



# Linkage Process & Acre, Brazil

*April 28, 2016*

# Workshop Materials & Submitting Comments

- ❑ Presentation posted at:  
<http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm>
- ❑ Written comments on this workshop may be submitted until 5pm (Pacific Time) on Friday, May 13, 2016 at:  
<http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm>
- ❑ During this workshop, email questions to:  
[auditorium@calepa.ca.gov](mailto:auditorium@calepa.ca.gov)

# Workshop Agenda

- ❑ Background on Acre, Brazil
- ❑ Acre's Jurisdictional Program
- ❑ Recap of Technical Topics
  - ❑ Program Scope
  - ❑ Reference Level & Crediting Baseline
  - ❑ Monitoring, Reporting, and Verification Requirements
  - ❑ Reversal Risk and Leakage Risk
- ❑ Next presentation: Discussion on Social and Environmental Safeguard Requirements
- ❑ Opportunity for EJAC Member Comments and Discussion on Topics Presented throughout the Day
- ❑ Adjourn

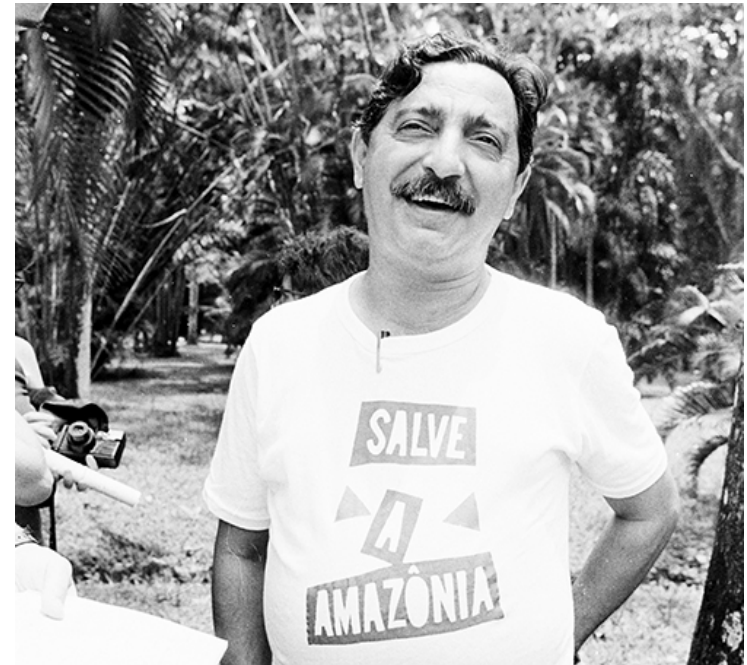
# Background on Acre

- ❑ Total land area is 164,000 km<sup>2</sup>
  - ❑ ~ 40% size of California
- ❑ 87% of state covered in tropical rainforest
  - ❑ ~100% 60 years ago
- ❑ High levels of biodiversity in flora and fauna
- ❑ 97% of state-wide GHG emissions are from deforestation; ~14 Million tCO<sub>2</sub>e in 2014
  - ❑ Current deforestation reference level ~500km<sup>2</sup> (average level from 2001-2010); ~22 Million tCO<sub>2</sub>e



# Background: History of Forest and Community Protection

- ❑ 1960s Brazil policy: incentivize intensive development of the Amazon
- ❑ Like USA's homestead acts, if you cleared forest and turned it into agricultural land for 1 year, you became legal owner
- ❑ 1980s rubber tapper movement in Acre: Wait! We live here and we get our livelihoods from standing forests
- ❑ Demand: forest reserves for rubber tappers, protections for extractivists, rural producers, and indigenous peoples' rights
- ❑ 1988: Rubber tapper movement leader Chico Mendes assassinated by ranchers





# Background on Acre

- ❑ Assassination galvanizes international attention: Chico Mendes Extractive Reserve established in 1990
- ❑ Since then 67 extractive reserves established all around Brazil: 14 million hectares
- ❑ Grassroots environmental justice movement becomes dominant political force in Acre
- ❑ Marina Silva, former rubber tapper, elected as Acre's Senator in 1994
- ❑ Appointed as National Environmental Minister in 2003



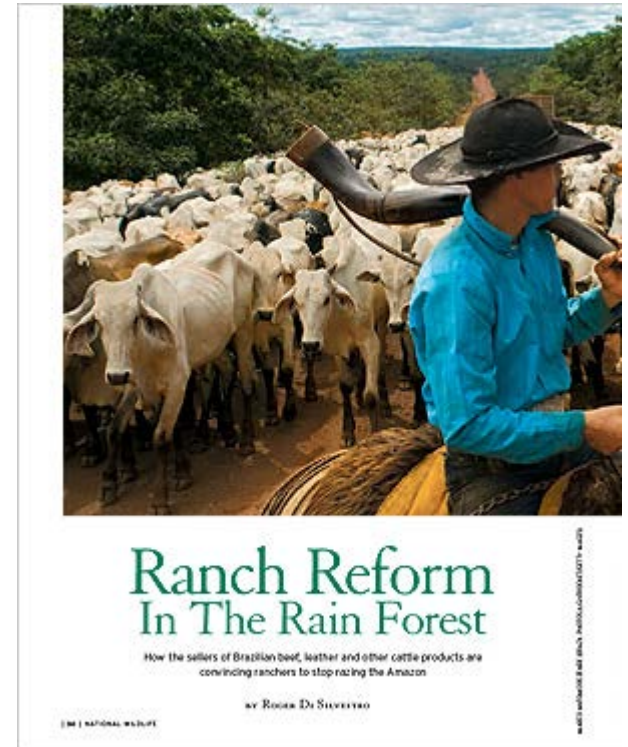
# Background on Acre

- ❑ 1992: Jorge Viana, forester and Chico Mendes associate, is elected Mayor of Rio Branco
- ❑ 1998: Jorge Viana elected Governor; implements "Government of the Forest"
- ❑ Goals:
  - ❑ Sustainable development based on local culture and ecological history
  - ❑ Identity based on social justice
  - ❑ Transparency & public participation
- ❑ Forest Government continues to dominate Acre politics



# Jurisdictional Program in Acre

- ❑ 1999: Passage of Chico Mendes Law establishes Payments for Ecosystem Services to rubber tappers
- ❑ 2006: Phase I of REDD-type program where credits created for emissions below a reference level
  - ❑ ~75 million tons of CO<sub>2</sub>e sequestered
  - ❑ Subprograms enacted to address drivers of deforestation





# Jurisdictional Program in Acre

- ❑ 2010: Passage of System of Incentives for Environmental Services (SISA) law
  - ❑ Draft law in 2009 available through website
  - ❑ 15 public consultation meetings
    - ❑ Indigenous peoples 18%
    - ❑ Rural producers and extractive workers 29%
    - ❑ Technicians from civil society organizations 50%
    - ❑ Representatives from grassroots groups 11%
  - ❑ 300+ recommendations from stakeholders
  - ❑ Public consultation resulted in important change: instead of focusing only on high-risk areas, SISA would focus on whole state

# Jurisdictional Program in Acre

- ❑ ISA-Carbono Multi-Pronged Approach
  - ❑ Environmental Compliance
    - ❑ Ex: Forest-dwelling communities had insecure land rights, thus inability to enforce local rules on forestlands. Acre's Gov't began to register all smallholder properties so residents have clear tenure rights
  - ❑ Improved Monitoring
    - ❑ Ex: Establishment of CEVA – Validation and Monitoring Commission – made up of civil society members and government employees
- ❑ Promotion of sustainable activities in agriculture and forestry sectors
  - ❑ Ex: Promotion of non-timber forest products like brazil nuts and rubber, improved pasture management, development of value-added products through aquaculture and fruit trees

# Acre-California Engagement

- ❑ 2008-2009: California helps found the Governors' Climate and Forests Task Force (GCF)
  - ❑ Acre joined in 2009 and hosted GCF annual meeting in 2014
- ❑ 2010: California signs MOU with Acre and Chiapas to establish REDD Offset Working Group (ROW)
  - ❑ Goal of ROW: develop recommendations for a state-to-state sector-based offset program and promote cooperation between subnational jurisdictions
- ❑ 2014: Jointly-signed Rio Branco Declaration by majority of GCF members setting forth the goal of achieving 80% reduction of deforestation by 2020, contingent on financing
  - ❑ California signed in early 2015
- ❑ California and Acre representatives continue to discuss details of respective programs and how we might be able to work together

# Recap of Technical Considerations and Overview of Acre's Approach

# Scope of the Program

- ❑ What is being measured?
  - ❑ Which forest carbon emissions would be counted?
  - ❑ How would carbon uptake from forest growth be accounted for?
- ❑ ROW Recommendation:
  - ❑ Only accept credits from deforestation/degradation emissions reductions, rather than carbon stock enhancement. Deforestation and degradation are simpler to measure and verify, and result in more conservative (e.g., less) crediting
  - ❑ If carbon enhancement methodology proves itself, then potentially include it later
- ❑ Acre's Scope: crediting only for reduced emissions from deforestation
  - ❑ May credit for reduced emissions from degradation in the future

# Reference Level

- ❑ **Reference Level** means “the quantity of GHG emission equivalents that have occurred during the normal course of business or activities during a designated period of time within the boundaries of a defined sector and a defined jurisdiction.”
- ❑ Acre’s Reference Level based on 10-year historical averages
  - ❑ Phase I RL (2006-2010) based on 1996-2005 data calculated at 602km<sup>2</sup>, or ~27 million metric tons of emissions from deforestation
  - ❑ Phase II RL (2011-2020) updated based on 2001-2010 data: 496km<sup>2</sup>, or ~22 million metric tons of emissions



# Crediting Baseline

- ❑ **Cap-and-Trade Regulation defines Crediting Baseline:**  
“...the reduction of absolute GHG emissions below the business-as-usual scenario or reference level across a jurisdiction’s entire sector in a sector based crediting program after the imposition of greenhouse gas emission reduction requirements or incentives.”
- ❑ Acre discounts crediting by 10% per year
  - ❑ Because California is not proposing to recognize early-action type credits for sector-based programs, emissions reductions from 2006 through today are “own-effort”
  - ❑ 10% discount goes into reserve account for reversals/leakage

# Monitoring, Reporting, & Verification (MRV)

- ❑ **Monitoring:** data collection
- ❑ **Reporting:** publication of data
- ❑ **Verification:** independent assessment of data
  
- ❑ Acre Monitoring: PRODES data, produced by Brazilian National Space Agency largely from Landsat data
  - ❑ Further refined by UCEGEO, Central Geoprocessing and Remote Sensing Unit
- ❑ Requires 3<sup>rd</sup> party verification

# Reversal Risk Mitigation

- ❑ Jurisdictional Approach
  - ❑ Larger scale reduces risk
- ❑ Buffer Pool
  - ❑ Technical reserve in case emissions rise above reference level
- ❑ Future Year Discounting
  - ❑ Reversals discounted from future year crediting

# Leakage Risk Mitigation

- ❑ Acre's approach: address deforestation drivers; 83% of deforestation due to new cattle pastures. Proceeds from sector-based offsets would ensure continued, further reductions
- ❑ Ecological-Economic Zoning program - clearly delineate land use rights between indigenous communities, other forest-dwelling communities, protected areas, rural agricultural properties, etc.
  - ❑ Offers legal organization and guides policies in different areas
- ❑ Increased efficiency of cattle production - introduction of nitrogen-fixing legumes and grasses, paddock rotation techniques, etc.
  - ❑ Cattle production increasing, while deforestation decreasing, indicating success. Results in lowered potential for increasing production in neighboring states
- ❑ Similar techniques for other drivers, i.e., sustainable agricultural practices for grain cultivation, improved sustainable supply chains (rubber factory), promoting alternative livelihoods (aquaculture)

# Linkage Process

# Linkage Process Outline

AB 32 (section 38564): state board shall facilitate development of integrated and cost-effective international GHG reduction programs

- ❑ Step 1: Public Workshops and Technical Meetings
- ❑ Step 2: Regulatory text development and Development of Initial Statement of Reasons (staff report for regulation)
- ❑ Step 3: Notice of Regulatory Amendments (public comment period of at least 45-days)
- ❑ Step 4: First Board Hearing
- ❑ Step 5: Request for Governor to make specific findings on linkage
- ❑ Step 6: 15-day changes if needed
- ❑ Step 7: Governor provides linkage findings
- ❑ Step 8: Final Board Vote
- ❑ Step 9: Final Statement of Reasons and Submittal to Office of Administrative Law



# California Public Workshops

- ❑ October 28
  - ❑ Presented staff white paper summarizing California's engagement on tropical forestry to date and ROW Recommendations
  - ❑ Presented other jurisdictions' work on sector-based offsets
  - ❑ Presented on MRV science and technology
  
- ❑ March 22
  - ❑ Crediting Pathway; Program Scope; Reference Levels and Crediting Baselines; MRV
  
- ❑ April 5
  - ❑ Reversals and Leakage Risk; Offset Tracking Registry; Verification
  
- ❑ April 28
  - ❑ Linkage and Social & Environmental Safeguards

# Regulatory Text Development

- ❑ Draft Regulatory Text and Initial Statement of Reasons (ISOR)
  - ❑ Staff explains why regulatory amendments proposed
- ❑ Notice of Proposed Rulemaking
  - ❑ Public release of draft regulation order and ISOR in July 2016 for at least 45-day public comment period
  - ❑ Comments responded to in Final Statement of Reasons following Board adoption
- ❑ Board Hearing
  - ❑ First hearing to consider staff proposal – September 2016
  - ❑ Potential for 15-day change packages
  - ❑ Second hearing to vote on adoption – Spring 2017

# SB 1018

- ❑ As described in the first presentation of the day, Senate Bill 1018 requires ARB to notify Governor regarding possible linkage
- ❑ Governor must make four findings for linkage to go through:
  - 1) Partner Jurisdiction has program requirements which are equivalent to or stricter than California's
  - 2) California has continued ability to enforce its laws and regulation
  - 3) Partner Jurisdiction has ability to enforce its laws and regulation
  - 4) Linkage does not impose any significant liability on California

# Next Steps

- ❑ Continue to assess comments submitted from informal public workshops
- ❑ Consider developing staff proposal for draft regulatory text as part of overall Cap-and-Trade 2016 amendment process
  - ❑ July 2016 Notice of Proposed Rulemaking
  - ❑ September 2016 – First Board Hearing to consider staff proposal
  - ❑ Spring 2017 – Final Board Vote
  - ❑ October 2017 – Regulation amendments effective
  - ❑ January 2018 – Sector-based credits, if a linkage is included in Board vote, eligible for use in program

Questions?