



# Analysis of REDD proposals

31 October 2008

**DRAFT**





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# Context

## *Problem and solution*

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### *The problem*

- Science suggests we need to "decarbonize" our economy by around 90% over the long term in order to stabilize the climate\*
- Without forestry abatement the target arguably cannot be met\*\*
- At present, forestry contributes around 18% of total CO2 emissions per year, but practically none of the abatement potential has been tapped as only afforestation and reforestation is included under the Clean Development Mechanism. Avoided deforestation is excluded

### *Moving to a solution*

- The Bali Action Plan of COP13 decided that a comprehensive approach to mitigating climate change should include reducing emissions from deforestation and forest degradation (REDD)
- The basic idea of REDD is that developing countries that are willing and able to reduced emissions from deforestation in a measurable, verifiable way should be compensated for doing so
- If REDD is to be included in a post 2012 framework, a decision about what the mechanism will look like and what it will include needs to be agreed by Copenhagen in 2009
- To date, a large number of proposals have been put forward, from both countries, NGOs and scientists, concerning the scope and methodology of REDD. As a consequence, it is difficult for interested parties to keep abreast of new proposals and to assimilate the increasing volume of ideas

\* Stern Review, Science, IPCC, Science

\*\* Vattenfall/ McKinsey cost curve

# **This document**

## ***What we hope to add***

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### ***Objectives***

- Act as an introductory guide to REDD proposals on the table, jointly and severally
- Introduce a framework for parties to analyse a proposal & compare proposals
- Add clarity in this space

### ***Scope***

- All papers submitted to UNFCCC (SBSTA) which we consider to constitute a specific proposal for RED(D) (from both developing and developed nations) and all NGO and scientist proposals of which we are aware at this time\*

*N.B. It should be noted that current countries views on REDD may not be that reflected in their latest submission to the UNFCCC. Therefore, the information on country proposals herein may not reflect latest opinion.*

\* For any proposals we have missed, our apologies

# Headlines

## *Executive summary*

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- Overwhelming consensus on scope is reduced emissions from deforestation and degradation
- A minority emphasise that carbon enhancement activities should be considered of equal importance.
- Very few appear to specifically support reward for conserved forest carbon stocks, but some incentivise conservation of carbon stocks within the REDD (reduced emissions) mechanism by either making forest protection a condition of participation or distributing a share of rewards based on forest stock
- There is agreement that only developing countries can participate, and on a voluntary basis
- Most proposals make no reference to which types of carbon are to be counted
- Strong push for a national approach, but also significant support for the recognition of sub-national approaches, either as an alternative to adopting a national reference level, or as part of a dual / phased system, or as a transitional approach from sub-national to national
- Clear preference for reference levels to be based on historic emissions alongside global and national approaches, though project based approaches are linked with projected emissions rates
- One outstanding question is exactly how national and sub-national accounting can co-exist (whether explicitly via a 'nested approach' or simply via the filtering down of a national approach
- Generally, distribution implications are simply implicit in the reference level methodology – very few suggest further redistribution, and one is strongly against it
- The majority of proposals support approaches which would reward historically high emitters and exclude low. However, some proposals also make reference to the possibility of allocating notional reference levels to low emitting countries. It seems that parties are increasingly open to these options.
- It is agreed that there is a need for significant and predictable sums of money over the long term & there is almost overwhelming support for a market solution as a source of monies for reduced emission credits
- That said, a large number of proposals are also open to a also support a fund based solution (in addition, funds are considered to be more appropriate for capacity building and for conservation of standing forests)

# Principles

## *What are we aiming for with REDD*

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### ***Over-arching objectives of any REDD mechanism***

- Consensus opinion\* is that the key objectives of a REDD mechanism are:
  - Environmental effectiveness
  - Economic efficiency
  - Distributional/ social equity
  - Political feasibility (*to the extent that this is not already covered by the above objectives*)
- Although all four objectives are key, they may not always be consistent, there are potential trade-offs and conflicts between them.
- For example, if it is agreed that the principal objective is climate change, then the critical test is the impact on overall emissions. However, achieving the greatest impact on emissions may entail sub-optimal outcomes from the perspective of economic efficiency and distributional equity.

\* Based on reading of the proposals and the Roundtable 'REDD; Refining a Path to Success' hosted by the PRP in October 2008

# The framework

## The idea

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### Scope

What's included

Which activities  
Which carbon  
Which countries

Each activity (AD, enhancement, conservation etc) deemed to be in scope for REDD will require i) a defined methodology for asset generation & quantification and ii) a defined financing source. And therefore, different distributional implications may apply to each. I.e. the considerations addressed in the three boxes below should be considered for each activity in scope. Whether multiple activities are addressed via a single comprehensive approach or a collection of separate ones is a key methodological choice.

### Asset generation

Assessment and quantification methodology

Reference basis  
Reference period  
(together = reference level)

### Distributional considerations

Where and for whom the incentives lie

Implicit in the assessment methodology, &/or explicit redistribution arrangements

### Financing

Where the money comes from

Source  
Transfer arrangements

### Impact:

Projected emissions savings at estimated financial cost

# The framework

## *A menu of options*

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- There appears to be a growing understanding that negotiators can build an effective system by choosing from a menu of options (from many different proposals) rather than needing to make a binary decision between proposals
- The following pages give more detail on the options encompassed within each module
- Some options potentially impose constraints /requirements on others

For example, setting a global reference level necessitates an explicit distribution mechanism to allocate the rewards earned in aggregate

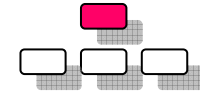
- However, when viewing the proposals as a group, there are arguably a number of different 'mix and match' options

For example, a number of proposals suggest that how you incentivise emissions reductions can, broadly speaking, be addressed separately from the question of where the money comes from to pay for them



# The framework

Scope: what's included = the remit of REDD



## Options

- Activities: avoided deforestation, avoided degradation, enhancement of forest carbon stocks and/ or conservation of forest carbon stocks

[N.B. The forest and related activities can be thought of as follows



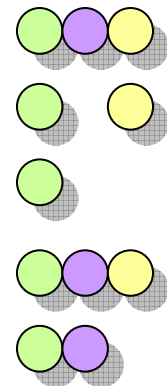
SFM is not considered a distinct activity incentivisable in its own right, but more of a means to achieving reduced emissions, conservation or enhancement of carbon stock]

- Carbon sources: above ground biomass, below ground biomass, soil carbon and/ or all terrestrial carbon
- Countries: developing and/or annex I

## Considerations

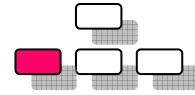
- Scale of mitigation potential
- Relative costs of different mitigation options
- Countries' perspective on which activities are meaningful/ expected relevance of deforestation etc today and in the future
- Feasibility of negotiating an international agreement on this basis
- Capability of countries to monitor and measure the extent and impacts of different activities and different sources of carbon

### Options for which a consideration



# The framework

## Asset generation: assessment and quantification methodology



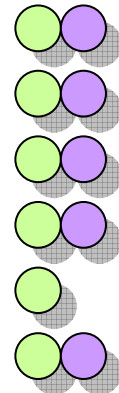
### Options

- Reference basis: sub-national, national and/ or global
  - Reference period: historic (flat, extrapolated, negotiated, adjusted), current (structural), projected
- N.B. These two options combined constitute the 'reference level' or 'baseline'

### Considerations

- Credibility of the reference level
- Feasibility of estimation
- Leakage considerations
- Distributional impacts
- Level of drivers of deforestation e.g. decided or heavily influenced by national governments?
- Feasibility of gathering necessary degree of participation

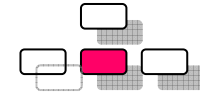
### Options for which a consideration



# The framework

## *Distributional considerations; where and for whom the incentives lie*

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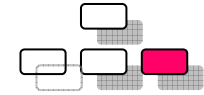


- The majority of proposals advocate payment/ compensation to directly incentivise own actions
  - This has **implicit** distributional considerations based on who has the potential to generate emissions savings against the specified reference level. This is a problem in respect of leakage and arguably also in respect of equity
    - For example, the adoption of historically based reference levels rewards historically high emitters, and does not incentivise the participation of historically low emitters.
    - One solution to this has been the allocation of notional baselines (global ones) to ensure all nations can generate eligible emissions reductions, and influence the balance of payments to historically high versus historically low emitters
  - Some proposals also make provision for **explicit** redistribution of monies so as to incentivise a wider group
    - For example, adopting global assessment against a global reference level then requires a second stage process to allocate the resulting global pot of monies down to acting agents
  - Where an explicit, alternative distributional mechanism is considered, the options are as follows:
    - Asset rewarded: efforts at avoiding emissions, actual avoided emissions, carbon stock, forest area
    - Reference basis: sub-national, national and/ or global
    - Reference period: historic, current, projected
    - Envisaged rate of payment on a per unit basis (e.g. at opportunity costs)
- N.B. It is likely that an explicit distributional mechanism will require i) a high(er) degree of institutional involvement and ii) may enable the setting of particular pricing/ compensation rates

# The framework

## *Financing: where the money comes from*

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### Options

- Source: fund, market and/or hybrid/ market-linked

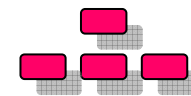
### Considerations / implications

- Conditions on use of monies
- Timing of payment
- Total quantity of cash expected to be available/ raised
- Per unit payment likely to be available/ raised (sufficient to cover opportunity costs for example?)
- Implied principal agents, including attitude to risk
- Institutional requirements – in country and internationally
- Safety mechanisms

# The framework

## Common requirements across all proposals

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### Scope

- *Nothing specific, as definitional only – requirements arise with application (i.e. asset generation, distribution, financing)*

### Asset generation

- Data: carbon inventory, deforestation and/ or emissions rates (historic or projected), protected areas
- Institutional capacity (sub-national, national and/ or international), for monitoring, measuring, registration, verification, auditing, accounting, reporting, oversight

### Distributional implications

- *As asset generation if explicit second stage redistribution implied*

### Financing

- In fund/ hybrid solutions: intermediary institutions to disburse monies, potentially match buyers and sellers
- *All quantification, verification, authorisation aspects per those specified under asset generation?*

### General

- Agreed definitions, standards and methodologies
- Clarification of rights (of ownership, to use, to trade etc)

## **Comparative analysis of the proposals**

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## Proposals included

### *Countries*

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Please see Appendix for specific submission references)

Australia  
Brazil  
Canada  
Chile  
Coalition for Rainforest Nations (CfRN)\*  
Colombia  
Congo Basin countries / COMIFAC\*\*  
EU  
India  
Indonesia  
Japan  
Malaysia  
Mexico  
New Zealand  
Norway  
Paraguay \*\*\*  
USA

The following parties also made submissions to the UNFCCC, but for a variety of reasons these submissions have not been included in our analysis (although the parties that are asterixed are represented in joint submissions we have included): Argentina\*\*\*, Bolivia\*, Costa Rica\*, Dominican Republic\*, El Salvador, Korea, Morocco, Nepal, Panama\* & \*\*\*, Peru\*\*\*, Senegal, South Africa, Sri Lanka, Switzerland, Thailand, Uruguay.

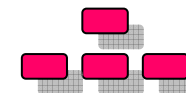
• Jointly submitted by Belize, Bolivia, Cameroon, Central African Republic, Costa Rica, DRC, Dominican Republic, Equatorial Guinea, Ghana, Guatemala, Guinea, Kenya, Lesotho, Liberia, Nicaragua, Panama, Pakistan, Papua New Guinea, Singapore, Solomon Islands, Thailand, Uganda & Vanuatu

\*\* Submitted by Gabon on behalf of Cameroon, Central African Republic, Congo, Equatorial Guinea, Gabon and Democratic Republic of the Congo

\*\*\* Submitted on behalf of Argentina, Honduras, Panama, Paraguay and Peru

# Proposals included

## Developing world country summary (part I)



	<b>Scope</b>	<b>Asset generation</b> (reference level methodology)	<b>Distributional impacts</b>	<b>Financing</b>
Brazil	<ul style="list-style-type: none"> <li>• REDD</li> </ul>	<ul style="list-style-type: none"> <li>• National assessment against historic national baseline, moving average</li> </ul>	<ul style="list-style-type: none"> <li>• Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>• Fund (from Annex I countries)</li> </ul>
Chile	See 'CATIE' under NGO and scientist proposals			
Coalition for Rainforest Nations *	<ul style="list-style-type: none"> <li>• REDD (separate and complementary to the CDM)</li> <li>• Conservation</li> </ul>	<ul style="list-style-type: none"> <li>• National assessment against historic national baseline, with development adjustment factor</li> </ul>	<ul style="list-style-type: none"> <li>• Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>• Market for REDD credits, fund for other</li> </ul>
Colombia	<ul style="list-style-type: none"> <li>• REDD (conservation should be considered primarily under adaptation)</li> </ul>	<ul style="list-style-type: none"> <li>• National or sub-national assessment at each country's discretion</li> <li>• National baseline is historic extrapolated, sub-national is n/s</li> </ul>	<ul style="list-style-type: none"> <li>• Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>• Market</li> </ul>
COMIFAC / Countries of the Congo Basin **	<ul style="list-style-type: none"> <li>• REDD</li> <li>• Conservation &amp; enhancement (via a separate mechanism)</li> </ul>	<ul style="list-style-type: none"> <li>• National or sub-national assessment, at countries discretion.</li> <li>• At national level, projected baselines, at sub-national 'benchmarks'</li> </ul>	<ul style="list-style-type: none"> <li>• Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>• Market for REDD credits, fund for conservation</li> </ul>
India	<ul style="list-style-type: none"> <li>• REDD</li> <li>• Conservation &amp; enhancement (via comprehensive mechanism / common methodology)</li> </ul>	<ul style="list-style-type: none"> <li>• National assessment against historic national baseline</li> </ul>	<ul style="list-style-type: none"> <li>• Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>• Market for changes in carbon stock (REDD &amp; AR)</li> <li>• Fund for conservation</li> </ul>

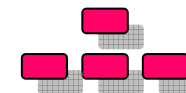
\* Jointly submitted by Belize, Bolivia, Cameroon, Central African Republic, Costa Rica, DRC, Dominican Republic, Equatorial Guinea, Ghana, Guatemala, Guinea, Kenya, Lesotho, Liberia, Nicaragua, Panama, Pakistan, Papua New Guinea, Singapore, Solomon Islands, Thailand, Uganda & Vanuatu

\*\* Submitted by Gabon on behalf of Cameroon, Central African Republic, Congo, Equatorial Guinea, Gabon and Democratic Republic of the Congo



# Proposals included

## Developing world country summary (part II)

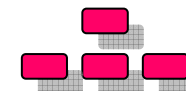


	<b>Scope</b>	<b>Asset generation</b> (reference level methodology)	<b>Distributional impacts</b>	<b>Financing</b>
Indonesia	<ul style="list-style-type: none"> <li>REDD (enhancement and conservation complementary to REDD)</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against national baseline: dual reference system – historic rate for unplanned emissions, projected for planned</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market (&amp; fund?)</li> </ul>
Malaysia	<ul style="list-style-type: none"> <li>REDD (should not undermine the CDM)</li> </ul>	<ul style="list-style-type: none"> <li>Level of assessment n/s (can see advantages of having national based approach but project based approach should also be considered), but historic baseline</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>
Mexico	<ul style="list-style-type: none"> <li>REDD (conservation and enhancement considered as a support to REDD)</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against historic national baseline, adjusted (sub-national approach as an interim step)</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market for REDD credits, fund for enhancement and conservation (subject to country circumstance)</li> </ul>
Paraguay*	See 'CATIE' under NGO and scientist proposals			

\*Submitted on behalf of Argentina, Honduras, Panama, Paraguay and Peru

# Proposals included

## Developed world country summary



	Scope	Asset generation (reference level methodology)	Distributional impacts	Financing
Australia	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>n/s – but to take into account national circumstance</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>	<ul style="list-style-type: none"> <li>Market based</li> </ul>
Canada	<ul style="list-style-type: none"> <li>RED(D) (if a country is not yet able to estimate emissions from degradation, it should not be excluded from RED)</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>
EU	<ul style="list-style-type: none"> <li>REDD (enhancement and conservation to complement REDD)</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against historic national baseline, adjusted negotiated (sub-national approach as an interim step)</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market &amp;/ or hybrid, as well as fund</li> </ul>
Japan	<ul style="list-style-type: none"> <li>REDD (need to consider how to combine REDD and CDM AR)</li> </ul>	<ul style="list-style-type: none"> <li>Projected baseline</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>
New Zealand	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against national baseline – basis n/s (sub-national approach as an interim step)</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection (should not apply arbitrary adjustments to financial incentives to 'correct' for possible inter-country leakage)</li> </ul>	<ul style="list-style-type: none"> <li>Market &amp; fund (Market preferred. Fund for transitory project approach. No presumption that from Annex I countries only)</li> </ul>
Norway	<ul style="list-style-type: none"> <li>REDD (plus enhancement and conservation of forest stocks)</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against historic national baseline (sub-national approach as an interim step)</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market &amp; fund (market ideal for countries with high deforestation and vice versa)</li> </ul>
USA	<ul style="list-style-type: none"> <li>REDD (need to be comprehensive)</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>

## Proposals included

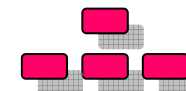
### *NGOs, Scientists*

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<b>Who</b>		<b>What</b>	<b>When</b>
CATIE	CATIE	Nested Approach	2007
Centre for Clean Air Policy	CCAP	Dual Markets Approach	Aug 2007
Institute of Sustainable Development & International Relations	IDDR	Compensated Successful Efforts	Jun 2008
Centre for International Sustainable Development	CISDL	Carbon Stock Approach	Feb 2007
CSERGE	CSERGE I	Combined Incentives I	2008
	CSERGE II	Combined Incentives II	Current
Environmental Defense Fund	EDF	Compensated Reductions	2005
Greenpeace	Greenpeace	TDERM	Dec 2007
IIASA	IIASA	Avoiding REDD Hot Air	Current
Joint Research Council	JRC	Incentive Accounting	Mar 2006
Terrestrial Carbon Group	TCG	Terrestrial Carbon	Jul 2008
Woods Hole Research Centre	WHRC	Stock Flow Approach	Aug 2008

# Proposals included

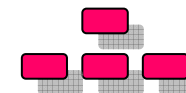
## NGO & scientist proposals summary (part I)



	<b>Scope</b>	<b>Asset generation</b> (reference level methodology)	<b>Distributional impacts</b>	<b>Financing</b>
CATIE	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>National and sub-national assessment and accounting in dual, compatible system – can start with sub-national and move to national, but both can co-exist into the long term</li> <li>National baseline is historic negotiated. If no national system is operating then sub-national baseline basis is various, but if national accounting then sub-national is sub-allocation of national</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market</li> </ul>
CCAP	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against national baseline</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Hybrid New, separate REDD 'market' created &amp; 'managed' – Annex I nations make purchasing commitments with identified seller nations</li> </ul>
IDDRI	<ul style="list-style-type: none"> <li>RED</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against national structural deforestation in the current period (identifies controlled deforestation rather than changes in performance versus a historic or projected baseline)</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Fund (methodology doesn't lend itself to a market)</li> </ul>
CISDL	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>All forest projected to be at risk of deforestation is potentially tradable. Asset is created when this area is put under protection</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market</li> </ul>

# Proposals included

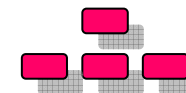
## NGO & scientist proposals summary (part II)



	Scope	Asset generation (reference level methodology)	Distributional impacts	Financing
CSERGE I	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>Global assessment against a global historic baseline</li> </ul>	<ul style="list-style-type: none"> <li>Explicit second stage distributes monies generated from global performance to participating nations. Distribution based on national emissions reductions against a combination of national and global historic baselines. The weightings applied can be adjusted to change the balance of monies to historically high and low emitters</li> </ul>	<ul style="list-style-type: none"> <li>Market and/or fund</li> </ul>
CSERGE II	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against both global and national historic baselines. The weightings applied can be adjusted to change the balance of monies to historically high and low emitters</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market and/or fund</li> </ul>
EDF	<ul style="list-style-type: none"> <li>RED (deforestation is the priority, but extendable methodology / umbrella concept)</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against national historic baseline</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market preference, but other sources not excluded</li> </ul>
Greenpeace	<ul style="list-style-type: none"> <li>RED</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against national historic baseline</li> </ul>	<ul style="list-style-type: none"> <li>Distribution of funds between entities is at the discretion of the managing entity – to both reward and incentivise emissions reductions.</li> </ul>	<ul style="list-style-type: none"> <li>Hybrid Mandatory purchasing and controlled supply. Price set by auction or linked to market price</li> </ul>

# Proposals included

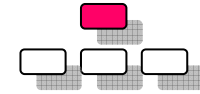
## NGO & scientist proposals summary (part i)



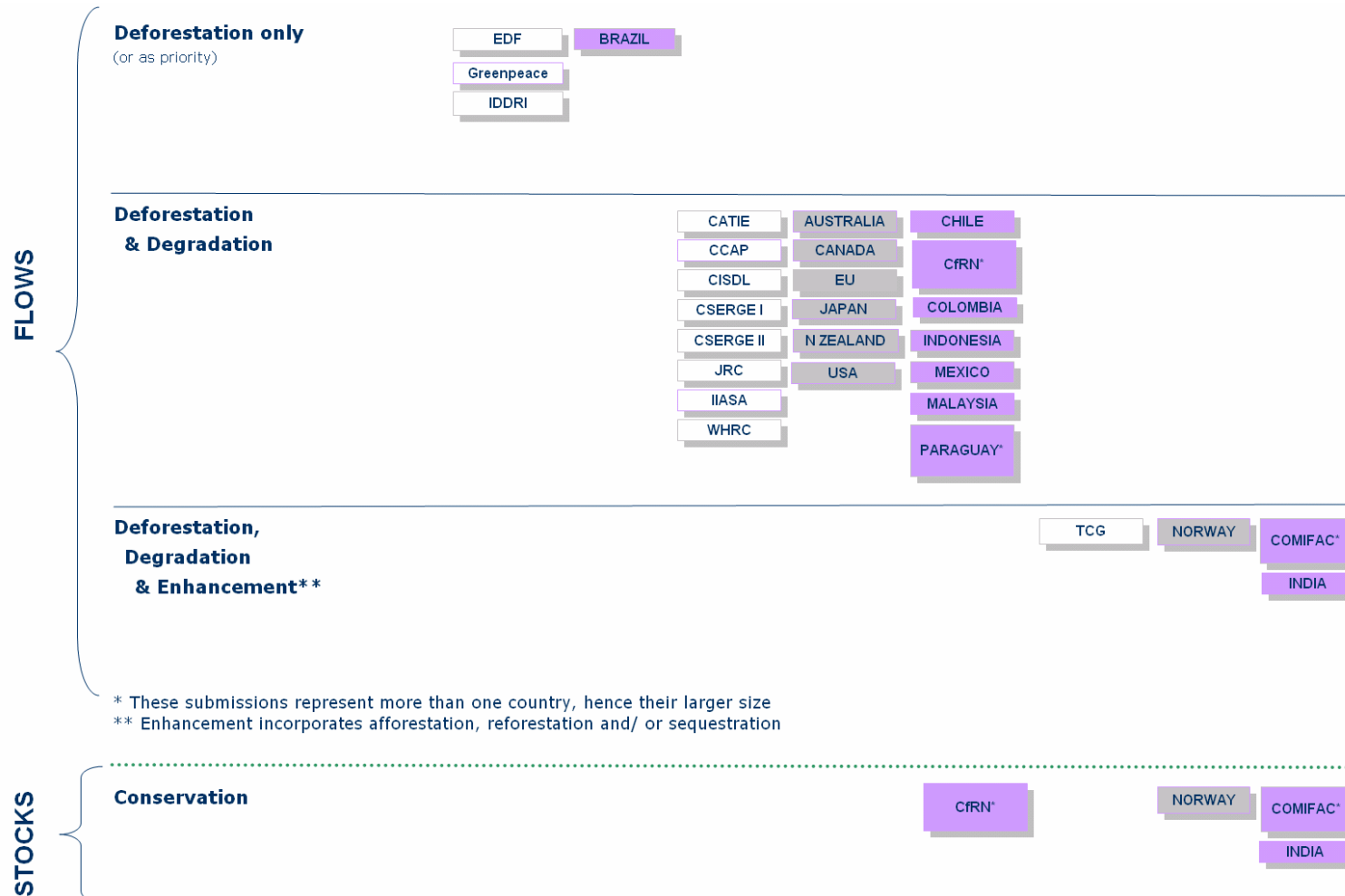
	Scope	Asset generation (reference level methodology)	Distributional impacts	Financing
IIASA	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>National</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>	<ul style="list-style-type: none"> <li>Fund Dutch tender auction proposed where price depends on carbon (and possibly biodiversity) 'content'</li> </ul>
JRC	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>National assessment against either global or national historic baselines</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>n/s</li> </ul>
TCG	<ul style="list-style-type: none"> <li>REDD</li> <li>Enhancement (via integrated system – to cover all terrestrial carbon)</li> </ul>	<ul style="list-style-type: none"> <li>All forest projected to be at risk of deforestation is potentially tradable. Asset is created when this area is put under protection</li> </ul>	<ul style="list-style-type: none"> <li>Implicit in reference level selection</li> </ul>	<ul style="list-style-type: none"> <li>Market &amp; or Fund</li> </ul>
WHRC	<ul style="list-style-type: none"> <li>REDD</li> </ul>	<ul style="list-style-type: none"> <li>Global assessment against a global historic baseline</li> </ul>	<ul style="list-style-type: none"> <li>Explicit second stage distributes monies generated from global performance to participating nations. Distribution based on national emissions reductions against historic national baseline (rewarded in line with standard opportunity cost + transaction cost) and share of global (participating) forest carbon stock</li> </ul>	<ul style="list-style-type: none"> <li>Market and/or fund</li> </ul>

# Comparative analysis

## Scope: where everyone stands



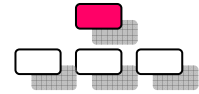
N.B. According to a strict definition of REDD, conservation and enhancement would not be in scope. However, a number of proposals talk about these activities also. To the best of my interpretation of some confusing language, this chart shows which activities parties would like to see directly incentivised via REDD. Where non-avoided emissions activities are referred to as “a support to REDD” or are rewarded purely in the interests of supporting reduced deforestation, they have not been classified as being in scope.



# Comparative analysis

## Scope: conclusions

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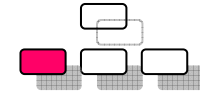
- Overwhelming consensus: reduced emissions from deforestation and degradation
- A minority explicitly emphasise that carbon enhancement activities should be considered of equal importance as reduced emissions. But widespread recognition that although deforestation and degradation are the immediate priorities, this could be part of a wider schematic and phased approach to encompassing degradation, afforestation, reforestation, sequestration or all terrestrial carbon
- Only a minority (India, COMIFAC, CfRN and Norway(?)) appear to specifically support reward for conserved forest carbon stocks
- Others incentivise conservation of carbon stocks within the REDD (reduced emissions) mechanism by
  - Making forest protection a condition of participation (TCG and CISDL)
  - Distributing a share of rewards based on forest stock (WHRC)
- There is agreement that only developing countries can participate, and on a voluntary basis
- Most proposals make no reference to which types of carbon are to be counted
- A large number of country proposals highlight the need for assistance from Annex I countries with capacity building for measurement and monitoring

*N.B. Per the above, the remit of REDD is considered as a supply side question, it does not extend into demand considerations such as measures to tackle the drivers of deforestation. This may be due to the recognition that in country actions are sovereign considerations*



# Comparative analysis

## Asset generation: development of NGO and scientific thinking



### Reference basis

2005

2006

2007

2008

### Sub-national

The original idea of compensated reductions from a historic **national baseline** - still a valid and supported methodology, and also the **kick off** point for various developments and subsequent proposals

Introduction of the idea of operation at a **sub-national** level in order to promote earlier and more widespread participation

Movement **away from global assessment back to national level** due to concerns over feasibility of widespread participation in a global scheme. However, **assessment is against a combination of national and notional (global) reference levels**

### National

EDF

CISDL

CATIE

CCAP

Greenpeace

TCG

CERDI

IIASA

JRC

CSERGE II

Focus of these proposals is financing rather than reference level - same for IIASA

### Global

Assessment is made at the national level, but to incentivise continued conservation in those countries which have not been historically high emitters, and therefore protect against international leakage, **allocation of a notional (in this case global) reference level** to countries with historically low rates of deforestation

Introduction of the idea of carbon budgets and accounts, and the **requirement to protect/ conserve significant areas of the forest as a precondition of participation**. However, still a flow / reduced emissions mechanism as only the proportion of carbon stock at risk of deforestation is potentially tradeable. Notably, this assessment is made on a **forward looking basis**

Move to **estimation of emissions reductions at global level** to fully protect against international leakage, and ensure the financier 'gets what he pays for'

CSERGE I

WHRC

Different colour arrows denote the development of different lines of thinking

Reference period:



Historic



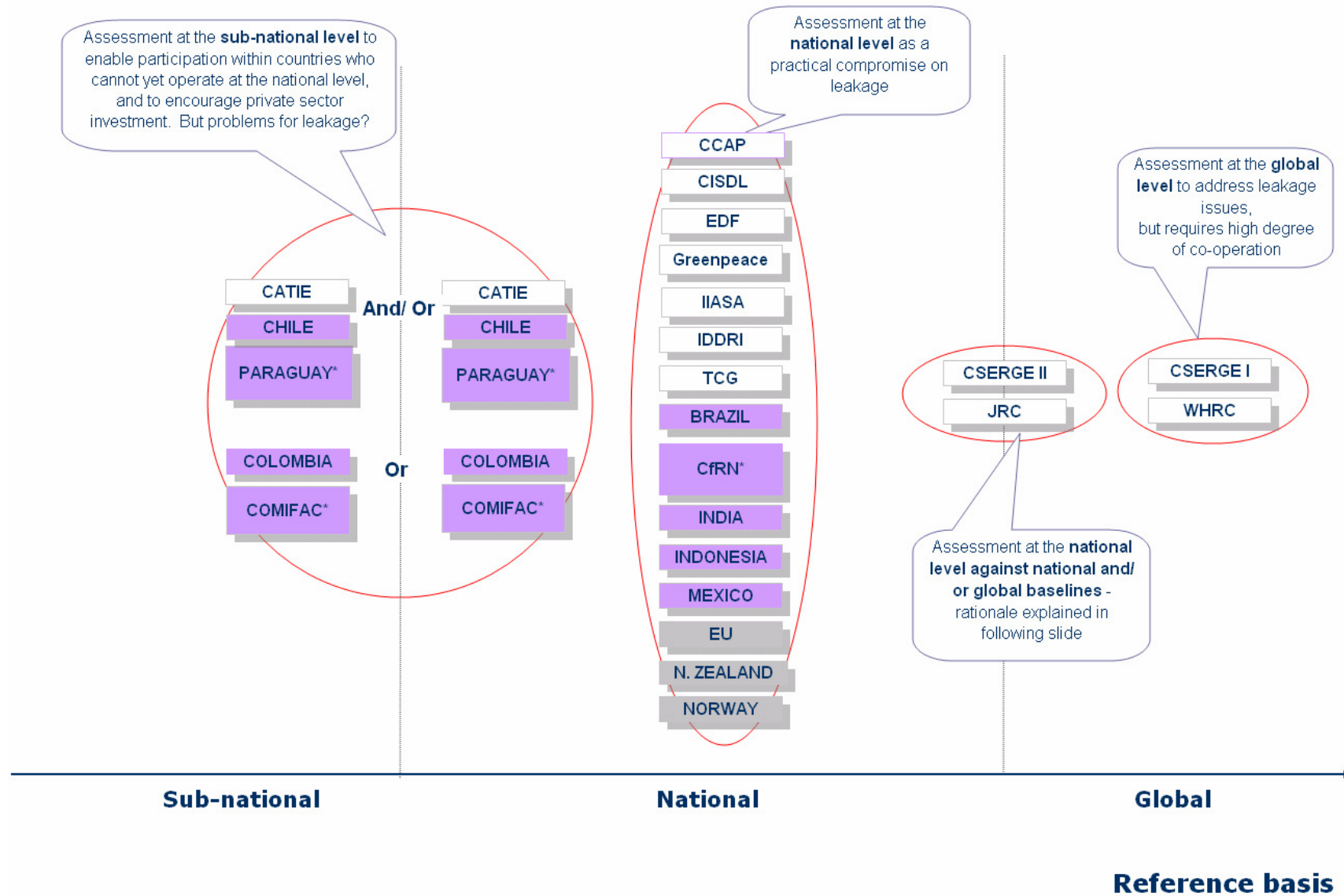
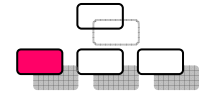
Current (structural)



Forecast

# Comparative analysis

## Asset generation: where everyone stands – reference basis

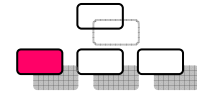


N/S - IIASA, Malaysia, USA, Canada, Australia, Japan

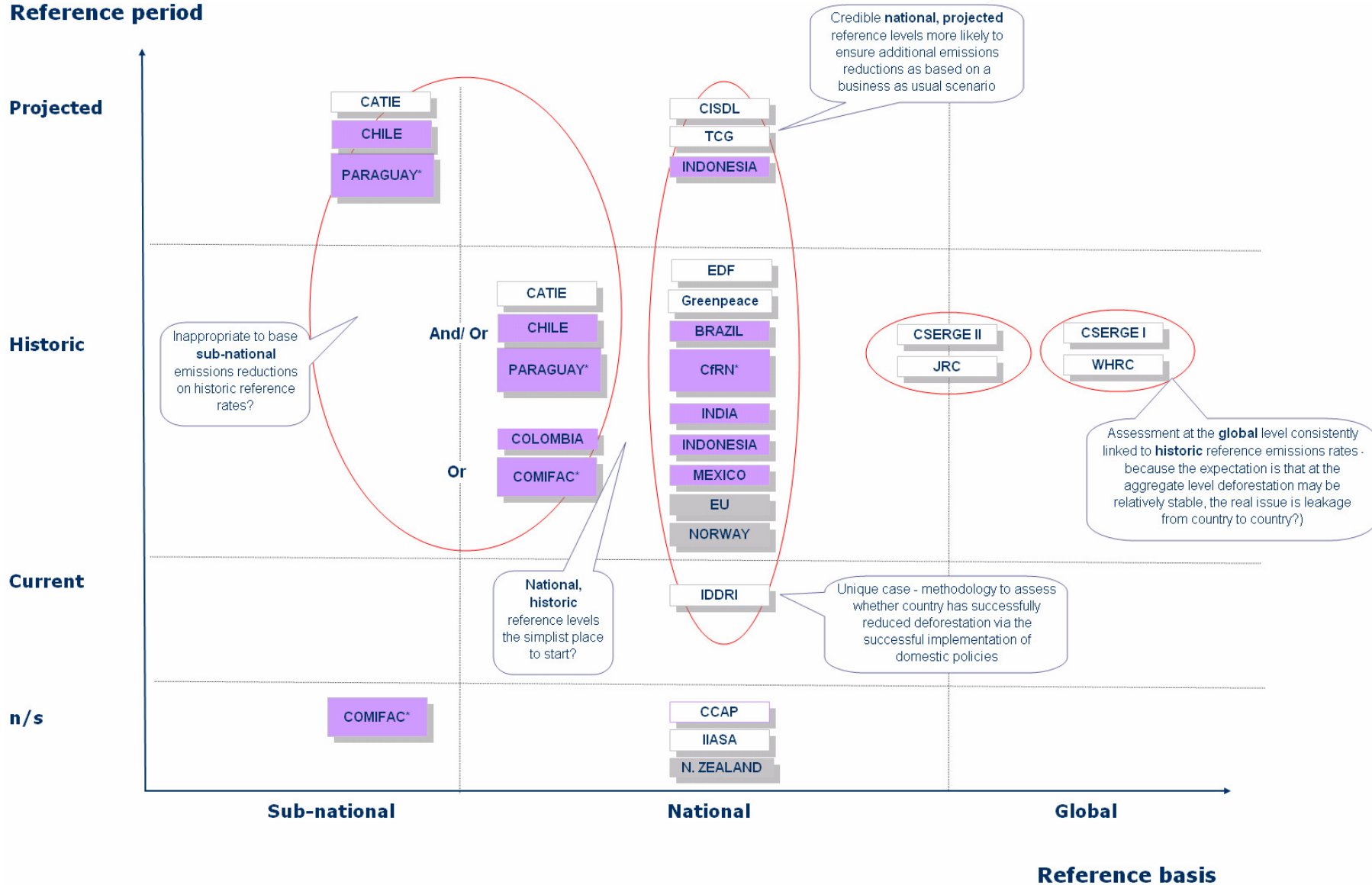
\* These submissions represent more than one country, hence their larger size

# Comparative analysis

Asset generation: where everyone stands - reference level (i.e. basis & period)



## Reference period



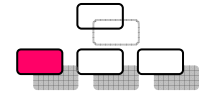
N/S - Malaysia, USA, Canada, Australia, Japan, Colombia (sub-national)

\* These submissions represent more than one country, hence their larger size

# Comparative analysis

## Asset generation: conclusions

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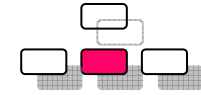
- Strong push for a national approach
- However, significant support for the recognition of sub-national approaches, either:
  - As an alternative to adopting a national reference level (COMIFAC, Colombia)
  - As part of a dual / phased system, where a country may start with sub-national reference levels and move up to national reference levels in the long term, and potentially simultaneously maintaining both (Paraguay coalition, Chile),  
  
N.B. A further contingent support a transitional approach from sub-national to national (EU, Norway, New Zealand, Mexico)
- Clear preference for reference levels to be based on historic emissions alongside global and national approaches
- Project based approaches are linked with projected emissions rates  
  
N.B. In the end there may be little difference between the use of historic or projected rates. Many who support the use of historic rates argue for the incorporation of ‘development adjustment factors’ or similar, which sounds very like a forward looking projection.
- Indonesia is an interesting anomaly in this space - supporting historic rates for unplanned emissions and carbon stock for planned (i.e. a projected rate for concession areas, where projection is full deforestation?)

### Key outstanding questions

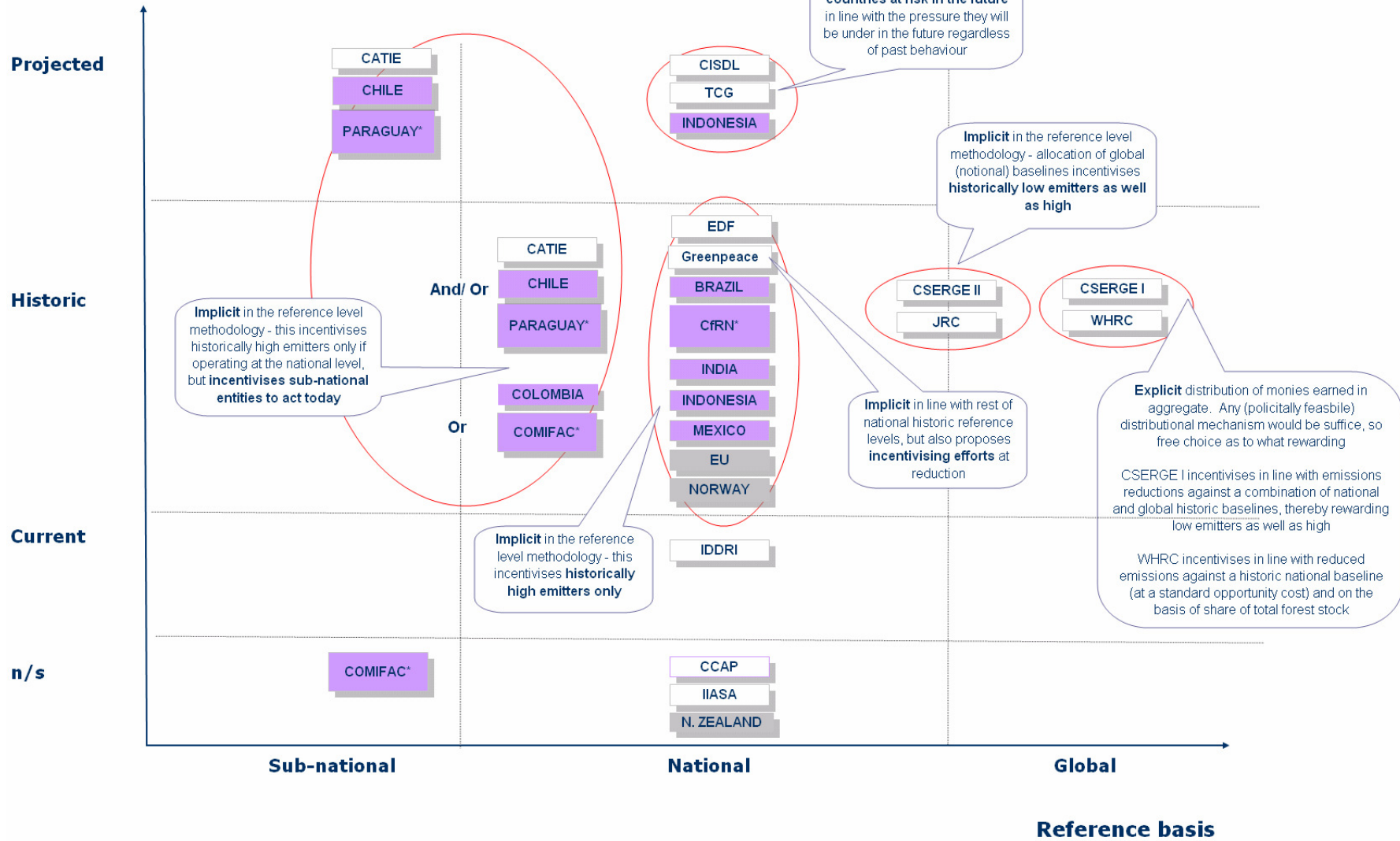
- The Nested Approach raises the question of how to ensure sub-national agents are appropriately incentivised when their reward is influenced by something outside their control, namely national level emissions. This problem does not yet appear to be adequately resolved. And it is important under a national approach also – sub-national agents will still be significant players in this set-up.

# Comparative analysis

## Distributional implications: where everyone stands



### Reference period



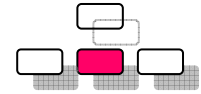
N/S - Malaysia, USA, Canada, Australia, Japan, Colombia (sub-national)

\* These submissions represent more than one country, hence their larger size

# Comparative analysis

## *Distributional implications: conclusions*

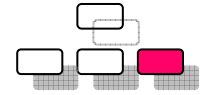
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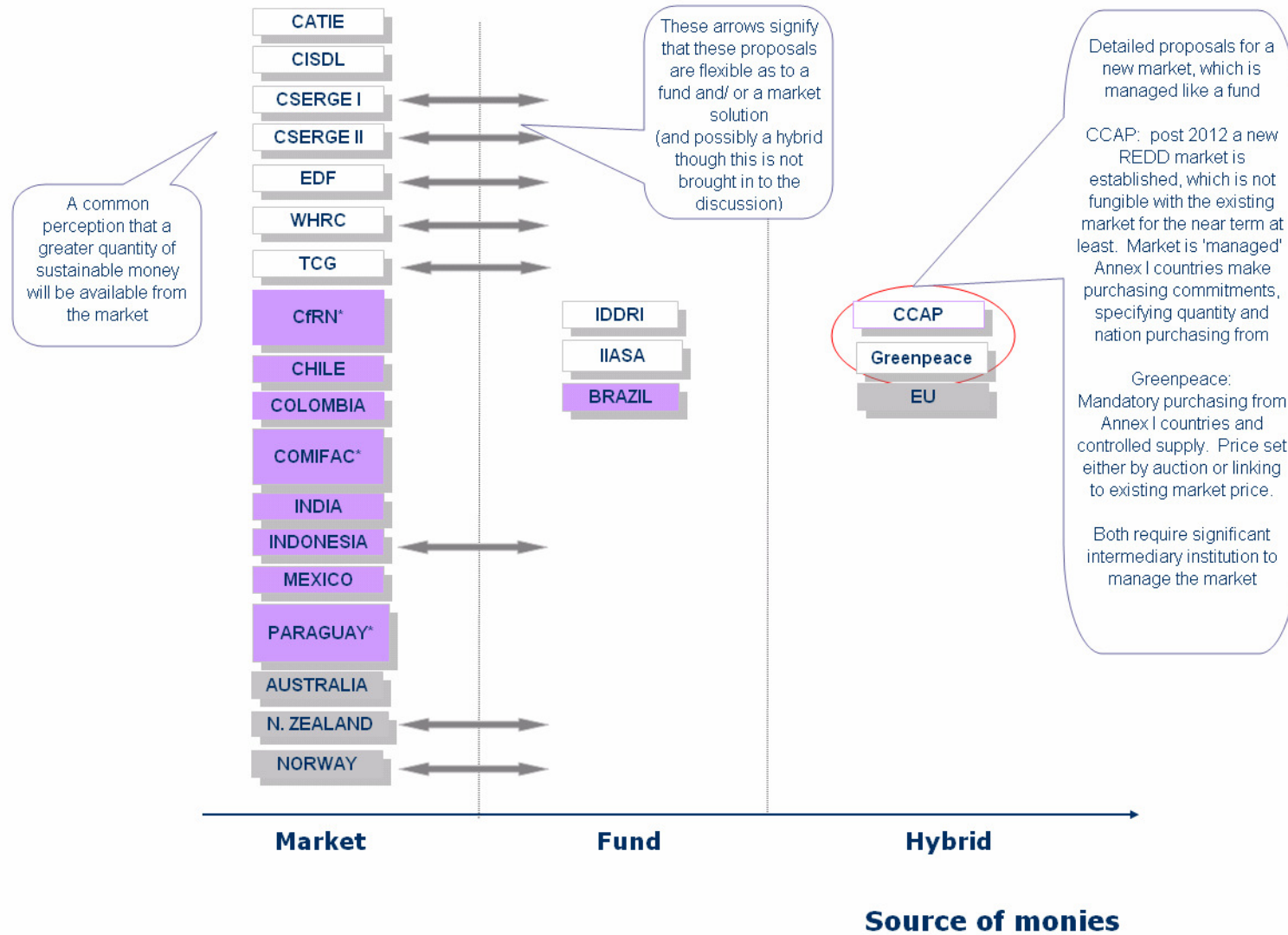
- Three proposals explicitly reference a separate mechanism enabling the redistribution of incentives amongst countries on a different basis to that in line with which they are earned
- Generally, distribution implications are simply implicit in the reference level methodology – most countries don't suggest any further redistribution (and New Zealand is strongly against it)
- One exception is Greenpeace, which advocates payment to both reward and incentivise emissions reductions. As the money in the pot is generated by those who have already reduced emissions, this implies some further distributional adjustments
- As noted on the previous slide, the majority of proposals support approaches which would reward historically high emitters and exclude low. However, some proposals (including CfRN) also make reference to the possibility of allocating notional reference levels to low emitting countries. It seems that parties are increasingly open to these options.
- N.B. Although distributional actions lend themselves more to fund than market solutions, there need be no direct line. The distribution does require some intermediary to manage the disbursements, but this intermediary could equally well raise monies by selling credits on the market
- In terms of how much monies actually flow to particular countries, this will depend on their costs of reducing emissions against the project price paid for carbon. Therefore, it is not straightforward to assess this

# Comparative analysis

## Financing; where everyone stands



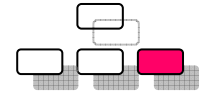
### Monies for reduced emissions



# Comparative analysis

## *Financing; conclusions*

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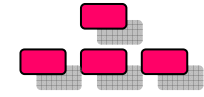
- It is agreed that there is a need for significant and predictable sums of money over the long term
- Therefore, there is almost overwhelming support for a market solution as a source of monies for reduced emission credits
- It should be noted though that a large number of proposals also support a fund based solution (i.e. fund and/ or market, generally and)
- A fund is considered to be more appropriate for capacity building and for conservation of standing forests
- Some proposals explicitly state that sub-national entities will be authorised to engage directly with financing systems, however the majority given no indication of who the principle agents are, nor how money is transferred down



# Cross cutting elements

## Common requirements across all proposals

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### Scope

- *Nothing specific, as definitional only – requirements arise with application (i.e. asset generation, distribution, financing)*

### Asset generation

- Data: carbon inventory, deforestation and/ or emissions rates (historic or projected), protected areas
- Institutional capacity (sub-national, national and/ or international), for monitoring, measuring, registration, verification, auditing, accounting, reporting, oversight

### Distributional implications

- *As asset generation if explicit second stage redistribution implied*

### Financing

- In fund/ hybrid solutions: intermediary institutions to disburse monies, potentially match buyers and sellers
- *All quantification, verification, authorisation aspects per those specified under asset generation?*

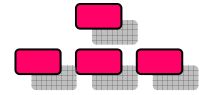
### General

- Agreed definitions, standards and methodologies
- Clarification of rights (of ownership, to use, to trade etc)

## Final thought

### *What's not in: in-country considerations*

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- In order for any mechanism to be successful, incentives and rewards need to reach the agents on the ground who drive and control deforestation activity.
- Many proposals acknowledge the importance of this, but do not extend their mechanism within country. Two reasons are commonly given:
  - Firstly, national circumstances vary markedly, and therefore there is no single appropriate mechanism or solution for in-country arrangements
  - Secondly, in-country arrangements and transfers are considered to be matters of national sovereignty and therefore outside the remit of international negotiations