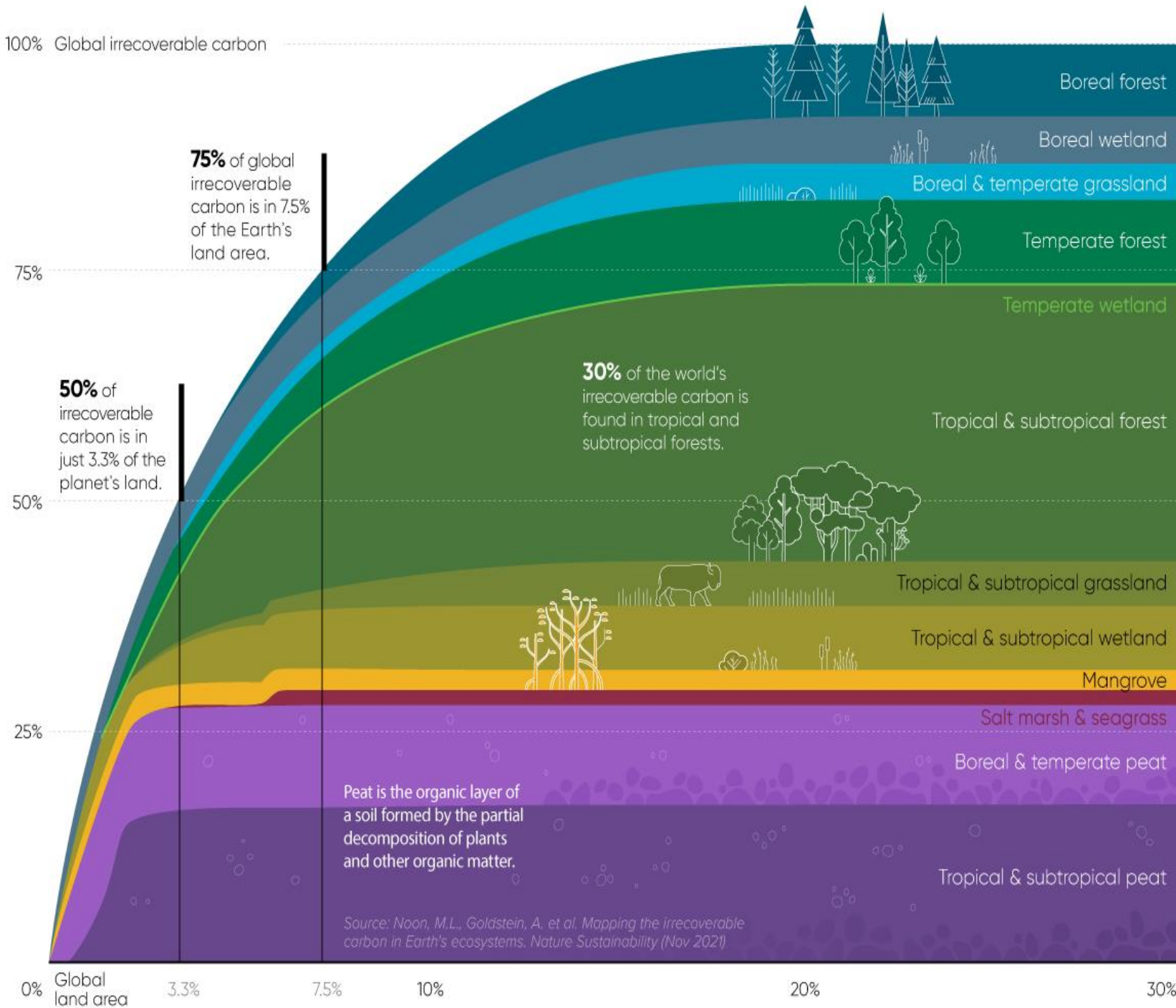
Forests and Climate Change by the Numbers

- US\$ 75-100 billion - Annual value of goods and service provided by forests
- 20% - Share of global GHG emissions from deforestation and forest degradation
- 15% - Current share of US fossil fuel emissions captured annually by US forests and forest products
- 27% - Potential share of current US emissions that forests could absorb to limit climate change
- 30% - Potential share of global emissions that forests could absorb to limit climate change below 2°C
- 3% - Share of the global climate mitigation funding to forests

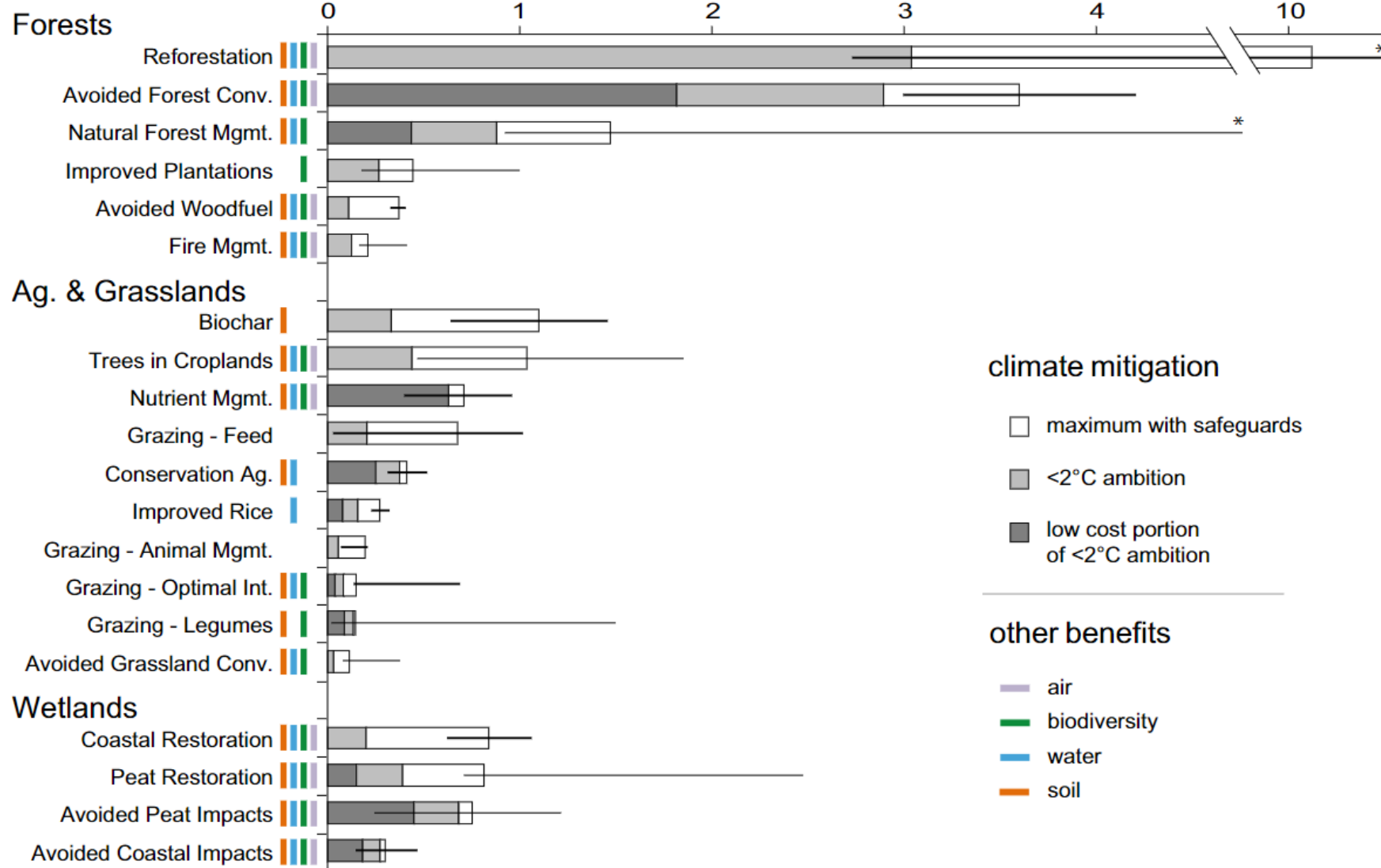



1t.org | us

Irrecoverable Carbon in Forests



Climate mitigation potential in 2030 (PgCO₂e yr⁻¹)





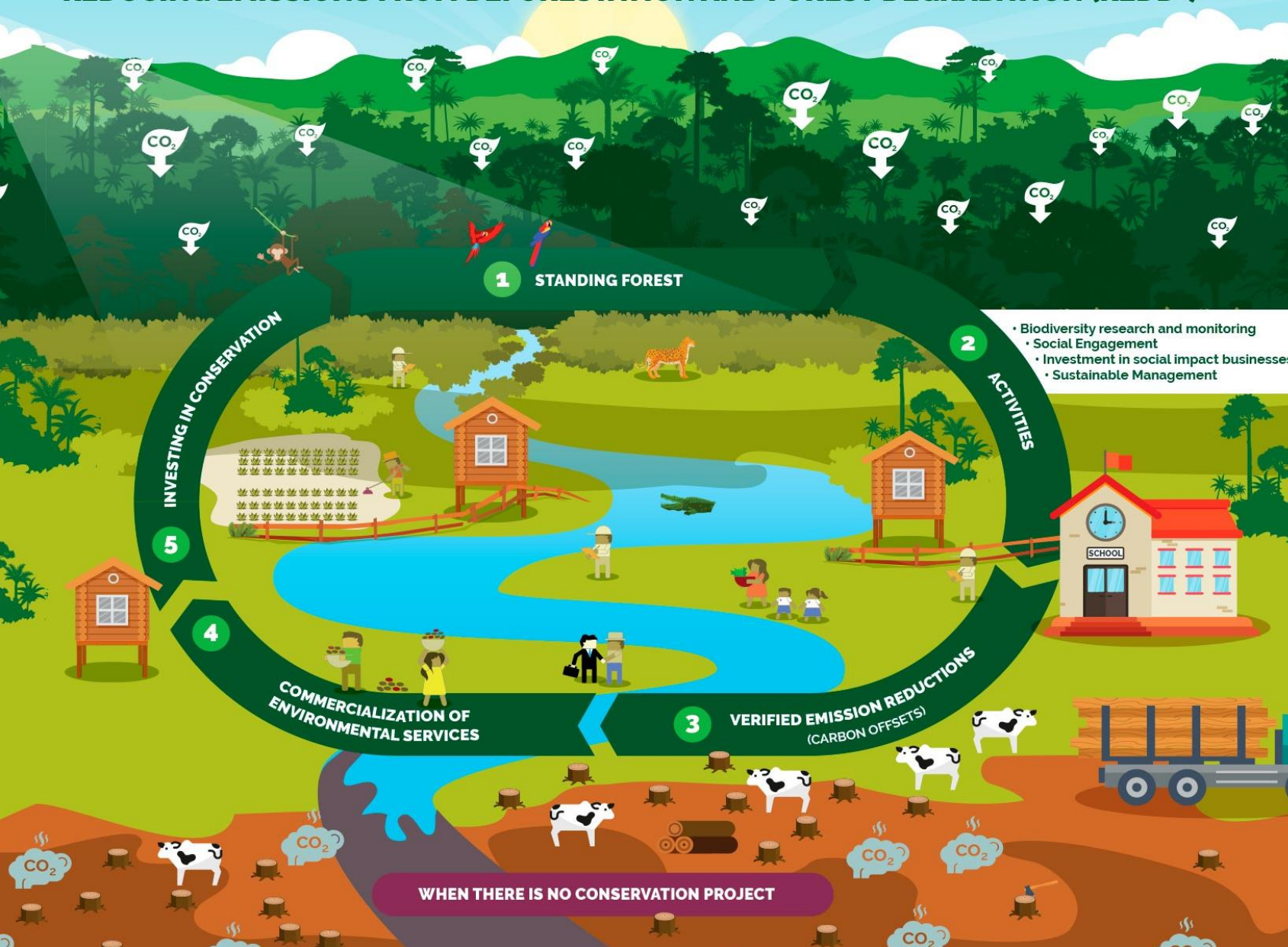
Actions to Conserve, Restore, and Grow Forest

- Combatting deforestation and forest degradation
- Restoring forest landscapes
- Enabling rights-based land use
- Unlocking forests benefits

Forests in the Inflation Reduction Act

- \$1.5 billion for Urban & Community Forestry Program
- \$1.8 billion for National Forest System (via USFS) to support wild-fire risk reduction
- \$350 million for vegetation management, environmental reviews, and inventory of old-growth forests on National Forest System land
- \$400 million in competitive grants and cost share from USFS to support underserved or small forest owners
- \$700 million in competitive grants to states through Forest Service Forest Legacy Program to conserve environmentally significant forests threatened by conversion

REDUCING EMISSIONS FROM DEFORESTATION AND FOREST DEGRADATION (REDD+)



REDD+

- Reducing
- Emissions from
- Deforestation and
- Forest Degradation
- Plus conservation, sustainable management of forests, and enhancement of forest carbon stocks



Forests at COP26

- **The Glasgow Declaration on Forests and Land Use**
 - 140 countries pledges to halt and reverse deforestation and land degradation by 2030 (since grown to 145)
- **The Global Forest Finance Pledge**
 - US\$ 19.2 billion to help protect and restore forests globally by 2025

US Government Priorities for Forests at COP27



- Up to US\$ 9 billion of international climate funding to support conservations of global forests by 2030
- “Plan to Conserve Global Forests: Critical Carbon Sinks”
 1. Incentivize forest and ecosystem conservation and forest landscape restoration
 2. Catalyze private sector investment, finance and action to conserve critical carbon sinks;
 3. Build long-term capacity; and
 4. Increase the ambition of governments and other stakeholders

Forests Action at COP27

- Meet the ambition of “The Glasgow Declaration on Forests and Land Use” and “The Global Forest Finance Pledge”
- Fulfil pledges and raise ambition towards financing the reversal of forest loss and degradation
- Leverage the private sector to play a key role in financing zero-deforestation and nature-positive action
- Seek cost-effective and equitable natural climate solutions

Natural Climate Solutions in Climate Adaptation



Source: Bapna et al. 2019.



Forests and the Private Sector

- Sustainable forestry standards and zero-deforestation supply chains
- Large-scale investment using direct finance or carbon credits
- Public-private partnerships for forest conservation, restoration, or reforestation



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**GOAL: One trillion trees
conserved, restored and
grown globally by 2030.**

PLEDGE TRACKER

U.S. chapter contributions
toward the global trillion tree goal



Trees

50,862,220,547

**Make a
Pledge →**

The US chapter drives change by facilitating the leadership of US companies, nonprofits, and governments to help us reach the goal of one trillion trees globally.

Thank you!



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An aerial photograph showing a vibrant green, dense forest. A winding river or stream, with a light blue-green hue, meanders through the center of the forest, creating a series of loops and curves. The sunlight filters through the trees, creating a dappled light effect on the canopy.

OCEAN & COASTAL PRIORITIES AT COP27

Courtney Durham

The Pew Charitable Trusts

EESI Briefing - October 28, 2022



Our ocean and coasts play a key role in regulating our climate system and can be a source of climate solutions for both mitigation and adaptation.

An aerial photograph of a lush mangrove forest. A dark, winding waterway cuts through the dense green canopy of the trees. The water reflects the surrounding foliage. The overall scene is a vibrant green, indicating a healthy ecosystem.

WHAT'S BLUE CARBON?

- Mangrove forests, seagrass meadows, and saltmarshes – coastal wetlands – are recognized for carbon sequestration values
- Coastal wetlands are among the world's key 'carbon sinks' since they store far greater carbon than they release

**International**

Nationally Determined
Contributions

**National
(United States)**

GHG Reduction Target: 50-52%
Reduction by 2030

States

State-Specific Policies (e.g., Executive
Orders, GHG Targets, etc.)

BLUE CARBON AT VARIOUS POLICY LEVELS

- Policymakers from state, national, and international levels turning theory to climate action with coastal blue carbon

SUBNATIONAL ACTION ON BLUE CARBON: OREGON

- Carbon rich wetlands now part of their climate solution
- Incorporated, for the first time, blue carbon into state climate mitigation policy
- Includes quantified carbon sequestration goal by 2030






The United States of America

Nationally Determined Contribution

**Reducing Greenhouse Gases in the United States:
A 2030 Emissions Target**

NATIONAL ACTION ON BLUE CARBON

- Biden 2021 NDC update: *the United States will support nature- based coastal resilience projects including pre-disaster planning as well as efforts to increase sequestration in waterways and oceans by pursuing “blue carbon”.*
- Bipartisan Infrastructure Investment and Jobs Act (IIJA) – over \$1bil for coastal nature-based solutions
- Inflation Reduction Act (IRA) - \$2.6bil for coastal and marine protection/restoration



INTERNATIONAL ACTION ON BLUE CARBON: NDC

71 countries include at least one ocean-based mitigation or adaptation action in their new or updated climate goals, including over 30 focused on blue carbon

Ocean-Climate Expectations for COP27

- Governments showcase ocean-climate solutions in their climate plans
- Oceans and Coasts elevated during Global Stocktake process
- Ocean-Climate Dialogue in Decision Text
- Over 40 ocean and coastal side events
- Announcements of new funding
- New initiatives launched



Scaling climate-smart agriculture ambition

In the U.S. and at COP27

Accelerating voluntary ag climate solutions



Inflation Reduction Act



Partnerships for Climate-Smart Commodities

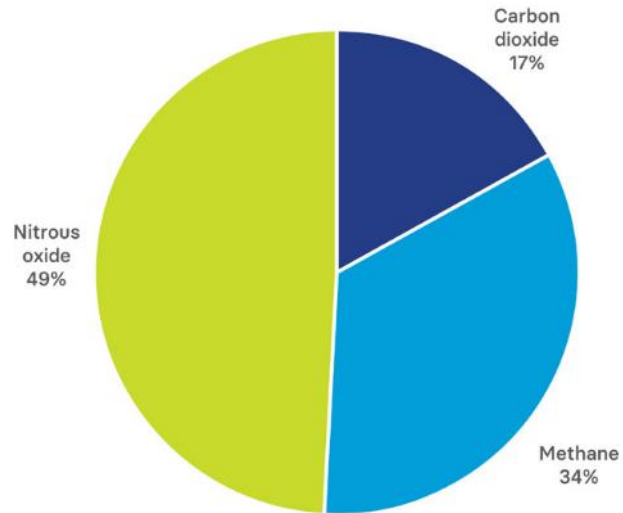
From national to global ambition



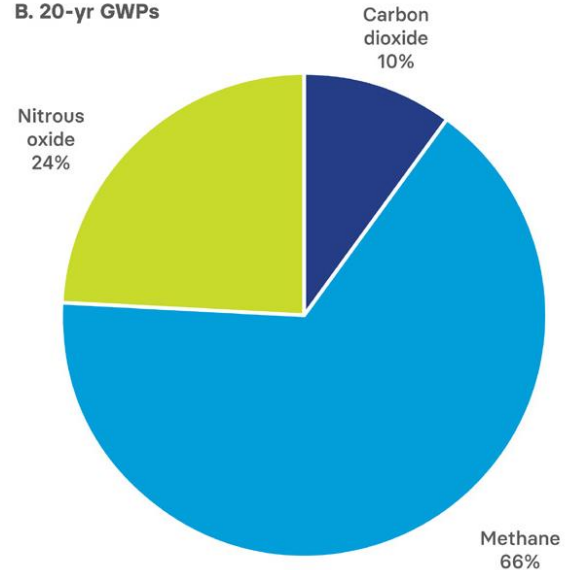
COP27
SHARM EL-SHEIKH
2022 EGYPT

Methane matters, especially for the next 20 years

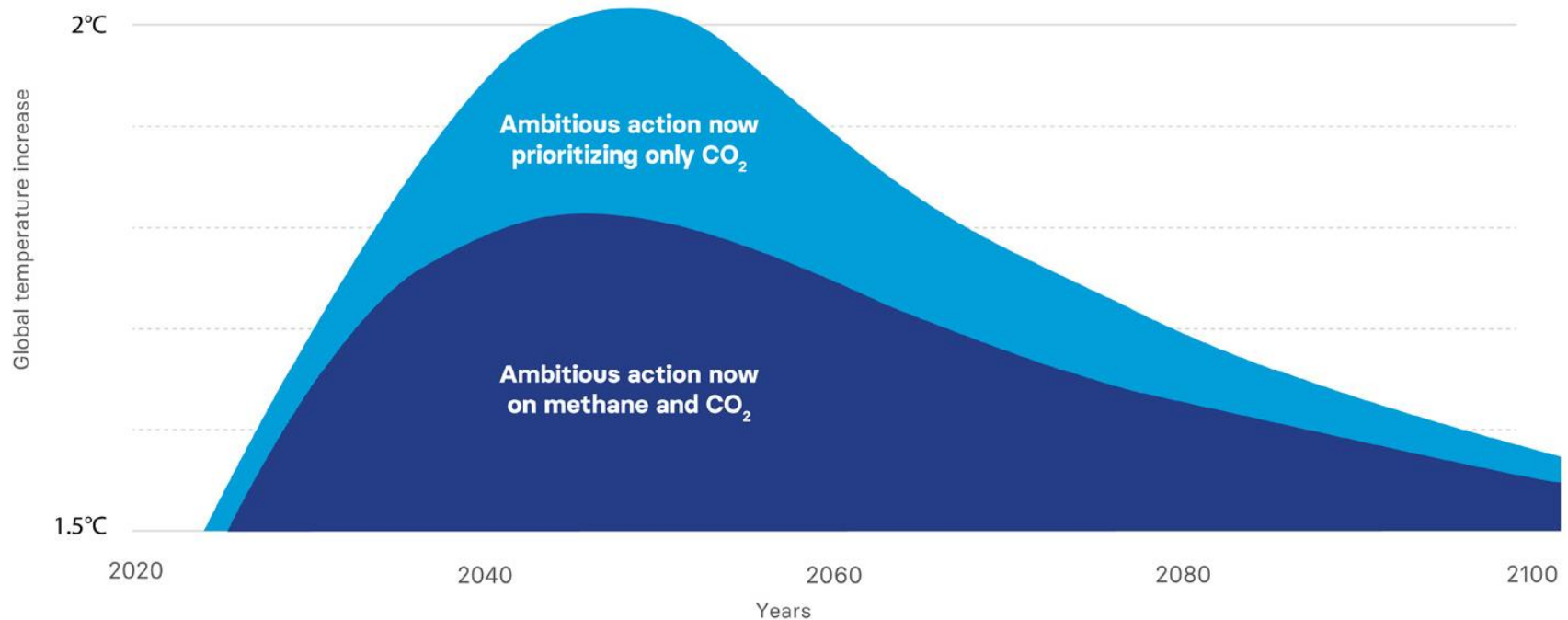
A. 100-yr GWPs



B. 20-yr GWPs



This is the most critical decade in the climate fight



Climate impacts are already here



By 2030, climate change will reduce corn, soybean and wheat productivity in the U.S.



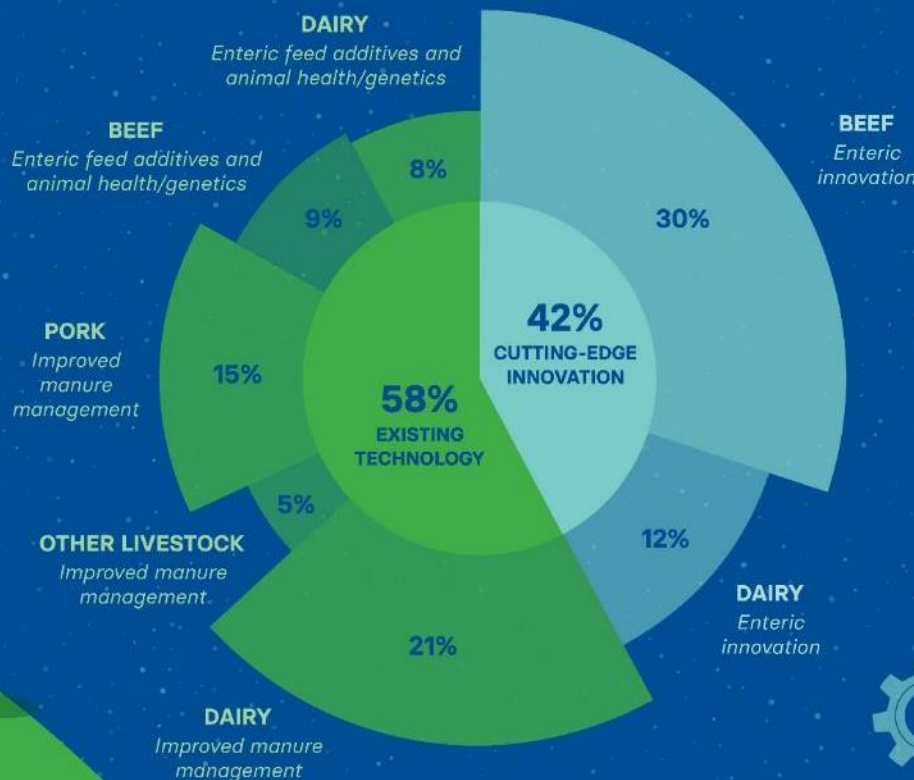
Land conversion releases stored carbon

The stakes are high...

But so are the opportunities

R&D and innovation are key to methane solutions

Accelerating
the use of
EXISTING
TECHNOLOGIES.



Investing in
CUTTING-EDGE
INNOVATION.



Fertilizer efficiency helps farm budgets and the climate



edf.org/ag-climate pathways

edf.org/climate-proofing-agriculture

Upcoming Briefings in this Series



What Congress Needs to Know About COP27⁴

What's on the Table for the Negotiations? Nov 02 @ 11:00 AM EDT

**Climate Summit Recap: Key Outcomes and What Comes Next
During the week of November 28, 2022**

**Signup for our COP newsletter here: eesi.org/signup
Briefing RSVP here: eesi.org/cop27**



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