

# WRI Update on Markets for Natural Climate Solutions

**December 20, 2019**  
**Council of State Governments**  
**Michelle Manion, Sr. Economist**

Photo: SCS Global



WORLD  
RESOURCES  
INSTITUTE

# Today's Presentation

1. Why are we here? Importance of Land Sector in Climate System
2. Carbon Markets and Trends (*not exhaustive*)
  - International trends
  - Updates from key jurisdictions
3. Key Policy Issues and Prognosis

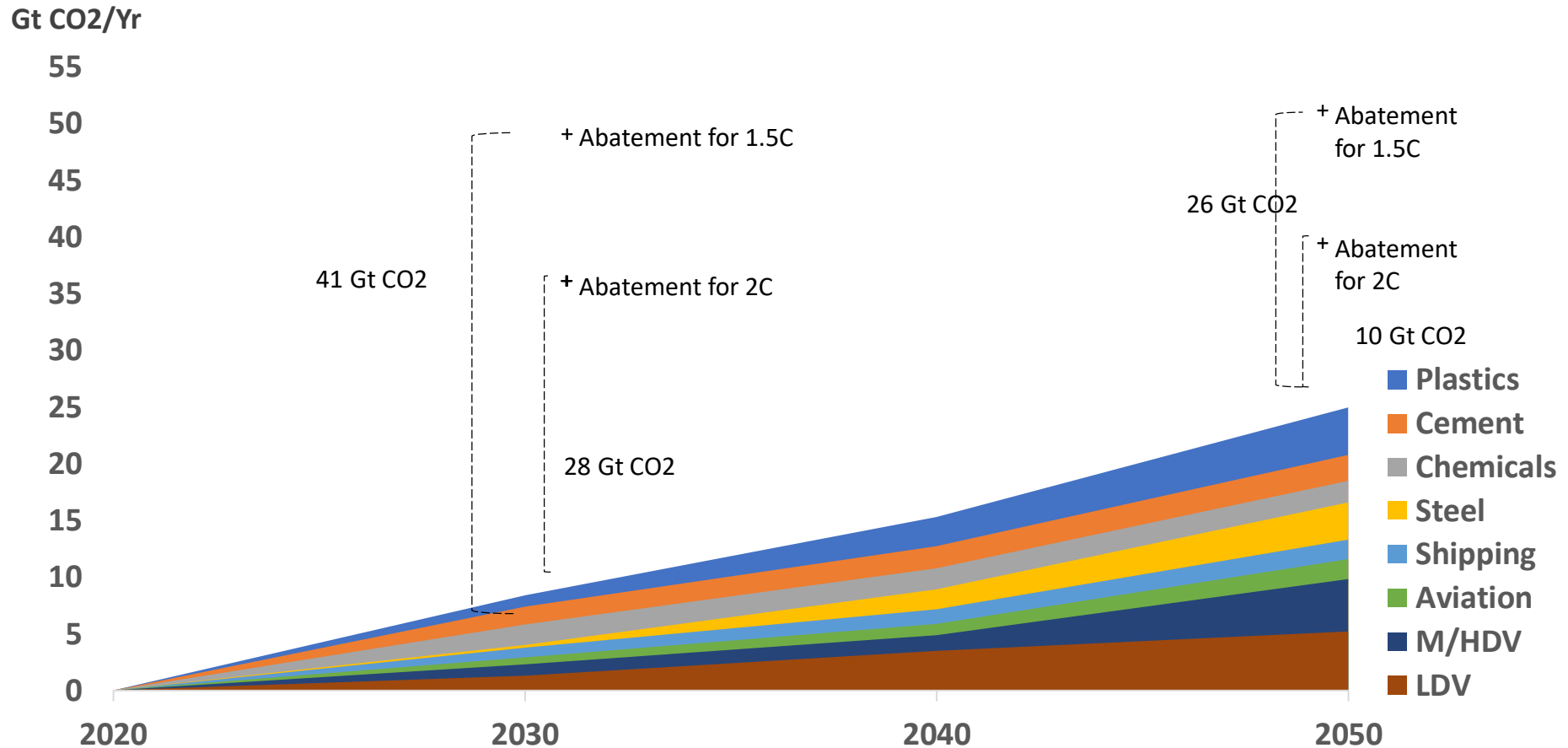
# Role of Terrestrial and Blue Carbon in Climate Stabilization

Photo: SCS Global



WORLD  
RESOURCES  
INSTITUTE

# Reality Check: Despite progress on clean electricity, even best estimates for GHG mitigation for 'hard-to-abate' energy sectors are well behind needed pace...



# Current investments in natural climate solutions are inadequate relative to the need...

Forests are capable of providing 23 percent of the cost-effective climate mitigation needed before 2030



23%

>>Adding contributions from **reducing agricultural emissions** and **restoring blue carbon** in coastal ecosystems would increase this to ~30%

Despite this potential, forests accounts for less than 3% of climate mitigation funding

3%

# Carbon Market Trends: International and Domestic

Photo: SCS Global



WORLD  
RESOURCES  
INSTITUTE

# Carbon Market Trends: International

- Failure to reach agreement on Article 6 of Paris Agreement at COP25
- Progress on standards/criteria for REDD+ projects
- Voluntary systems continue as primary marketplace
- Oil and Gas majors, aviation emerged as major market entrants on demand-side for natural climate solutions
- Finance still inadequate, but picking up

## Architecture for REDD+ Transactions (ART)

---

### Purpose:

- ART is a global voluntary initiative to develop a credible, independent program overseen by a Board and a Secretariat (hosted by Winrock International)
- Goals of ART are as follows:
  - Promote the environmental and social integrity and ambition of carbon emissions reductions from the forest and land use sector
  - Recognize forest countries that deliver high quality REDD+ emissions reductions.
- **TREES:** The REDD+ Environmental Excellency Standard to quantify emissions reductions from REDD+ activities at a jurisdictional and national scale <https://www.artredd.org/trees/>
- Comprehensive process to transparently register, verify and issue high quality, serialized credits that are fungible with those from other sectors.

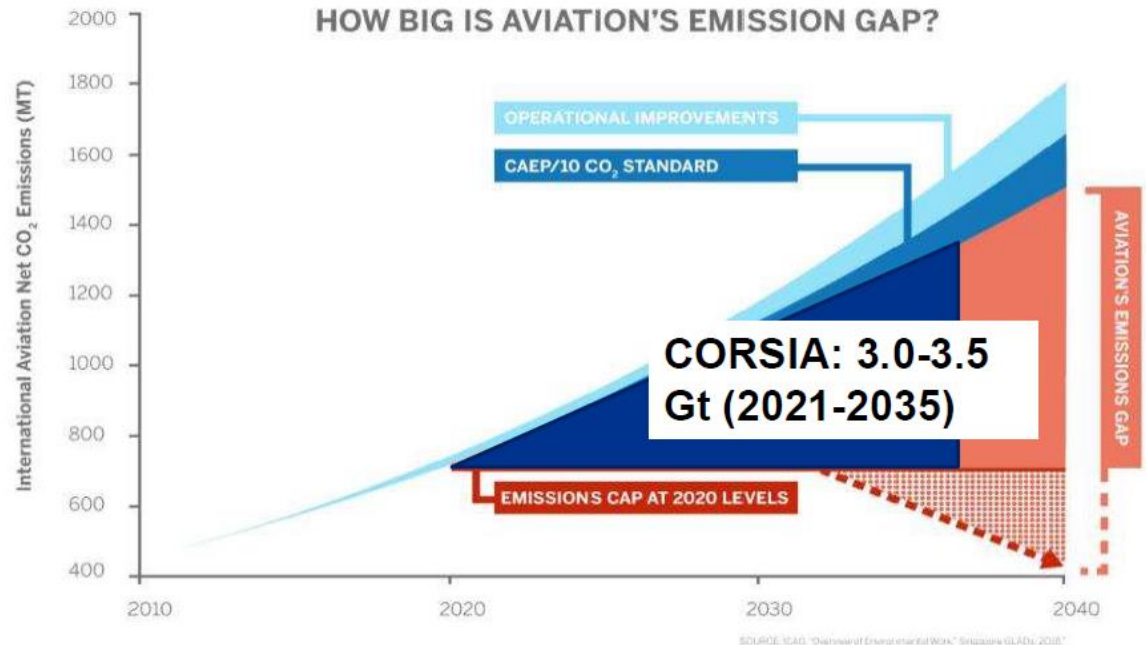


# Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

Likely that CORSIA will include credits from natural climate solutions:

- Q1 2020 announcement of decision on NCS programs that have applied
- New round of project opens in March 2020 – ART will apply

## International Civil Aviation Organization's (ICAO) market-based measure (CORSIA)



# O&G Majors Enter NCS Market

*“Shell boss says mass reforestation needed to limit temperature rises to 1.5C: Ben van Beurden says ‘another Brazil in terms of rainforest’ will help achieve UN target”  
(Guardian, 2019)*

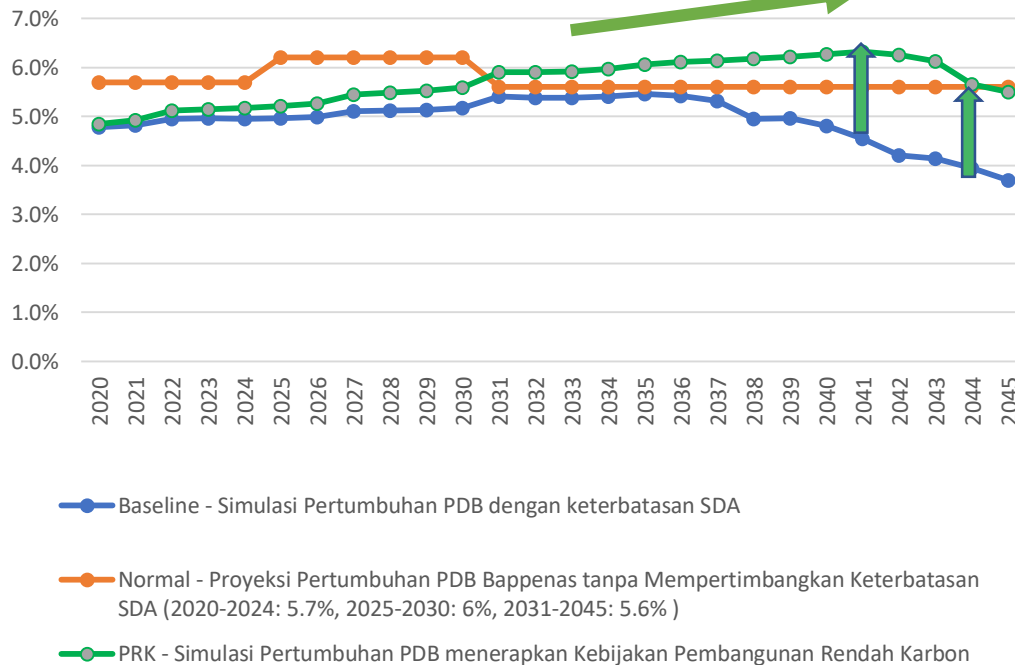
*“Equinor is ready to invest in tropical forest protection” (Equinor.com, Nov 2018)*

- Publicly traded O&G majors already making investments in NCS (est. value over \$1B)
  - Royal Dutch Shell - \$300M from 2019-2021 (Spain, Netherlands)
  - ENI (Ghana)
  - Repsol, Total, BP, Equinor, Enel, others actively engaged and/or starting to invest
  - **NCS Alliance** now a key forum for engagement by industry, NGOs, others on NCS policy and markets



# Indonesia: Low Carbon Development Policy Intervention to Encourage GDP Growth

Comparison Scenarios of GDP Growth  
(Normal, Baseline Natural Resources Limitations, LCD Policy-PRK)



## Policy Intervention:



Improve environmental quality



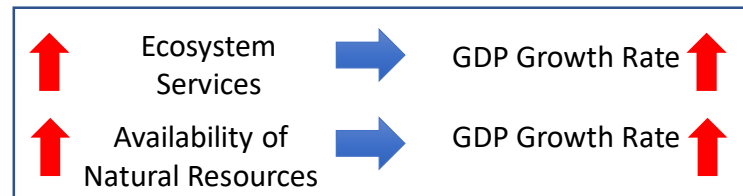
Improve agricultural productivity and efficiency of natural resources utilization



Increase the use of renewable energy and improve energy efficiency



Reforestation and reducing deforestation, including peat restoration



Note: Temporary simulation results and validation will be carried out

# Domestic Market Trends

- Discussions on federal programs continue despite current Admin. efforts to thwart climate action
  - ~\$40M for carbon removal included in FY2020 budget
  - Carbon Leadership Council discussions on federal carbon fee <https://www.clcouncil.org/our-plan/>
- States and regions continue to lead carbon policy and markets
  - **California:** Key training ground for use of offsets within mandatory GHG program and technical protocols (forests, rice cultivation, mine methane, ODSs)
    - US Forest projects (120MtCO<sub>2</sub>e) 84% of total offsets thus far
  - **RGGI:** Not a strong source of demand to date

# Key Issues and Prognosis

Photo: SCS Global



WORLD  
RESOURCES  
INSTITUTE

# Policy Issues Looming

- What does a high quality credit look like?
  - Country/state vs. project level (aka the nesting issue)
- What does a buyer company have to do (in terms of their own decarbonization) to get a “social license to offset”?
- What are good design features of markets that include NCS credits?
  - Limits on use of offsets: by quantity available and/or GHG performance, time period for application
- Article 6 prognosis for COP26 (??)



**Thank you!**

Additional Questions or Comments:

[Michelle.Manion@wri.org](mailto:Michelle.Manion@wri.org)

# Carbon Project Criteria

Concern	WRI Preferred Approach
<b>Leakage</b>	<p>Transition rapidly from project-based approaches to a jurisdictional scale, ultimately operating at the level of national net land use emissions inventories.</p> <p>Direct and indirect leakage should be estimated using best available economic/land-use modelling tools and credits discounted accordingly.</p>
<b>Permanence</b>	<p>Credit buffers or other instruments as insurance against impermanence.</p> <p>Long-term monitoring (e.g. 100 years) and any reversals must be replaced.</p>
<b>Additionality</b>	<p>The crediting baseline for any offsets must ensure additionality. E.g. it could be the lower of:</p> <ul style="list-style-type: none"> <li>a) historic average emission rates over a 10-year period with a margin of safety to account for uncertainty and variability;</li> <li>b) the emission level expected to result from domestic policies combined with any non-offset international assistance; and</li> <li>c) a land sector scenario consistent with achieving zero net emissions by 2050.</li> </ul>
<b>Precision of measurement</b>	<p>Take advantage of new monitoring technologies and use conservative approaches.</p>
<b>Uncertainty from above</b>	<p>A discounting approach is pursued.</p>

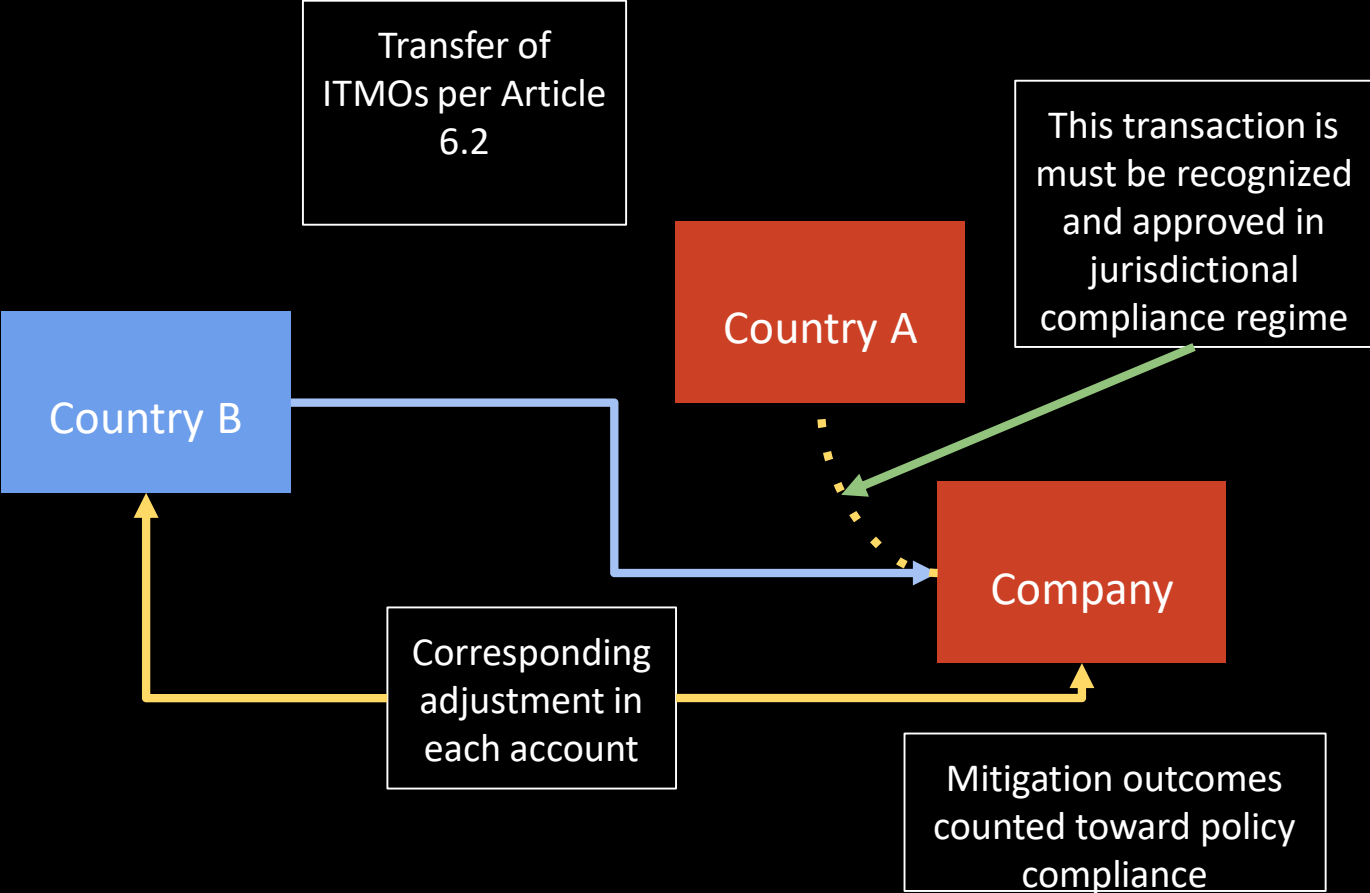


## Draft WRI Principles

1. To limit global warming to 1.5 °C, humanity must achieve net zero greenhouse gas emissions by mid-century and net negative emissions in the latter half of the century. This requires emissions from fossil fuel combustion and the land sector to be reduced to near zero and scaled-up removal of greenhouse gases through natural and technological means, as rapidly as possible.
2. WRI will assess offset proposals (for both mandatory and voluntary regimes) based on their consistency with achieving net zero emissions by 2050.
3. WRI supports dedicating a portion of the revenue from mandatory carbon pricing systems, along with other sources of public and private funds, for financing Reduced Emissions from Deforestation and Degradation and enhanced forest carbon stocks (REDD+).
4. WRI encourages companies to adopt Science Based Targets to reduce emissions from their operations and supply chains (which do not allow offsets), and to also invest in REDD+ to make a further contribution to combatting climate change.
5. Natural climate solutions must respect internationally recognized human rights and maintain or enhance the long-term social and economic well-being of workers and affected local communities
6. In seeking to achieve zero net emissions by the second half of this century, or earlier if feasible, companies should prioritize actions to avoid, minimize or rectify emissions according to the mitigation hierarchy.
7. Any use of “offsets” must enhance rather than dilute ambition towards limiting global warming to 1.5C. Any short-term use of offsets to enable investment in natural climate solutions should be a temporary bridging solution rather than a permanent financing mechanism.

# Transaction Guardrails

## Trading between Countries Under Article 6.2



# Transaction Guardrails

## Trading between Countries Under Article 6

This transaction requires approval by both receiving jurisdiction and host jurisdiction, under Article 6. (Unapproved transfers would not affect jurisdictional accounts -- creating potential for double claiming.)

