New Zealand's views on LULUCF in a post 2012 climate change agreement

Hayden Montgomery
New Zealand Ministry of Agriculture and Forestry
AWG KP Accra, Ghana
August 2008

Outline of presentation

- Rules before commitments
  - Need to quantify implications of alternatives
  - Time needed, specificity needed
- Improving the rules for LULUCF
  - Considerations and principles
- Elements of packages
  - Forest Management - age class legacy effect
  - A/R Debit rule for Article 3.3
  - Flexible land use for planted production forests
  - Emissions to Atmosphere Approach for harvesting
  - Voluntary Article 3.4 Activities

Improving the rules for LULUCF

- To optimise the contribution forests and land use activities can make to addressing climate change
- Need to learn from experience in implementing rules in CP1
- Reducing complexity and implementation problems
  - for Parties with significant forest resources and where LULUCF sector is large proportion of total emissions the fiscal costs of moving away from the international rules in domestic policy can be significant
- Increase flexibility for production lands
  - Benefits – adaptation, food production, sustainable economic development
  - For many countries with economies dependant on land-based sectors, flexibility in the use of production lands is essential to their economic welfare
- Increase investor confidence

Considerations and principles

- Environmental integrity
- Rules before commitments
- Economic efficiency
- Materiality
- Responding to national circumstances
- Credibility and acceptability
- Maintaining confidence within the investment community
- Flexibility in allocation of production resources

Key elements – some specificity

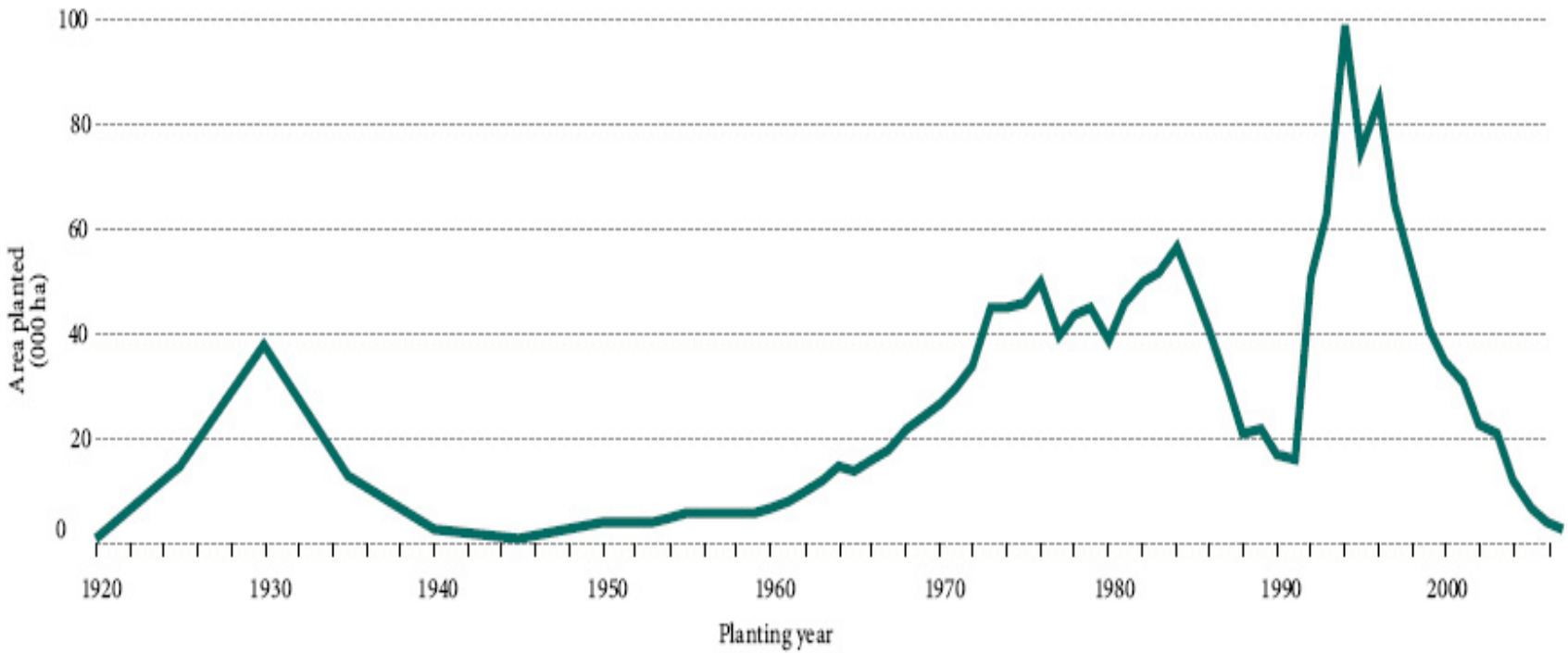
- Forest Management – the age class legacy effect
- Flexibility for planted production forests established before 1990
- “Emissions to Atmosphere Approach” to address emissions from harvesting
- A/R Debit-Credit Rule

The age class legacy effect in New Zealand forests

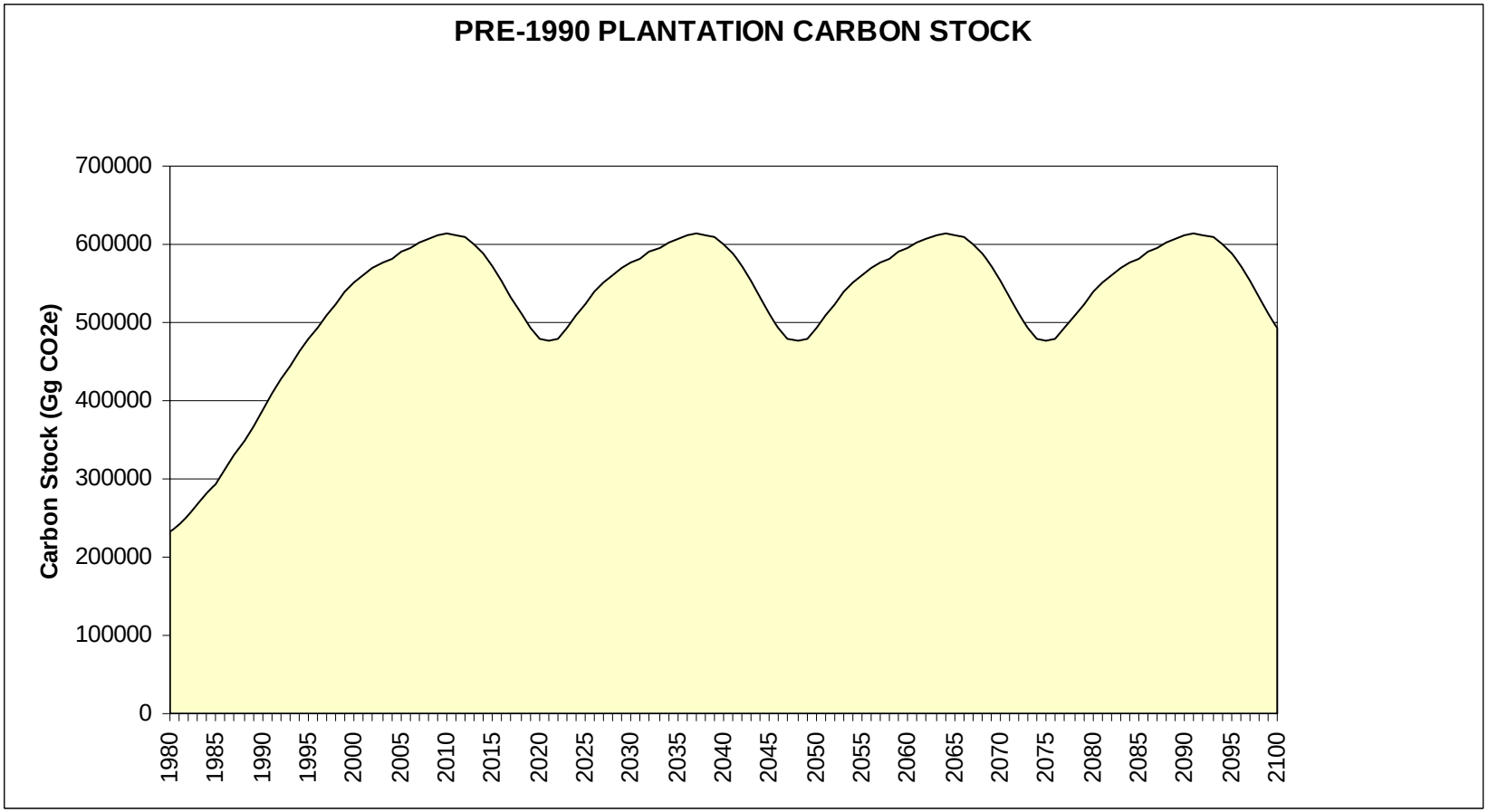
- Context:
  - In New Zealand major planting period 1930s and leading up to 1990
  - As a result we have a harvest and re-growth “saw tooth”

- Implications on accounting:
  - Major accounting liabilities dependent on interaction of this saw tooth with Commitment Period start and end
  - This occurs under both Gross-Net and Net-Net accounting approaches for Forest Management

Planting of new exotic forest in New Zealand



Forest Management – The New Zealand context



Age class legacy effect and Gross-Net Forest Management

- The forest estate was still expanding up until 1990 with a steady cycle becoming apparent after 1990.
- The pre-1990 plantation forest estate is expected to become a net source from around 2011 due to its age class profile. This is all due to BAU harvesting activity.
- For the period 2013-2020 accounting on an uncapped gross-net basis NZ's 'emissions' from pre-1990 planted forests would be 124Mt.
- This compares to NZ's 1990 emissions of 62Mt from all sectors.

Age class legacy effect and Net-Net Forest Management – 1990 base year

- As a result of New Zealand's age class effect, net-net accounting for forest management presents major problems.
- New Zealand forests were a net sink of 20Mt in 1990 as compared with total emissions in 1990 of 62Mt.
- Under net-net accounting New Zealand's liabilities for pre-1990 forest management would be in the order of 257Mt over the period 2013-2020 .
- However, no long term change in carbon stocks – business as usual planted production forest harvesting.

Forest Management

- Net-Net 1990 base year for Forest Management highly problematic.
- Same problems apply to “Land-based approach based on reporting”.
- Net-Net Forward Looking Baseline may resolve some key problems but many technical challenges.
- At this stage New Zealand prefers a Gross-Net approach.

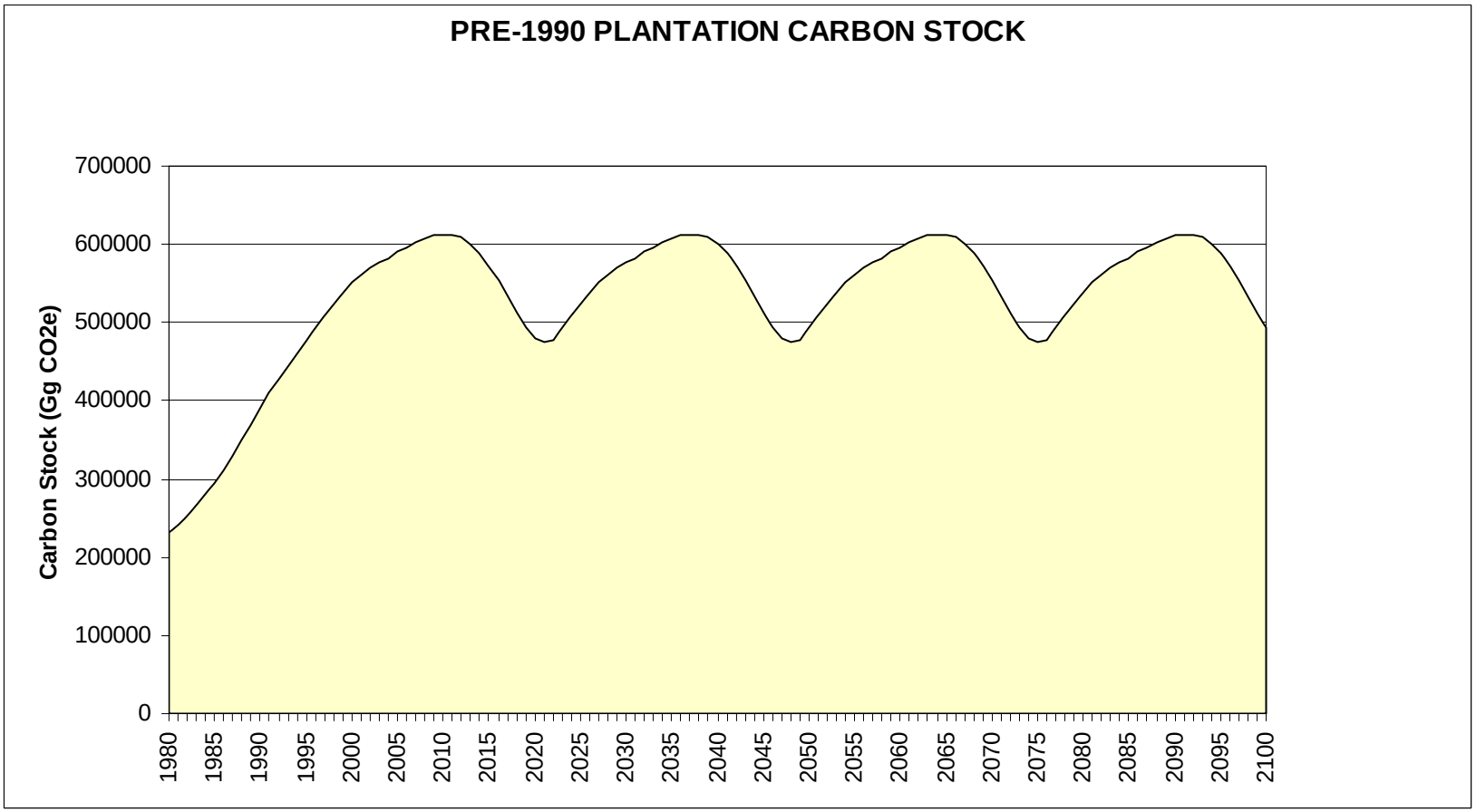
Land use flexibility for planted production forests

- For land based economies flexibility for land use is essential for economic development

- As climate changes into the future, countries will need flexibility to move production to best suited location:
  - Erosion control co-benefits
  - Water availability limitations

- Current Article 3.3 rules unnecessarily restrict dynamic land use in planted production lands
  - Cost implications of these rules are too significant to be addressed domestically

Flexibility proposal in context - business as usual carbon stocks in New Zealand



Land use flexibility for planted production forests

- Proposal applies to planted production forests only
- Must maintain at least equivalent carbon stocks compared to business as usual activity – no long term reduction in carbon stocks
- Allow a planted production forest that was established prior to 1990 to be harvested and an equivalent forest to be re-established in another area of land

Addressing emissions from harvesting activities under Article 3.3 and 3.4

- Emissions from harvesting activities are currently assumed to occur when the carbon leaves the area of land on which it was harvested.
- This assumption fails to recognise the reality of when carbon stored in trees is returned to the atmosphere.
- It poses a significant and unnecessary short term cost.
- We propose the Emissions to Atmosphere Approach as a simple and transparent solution.

Emissions to Atmosphere Approach

- All carbon removed from the forest area is accounted for when the emissions occur
- Emissions are accounted for by the producing country
- More accurately reflects what the atmosphere sees and improves incentive to produce longer lived wood products
- Similar to the S*imple Decay Approach* for HWP
- Based on existing LULUCF reporting guidelines – existing LULUCF carbon pools
- Simple, transparent, environmental integrity
- Deals only with emissions from forests that fall within the Kyoto accounting system
- Transition from CP1 simple because emissions from carbon removed from areas that were harvested in CP1 will have already been accounted for by producing country via instant oxidation.
- Could be applied to Articles 3.3, 3.4, 6 and 12

A/R Debit-Credit Rule

- Carbon accumulated between 1990 and 2008 in post-1989 forests is not credited within the 2008-2012 accounting period, or subsequent periods.

- Same rationale for its agreement in the first commitment period continues to apply in the future as forests planted between 1990 and 2008 are yet to be harvested.

- Disturbances to these forests, through harvesting or natural events like fire or pests could result in debits being greater than credits accounted for on that unit of land.

Conclusions

- Rules should be agreed before commitments
- Specificity of elements needed as soon as possible
- Forest Management is key issue:
  - For NZ age class legacy effect needs to be addressed
- A/R Debit rule should continue for Article 3.3
- Flexible land use for planted production forests
- Emissions to Atmosphere Approach for harvesting
- Maintain voluntary Article 3.4 Activities