

Summary

The general picture now clearly shows the impact of the introduction of Guarantees of Origin and EECS: Total issuing as well as redemption is most likely to rise above the 2003 level. GO activity appears to be replacing RECS activity, which becomes clear when considering the much higher imports and exports; with the Netherlands importing and redeeming a substantial number of certificates; while Austrian activity also continues to grow.

Readers should note that:

- 1. As the base data for issued certificates derives from meter data, there is always an element of delay in gaining an accurate picture of certificates issued for a particular month. Thus the most recent [3] months will always be understated and the corresponding information should be treated with caution.
- 2. Historic import and export figures continue to be misleading due to the practice of redeeming certificates in one country and transferring the renewable benefit over national borders by means of redemption statements. This appears to be increasingly replaced by inter-CMO transfers.
- 3. Data is available for all months to date, from all parties.

Phil Moody General Secretary, Association of Issuing Bodies 11 October 2004 Ref: AIB-2004-Statistics-July Date: 11 October 2004

RECS activity figures as reported mid-October 2004



Figure 1: raw data - by country

Tigure 1. Taw data - by country															
		2004					2003								
	Issued Transferred		Transferred	Redeemed		Issued	Transferred			Redeemed	Issued	Transferred			Redeemed
		Total	Export	Import			Total	Export	Import			Total	Export	Import	
Austria	4,795,177	203,430	137,288	1,422,876	1,011,215	1,785,844	200,000	131,612	1,402,716	628,003	1,950,584		5,676	20,160	298,543
Belgium and Luxembourg	113,390			7,000	7,000									7,000	7,000
Switzerland	455,109	80,727	24,150	12,232	141,554	79,052	74,009	14,050		101,924	276,837	6,718	10,100	12,232	35,530
Germany	42,388	513,728		53,460	48,647				31,740	48,647	41,789			21,720	
Denmark (West)	495,873		206,133		24,614	243,907		206,133			24,680				24,614
Denmark (East)															
Spain	2,466,274		1,321,790		140,031	743,620		1,291,630		93,400	795,287		30,160		46,631
Finland	18,955,957	1,416,476	4,379,473		7,150,068	5,227,103	828,305	4,365,699		1,430,432	7,175,421	340,784	13,774		4,192,610
France	317,923	35,377	5,000	5,000	265,021	170,706	35,377			178,264	142,665		449	5,000	86,757
Italy	373,759	163,467			11,682						59,549	163,467			10,557
Netherlands	1,302,236		3,303	4,999,222	3,408,024	936,963		3,303	4,867,668	3,298,959	162,773			124,554	107,962
Norway	14,880,339	733,745	7,100	100	4,328,009	3,562,635	37,194			543,541	7,817,149	690,960	7,100	100	1,325,707
Poland															
Portugal															
Sweden	8,998,731	3,080,395	261,181		3,859,204	3,707,156	3,077,895	136,181		628,066	2,040,632	2,500	125,000		2,106,088
Slovenia	2,178,554	486,003		_	86,400	2,178,554	486,003			86,400					
UK & Ireland	90,158														
All countries	55,465,868	6,713,348	6,345,418	6,499,890	20,481,469	18,635,540	4,738,783	6,148,608	6,302,124	7,037,636	20,487,366	1,204,429	192,259	190,766	8,241,999

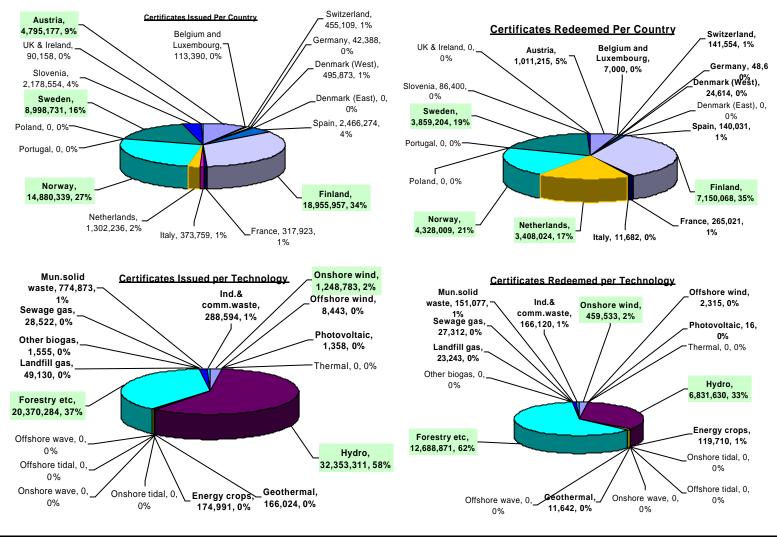
Figure 2: raw data - by technology

				2004	2003										
	Issue	Transfer		Redeem	Issue	Transfer			Redeem	Issue	Transfer			Redeem	
		Total	Export	Import			Total	Export	Import			Total	Export	Import	
Onshore wind	1,248,783	45,747	212,091	307,363	459,533	745,495	8,374	204,563	293,309	259,329	312,228	27,278	5,105	7,054	153,738
Offshore wind	8,443	70	3,293		2,315	5,175		3,293		2,129	4				186
Photovoltaic	1,358				16	1,345				16	13				
Thermal															
Hydropower	32,353,311	6,021,683	1,762,727	1,895,019	6,831,630	12,457,185	4,466,914	1,587,191	1,723,027	2,154,644	11,967,408	1,016,014	173,408	171,992	1,739,735
Onshore tidal															
Offshore tidal															
Onshore wave															
Offshore wave															
Geothermal	166,024	159,071			11,642							159,071			10,517
Energy crops	174,991			21,359	119,710	28,459			21,359	53,110	66,513				52,078
Forestry etc	20,370,284	481,597	4,367,307	4,181,587	12,688,871	4,912,854	262,295	4,353,561	4,169,867	4,327,845	7,945,838	4	13,746	11,720	6,201,910
Landfill gas	49,130	1,200			23,243	26,119	1,200			14,066	3,890				742
Sewage gas	28,522			2,477	27,312	3,293			2,477	2,131	1,075				25,181
Other biogas	1,555					925					630				
MSW	774,873				151,077	267,250				145,096	171,379				3,026
IB&CW	288,594	3,980		92,085	166,120	187,440			92,085	79,270	18,388	2,062			54,886
Total	55,465,868	6,713,348	6,345,418	6,499,890	20,481,469	18,635,540	4,738,783	6,148,608	6,302,124	7,037,636	20,487,366	1,204,429	192,259	190,766	8,241,999

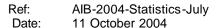
RECS activity figures as reported mid-October 2004



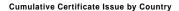
The above tables display statistics for individual years 2003 and 2004, and for 2001-4 in total. These, and the following pie charts, show that volumes issued and redeemed continue to increase; and that international transfers have risen sharply since spring 2004 – presumably with the advent of Guarantees of Origin. The Netherlands has made a late showing, again as a result of guarantees of origin, or more precisely their acceptability to the Dutch government as evidence for support – this is evidenced by the higher figures for redemption than for issue in the Nertherlands. Other than this, the major certificate issuing countries and technologies have remained the same; although issue of onshore wind certificates is increasing.

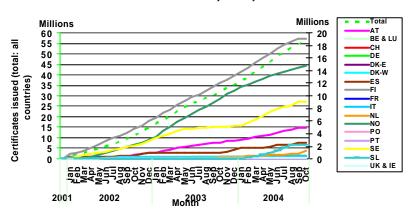


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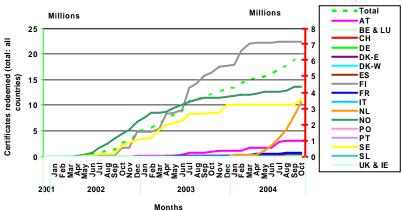


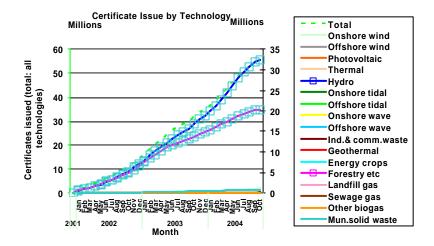


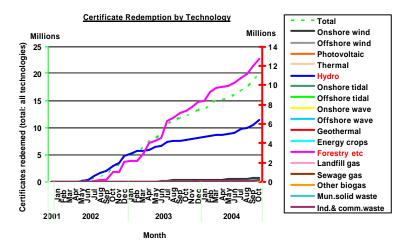




Cumulative Certificate Redemption by Country





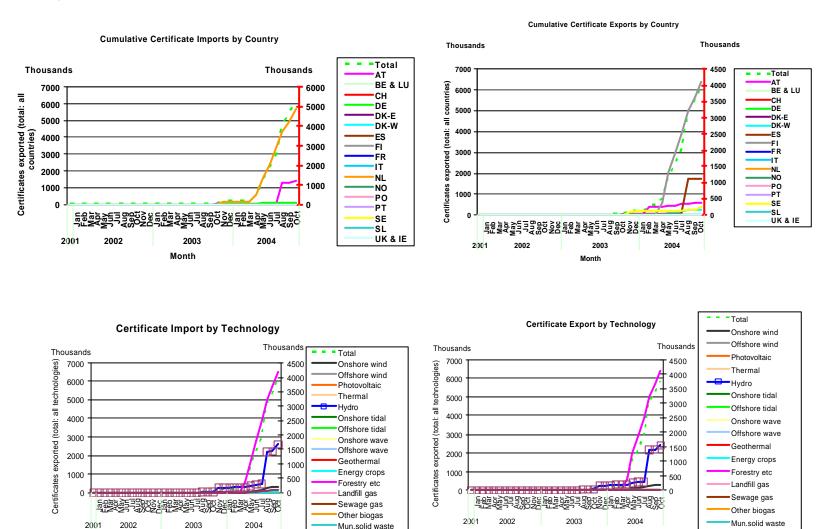


Month



Ind.& comm.waste

While the majority of certificate activity commenced October 2003, imports and exports via the CMO interface commenced in spring 2004 – suggesting that these are Guarantees of Origin, as the scheme commenced at that time. Note that imports do not necessarily equate to exports, because of timing considerations (different IBs process data at different times). Of particular note is the continued strong growth of trade into the Netherlands, and out of Finland.



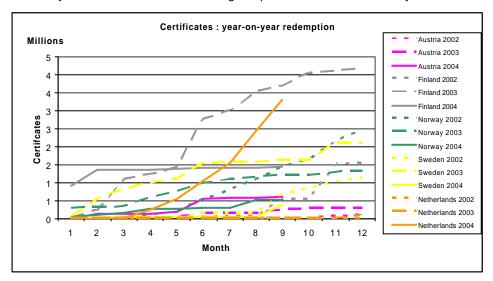
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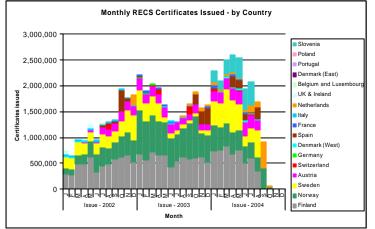
Month

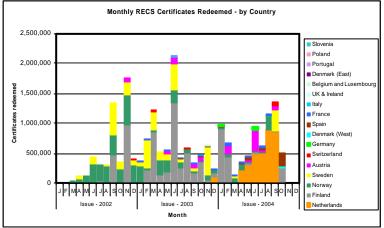


Year-on-year issuing (major domains)

Annual comparisons of national certificate activity are only likely to be meaningful for countries that have been active for more than two years – Finland, Norway, Sweden, Denmark, Netherlands and Austria. This is shown in the graphs of cumulative and actual activity below, demonstrating that activity is again picking up as activity based on Guarantees of Origin replaces and adds to activity based on RECS.





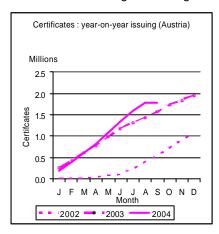


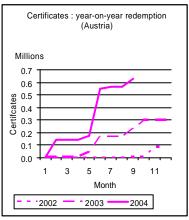
RECS activity figures as reported mid-October 2004

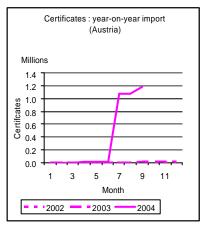


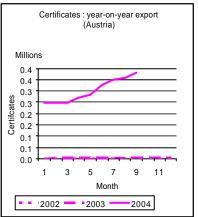
Not surprisingly, the position in the various countries differs. This is shown below, for the five most active countries.

• Austria is issuing increasing numbers of certificates this year, and redemption has markedly increased.



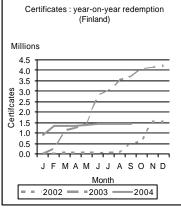


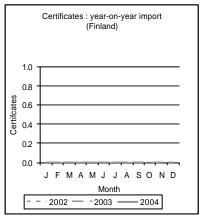


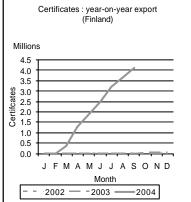


• Finland continues to issue at a fairly constant rate, but is redeeming less certificates than in the past.



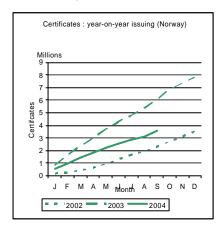


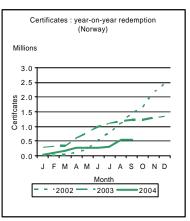


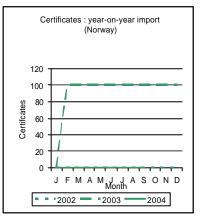


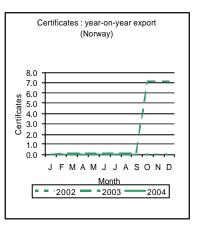


• Norway continues to issue and redeem at a fairly constant rate.

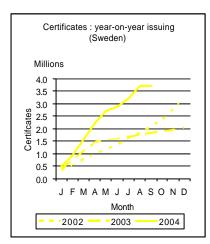


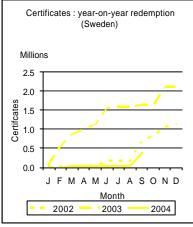


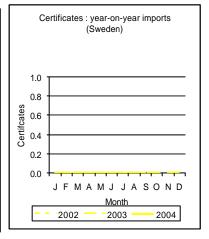


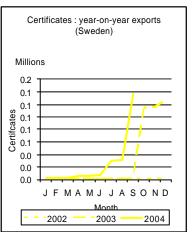


• Sweden has also issued a fairly constant number of certificates, but has redeemed virtually none recently.



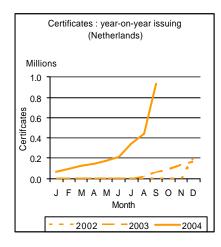


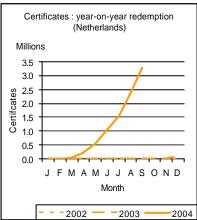


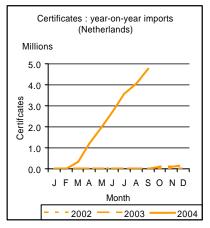


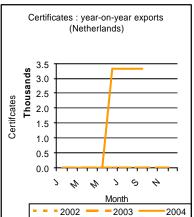


• The Netherlands continues its marked increase in activity.

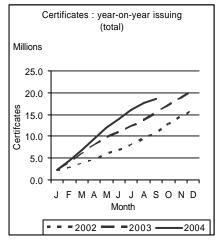


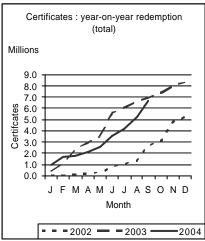


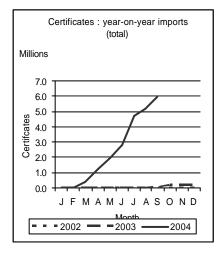


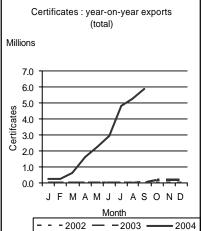


Summary



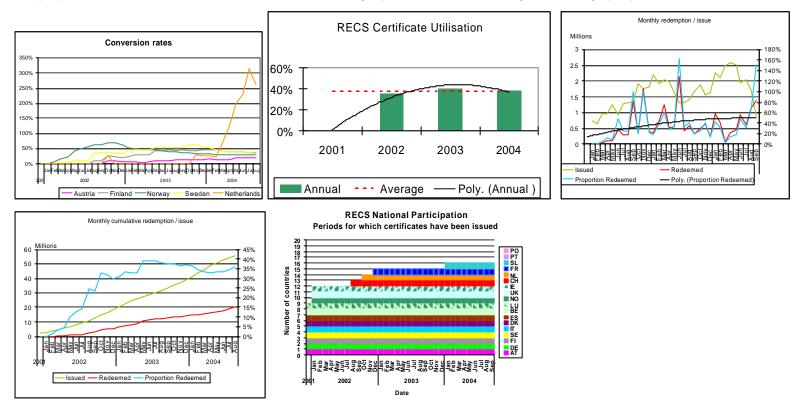








The proportion of certificates that are redeemed has fallen slightly, to 37% overall, although the average per year has risen. This is shown below.



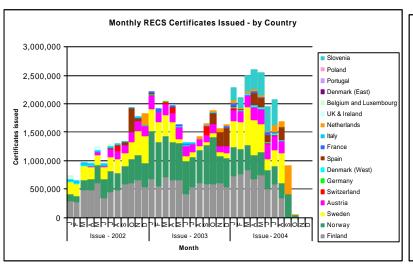
It is also interesting to note that the Netherlands is redeeming three times as many certificates than it issues.

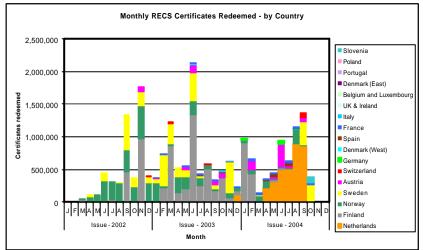
The growth in participating countries is also shown, unchanged from the last quarter (note that Slovenia has commenced operations).

RECS activity figures as reported mid-October 2004



The number of countries, and the differences in activity between them, makes the monthly picture a little confusing. However, aggregating the individual countries makes the picture more clear.





This is further demonstrated by looking at cumulative activity over the preceeding three and six months, which appears to show a return to growth.

