Climate Change: Financing Global Forests

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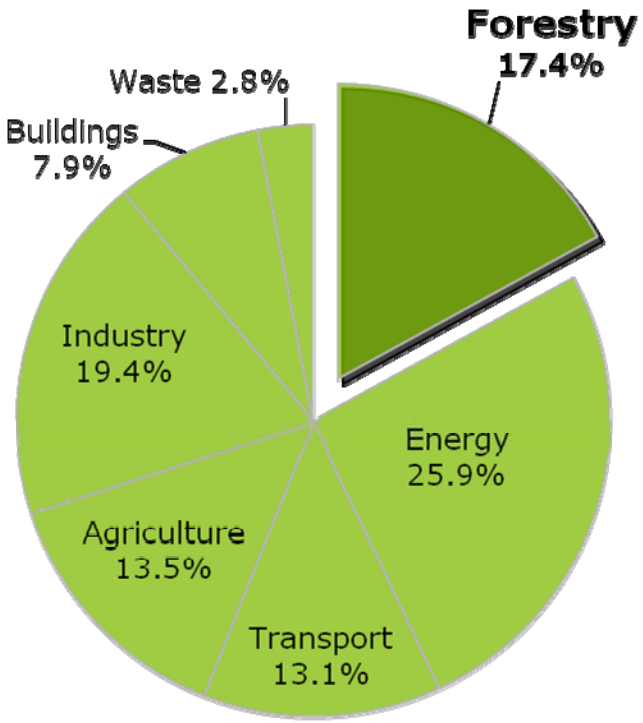
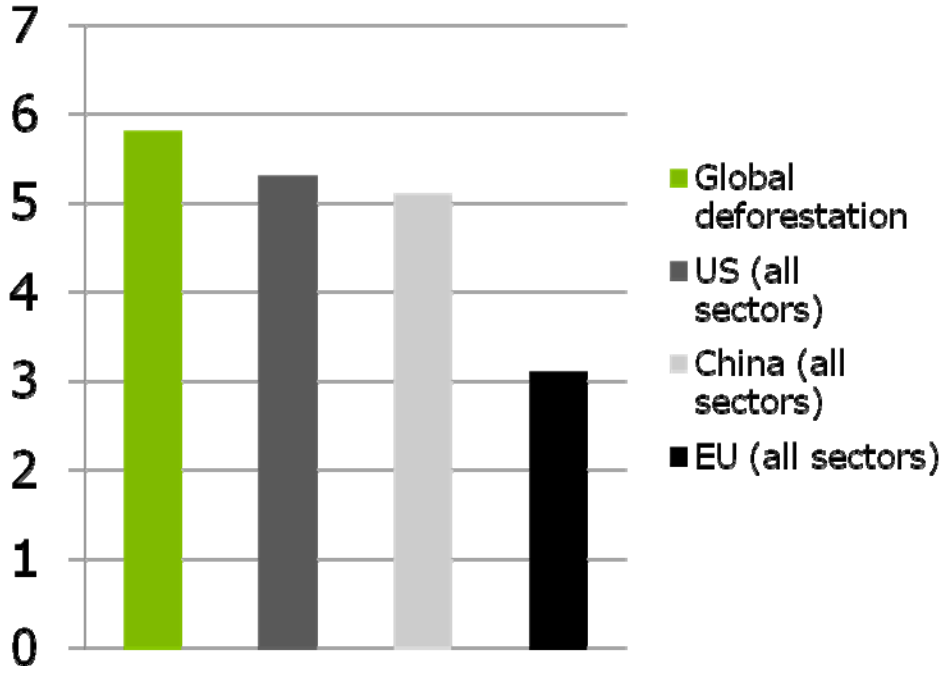
ELIASCH REVIEW

Emissions from forests are significant...

Global GHG emissions by sector



Annual CO_2 emissions ($GtCO_2$)



Sources: IPCC Fourth Assessment Report (2007), IPCC GHG inventory (2007) and IEA World Energy Outlook (2007)

The vision: what needs to be done

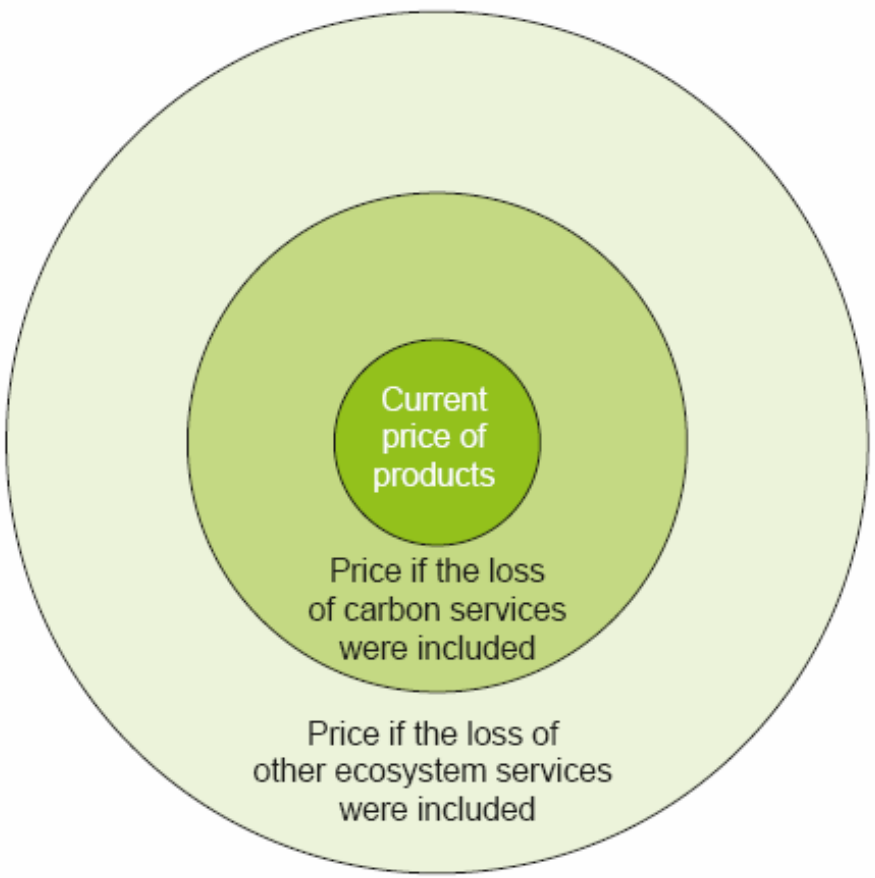
A step change in how land is used and commodities produced

Forests more valuable standing than cut

- More efficient and sustainable agricultural production
- Sustainable plantations and forest management
- Infrastructure expansion properly managed
- Alternative employment opportunities
- Protected areas with full participation of communities
- Payments for ecosystem services
- Sustainable biofuels

Some key policy challenges need to be addressed in realising the vision...

Price of products from deforested land



- The social and environmental costs of deforestation are not reflected in the price of timber and agricultural products (i.e. **externalities**)
- **Subsidies** and other policies in producer nations further incentivise deforestation
- **Unsustainable purchasing practices** in consumer countries provide yet more incentive to deforest

Delivering the vision

How do we deliver this?

Carbon finance

Policy incentives in forest nations

Consumer awareness & regulation

A step change in how land is used and commodities produced

Forests more valuable standing than cut

The benefits

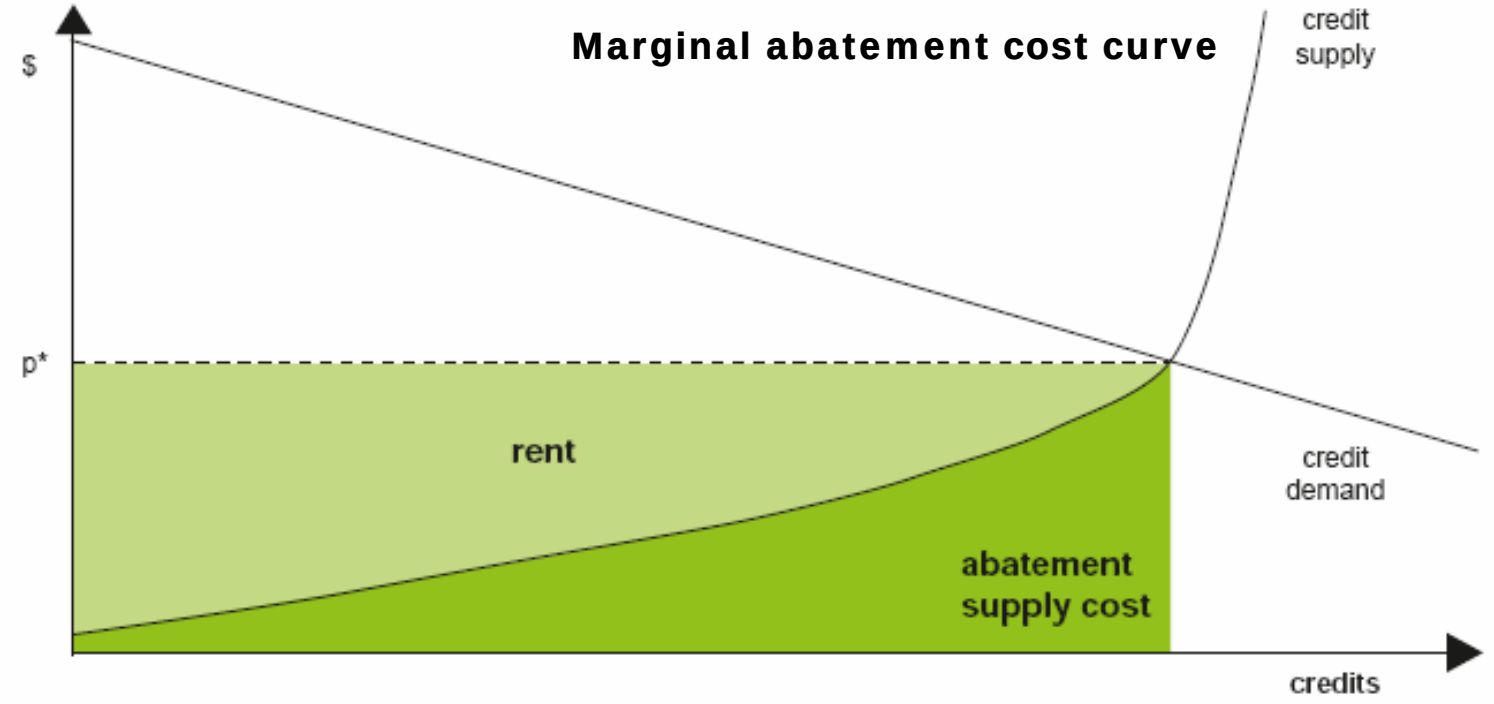
Substantial emissions reductions

Lower costs of tackling climate change

Poverty reduction

Protection of biodiversity & water systems

How much could it cost?



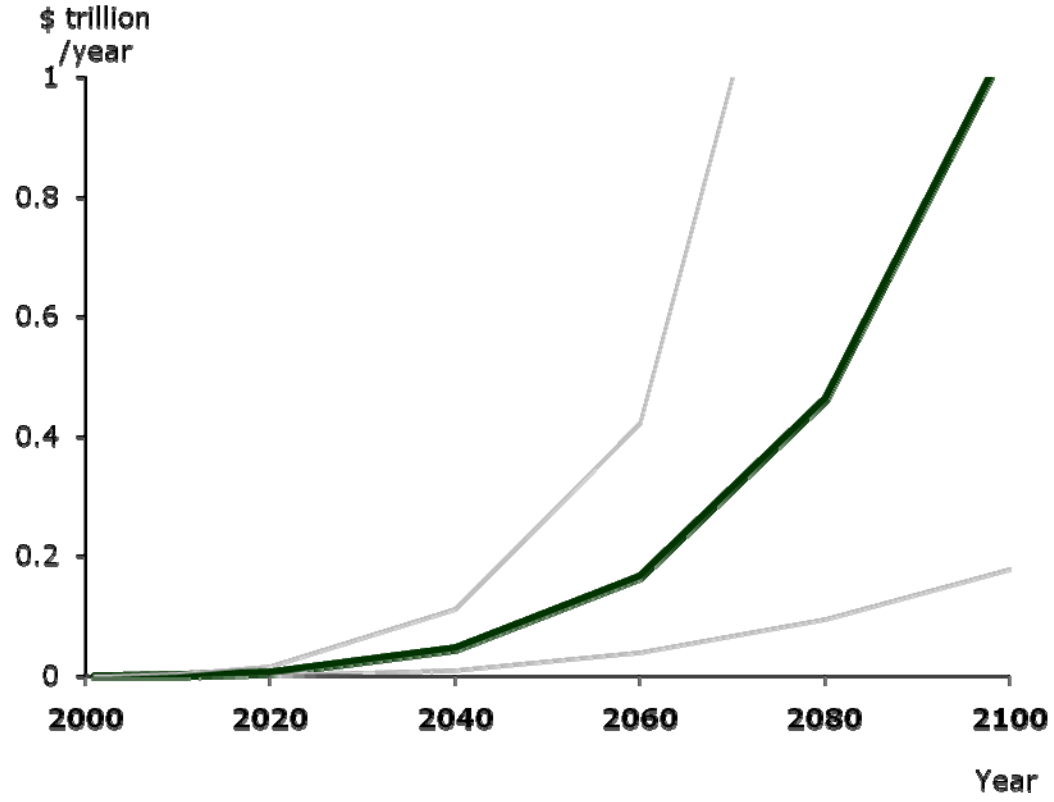
- An update of the 'bottom-up' *opportunity cost* estimate for the Stern Review gives around $7 billion per year for halving global deforestation (no rent)

- On the basis of global land-use model results, the Eliasch Review estimates the *cost of purchasing* forest credits on the open credit market sufficient to halve deforestation to 2030 at $17-33 billion per year (includes full rent)

Sources: Grieg-Gran (2008); Sathaye et al (2008); Gusti et al (2008); and Kindermann et al (2008)

The benefits of taking action outweigh the costs...

Effects of deforestation on climate change could lead to additional global damages of $1 trillion a year by 2100



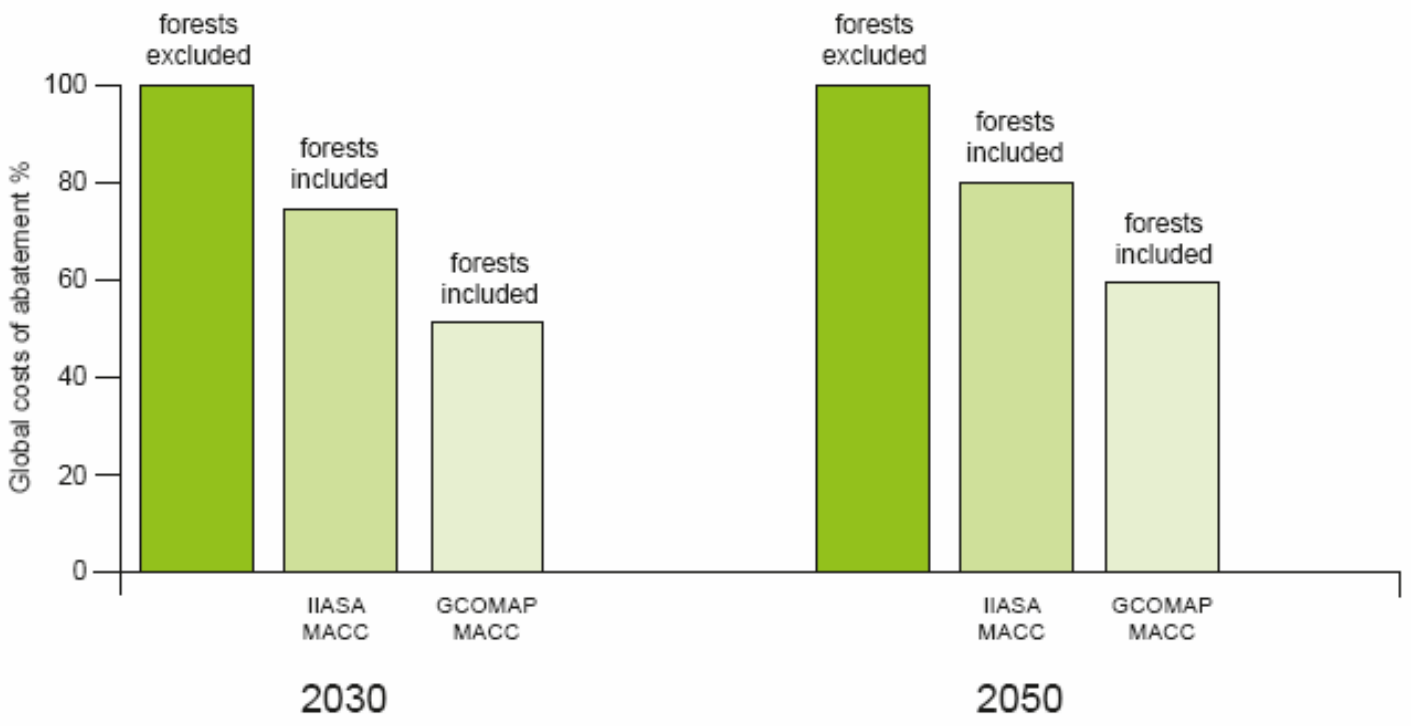
The benefits of abating forest emissions

- Reducing forest emissions by 50% gives a mean net benefit of around **$3.7 trillion** (NPV of climate change damages minus mitigation costs)
- The net benefit increases to **$6.3 trillion** if forest emissions are reduced by 90%

Sources: Hope (2008); Hope and Castilla-Rubio (2008)

In the long term, the forest sector should form part of a global cap and trade system

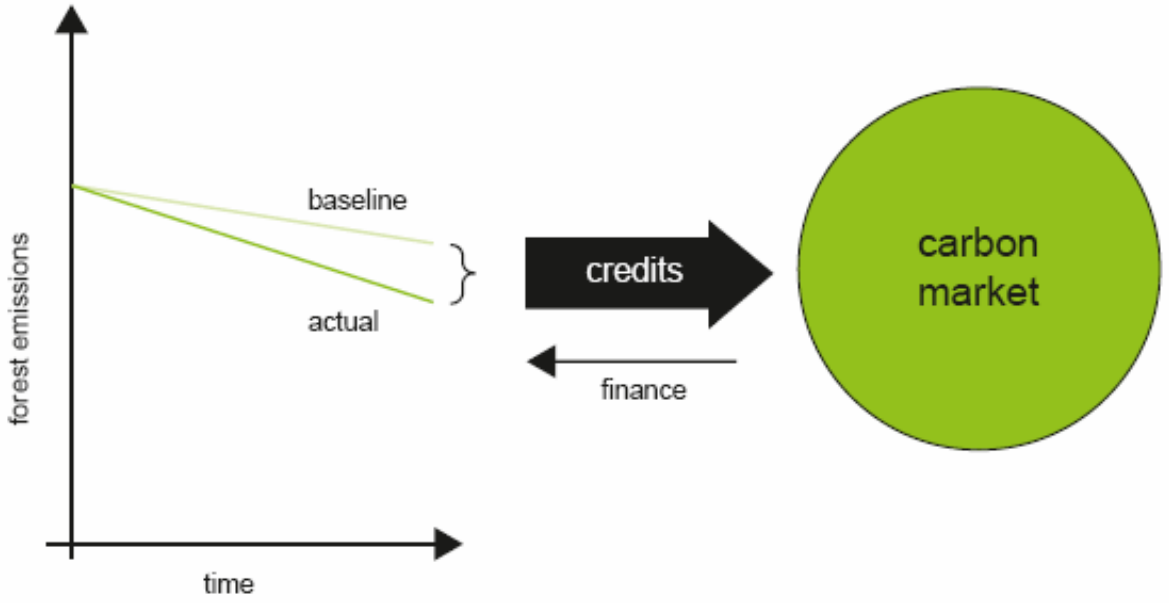
- Including the global forest sector in a well-designed cap and trade system could make it carbon neutral by 2030 (**3.5 $GtCO_2$ of abatement**)
- Including forests could **reduce global costs** of climate change mitigation by up to 50% in 2030 and by up to 40% in 2050



- This could enable an **extra 10% reduction** in global CO_2 emissions in 2050.

Sources: Modelling for the Eliasch Review

In the transition, four building blocks will be essential to access carbon finance...



1. Effective targets

National baselines, inclusive of all countries

2. Robust measuring

Forest credits based on real reductions in forest emissions

3. Linking to carbon finance

Carbon markets and other funding initiatives

4. Governance

International standards and full participation of forest communities

1. Targets that minimise leakage and maximise additionality

National level

- Prevents intra-national leakage
- Activates government policy levers
- Reduced transaction costs

Inclusive

To reduce international leakage, targets should incentivise both high and low deforesting nations

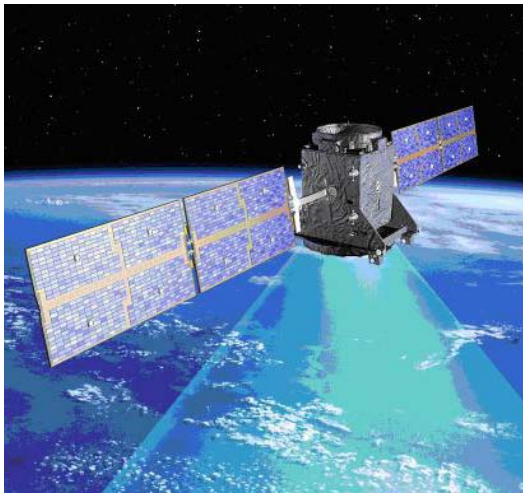
Should also be simple & transparent

Additional

Baselines should diminish over time:

- Emissions are projected to decline as forests disappear
- Forest nations to take on greater commitments

2. The development of robust measuring and monitoring capabilities



- Forest emissions can be estimated with **similar confidence** to emissions from other sectors.
- However, **capacity building** is needed in many countries to realise this in practice. The Eliasch Review estimates that for 25 forest nations, a total of around $50 million will be needed in set-up costs. A further $7-17 million would be needed for annual running costs.
- While capacity is developing, **conservative estimates** should be used.
- There should be **verification** of emissions reductions, just like for Annex I countries.

Sources: Hardcastle et al (2008)

3. Linking to carbon markets

- The impact of forest credits on carbon markets will depend on **four variables**:

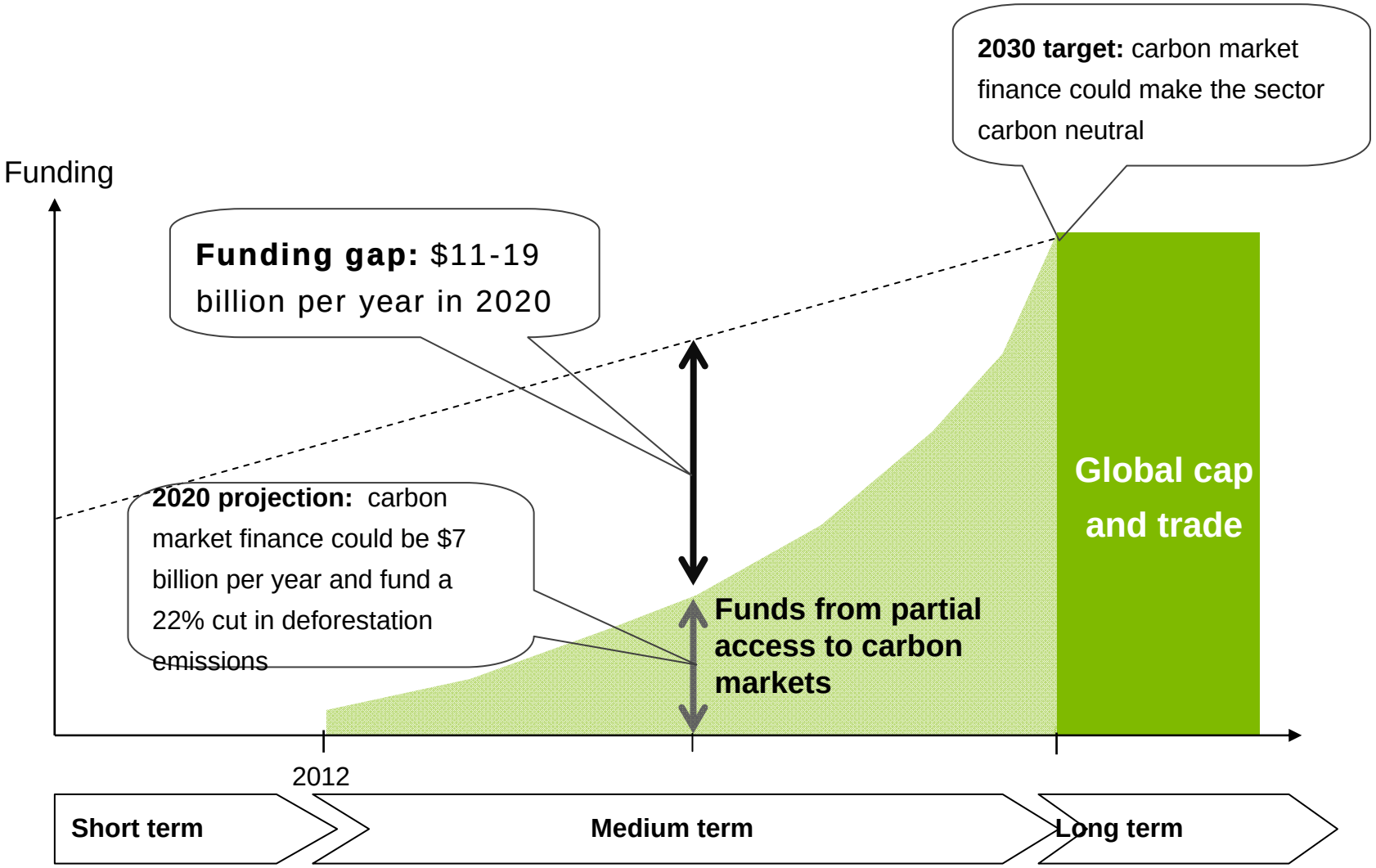
The stringency of emissions targets	Supplementarity limits	The cost of supplying forest credits...	...and the relative cost of supplying other credits

- Modelling suggests that if supplementarity limits are set at 50% or lower in phase III of the **EU ETS**, then admitting forest credits to the international credit market will have little or no impact on the EU carbon market price.

- There would, however, be an impact on the **international credit market** unless global emissions targets are tightened or supplementarity restrictions loosened on forest credits being admitted. Without such adjustment, forest credits would displace some more expensive abatement in other sectors.

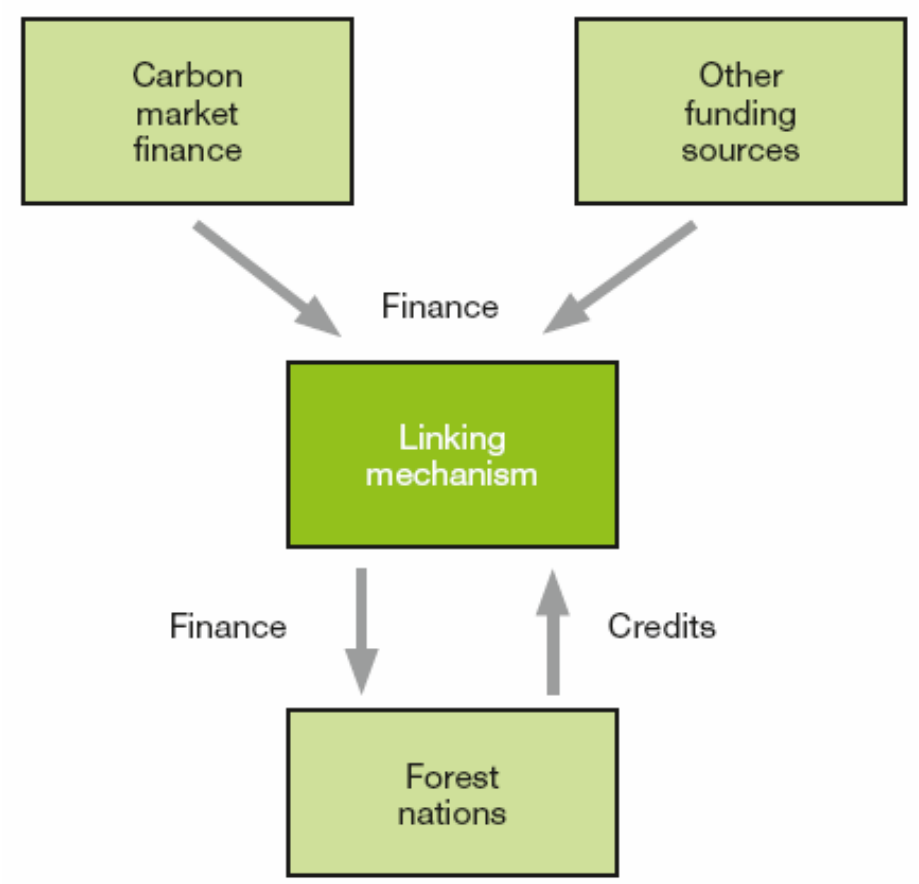
Source: Modelling for the Eliasch Review

This could leave a funding gap in the medium term…



Source: Modelling for the Eliasch Review

A linking mechanism could combine different funding sources and perform other functions



A linking institution could perform three functions:

- **Aggregate** different sources of funding
- Manage the risk of reversal of emissions reductions using a **reserve of credits**
- Reduce the risk of investment in emissions abatement for forest nations by guaranteeing a **minimum price** for credits

4. Good governance will be needed for forest abatement efforts to succeed...

Good Governance

National level

- Full participation of forest communities will make reforms more likely to succeed and benefit the poor
- UN Declaration on the Rights of Indigenous Peoples (Articles 18 & 19)

International level

- Reporting on policies and measures, as for Annex I countries
- Financial transparency, like the Extractive industries Transparency Initiative

Immediate action: mobilising international funds for capacity building

Research & analysis

- National drivers of deforestation
- Solutions and strategies
- Development of baselines

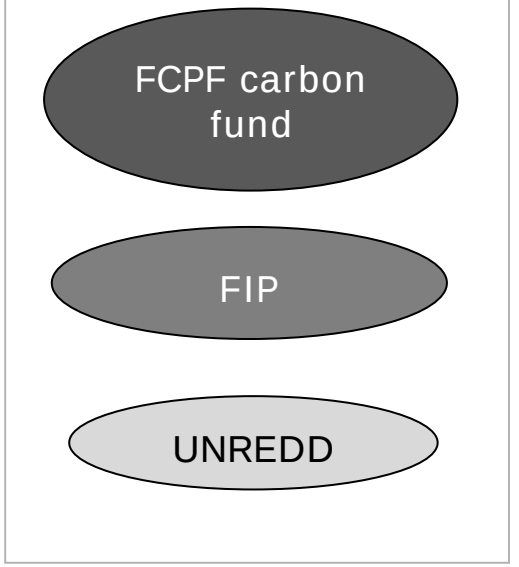
Policy reforms

- Reform of policy and legal framework
- Land tenure reform
- Measuring and monitoring capability
- Institutional strengthening

Investment in early action

- Demonstration activities
- Major practical programmes

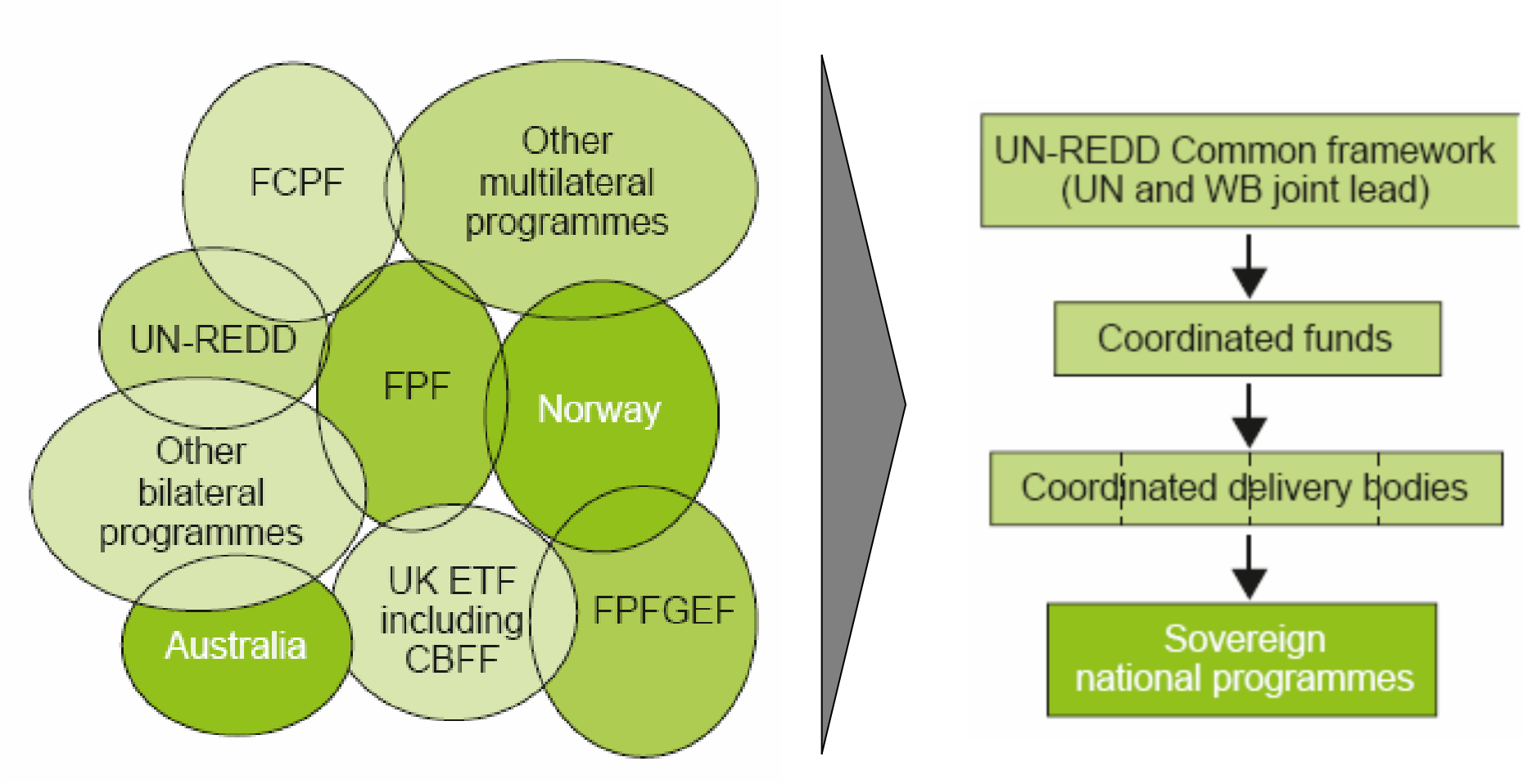
Mechanisms proposed



Capacity-building costs estimated at up to $4 billion over 5 years

Source: Hoare et al (2008)

International coordination will be needed if support is to be efficient and effective...



Key Eliasch Review recommendations

- The international community should aim to support forest nations to **halve deforestation by 2020 and make the global forest sector carbon neutral by 2030**, with emissions from forest loss balanced by new forest growth.
- The global forest sector should be **fully included in any post-2012 deal** at Copenhagen.
- **Forest nations should develop their own strategies** to combat deforestation, including establishing baselines, targets and effective governance and distribution of finance.
- Access to finance from **carbon markets as well as funding from other initiatives** will be required.
- The international community should provide **support for capacity building**. Total capacity building costs are up to $4 billion over 5 years for 40 forest nations.

Any questions?

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