
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.

Volumes issued and redeemed continue to increase. Redemption has increased markedly in December (presumably this marks the end of eligibility for the Dutch REB), particularly in Sweden and the Netherlands, which has now overtaken Finland as the major redeemer of certificates. The major certificate issuing and redeeming countries and technologies have remained the same; although issue and redemption of onshore wind certificates is now increasing, along with municipal solid waste.

International transfers continue to rise, and of particular note is the continued strong growth of trade into the Netherlands and Austria, and out of – in particular - Finland and Sweden, with Spain, Switzerland and Denmark also exporting. Note also that Austria both imports and exports.

The proportion of certificates that are redeemed has risen sharply to 45% overall, with 57% of certificates issued last year being redeemed.

Finally, note that the number of issuers has fallen for the first time, due to the UK & Ireland RECS issuing body ceasing operations there. The obligatory certificate issuers in these countries will be approached, to invite them to join.

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
26 January 2005

Figure 1: raw data - by country

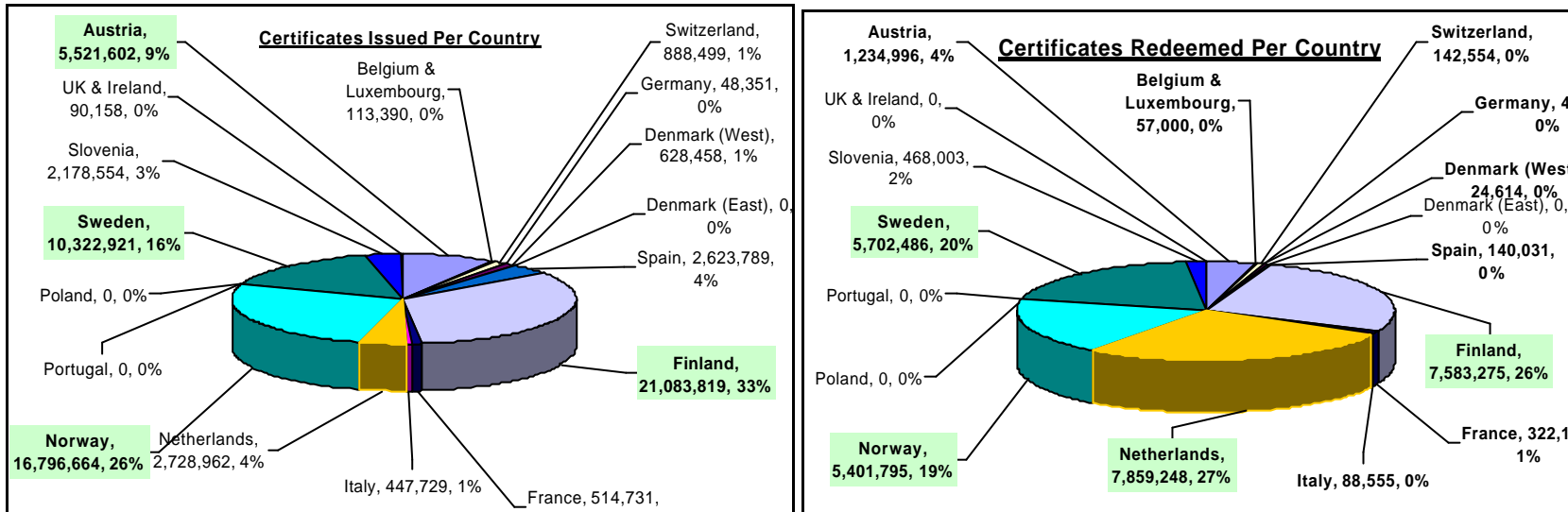
	Total				2004					2003						
	Issued	Transferred			Redeemed	Issued	Transferred			Redeemed	Issued	Transferred			Redeemed	
		Total	Export	Import			Total	Export	Import			Total	Export	Import		
Austria	5,521,602	623,430	336,031	1,723,501	1,234,996	2,452,748	430,000	330,355	1,703,341	851,784	1,950,584	5,676	20,160	298,543		
Belgium and Luxembourg	113,390			57,000	57,000				50,000	50,000				7,000	7,000	
Switzerland	888,499	80,727	464,350	235,832	142,554	512,442	74,009	454,250	223,600	102,924	276,837	6,718	10,100	12,232	35,530	
Germany	48,351	513,728		53,460	49,050	5,963			31,740	43,087	41,789			21,720		
Denmark (West)	628,458		317,138		24,614	376,486			317,138		24,686				24,614	
Denmark (East)																
Spain	2,623,789		1,402,815		140,031	901,135		1,372,655		93,400	795,287		30,160		46,631	
Finland	21,083,819	1,588,542	5,840,506		7,583,275	7,352,432	1,000,371	5,826,732		1,863,639	7,177,954	340,784	13,774		4,192,610	
France	514,731	37,457	5,000		6,000	322,123		367,514		37,457	214,878		449		5,000	86,757
Italy	447,729	247,437			88,555	73,970		83,970		76,873	59,549	163,467			10,557	
Netherlands	2,728,962		3,303	8,479,205	7,859,248	2,172,121		3,303	8,347,651	7,542,276	162,773			124,554	107,962	
Norway	16,796,664	2,276,452	57,100	100	5,401,795	5,419,439	1,389,901	50,000		1,617,327	7,817,149	690,960	7,100	100	1,325,707	
Poland																
Portugal																
Sweden	10,322,921	3,588,273	1,719,876		5,702,486	5,031,346	3,585,773	1,594,876		2,471,348	2,040,632	2,500	125,000		2,106,088	
Slovenia	2,178,554	486,003			468,003	2,178,554	486,003			468,003						
UK & Ireland	90,158															
All countries	63,987,627	9,442,049	10,146,119	10,555,098	29,073,730	26,844,150	7,087,484	9,949,309	10,357,332	15,395,539	20,489,905	1,204,429	192,259	190,766	8,241,999	

Figure 2: raw data - by technology

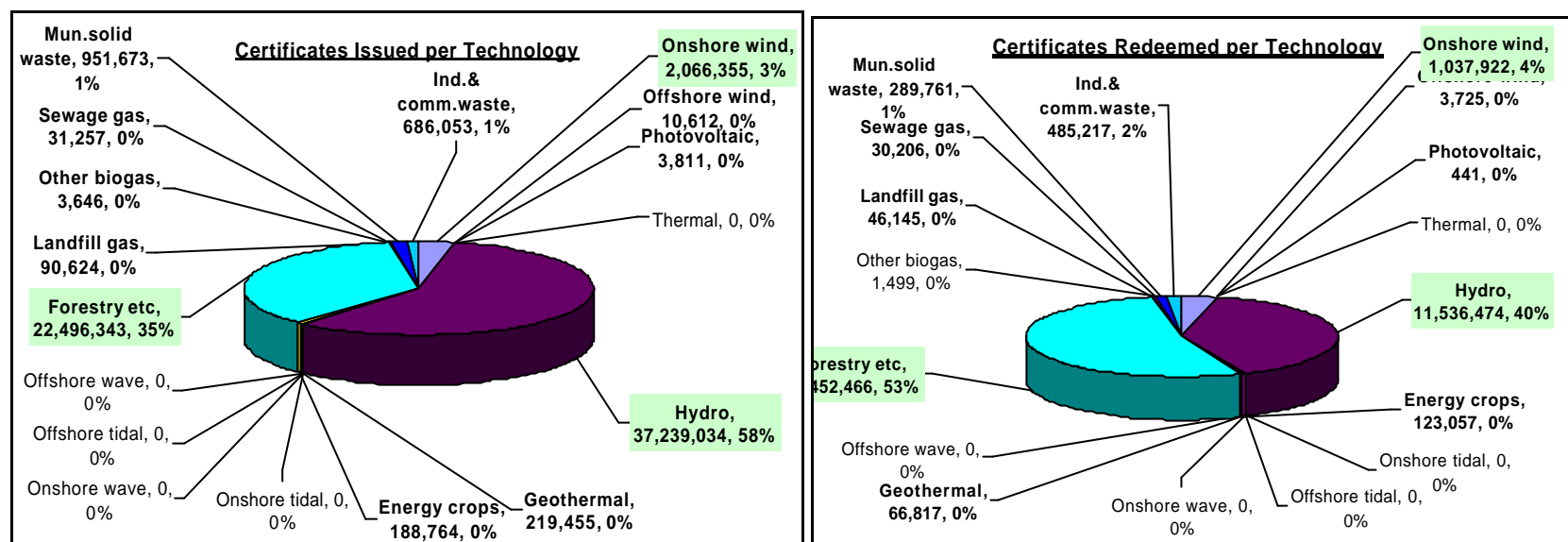
	Trading report for all countries					2004					2003				
	Issue	Transfer			Redeem	Issue	Transfer			Redeem	Issue	Transfer			Redeem
		Total	Export	Import			Total	Export	Import			Total	Export	Import	
Onshore wind	2,066,355	46,981	323,927	333,467	1,037,922	1,492,284	9,608	316,399	319,413	804,377	314,767	27,278	5,105	7,054	153,738
Offshore wind	10,612	70	4,368	2,922	3,725	7,344		4,368	2,922	2,539	4				186
Photovoltaic	3,811		1,094		441	3,576		1,094		423	13				
Thermal															
Hydropower	37,239,034	8,616,005	4,077,658	4,243,951	11,536,474	17,229,813	6,681,236	3,902,122	4,071,959	6,833,053	11,967,408	1,016,014	173,408	171,992	1,739,735
Onshore tidal															
Offshore tidal															
Onshore wave															
Offshore wave															
Geothermal	219,455	212,502			66,817	53,431				55,175	159,071				10,517
Energy crops	188,764			27,441	123,057	42,232			27,441	56,457	66,513				52,078
Forestry etc	22,496,343	561,311	5,739,072	5,809,998	15,452,466	7,016,055	342,009	5,725,326	5,798,278	6,917,876	7,945,838	4	13,746	11,720	6,201,910
Landfill gas	90,624	1,200			46,145	67,145	1,200			36,968	3,890				742
Sewage gas	31,257			3,393	30,206	6,028			3,393	5,025	1,075				25,181
Other biogas	3,646				1,499	3,016				1,499	630				
MSW	951,673				289,761	338,327				283,780	171,379				3,026
IB&CW	686,053	3,980		133,926	485,217	584,899			133,926	398,367	18,388	2,062			54,886
Total	63,987,627	9,442,049	10,146,119	10,555,098	29,073,730	26,844,150	7,087,484	9,949,309	10,357,332	15,395,539	20,489,905	1,204,429	192,259	190,766	8,241,999

The above tables display statistics for individual years 2003 and 2004, and for 2001-5 in total (note that figures for 2005 are not significant, and have been excluded). These, and the following pie charts, show that volumes issued and redeemed continue to increase. Redemption has

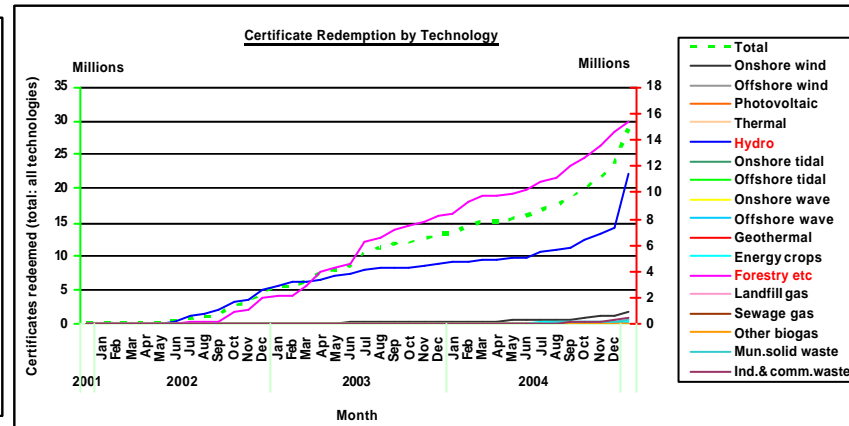
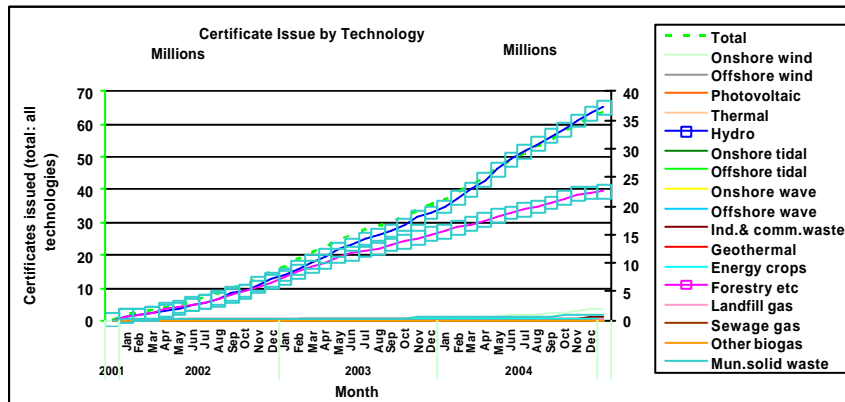
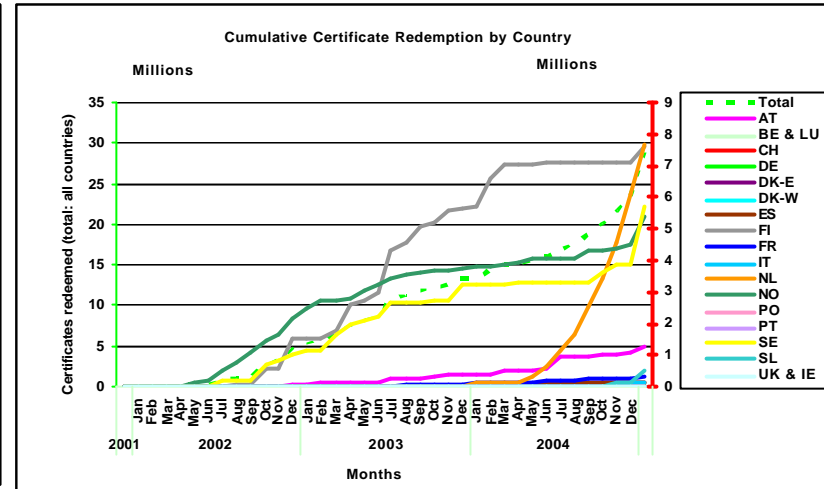
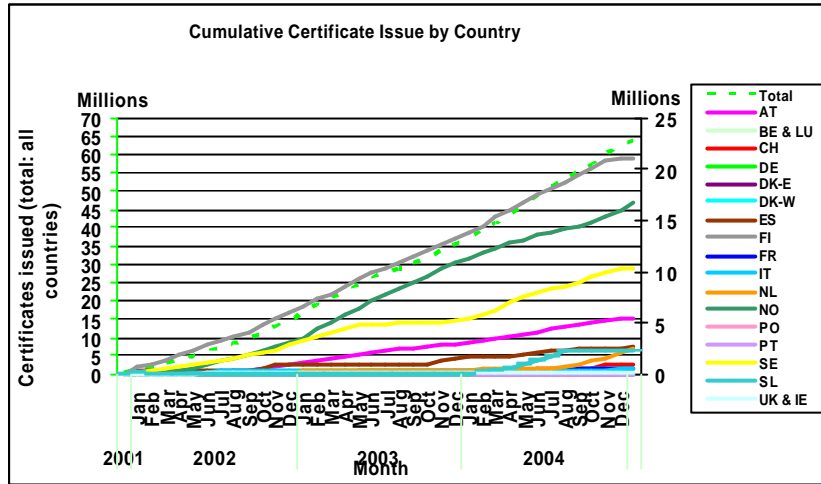
increased markedly in December, presumably this marks the end of eligibility for the Dutch REB; and international transfers have continued to rise. The Netherlands has now overtaken Finland as the major redeemer of certificates. The major certificate issuing and redeeming countries and technologies have remained the same; although issue and redemption of onshore wind certificates is increasing, along with municipal solid waste.



RECS activity figures as reported mid-January 2005



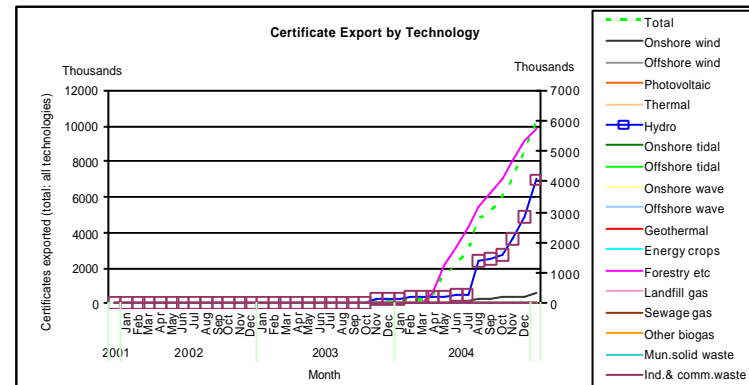
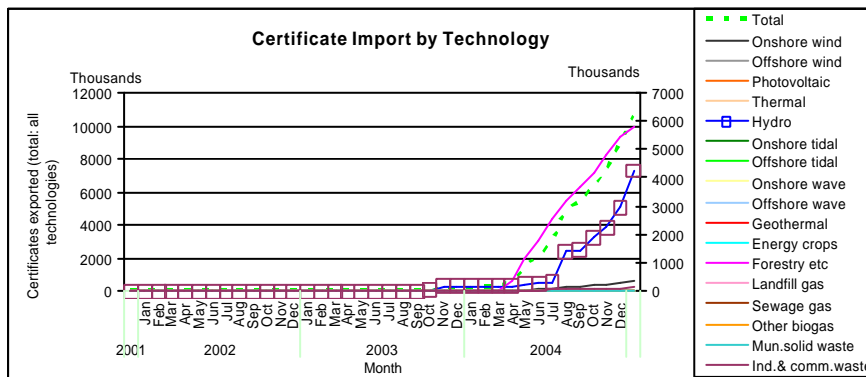
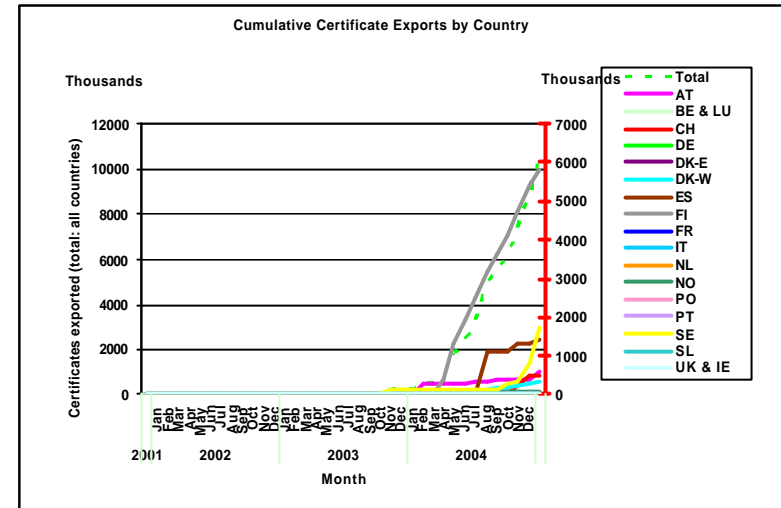
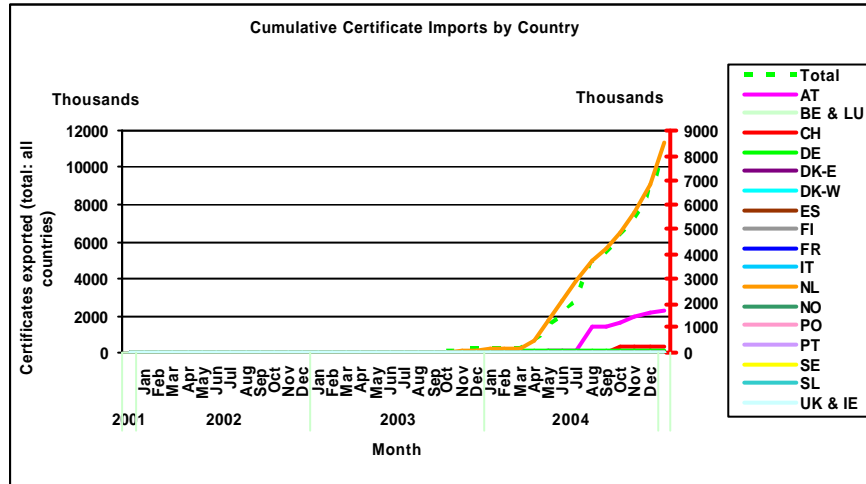
Issue and redemption continue, fairly steadily, although redemption by Netherlands and Sweden have risen sharply since summer and autumn respectively, presumably reflecting the GO market. Of further note is that the volume of hydro redeemed has increased substantially over the last quarter, in particular in Sweden.





While the majority of certificate activity commenced October 2003, international trade via the CMO interface commenced in spring 2004 – suggesting that these certificates are Guarantees of Origin, as the scheme commenced at that time.

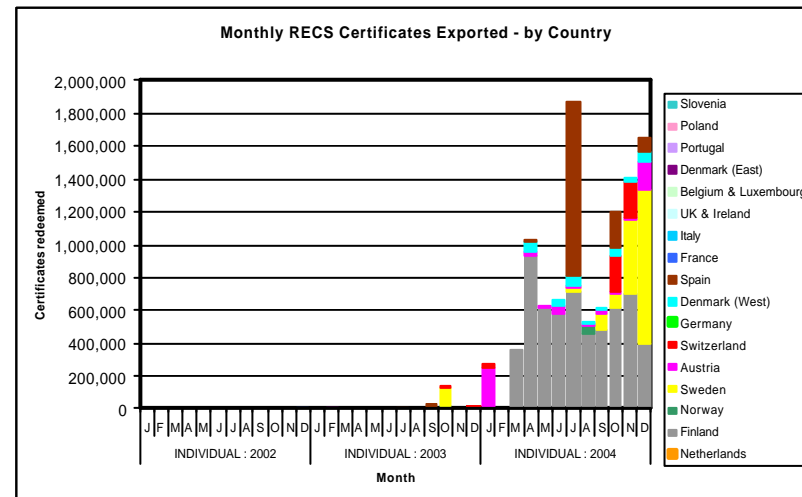
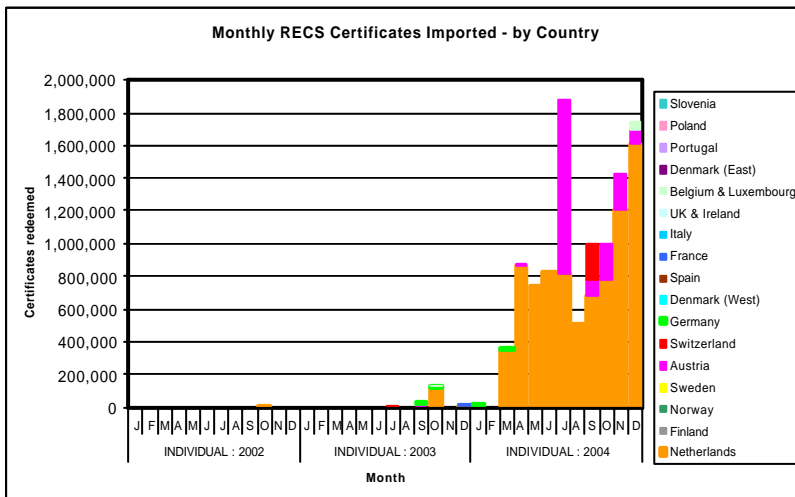
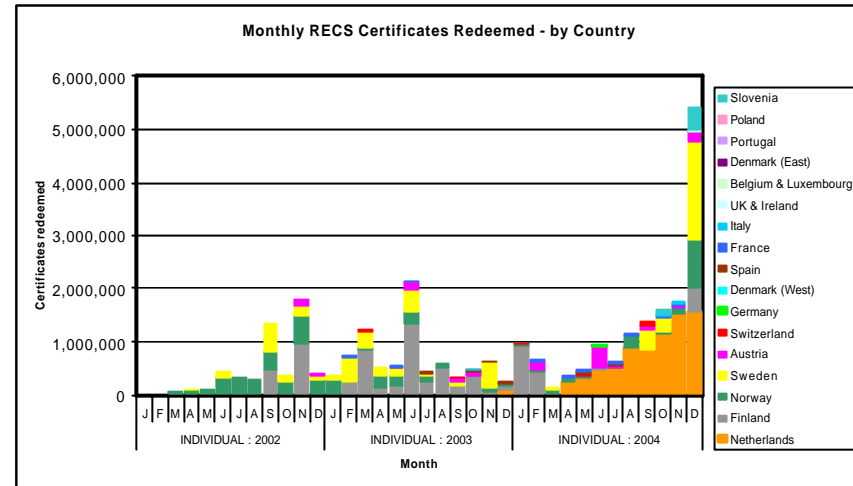
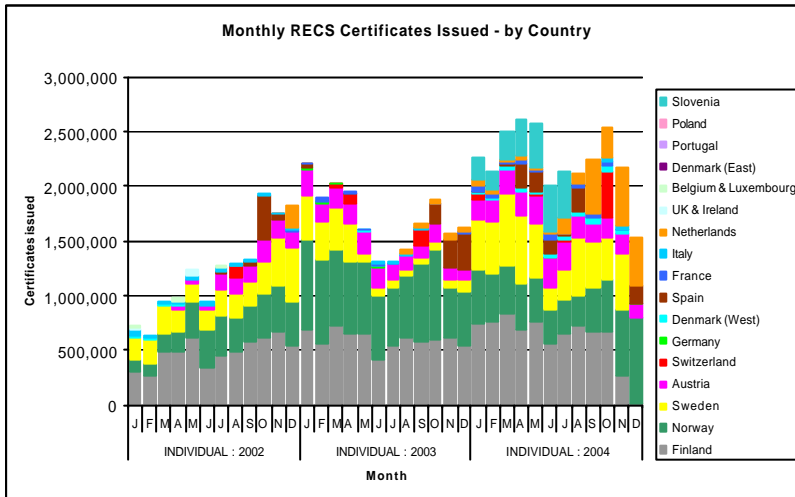
Imports may differ from exports because of timing considerations (different IBs process data at different times). Of particular note is the continued strong growth of trade into the Netherlands, and out of – in particular - Finland and Sweden.





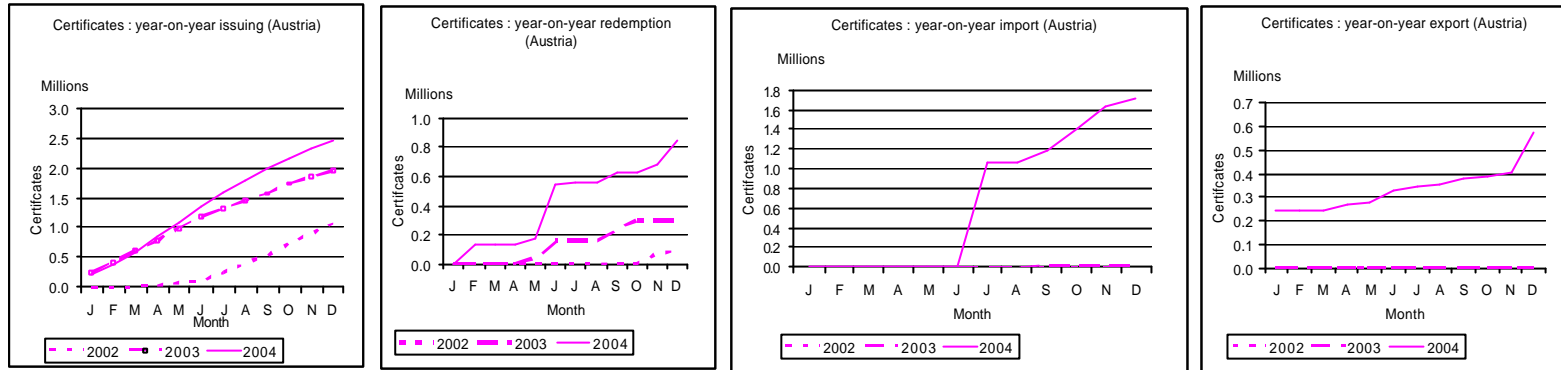
Monthly activity

As the market grows, monthly activity is becoming more meaningful. The following barcharts summarise monthly activity, clearly showing the growing influence during 2004 of the Netherlands and, to a smaller extent, Austria (primarily importers) and Sweden (primarily an exporter) on international trade. Finland continues to be a major exporter, along with Spain and Switzerland, while Denmark continues as a minor exporter.

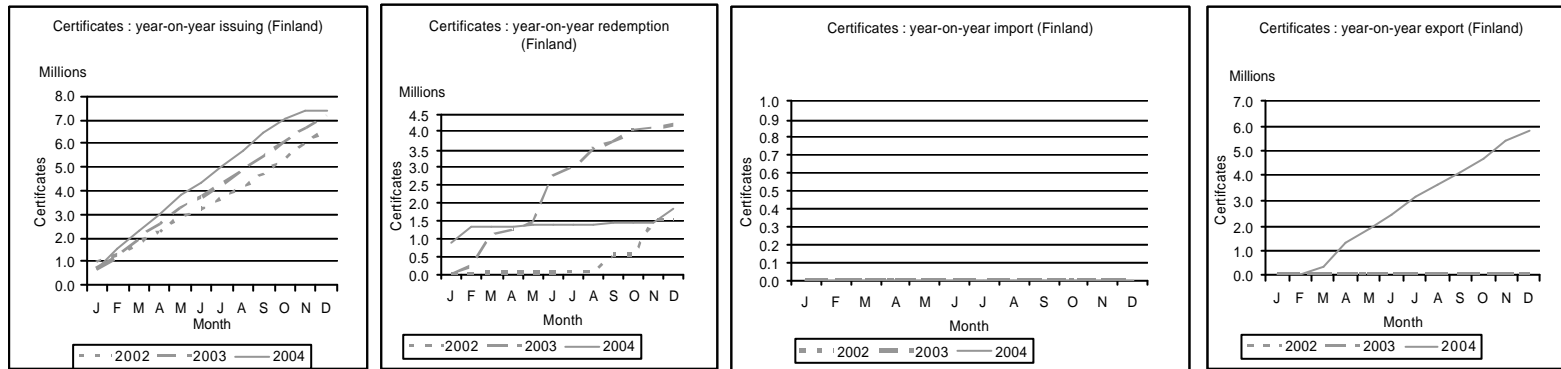


The behaviour of the five most active countries is shown below.

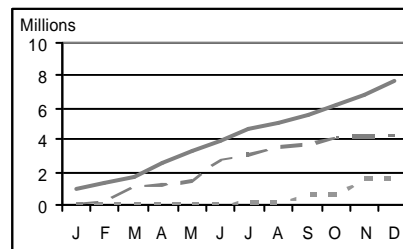
- Austria is issuing increasing numbers of certificates this year, and redemption has increased substantially. Both imports and exports have increased, suggesting that Austria has – at least in part - a “trading” role.



- Finland continues to issue at a slightly increased rate, but is redeeming less than in the past. This is perhaps because exports are replacing the old practice, necessary before the inter-registry link, of redeeming certificates and then transferring them “on paper”.

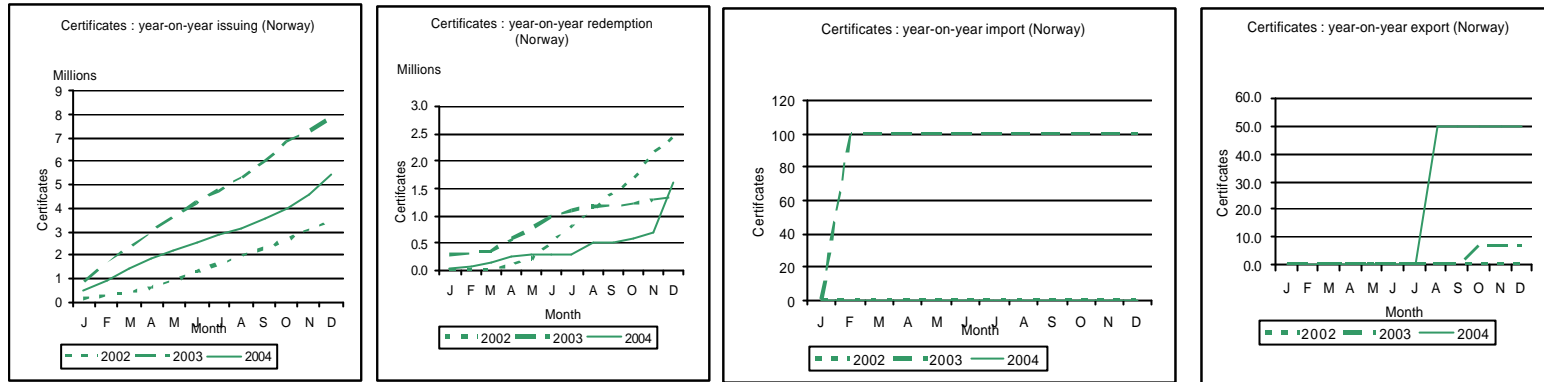


The effect of combining Finland’s redeemed and exported certificates is shown below.

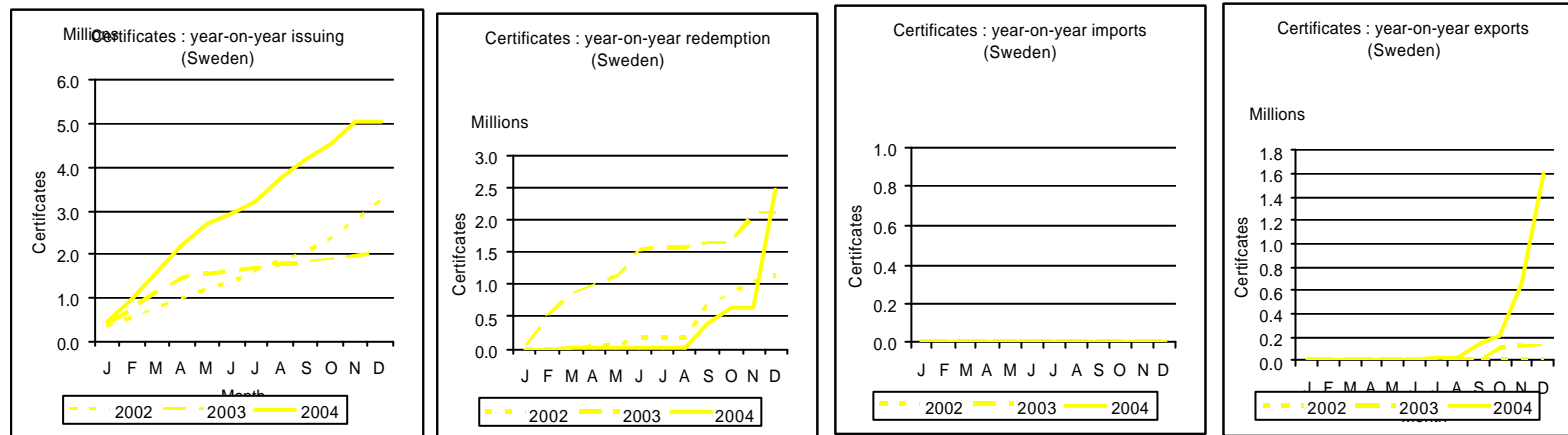




- Norway continues to issue and redeem at a lower rate than in 2004, although recent redemption has increased substantially.

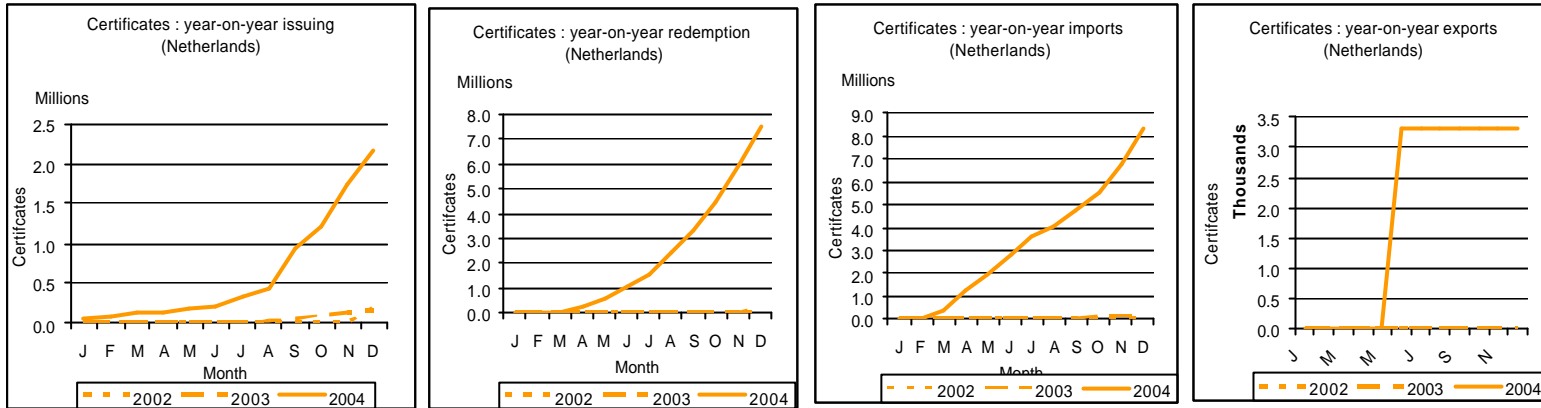


- Sweden has issued substantially more certificates than in previous years, and over the past quarter has redeemed and exported large numbers of them.

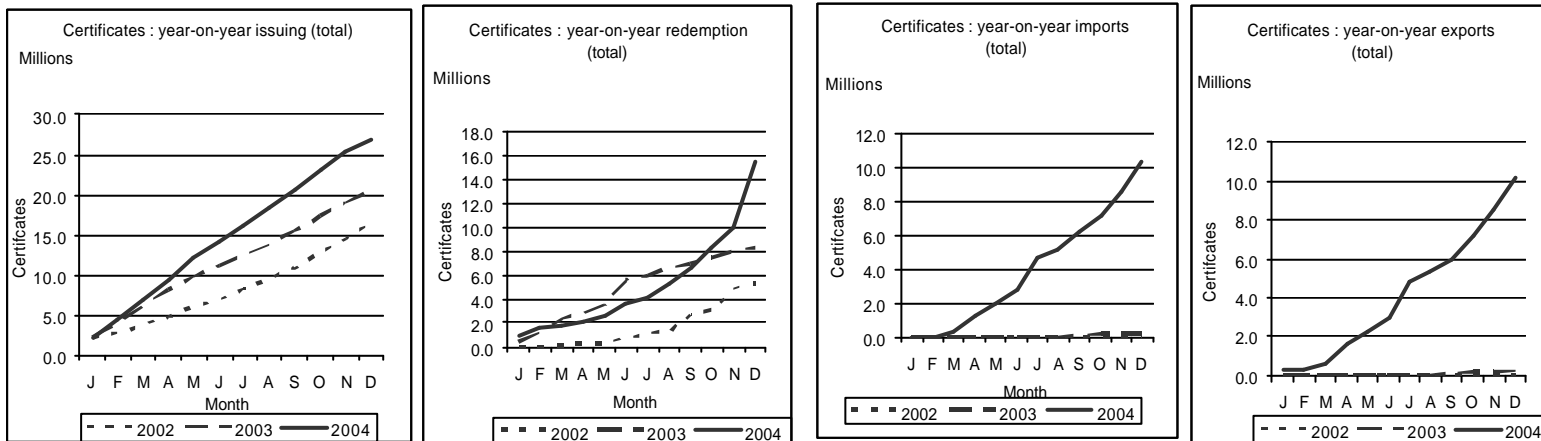




- The Netherlands continues its marked increase in all forms of activity except export.

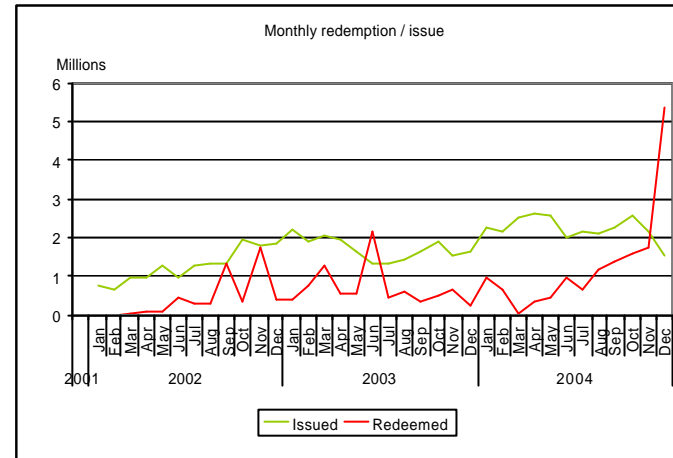
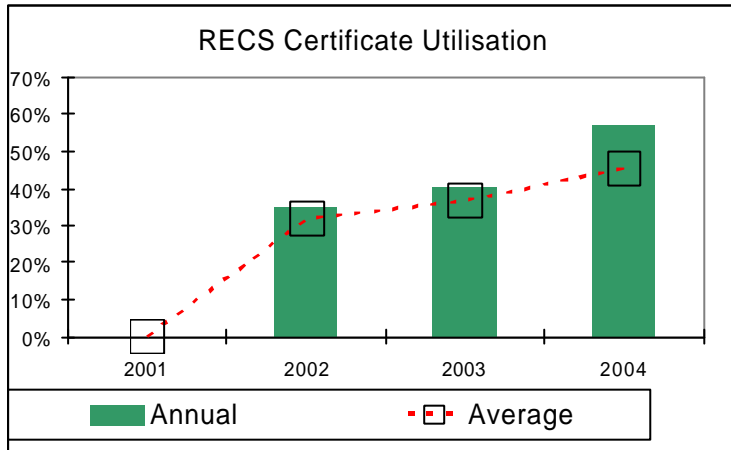


- In summary, issuing and international trade continue to rise, with redemption sharply increasing.

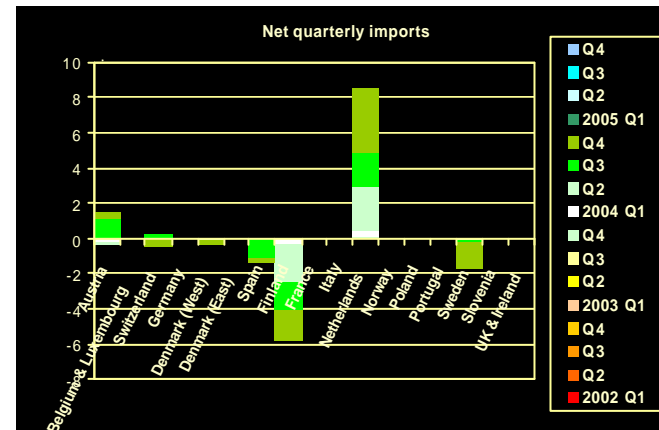
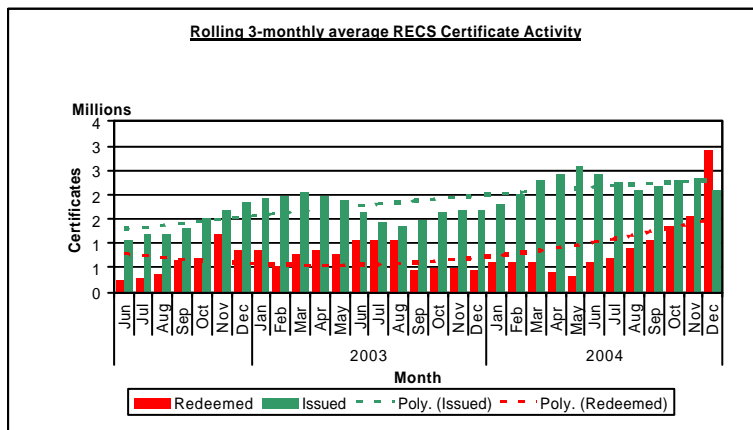


Summary

The proportion of certificates that are redeemed has risen sharply, to 45% overall, with 57% of certificates being redeemed last year. It is also interesting to note that there have only been more certificates redeemed than issued in two months: both of these seem to coincide with changes to Dutch support schemes.



Rolling three-month averages show that the market continues to grow – the growth of international trade can be seen below.



Finally, note that the number of issuers has fallen for the first time, due to the UK & Ireland RECS issuing body ceasing operations there. The administrators of the governmental certificate schemes in these countries – Ofgem and CER - will be approached to invite them to join in their place.

