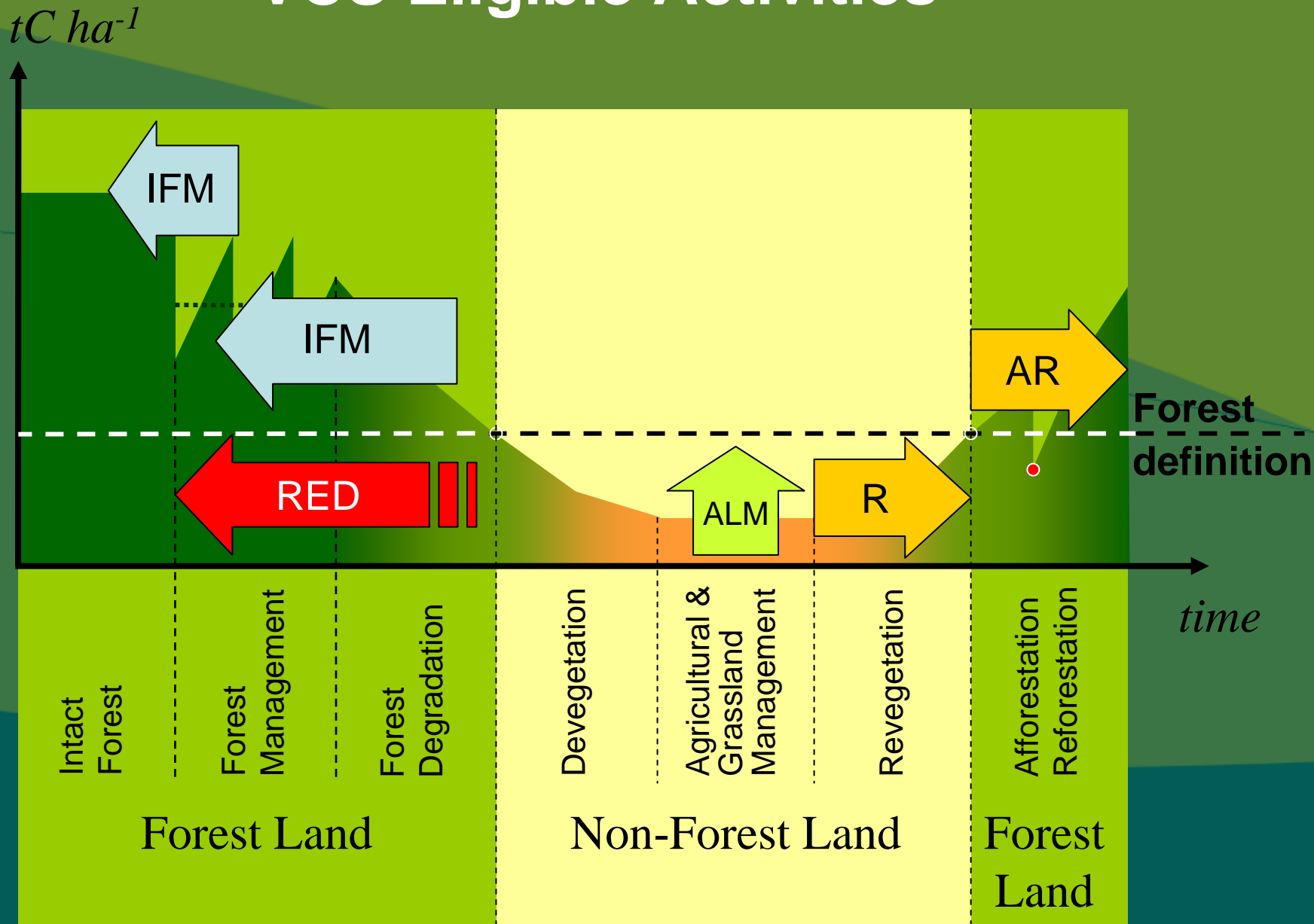


# Voluntary Carbon Standard

- Global benchmark standard for voluntary carbon projects
- Developed by The Climate Group, the International Emissions Trading Association (IETA), the World Business Council for Sustainable Development (WBCSD) and a range of business, government and non-government organizations
- Designed to be as robust as Kyoto Protocol's Clean Development Mechanism (CDM), while attempting to reduce costs and bottlenecks
- Covers new sectors (e.g., IFM, ALM, REDD) and creates permanent, fungible credits (VCUs)

# VCS Eligible Activities



# Key Non-Permanence Questions

## How Long is "Permanent"?

- Temporary credits (TCERs, LCERs – but market dislike) [CDM]
- 100 years (or less)
- No fixed end, i.e., in perpetuity [VCS]

## Who is Liable?

- Buyer (tradability barriers) [CDM]
- Seller (best able to mitigate risks, but hard to make liable)
- No one – system compensates for potential and actual losses [VCS]

## What Compensation Required?

- Carbon credits from same or similar forestry projects [VCS]
- Carbon credits from non-forestry projects [CDM]
- Financial

## How Track Reversals Over Time?

- Mandatory re-verification (every 5 yrs?) [CDM]
- Optional re-verification w/ incentives to re-verify [VCS]
- Self-reporting of stock changes w/ spot checks / sampling

## How Manage Risk?

- 3<sup>rd</sup> party insurance (need v.big asset pool + moral hazard issues)
- Individual project set aside (buffer) [CCX]
- Aggregated buffer pool from small number of projects
- Centrally managed buffer pool [VCS]

# Addressing Permanence / VCS Buffer Approach

- Project risk assessment to determine buffer withholding percentage, placed in shared VCS buffer pool
- Re-verification optional, but incentivized...
  - 10% of project's buffer released every 5 yrs at re-verification (as project demonstrates longevity and risk mitigation)
- Buffer (insurance) approach →
  - no buyer or seller liability
  - creates permanent, fungible credits (VCUs)
- Efficient risk mitigation mechanism:
  - only 3%-10% reduction in Total Discounted Carbon Revenues for av. project (assuming 20% buffer, 30-70 yr lifetime)
- 20-year minimum project life (max. 100-year crediting period)
- Periodic “truing-up” ensures total portfolio carbon losses over time are covered by buffer pool
  - adjust buffer values and/or risk criteria as needed
- California (CCAR ) forestry projects can participate in VCS buffer to generate permanent credits