

Stakeholder Working Group

February 8th, 2024



Agenda

- Revisions to Principles
- Additionality
- Overview of emerging regulation and legislation around carbon markets
- Sports sustainability
- Insurance subcommittee debrief



Upcoming Meetings



- Next full Stakeholder Working Group – March 14th
- Invites for Q2 SWG meetings forthcoming – stay tuned for details





Revised Principles

Development recap

- **2021:** initial, soil-focused principles passed by stakeholder group
- **2023:** BCarbon staff begins revisiting principles in light of our expansion into areas beyond soil carbon
- **January 2024:** new proposed principles brought to stakeholders
- **January 25, 2024:** deadline for stakeholder comments/feedback
- **February 2024:** BCarbon revises principles with stakeholder feedback. Now bringing the edited version back for further discussion



1: addition of nature-based solutions; line edits for readability

BCarbon is a nonprofit organization formed to address climate change and aid in the global energy transition, primarily through nature-based solutions. We work as an agent of change in the voluntary carbon market by issuing carbon credits and generating solutions to the persistent problems of accessibility, quality, and scale.



2: no change

BCarbon is both a registry and a research hub. We work with landowners, project developers, buyers, and industry leaders to develop Protocols that are rigorous and practical, and we collaborate with corporate, academic, and government partners to explore innovative solutions to market challenges.



3: revised to acknowledge the interconnectedness of community well-being and ecological health.
Removed reference to “profit motivation”

BCarbon adopts an inclusive, holistic view of ecosystem services. We see ecological health as foundational to the socioeconomic and cultural resilience of all communities. Credit issuances under BCarbon protocols are dedicated both to the removal and mitigation of greenhouse gas emissions and the enhancement of ecological and social integrity.



4: no change; line edit (populations → peoples)

BCarbon aims to engage, support, and uplift diverse and marginalized communities, with particular attention to the rights of indigenous peoples and communities disproportionately impacted by climate change. BCarbon also acknowledges barriers that prevent participation in projects by certain landowners and interested parties and is engaged in the exploration and implementation of new ideas to overcome these obstacles.



5: no change; line edits for readability

BCarbon is committed to transparency via open-access collaboration and hosts a monthly stakeholder group that brings together voices from disparate disciplines and sectors to problem-solve, inform organizational direction, and share knowledge.



6: addressed previous questions about “ecological accounting”, made direct reference to measurement + quantification

BCarbon views the legitimacy and defensibility of credit issuances as a responsibility owed to both the end user of the product and the public. We use direct measurement, field testing, and other science-based, best-practice metrics to balance Protocol practicality with rigorous and reliable quantification.



7: fully new! Added in response to stakeholder suggestions about referencing our connection to the overall market

BCarbon sees the transition towards a circular economy that accounts for the value of natural ecosystems as fundamental to a sustainable future. We support the development of a thriving and accessible carbon market as a key step towards this goal.



Discussion



Additionality

Overview of common “legacy” additionality approaches

General definition: additional if the mitigation activity would not have taken place in the absence of the added incentive created by the carbon credits.

ICROA: Project-based emission reductions and removals go beyond what would have occurred had the project not been carried out.

ACR:

1. Exceed regulatory/legal requirements;
2. Go beyond common practice; and
3. Overcome at least one of three implementation barriers: institutional, financial, or technical.



BCarbon and Texas Landowners: A Matter of Principle



- Many undertaking excellent stewardship practices
- Can prove removal of carbon dioxide
- Unfair that they cannot participate in global trading
- “Thank You For Your Contribution”

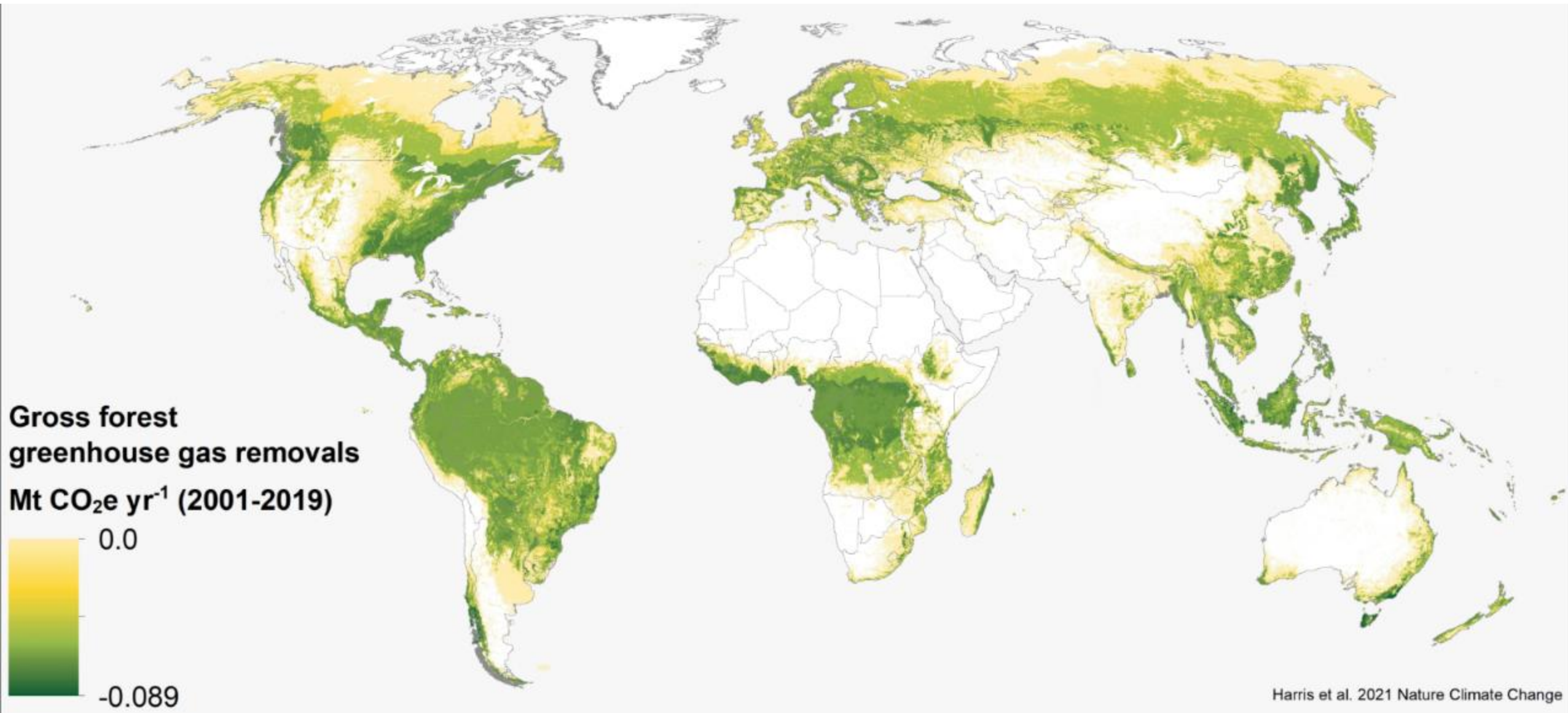


Additionality of BCarbon Current Credits

- ***Soil***
 - Beyond current legal requirements
 - Measured drawdown of carbon dioxide from atmosphere
- ***Forest***
 - Beyond current legal requirements
 - Measured drawdown of carbon dioxide from atmosphere
- ***Coastal Blue Carbon***
 - Beyond current legal requirements
 - Adds physical features to develop credits
 - Based on measured stored carbon and monitored drawdown from atmosphere
- ***Methane Plugging***
 - Beyond current legal requirements
 - Requires plugging to develop credits
 - Proof of leakage and stopping of leakage required



The Global Practical Dilemma



Next Steps

- Prepare internal working paper of options for moving forward
- Potential formation of sub-committee to tackle this issue
 - Working Group
 - Asking for volunteers – may limit number of participants
 - Want to include landowners, project developers, buyers and academics
 - Want to probe ICROA, SustainCERT and other third-party certifiers
- Intend To Bring Issue Back to Full Stakeholder Group With Recommendations



Discussion

Is there a way to advocate for current sinks & good stewards without alienating buyers, who have come to expect legacy definitions?

Thoughts and perspectives? How might we navigate this issue?

Regulatory frameworks



The growing regulatory “web”



EPA United States Environmental Protection Agency

Search EPA.gov

Environmental Topics | Laws & Regulations | Report a Violation | About EPA

Controlling Air Pollution from the Oil and Natural Gas Operations CONTACT US

Oil and Natural Gas Air Standards Home

Basic Information

Actions and Notices

Implementation

EPA's Final Rule for Oil and Natural Gas Operations Will Sharply Reduce Methane and Other Harmful Pollution.

December 2, 2023 -- EPA has issued a final rule that will sharply reduce emissions of methane and other harmful air pollution from oil and natural gas operations -- including, for the first time, from existing sources nationwide. The final action includes New Source Performance Standards to reduce methane and smog-forming volatile organic compounds from new, modified and reconstructed sources. It also includes Emissions Guidelines, which set procedures for states to follow as they develop plans to limit methane from existing sources. Oil and natural gas operations are the largest industrial source of methane pollution in the U.S.

Methane is a climate "super pollutant" that is more potent than carbon dioxide and is responsible for approximately one third of current warming resulting from human activities. Rapid, sharp cuts in methane can generate near-immediate climate benefits and are a crucial addition to cutting carbon dioxide in slowing the rate of warming of Earth's atmosphere.

Regulatory Documents

- Final Rule and Regulatory Text (pdf) (5.9 MB)
- Regulatory Impact Analysis (pdf) (3.3 MB)
 - Supplementary Material for the Regulatory Impact Analysis: Report on the Social Cost of Greenhouse Gases (pdf) (8.8 MB)
Note: EPA reposted this file on 12/5/23 to correct bookmark errors.
 - Additional Information on the Social Cost of Greenhouse Gases Report

Fact Sheets

- Key Things to Know About EPA's Final Rule for Oil and Natural Gas Operations (pdf) (184.1 KB)
- La EPA publica una norma final para reducir el metano y otros agentes contaminantes de las operaciones de petróleo y gas natural (pdf) (173.3 KB)
- EPA's Final Rule for Oil and Natural Gas Operations: Overview (pdf) (183.7 KB)
 - Cuestiones importantes a saber sobre la norma final de la EPA para reducir el metano y otros agentes contaminantes de las operaciones de petróleo y gas natural (pdf) (184.7 KB)
- Technical Fact Sheet: Appendix K: Requirements for Using Optical Gas Imaging Applied to Natural Gas Processing Plants (pdf) (180.9 KB)

Tables

- Table of Covered Sources by Site: EPA's 2012, 2016 and 2023 Rules (pdf) (227.7 KB)
- Summary of Requirements: Final New Source Performance Standards and Emissions Guidelines (pdf) (248.2 KB)

Presentation

- EPA's Final Rule for Oil and Natural Gas Operations (pdf) (370.5 KB)

Upcoming Trainings

EPA will hold trainings in early 2024 to provide an overview of the final rule for communities, Tribes, tribal environmental professionals and small businesses. The Agency also will hold trainings on how to apply to use alternate test methods for detecting methane and on how to apply to be EPA-certified for the Super Emitter Program. We will post information on the trainings on this web page as they are scheduled.

EPA's New Methane Oil & Gas Rule:

Proposal to the State of Texas to Include Voluntary Well Plugging and Carbon Credit Issuance as Part of the State Implementation Plan



Applicability & Definitions

- The rule applies to “**designated facilities**” - “any existing facility which emits a designated pollutant and which would be subject to a standard of performance for that pollutant if the existing facility were an **affected facility**.” See 40 CFR 60.21a(b).
- “**Affected facility**” - “each existing well that **produces associated gas** which commenced construction before December 6, 2022.”
- “**Associated gas**” - the “natural gas from well operated primarily for oil production that is released from the liquid hydrocarbon during the initial state of separation after the wellhead. Associated gas product begins at the startup of production after the flow back period ends. Gas from wildcat or delineation wells is not associated gas.”



Conclusion

- Our legal opinion – EPA methane rule as currently drafted does not apply to orphan and idle wells
- There will be multi-state litigation against the EPA methane rule
- Believe there is a role for voluntary plugging and credit issuance to assist states in addressing methane emissions



EU Carbon Border Adjustment Mechanism (CBAM)



- Price on the carbon emissions embedded in imported goods entering the European Union
- Transitional phase: October 1, 2023
 - Importers of steel, cement, aluminum, fertilizers, electricity, and hydrogen must report emissions data
- Levy begins with full implementation in 2026
- Indirect impacts on US industry
 - Only 1.1% of US exports to EU
- Similar US proposals: CCA, PROVE IT Act, Foreign Pollution Fee



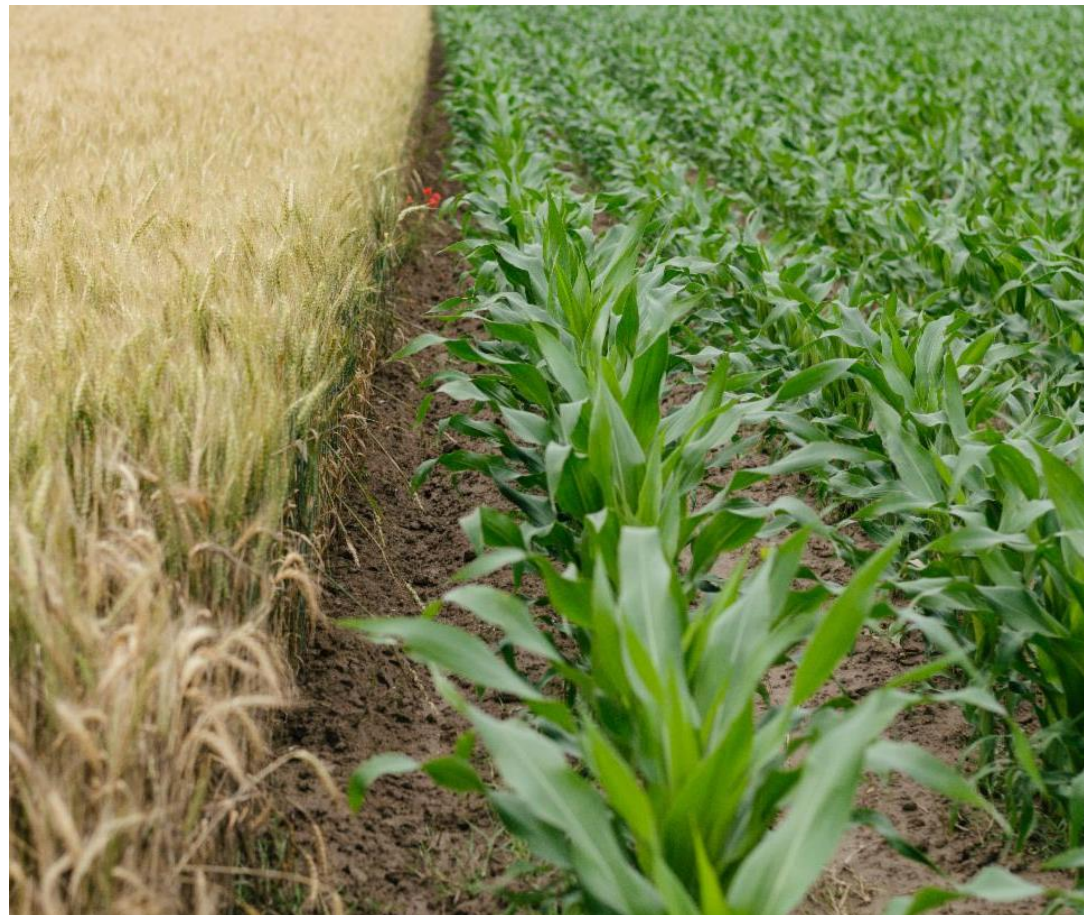
CA Disclosures Act

- Required information (on entity website)
 - Details on carbon offsets purchased/used (project type, location, verification)
 - Methodology used to calculate emissions and reductions
 - Risk factors and limitations of offsets
- Applies to businesses operating in California that
 - Purchase, broker, or utilize voluntary carbon offsets
 - Make claims about "net zero," "carbon neutral," or significant GHG reduction



Growing Climate Solutions Act

- Signed into law: December 2021
- First deliverable: October USDA report
 - General Assessment of the Role of Agriculture and Forestry in U.S. Carbon Markets.
 - Next step is for USDA to determine whether to establish a Greenhouse Gas Technical Assistance Provider and Third-Party Verifier Program
- Entities will register by applying to the USDA
 - Not a certification or endorsement
 - More guidance expected this year



Commodity Futures Trading Commission December 2023 Proposed Guidance

The CFTC

- Regulator of designated contract markets (DCMs), where futures and options are traded
- Carbon credits are commodities, not derivatives. They can be sold via derivative contracts
- CFTC has authority over DCM contract rules, ***not underlying commodities***



CME Group

CBL Global Emissions Offset

Futures



Commodity Futures Trading Commission December 2023 Proposed Guidance

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The Proposed Guidance

- Focuses on how to apply existing CFTC regulations to carbon credit derivative contracts
- How do we ensure quality?
- ***Does not directly regulate registries or credits*** – just requires specific areas of transparency in derivative contracts



How does existing CFTC regulation apply to the regulation of carbon credits?

The terms and conditions of a physically settled derivative contract should “describe or define all of the ***economically significant characteristics or attributes of the commodity underlying the contract***”.



What are the economically significant characteristics or attributes of a carbon credit?

Quality Standards

Delivery points and facilities

Inspection provisions

****All three of these categories are generally defined as potential “significant attributes” of a commodity by the CFTC***



What are the economically significant characteristics or attributes of a carbon credit?

Quality Standards

- Transparency
- Additionality
- Permanence and risk of reversal
- Robust quantification of GHG removals/reductions

Delivery points and facilities

- Governance of the crediting program
- Tracking of underlying credits (issuance, transfer, and retirement)
- No double counting

Inspection provisions

- Third party validation and verification



Why does this matter?

- Does not directly “regulate” BCarbon, our protocols, or our issuances
- However, could set the tone for future regulatory actions
- Regulatory action calling for more transparency and detail on the qualities of credits has benefits:
 - Could address lack of confidence in the VCM overall
 - Could push actors across the board towards higher quality work – as long as we agree on a definition of “quality”!



III. Request for Comment

The Commission requests comment from the public on all aspects of the Commission's proposed guidance regarding the listing of VCC derivative contracts, and further invites comments on specific questions related to the listing of such contracts. The Commission encourages all comments including background information, actual market examples, and best practice principles.

Due 02/16

BCarbon areas of focus:

- Risk of reversal
- Robust quantification
- Sustainable development benefits and safeguards
- ***Additionality***

Mention of insurance as an alternative to traditional “buffer pools”

What makes quantification robust?
Models vs. measurements?



Additionality in the Proposed Guidance

“A VCC is considered additional when it is credited only for emissions reductions that would not have occurred but for the monetary incentive created by the revenue from the sale of carbon credits”

How should we respond?



Sports and Sustainability



Carbon Footprint of Sports

- Sports are large part of our economy in the United States
- Billion \$ Industry
- No matter the level, High School to College to Professional, CO₂ is Emitted





Scope of Sports Emissions

- Majority of emissions from hosting sporting events are related to travel
 - Scope 3: Indirectly



162 GAMES



82 GAMES



82 GAMES



34 GAMES



17 GAMES

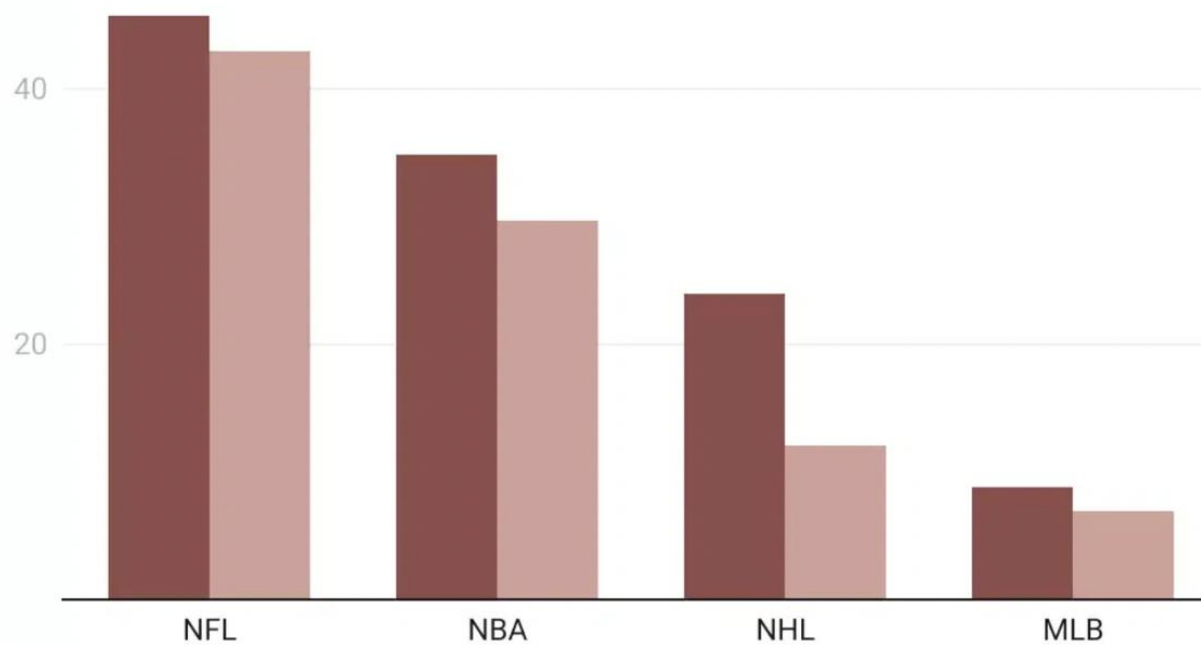




CO2 Emissions & Professional Sports

Climate impact of professional sports travel

2018 Emissions per game 2020 Emissions per game



Emissions measured in tonnes of carbon dioxide

Source: Seth Wynes



NFL Gameday

ESTIMATED CO2 EMISSIONS
PER SEASON = 4983 mT



Carbon Credits & The NFL



In January of 2023, the Houston Texans became the first NFL team to buy Carbon Credits, when they purchased credits from 1PointFive (a subsidiary company of Occidental Petroleum) to offset their travel emissions for three years



Carbon Credits & The NBA

- In 2018-19 The NBA was considered the most polluting of the four major sports leagues in the U.S. due to their rigorous travel schedule.
- Pledge to reduce carbon footprint by 50% by 2030, and Net-Zero by 2040
- Opportunities for Carbon Credits through initiatives

October 16, 2023 |

NBA Legend Rick Fox Builds World's First Carbon Negative Home



As part of the UN Sport for Climate Action Framework, we aspire to reduce our carbon footprint by 50% by 2030.



50,000

Miles the league reduced its team aviation impacts for the 2022-23 NBA season.



100%

April 2023: Launched NBA Arena Sustainability Task Force with all NBA



80%

Reduced plastic bottles by 80% in our offices.



Carbon Credits & The MLB



1PointFive



Houston Astros

In March of 2023, the Houston Astros partnered with purchased Direct Air Capture (DAC) credits from 1PointFive (a subsidiary company of Occidental Petroleum) to offset emissions, the same project that the Texans are a part of



Carbon Credits & The MLS

MLS has partnered to support reforestation projects amongst other carbon credits*

- One Tree Planted
- South Pole



Carbon Credits & Other Sports

November 16, 2023 |

The Race to Sustainability: Formula 1's Carbon Footprint and Net Zero Pledge

By Jennifer L

NASCAR CUP SERIES

On Earth Week, NASCAR commits to net zero operating emissions by 2035

By Staff Report

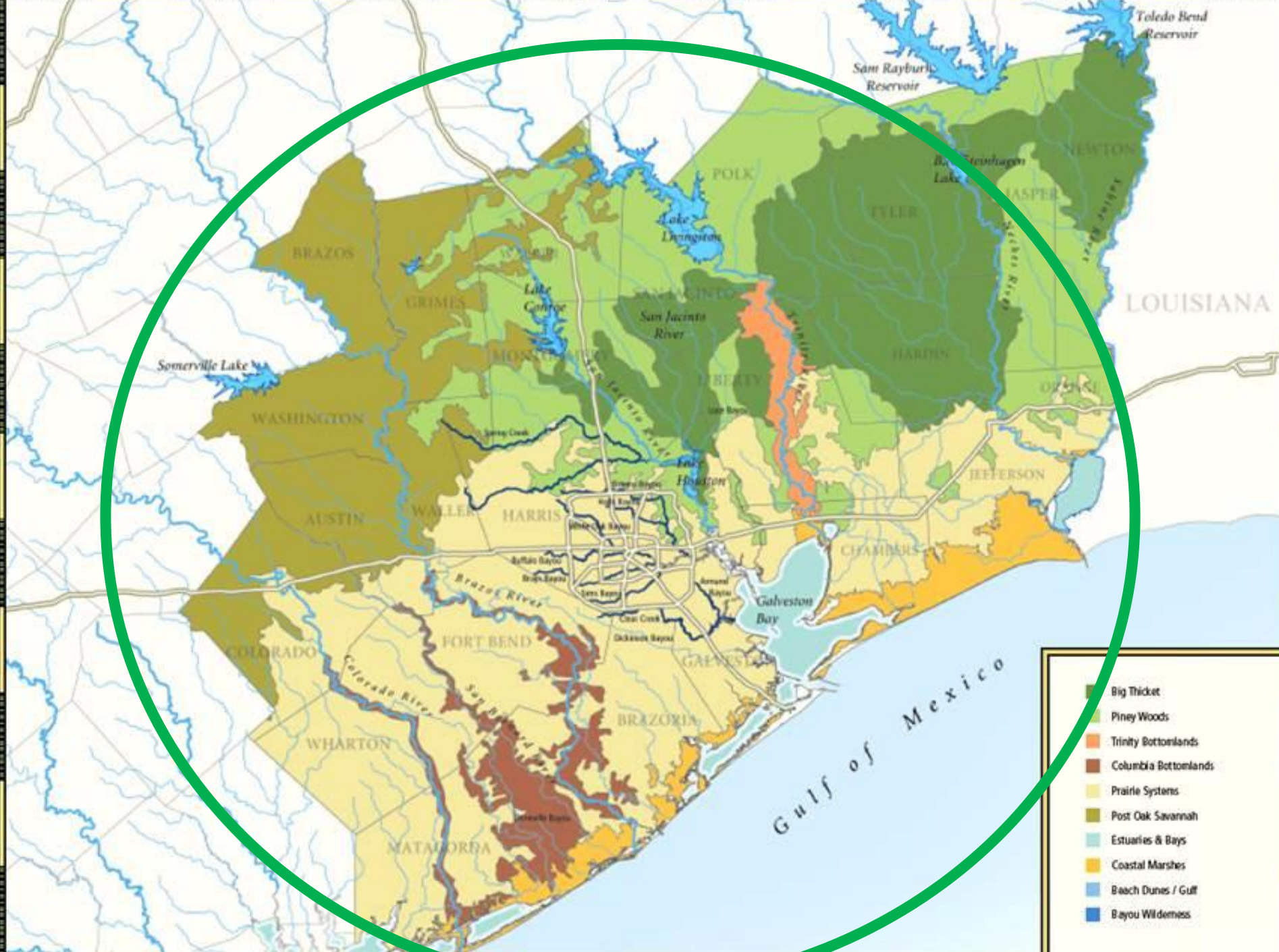
NASCAR.com



2026 FIFA World Cup X Houston

Houston will host seven FIFA World Cup Matches in 2026





Bringing Houston's Ecological Wealth to the World Cup

Having Zero Net Footprint Using Locally-Sourced, Nature-Based Carbon Credits

Insurance Subcommittee



Climate Change and Its Undeniable Impact on Insurance: How To Respond?

December 13, 2023

Insurers heavily exposed to climate change, global watchdog says

Reuters

December 6, 2023 8:34 AM CST · Updated 2 months ago

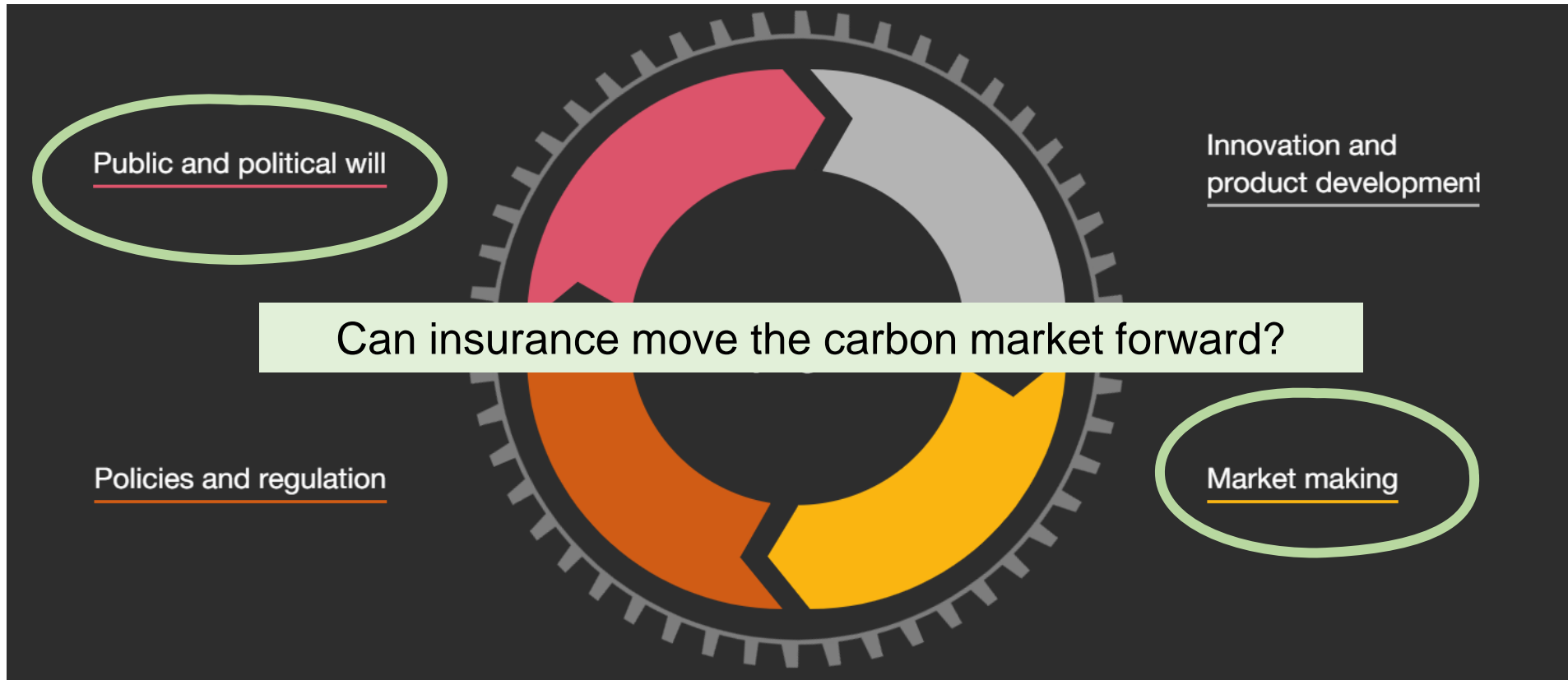


PWC's [2024 insurance trend assessment](#) looks towards the development of “new products and services that facilitate low carbon growth, including:

- 1) entering new markets like clean energy and climate tech,
- 2) providing coverage enhancements for green buildings, and
- 3) offering climate risk management/ emissions modeling services.



Insurance helps manage risk in new and mature markets



Progress and peril on the road to net zero, [PWC](#) (2022)



Short presentations from leaders in climate/carbon insurance

Kita

We Insure
Carbon



InnSure

HOWDEN

Oka™

The
Carbon Insurance
Company™

Willis Towers Watson
| | | | |



What can BCarbon contribute?

- Traditional underwriting vs. parametric coverage?
- Connecting industry experts with carbon market practitioners?
- Insurance solutions for BCarbon protocols?

Soil

Forest

Blue Carbon /
Living
Shoreline

Methane
Capture &
Reclamation

*Future
Protocols?*

In each case:

- What are we insuring?
- Who pays? How much would it cost?
- Is it required or optional?
- How reasonable are our requirements?

If interested in joining, please email
Sarah.Swackhamer@bcarbon.org



A flock of birds is flying across a vast green field under a dramatic sunset sky. The sun is low on the horizon, casting a warm glow over the scene. The birds are scattered across the sky, some in flight and some resting. The overall mood is peaceful and grateful.

Thank You