



# Linking

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Shell Trading



## Leaked EU proposal... to link or not to link...

All contingent on Russian ratification and entry into force of the Protocol

- Quantitative:
  - ▶ Member States can convert CERs or ERUs into EU allowances up to 6% of allowances allocated in the national allocation plan.
  - ▶ The proposal does not prevent a Member State from generating and buying CERs and ERUs in order to use them for Kyoto compliance.
  
- Qualitative
  - ▶ Exclusion of LULUCEF, nuclear and hydro that does not meet World Commission on Dams' criteria.
  - ▶ Presumably the proposal does not prevent a Member State from generating or buying such CERs and ERUs in order to use them for Kyoto compliance.



## Trading and quant constraints...

- How will governments devolve the 6% limit to companies?
- Assuming
  - ▶ 6% constraint is pro-rated per installation allocation
  - ▶ CER/ERUs are cheaper than EU allowances
- This creates a secondary market in “conversion rights” if:
  - ▶  $(\text{ERU/CER price} + \text{conversion premium}) < \text{EU allowance price}$
- Since EU allowances fully fungible, Irish/Danish/Spanish companies can convert ERU/CER through Slovak/Czech/Latvian installation account
- If CER/ERUs are cheaper than EU allowances then this conversion will be maximized until either (a) prices equalize, or (b) 6% of the aggregate of all NAPs has been converted to EU allowances.
- Net effect is a transaction cost on companies. Governments are exempt from this.



## Trading and qualitative constraints...

- Exclusion of LULUCEF, nuclear and hydro that does not meet World Commission on Dams' criteria.
- But some Annex 1 countries will not apply the same constraints
- Hence, scope for Japanese/Canadian companies to swap EU compliant CER/ERUs for EU non-compliant CER/ERUs
- EU compliant CER/ERUs will trade at premium until:  
(EU allowances + conversion rate) = price of EU non-compliant CER/ERUs
- This is a real constraint when no non-EU company has any more EU compliant CER/ERUs



## Linking questions

- US credits/offsets/VERs:
  - ▶ Chicago Climate Exchange
  
- Renewable energy credits
  
- Spark spread
  - ▶ (gas + allowance cost + operating cost) < power price
  - ▶  $10x + (1y) + k < 25$
  
  - ▶ (coal + allowance cost + operating cost) < power price
  - ▶  $5x + (2y) + k < 25$

