Hvordan kan CCS påvirke CDM og dermed EU's CO2-handelssystem

Jørgen Fenhann
UNEP Risø Centre, Denmark
j.fenhann@risoe.dk

CO2-lagring – fiks teknik eller teknisk fix?

NOAH, Trekanten, Kalvebod Brygge, 31 oktober, 2007

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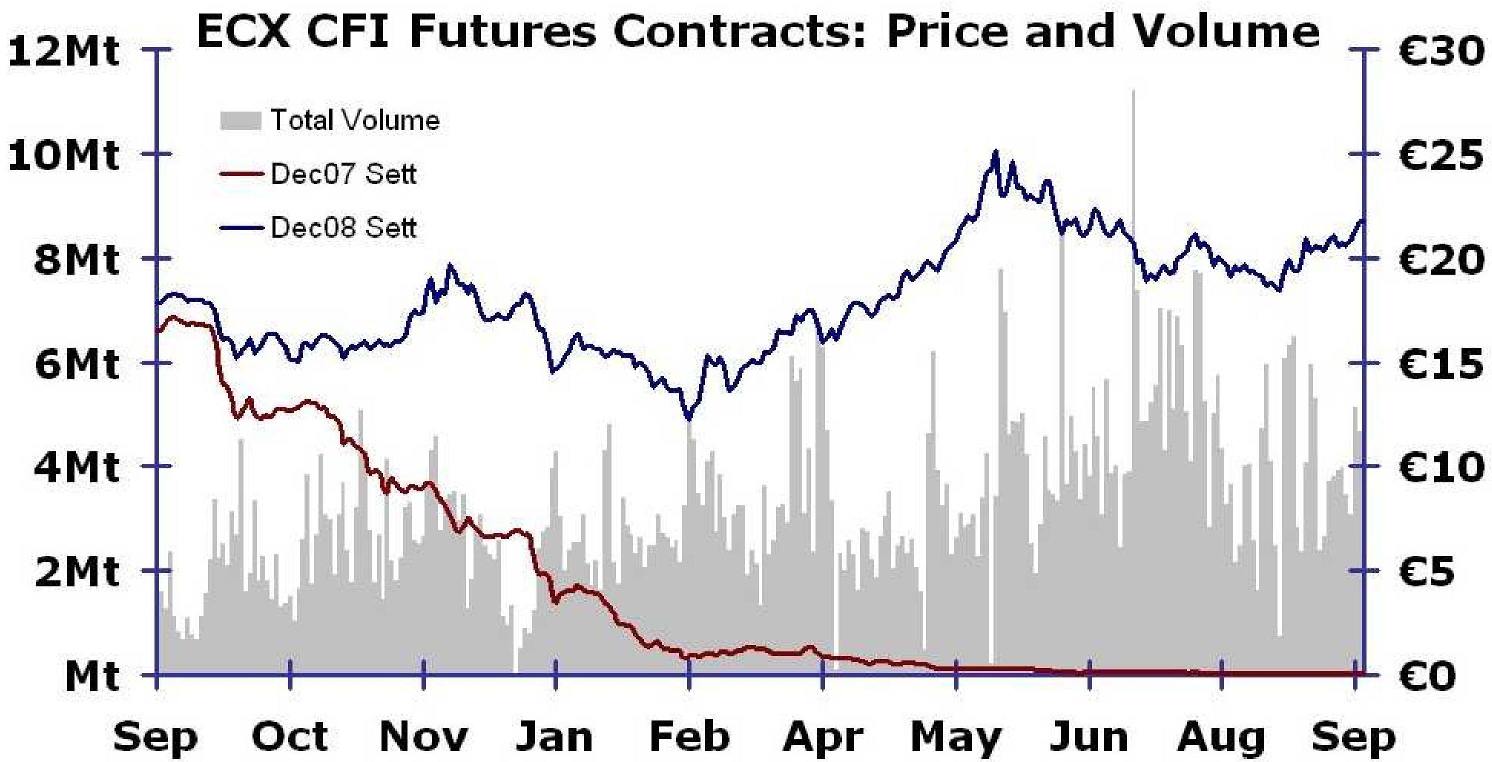
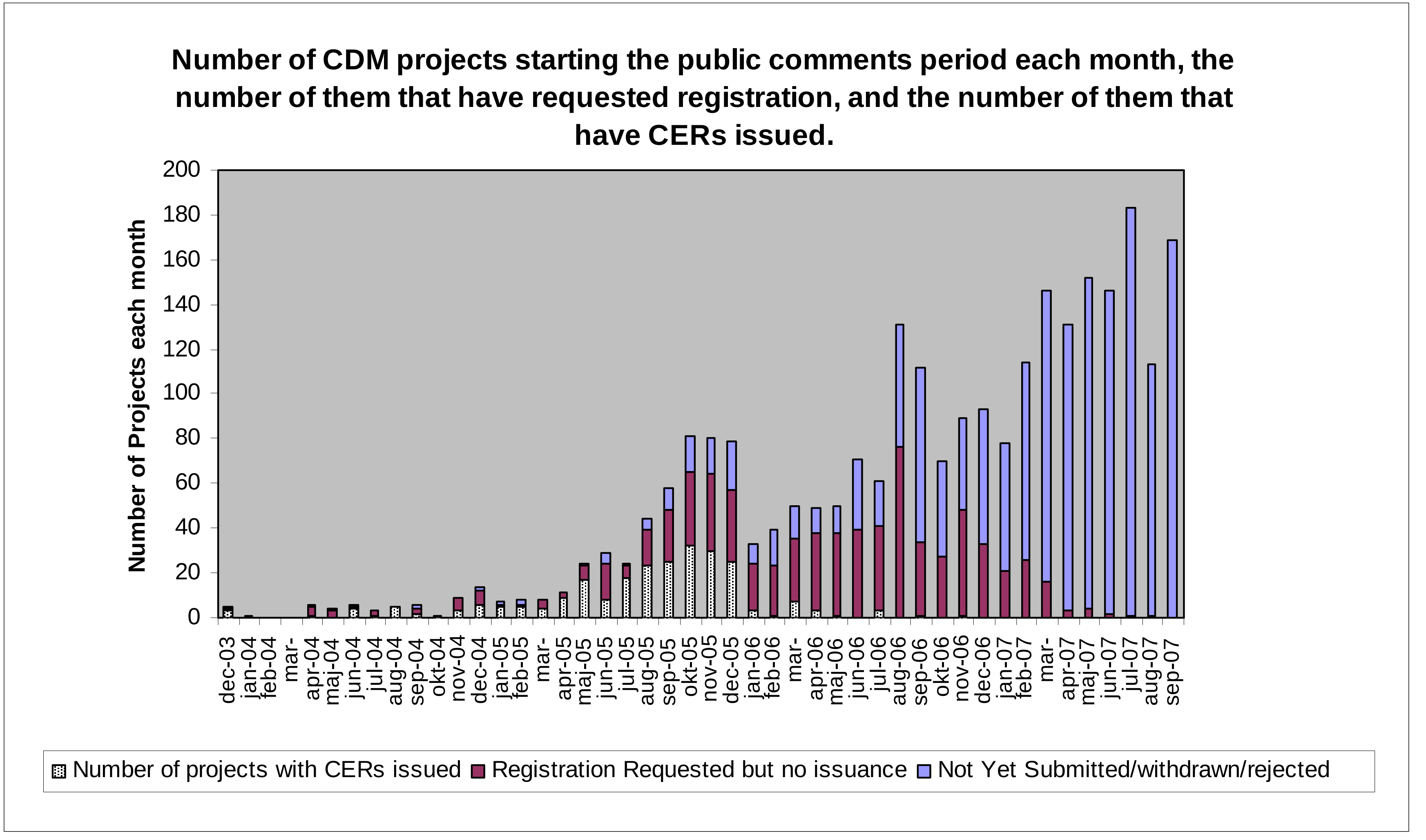
Indhold

- Hvad kan der ske, når udbuddet af kvoter er for stort?
- Hvor hurtigt vokser CDM Pipeline?
- Hvor langt er projekterne kommet i CDM projekt cyklus, og hvor store er de?
- Får projekterne de forventede CERs udstedt?
- Hvordan er fordelingen af CDM projekter på sektorer?
- Hvor mange CER vil der være til rådighed 31 dec. 2012?
- Nogle regioner (og lande) er bagud.
- Hvor meget kan JI levere?
- Konklusion

Prisen på EU's CO2 handelssystem i 1st fase før 2008 gik i nul da udbuddet var for stort. Det samme kan ske for CDM og EU's 2. og 3. fase




Number of CDM projects starting the public comments period each month, the number of them that have requested registration, and the number of them that have CERs issued.
Number of Projects each month
0
20
40
60
80
100
120
140
160
180
200
dec-03 jan-04 feb-04 mar- apr-04 maj-04 jun-04 jul-04 aug-04 sep-04 okt-04 nov-04 dec-04 jan-05 feb-05 mar- apr-05 maj-05 jun-05 jul-05 aug-05 sep-05 okt-05 nov-05 dec-05 jan-06 feb-06 mar- apr-06 maj-06 jun-06 jul-06 aug-06 sep-06 okt-06 nov-06 dec-06 jan-07 feb-07 mar- apr-07 maj-07 jun-07 jul-07 aug-07 sep-07
Number of projects with CERs issued
Registration Requested but no issuance
Not Yet Submitted/withdrawn/rejected

Status of CDM projects: 2593 in the pipeline

Status of CDM projects as of 1 October 2007	Number
At validation	**1596**
Request for registration	51
Request for review	41
Correction requested	30
Under review	30
Total in the process of registration	**152**
Withdrawn	6
Rejected by EB	36
Registered, no issuance requested	556
Registered. CER issued	247
Total registered	**803**
Total number of projects (incl. rejected & withdrawn)	2593

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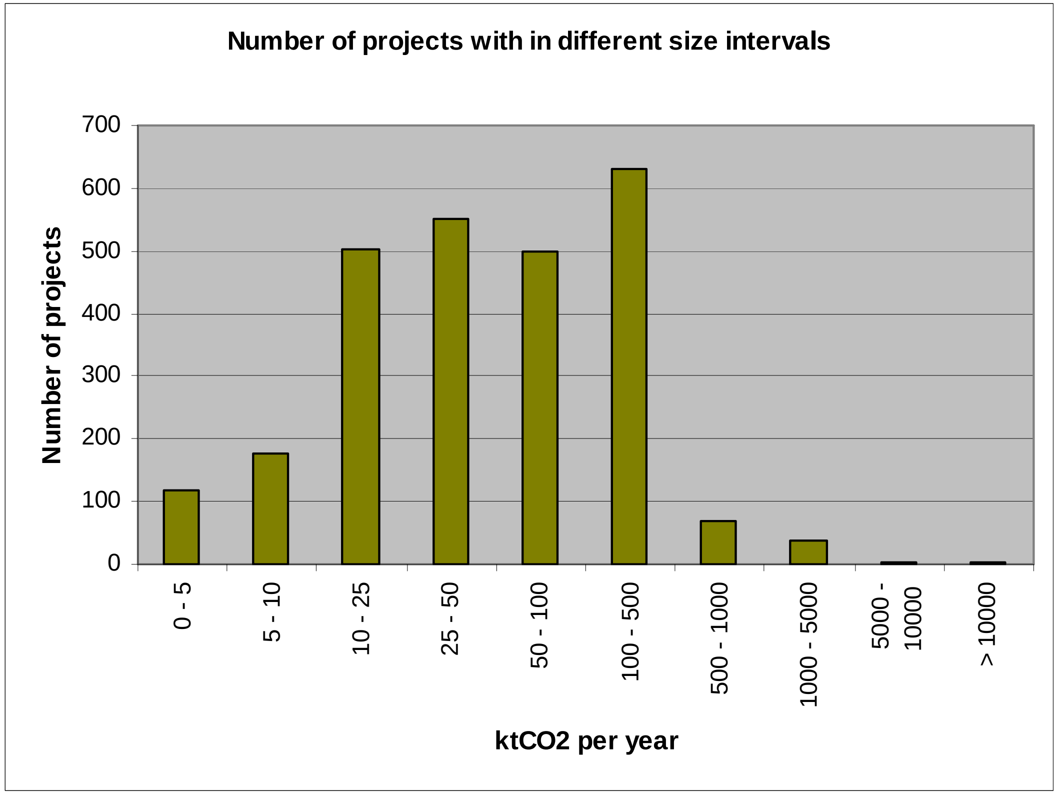
What is the size of the CDM projects?



P-CDM (maybe with microfinance) needed to enhance the small CDM projects with high SD profiles

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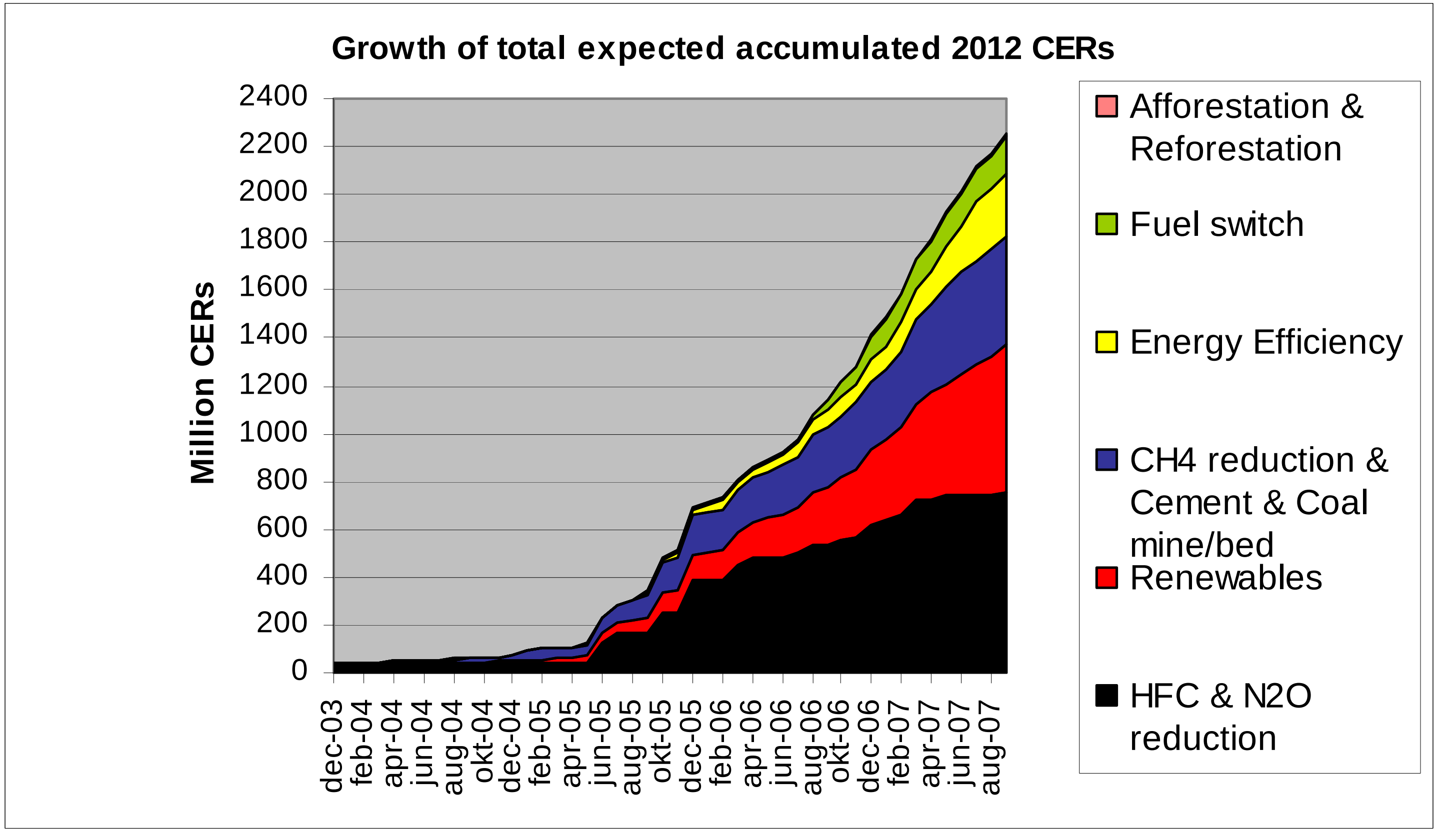
Projects get about 90% of the expected CERs

CDM projects in the pipeline	CDM project with CERs issued		
Type	Projects	Issued kCERs	Issuance success
Afforestation			
Agriculture	29	2019	49%
Biogas	3	274	87%
Biomass energy	76	7328	90%
Cement	4	703	83%
Coal bed/mine methane			
Energy distribution			
EE households			
EE industry	9	387	82%
EE own generation	14	6550	103%
EE service	1	2	63%
EE supply side	2	30	83%
Fossil fuel switch	9	1012	84%
Fugitive	1	553	97%
Geothermal	2	102	20%
HFCs	11	41570	93%
Hydro	44	3175	88%
Landfill gas	12	2301	35%
N2O	4	17504	119%
Others			
PFCs			
Reforestation			
Solar			
Tidal			
Transport	1	59	51%
Wind	37	2257	74%
Total	259	85827	89,8%

Expected CERs at 2012 from present projects (by project type)



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Sectoral distribution of CDM projects:

Demand-side Energy Efficiency

Transport,

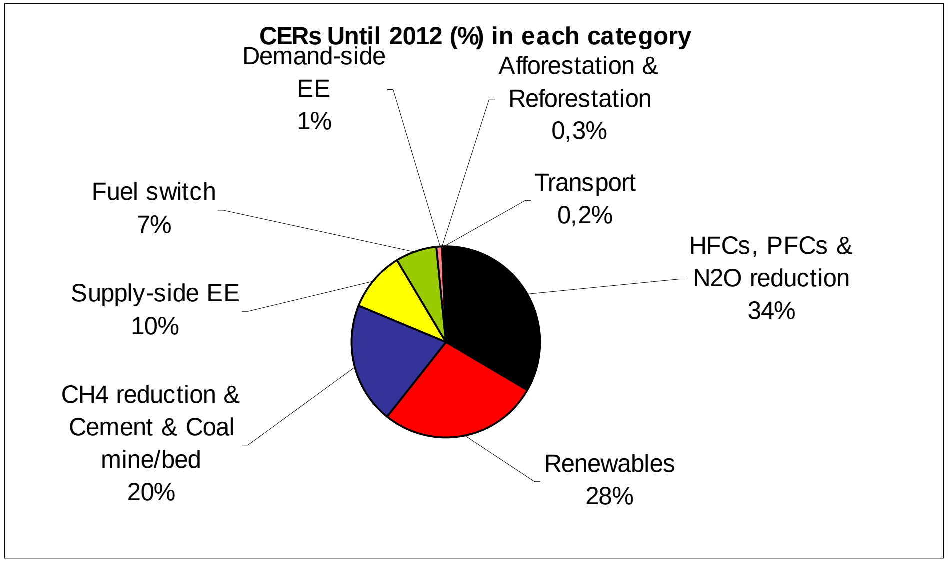
Small renewables

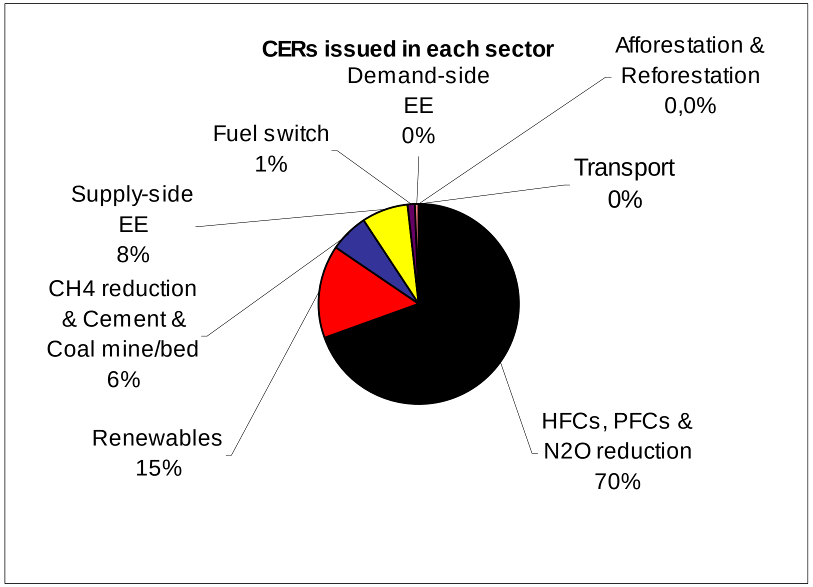
and Forest projects are behind:

Programmatic-CDM might help!

Type	number		2012 CERs (000)	
Hydro	612	24%	265729	12%
Biomass energy	462	18%	162679	7%
Wind	311	12%	137694	6%
EE own generation	235	9%	214292	10%
Agriculture	177	7%	44294	2%
Landfill gas	177	7%	212569	9%
Biogas	145	6%	39782	2%
EE Industry	119	5%	24512	1%
Fossil fuel switch	80	3%	158301	7%
N2O	44	2%	246088	11%
Coal bed/mine methane	43	2%	114703	5%
Cement	28	1%	29345	1%
EE Supply side	27	1%	18155	1%
Fugitive	20	1%	55042	2%
HFCs	19	1%	502355	22%
Afforestation & Reforestation	11	0%	7264	0%
Geothermal	10	0%	11795	1%
Solar	8	0%	1111	0%
EE Households	7	0%	988	0%
Transport	6	0%	3459	0%
EE Service	4	0%	216	0%
Energy distrib.	3	0%	967	0%
PFCs	2	0%	944	0%
Tidal	1	0%	1104	0%
Total	2551	100%	2253387	100%
HFCs, PFCs & N2O reduction	65	3%	749387	33%
Renewables	1549	61%	619895	28%
CH4 reduction & Cement & Coal mine/bed	445	17%	455953	20%
Supply-side EE	265	10%	233414	10%
Fuel switch	80	3,1%	158301	7,0%
Demand-side EE	130	5,1%	25715	1,1%
Afforestation & Reforestation	11	0,4%	7264	0,3%
Transport	6	0,2%	3459	0,2%

Expected CERs and issued CERs by sector

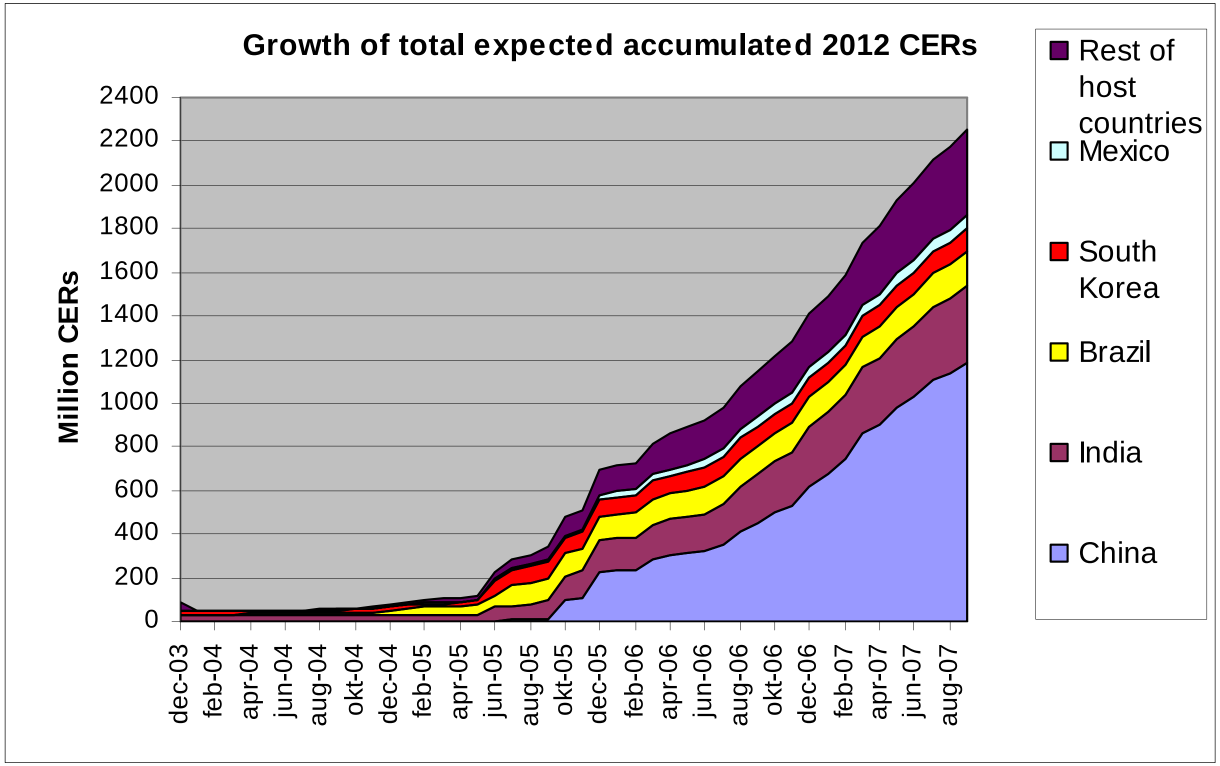




2125 MCERs issued in 2012, assuming 17,1 MCERs extra expected monthly until end-2010

	Existing projects	Projection End 2012
	Million CERs	
Total 2012 CERs expected from projects in the Pipeline	2253	
Total amount of CERs expected annually	392	
Number of project that have CERs issued	247	
Total amount of CERs issued	83	2125
Total amount of CERs expected to be issued in these projects	93	
Total issuance success	89,3%	89,3%
Share Of Proceeds (SOP) for the Adaptation Fund	1,7	42
Total amount of CERs expected at the end of 2030	7057	
Post 2012 CERs available	4804	

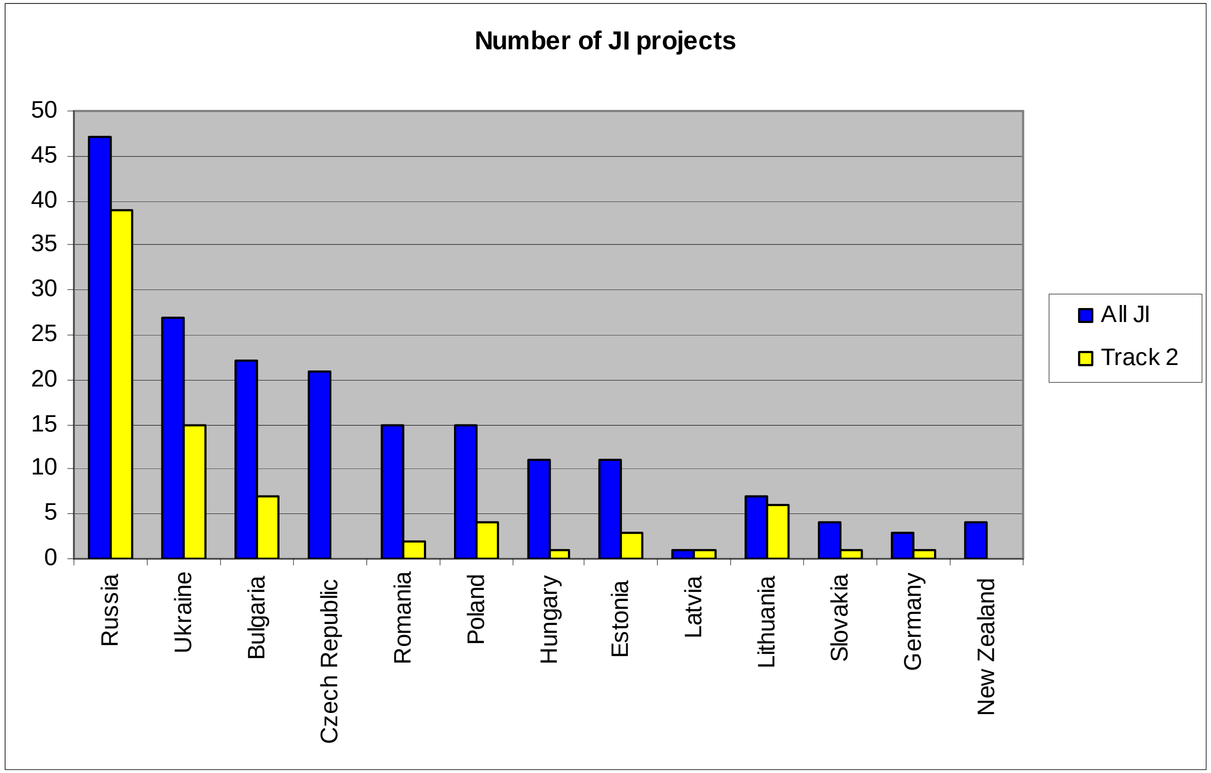
Expected CERs at 2012 from present projects (by host country)



Some regions and countries are behind

Total in the CDM Pipeline	Number		2012 kCERs	
Latin America	610	**23,2%**	354350	**15,5%**
Asia & Pacific	1931	**73,3%**	1816997	**79,5%**
Europe and Central Asia	23	**0,9%**	10088	**0,4%**
Sub-Sahara Africa	34	**1,3%**	61675	**2,7%**
North Africa & Middle-East	35	**1,3%**	42847	**1,9%**
Less developed World	2633	**100%**	2285957	**100%**

80 of the 188 JI projects are track 2, the rest is early movers. With the present speed, JI can deliver no more than 200 million ERU 2012.



Konklusion

- Sørg for at udbuddet af projekt kvoter ikke overstige behovet!
- Det er først nu at kvoter fra VE og energibesparelser begynder at vokse.
- De eksisterende og forventede CDM projekter kan omtrent levere, hvad der er behov for indtil 2012.
- JI når sikkert ikke at levere ret meget inden 2012.
- Hvis CCS eller andre større klumper får adgang inden 2012, bliver der ikke plads til at VE + Energibesparelse kan vokse til et rimeligt niveau.
- Der er et kæmpe uudnyttet potentiale i energibeparelse der ikke er blevet udnyttet endnu.
- Hvad der yderligere bliver plads til Post-2012 afhænger af hvor store reduktioner industrilandene (Annex-I) bliver enige om.

Source: UNEP Risoe CDM/JI Pipeline Analysis and Database
UNEP Risoe Centre, 1 October 2007

For more information:

www.cdmpipeline.org

j.fenhann@risoe.dk

Phone: +45 4677 5105