

# Post-2012 eligibility of land-use and bioenergy activities in the CDM

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# Managing the biosphere

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- Avoid emissions from terrestrial biosphere (conservation management)
- Sequester additional carbon in the biosphere and in products (sequestration management)
- Substitute renewable biomass fuels and wood products for fossil fuels and fossil-fuel based products (substitution management)
- Replace or improve non-renewable forms of biomass (such as traditional fuelwood and charcoal)

# Questions

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- What changes in forestry / agriculture / bio-energy eligibility should be considered post-2012?
- What would be the negotiation, institutional and data implications of such change?
- Could changes here help ensure a more even regional distribution of CDM projects?

# New activities for post-2012

## Some general thoughts

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- Scope of CDM LULUCF was constrained because targets were set before opportunities to meet targets
- Why should activities be excluded from CDM if they are allowed for Annex I countries?
- Sectoral approaches should be possible, following some principles
- Some continuity needed, so not to “loose” investors. Especially forestry projects are “long term”.
- Reflect close relationship LULUCF / bioenergy
- Agriculture and forestry dominate in economy of many LDCs; bioenergy dominates energy system

# New activities for post-2012

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- **Revegetation with trees** would
  - allow small, and/or linear plantings
  - help agroforestry systems
  - avoid definitional problems
  - allow projects that have no leakage
- **Revegetation with non-tree vegetation**
- ... All these are already eligible for Annex I countries under Art 3.4

# New activities for post-2012

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## ■ Reducing emissions from deforestation

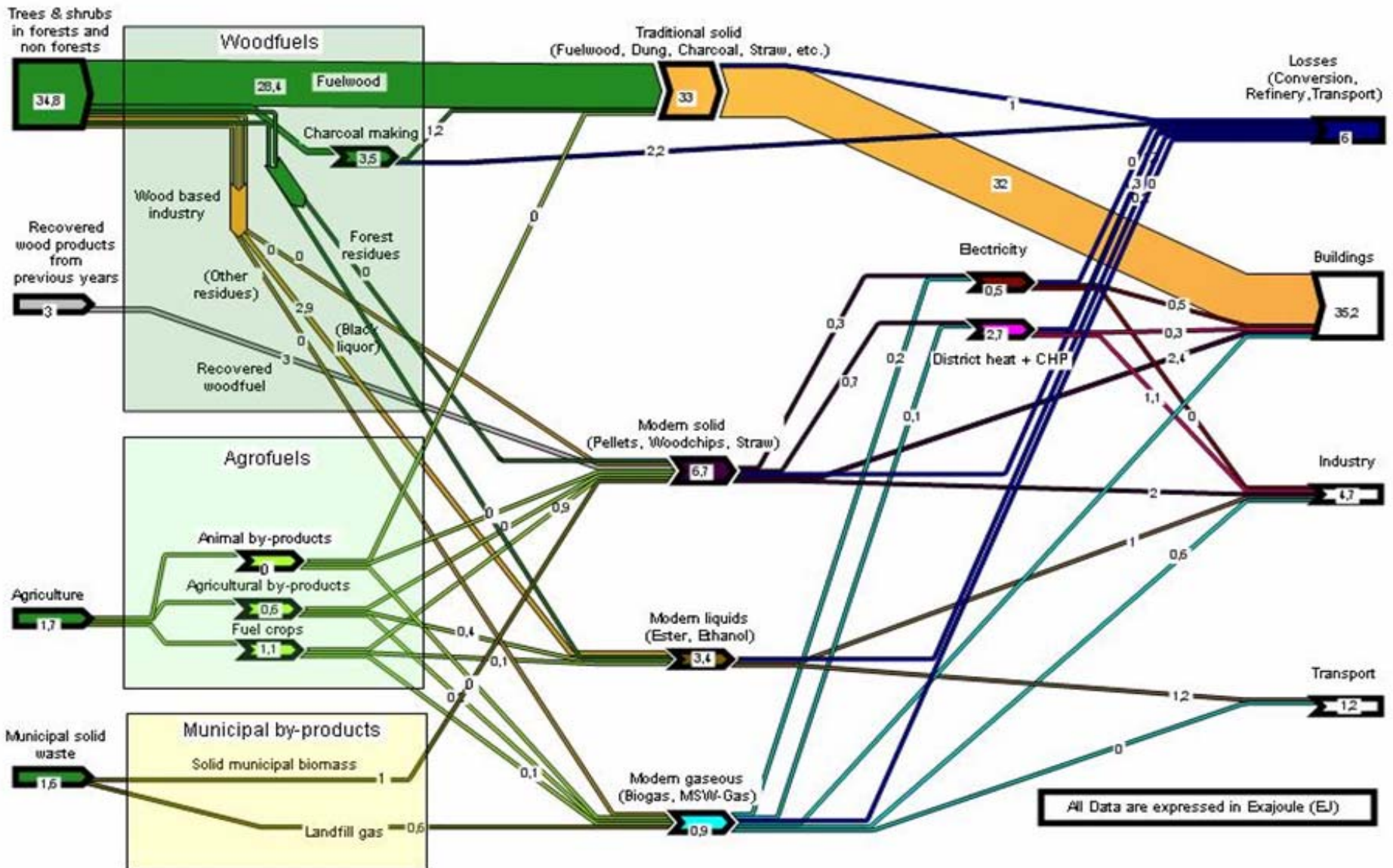
- Current negotiations focus on national approaches
- What if a country cannot meet requirements: Should there be a project-based alternative?
- Leakage not accounted at national level – like Annex I?
- Permanence: are tCERs and ICERs needed for national-level accounting? Give option of permanent credits, if country assumes future liability (like Annex I country)
- If national approach for REDD is possible, why not also allow this for AR, to give most flexibility to countries.

# New activities for post-2012

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- **Managing soil carbon in croplands and grasslands**
  - Detecting significant change, beyond “noise” may require large projects or programmatic approaches to justify high number of sampling plots
  - “Carbon response curves” and only monitor activity data?
  - Non-permanence needs to be addressed
  - Important for many countries, including in Africa
- **Provide a mechanism for countries to propose any other activities in line with certain principles**
- **Provide countries with choice between projects, programmatic, and sectoral approaches**

# Global biomass flows



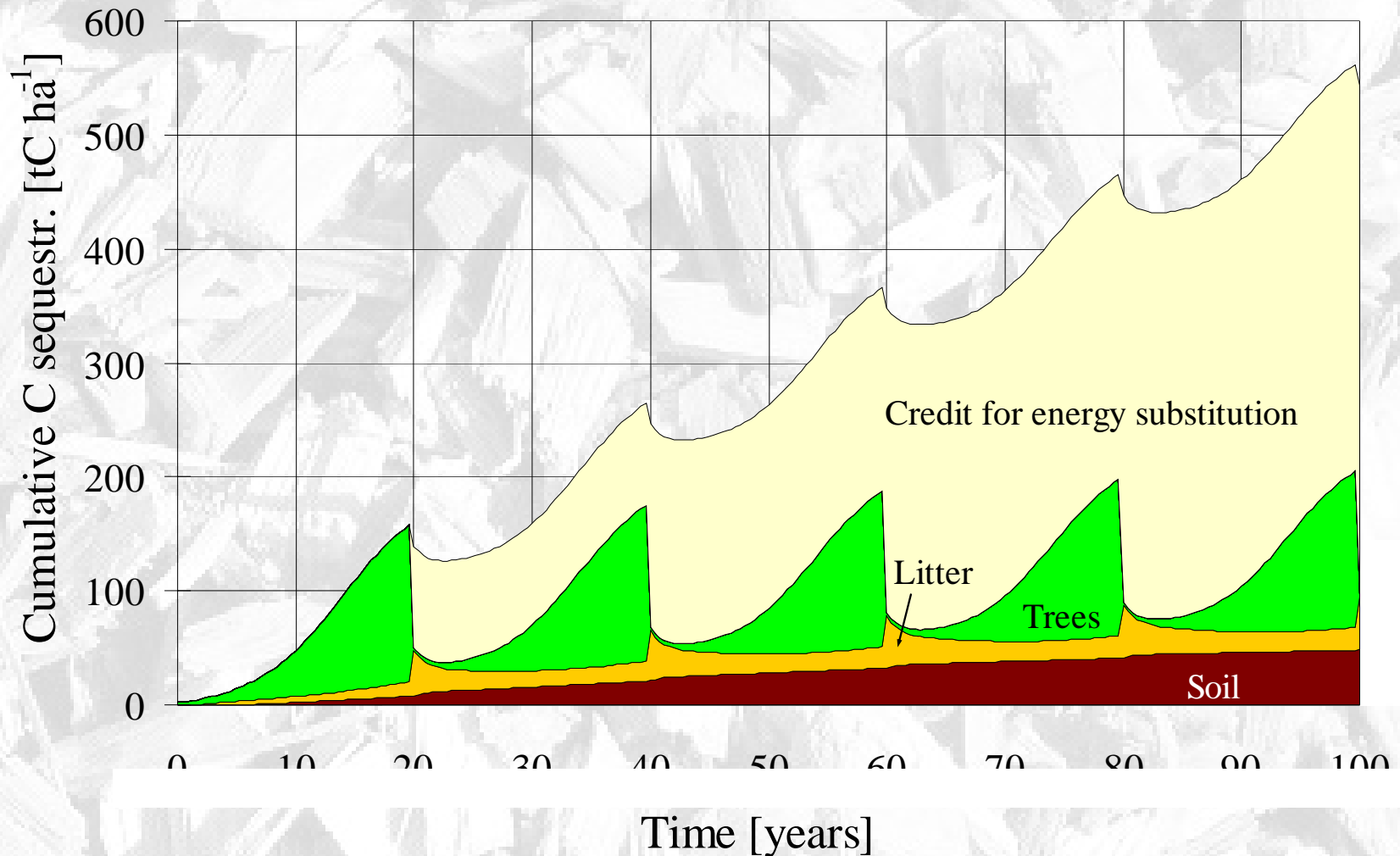
# New activities for post-2012

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- **Energy-sector projects that reduce deforestation, degradation, or otherwise improve LULUCF C stocks (the “non-renewable biomass” issue)**
  1. Non-renewable biomass → renewable biomass or other renewables (solar etc.)
  2. Efficiency improvements in non-renewable biomass
  3. Non-renewable biomass → efficient fossil fuels (e.g., LPG)
- ➔ Window for submissions on this in SSC (26 April)
- ➔ Solution: hypothetical fossil fuel in baseline, combined with actual (low) efficiency of non-renewable biomass
- ➔ Post 2012 should allow this for large projects

# Combined AR / bioenergy projects

Model results: fuelwood plantation on agricultural land



# Combined AR / bioenergy projects

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- *Reforestation of today provide the biomass energy of tomorrow*
- There is no methodology / process for combined AR / bioenergy projects
- EB should allow combined projects to avoid
  - ➔ duplicate costs for PDD
  - ➔ complex relationships between two different tracks of validation, monitoring, verification, additionality issues

# What are the negotiation, institutional and data implications of such change?

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- Negotiations: no major complications expected, if targets are set after determination of eligible activities
- Negotiations were not problematic for the broad (unlimited, except nuclear and CCS) scope of other parts of CDM
- Setting up principles, rather than micro-managing the modalities for a list of activities is essential
- New methodologies may be required; RV benefits from AR
- Simplify methodologies, preserving environmental integrity
- Data implications: no difference to other parts of CDM

# Could changes here help ensure a more even regional distribution of CDM projects?

- Yes, absolutely, especially for Africa
- Use of biomass fuels in 13 countries of different economic, climatic, and demographic conditions

Country	Total energy consump. [PJ]	Bio-energy consump. [PJ]	Share of bio-energy [%]	Population density [cap/km <sup>2</sup> ]	Total energy per cap. [GJ/cap]	Bioenergy per capita [GJ/cap]
Austria	1,053	100	9.5	94.3	137	13.0
Germany	15,012	84	0.6	230.8	189	1.1
Japan	17,390	6	0.0	331.9	141	0.0
Poland	3,595	40	1.1	126.5	94	1.0
Sweden	1,971	230	11.7	21.1	230	26.8
USA	84,321	3,482	4.1	28.1	337	13.9
Brazil	5,155	1,604	31.1	18.5	35	10.8
China	36,632	9,287	25.4	129.2	32	8.1
Egypt	1,502	380	25.3	56.3	29	7.2
India	16,554	8,543	51.6	301.6	20	10.1
Malaysia	1,488	663	44.6	58.6	83	37.1
Tanzania	954	925	97.0	32.5	37	35.6
Zaire	435	362	83.2	18.2	12	9.7

# Other points where LULUCF is disadvantaged

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- Why require a replacement of tCERs or ICERs after the project end? Is a significant barrier to investment
- Should differentiate between
  - ➔ project duration (for crediting new tons), and
  - ➔ replacement duration (for creating replacement tCERs of previous tons)
- “Non-forest since 1990”: replace with a non-forest period (5 or 10 yrs), or judgement by DOE that no deforestation or degradation was caused prior to project
- ICERs, RMUs, ERUs (not tCERs) should be bankable
- SSC projects
  - ➔ Much smaller threshold (8000 tons), under negotiation
  - ➔ Poor communities (why only in LULUCF, not other sectors?)
- CDM AR projects must be verified EXACTLY every 5 years

# Other recommendations

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- Remove the 1% cap on AR credits
- Lengthen commitment periods to promote LULUCF
- Simplify methodologies, PDDs and entire process
  - ➔ how can a community in Africa work with a 120 page methodology, when a large HFC23 or energy project can get away with 20 pages
- CDM AR WG and other relevant panels should consist of professionals hired and paid for this purpose (applies to rest of CDM as well). This work should not be done “after a day job”.