
Summary

The general picture now clearly shows the impact of the introduction of Guarantees of Origin: activity is greater than ever before, and redemption has increased significantly this quarter.

The major certificate issuing and redeeming countries and technologies have remained the same, although Slovenia is fast catching up on the larger redeeming countries.

International transfers continue to rise, and of particular note is the continued strong growth of trade into the Netherlands, and out of – in particular – Finland, Sweden and, recently, Norway.

The proportion of certificates that are redeemed has risen sharply to 50% overall, due to the same numbers of certificates being issued and redeemed this year.

Finally, administrators of the governmental certificate schemes in UK and Ireland – Ofgem and CER – have been approached to invite them to join in the place of GCC.

Readers should note that:

1. All certificates are 1MWh.
2. 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.
3. 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.
4. Data has been collected for all months to date, from all parties.

Phil Moody
General Secretary, Association of Issuing Bodies
18 April 2005

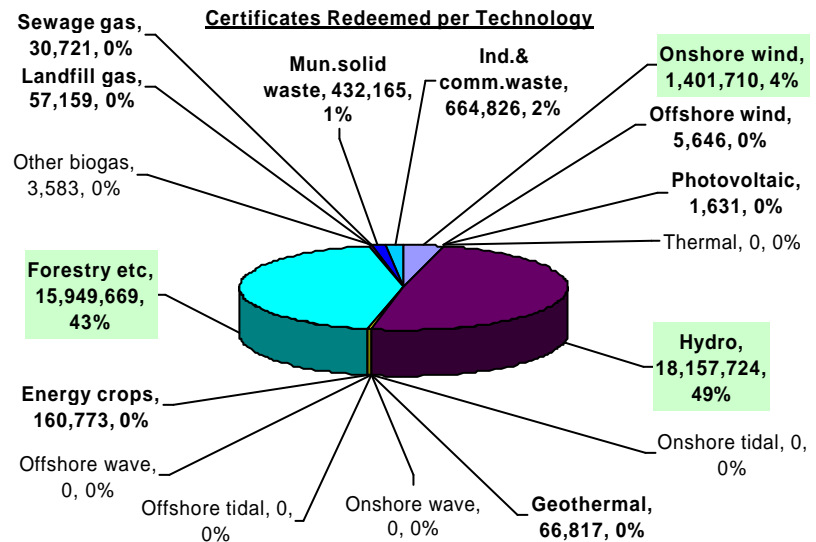
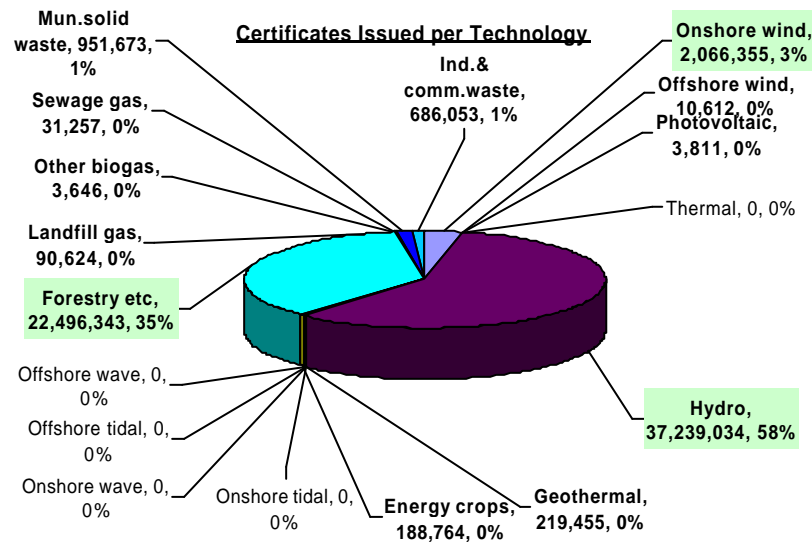
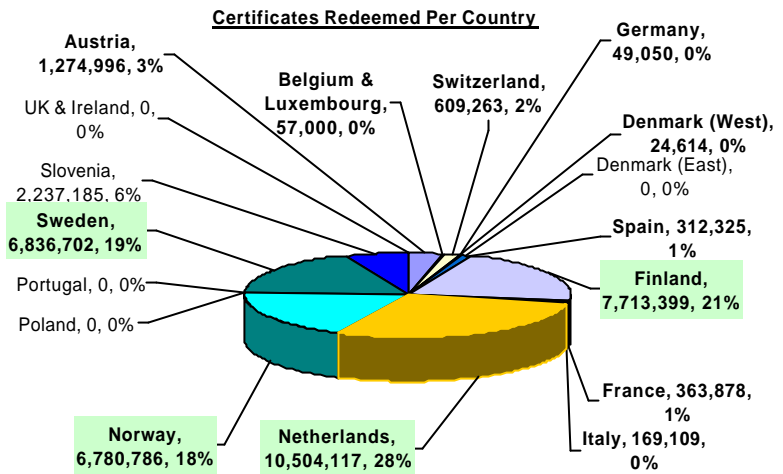
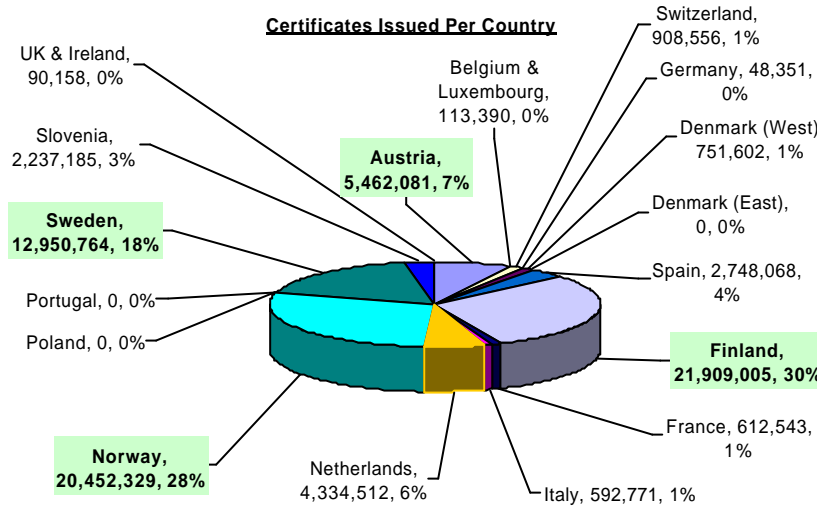
Figure 1: raw data - by country

	Total					2005					2004				
	Issued	Transferred			Redeemed	Issued	Transferred			Redeemed	Issued	Transferred			Redeemed
		Total	Export	Import			Total	Export	Import			Total	Export	Import	
Austria	5,462,081	433,430	386,031	1,750,501	1,274,996			50,000	27,000	40,000	2,452,748	430,000	330,355	1,703,341	851,784
Belgium and Luxembourg	113,390			442,001	57,000				385,001					50,000	50,000
Switzerland	908,556	80,727	464,350	238,832	609,263	20,057			3,000	466,709	512,442	74,009	454,250	223,600	102,924
Germany	48,351	513,728		53,460	49,050					5,963	5,963			31,740	43,087
Denmark (West)	751,602	1,000	317,138		24,614	72,112	1,000				427,518		317,138		
Denmark (East)															
Spain	2,748,068		1,429,815		312,325	124,279		27,000		172,294	901,135		1,372,655		93,400
Finland	21,909,005	2,085,574	6,081,129	13,619	7,713,399	318,444	497,032	240,623	13,619	130,124	7,859,174	1,000,371	5,826,732		1,863,639
France	612,543	49,577	5,000	6,000	363,878	21,410	11,120			62,243	443,916	38,457		1,000	214,878
Italy	592,771	297,437			169,109	145,042	50,000			80,554	73,970	83,970			76,873
Netherlands	4,334,512		16,923	10,482,699	10,504,117	1,797,118		13,620	2,003,494	2,852,776	2,172,121		3,303	8,347,651	7,542,276
Norway	20,452,329	2,847,831	377,872	100	6,780,786	3,509,109	761,379	320,772		1,378,991	5,625,516	1,389,901	50,000		1,617,327
Poland															
Portugal															
Sweden	12,950,764	3,754,762	3,501,037		6,836,702	1,826,499	166,489	1,781,161		1,134,216	5,832,690	3,585,773	1,594,876		2,471,348
Slovenia	2,237,185	468,003			2,237,185					1,769,182	2,237,185	468,003			468,003
UK & Ireland	90,158														
All countries	73,211,315	10,532,069	12,579,295	12,987,212	36,932,424	7,834,070	1,487,020	2,433,176	2,432,114	8,093,052	28,544,378	7,070,484	9,949,309	10,357,332	15,395,539
Percentage redeemed					50%					103%					54%

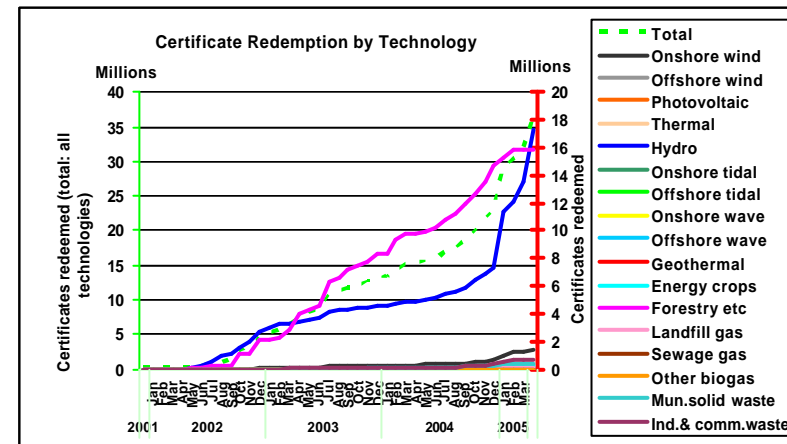
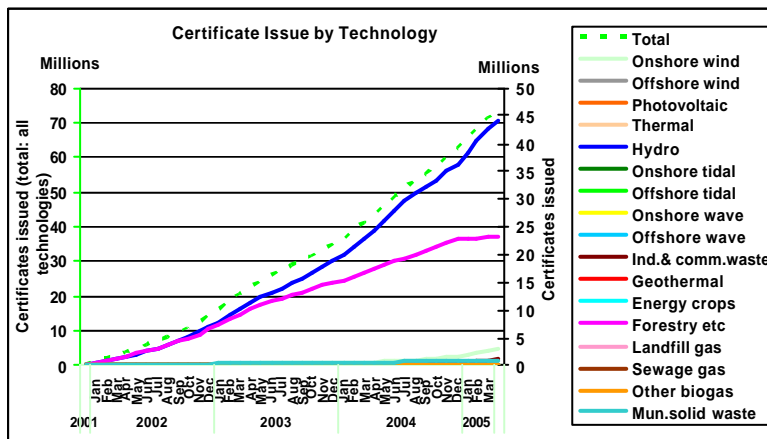
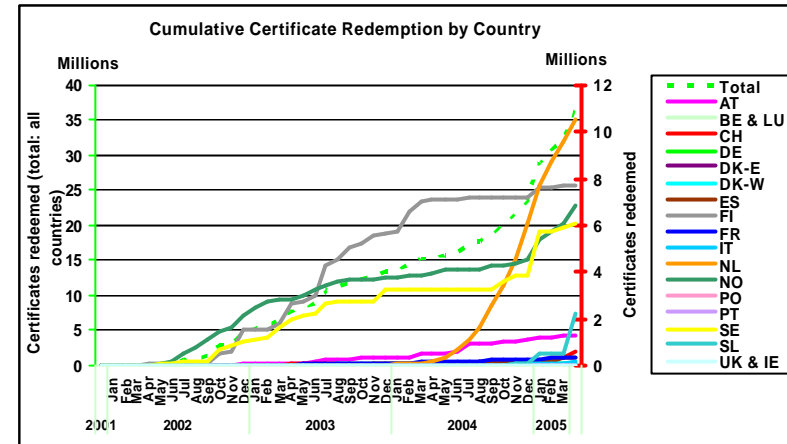
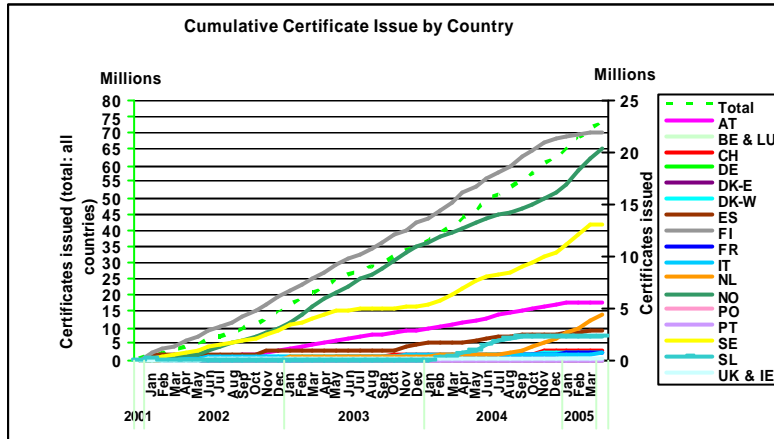
Figure 2: raw data - by technology

	Trading report for all countries					2005					2004				
	Issue	Transfer			Redeem	Issued	Transferred			Redeemed	Issue	Transfer			Redeem
		Total	Export	Import			Total	Export	Import			Total	Export	Import	
Onshore wind	2,945,864	75,177	324,927	334,467	1,401,710	893,933	28,196	1,000	1,000	397,129	1,546,104	9,608	316,399	319,413	804,377
Offshore wind	12,154	70	4,368	2,922	5,646	1,542				2,921	7,344		4,368	2,922	2,539
Photovoltaic	5,292		1,094		1,631	492				1,208	4,787		1,094		423
Thermal															
Hydropower	44,129,852	9,617,850	6,484,842	6,650,073	18,157,724	5,857,432	1,398,845	2,407,184	2,406,122	6,647,685	18,376,294	6,664,236	3,902,122	4,071,959	6,833,053
Onshore tidal															
Offshore tidal															
Onshore wave															
Offshore wave															
Geothermal	219,455	212,502			66,817						53,431	53,431			55,175
Energy crops	205,748			27,441	160,773	193				37,716	59,023			27,441	56,457
Forestry etc	23,194,899	621,170	5,764,064	5,834,990	15,949,669	277,748	59,859	24,992	24,992	670,767	7,459,721	342,009	5,725,326	5,798,278	6,917,876
Landfill gas	142,841	1,320			57,159	17,698	120			11,014	102,132	1,200		3,393	36,968
Sewage gas	31,257			3,393	30,721					515	6,028				5,025
Other biogas	5,239				3,583	1,593				2,084	3,016				1,499
MSW	1,025,988				432,165	179,196				142,404	339,170				283,780
IB&CW	1,292,725	3,980		133,926	664,826	604,243				179,609	587,328			133,926	398,367
Total	73,211,315	10,532,069	12,579,295	12,987,212	36,932,424	7,834,070	1,487,020	2,433,176	2,432,114	8,093,052	28,544,378	7,070,484	9,949,309	10,357,332	15,395,539

The above tables display statistics for individual years 2004 and 2005 (to early April), and for 2001-5 in total). These, and the following pie charts, show that volumes issued and redeemed continue to increase at a greater rate than last year. Redemption increased markedly in March. The major certificate issuing and redeeming countries and technologies have remained the same, although Slovenia is fast catching up on the larger redeeming countries.



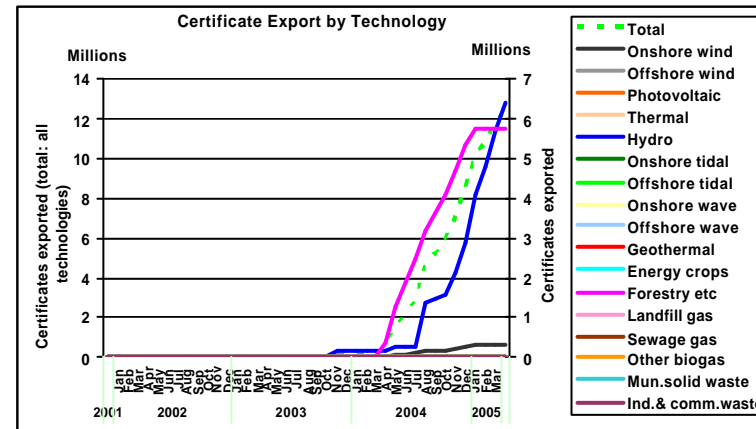
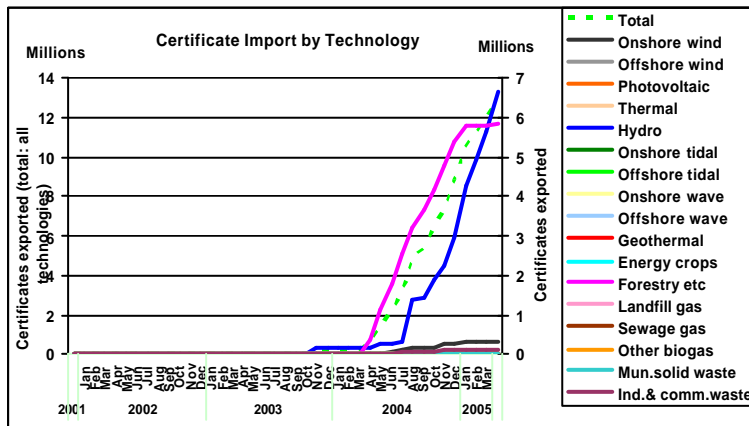
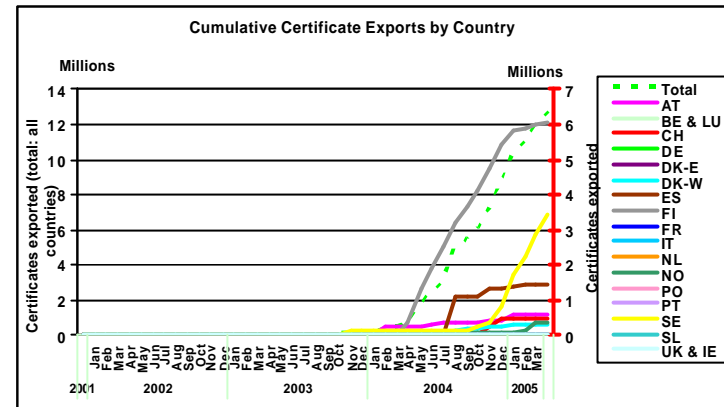
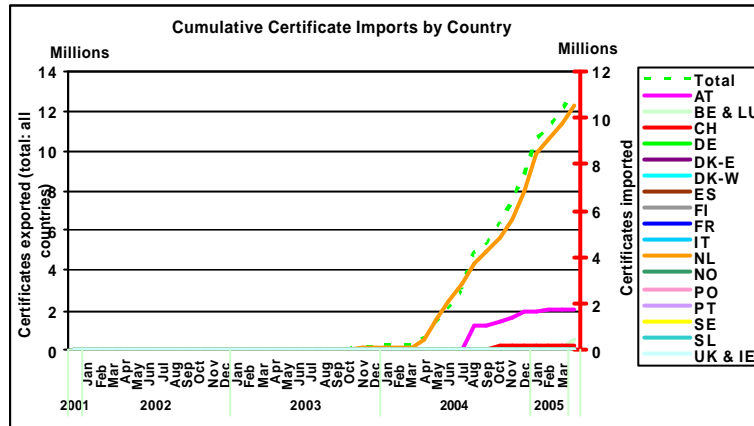
Issuing and redemption continue fairly steadily, although redemption by Norway and Slovenia have risen swiftly this quarter, presumably reflecting the GO market. Of further note is that the volume of hydro redeemed has continued to increase substantially over the last quarter.





While the majority of certificate activity commenced in 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.

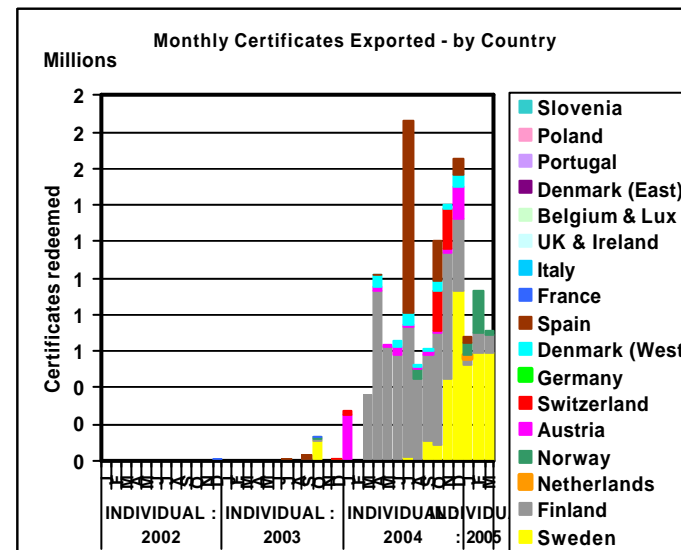
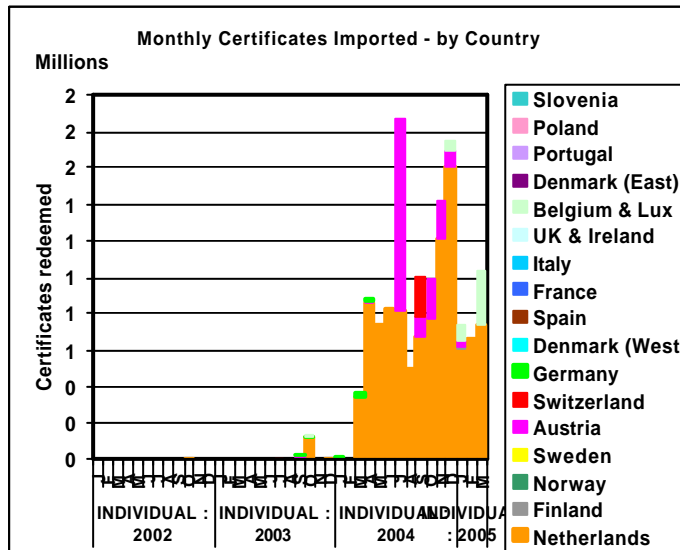
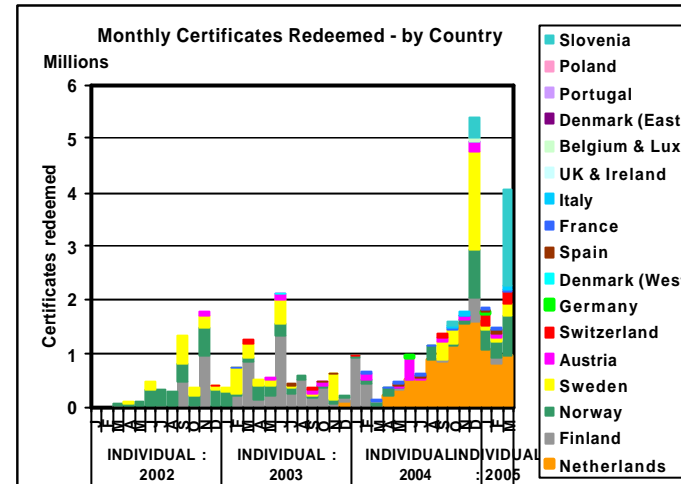
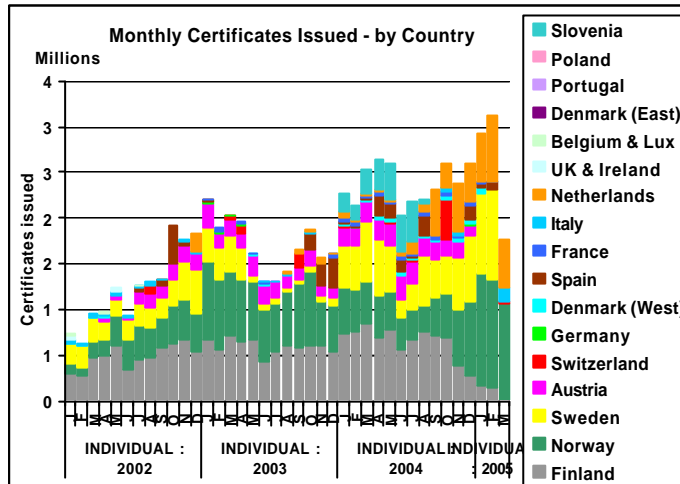
Imports may differ from exports because of timing considerations (different IBs process data at different times). Of particular note is the continued strong growth of trade into the Netherlands, and out of – in particular - Finland and Sweden, which are now being joined by Norway.





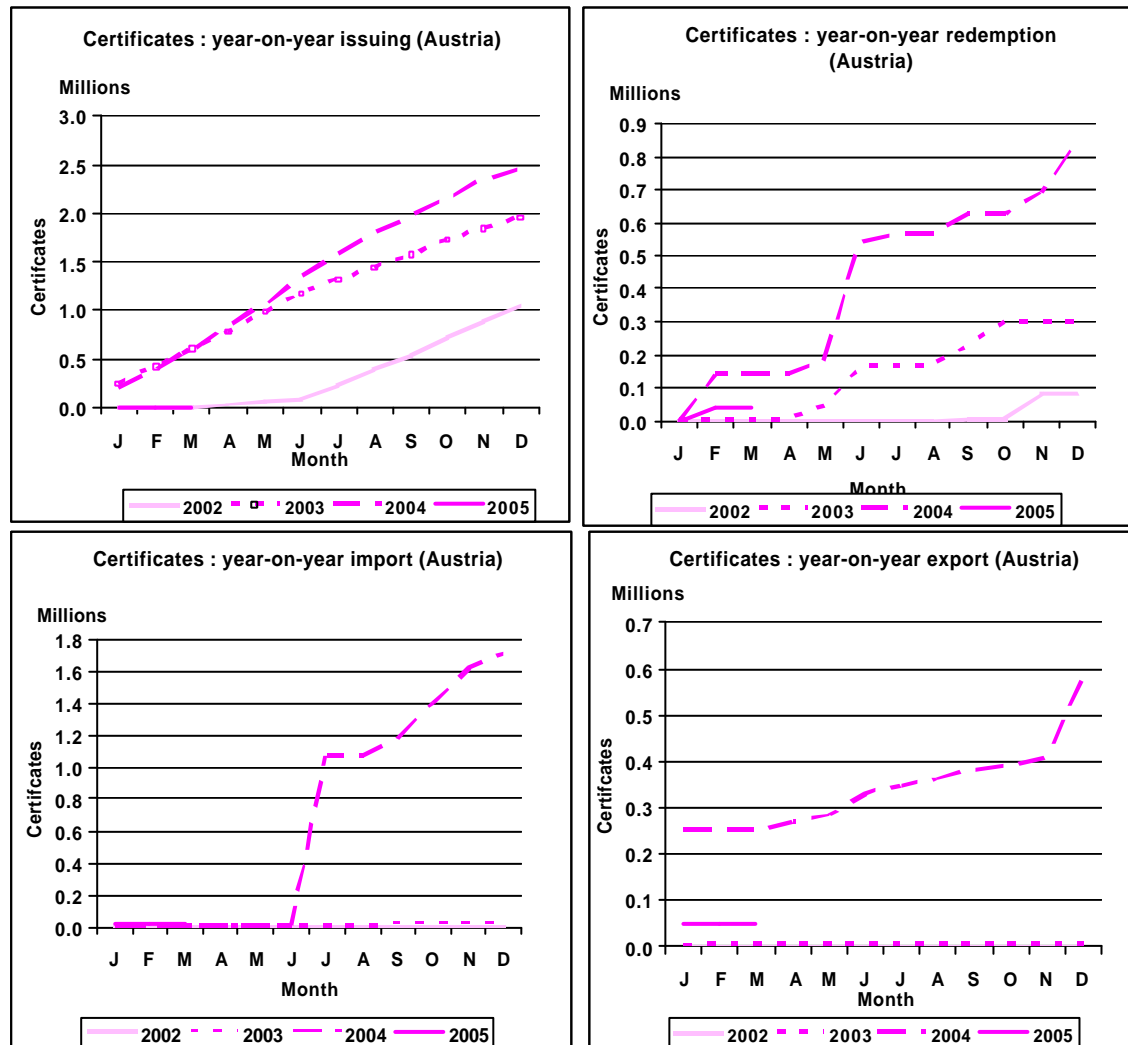
Monthly activity

As the market grows, monthly activity is becoming more meaningful. The following bar charts 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.



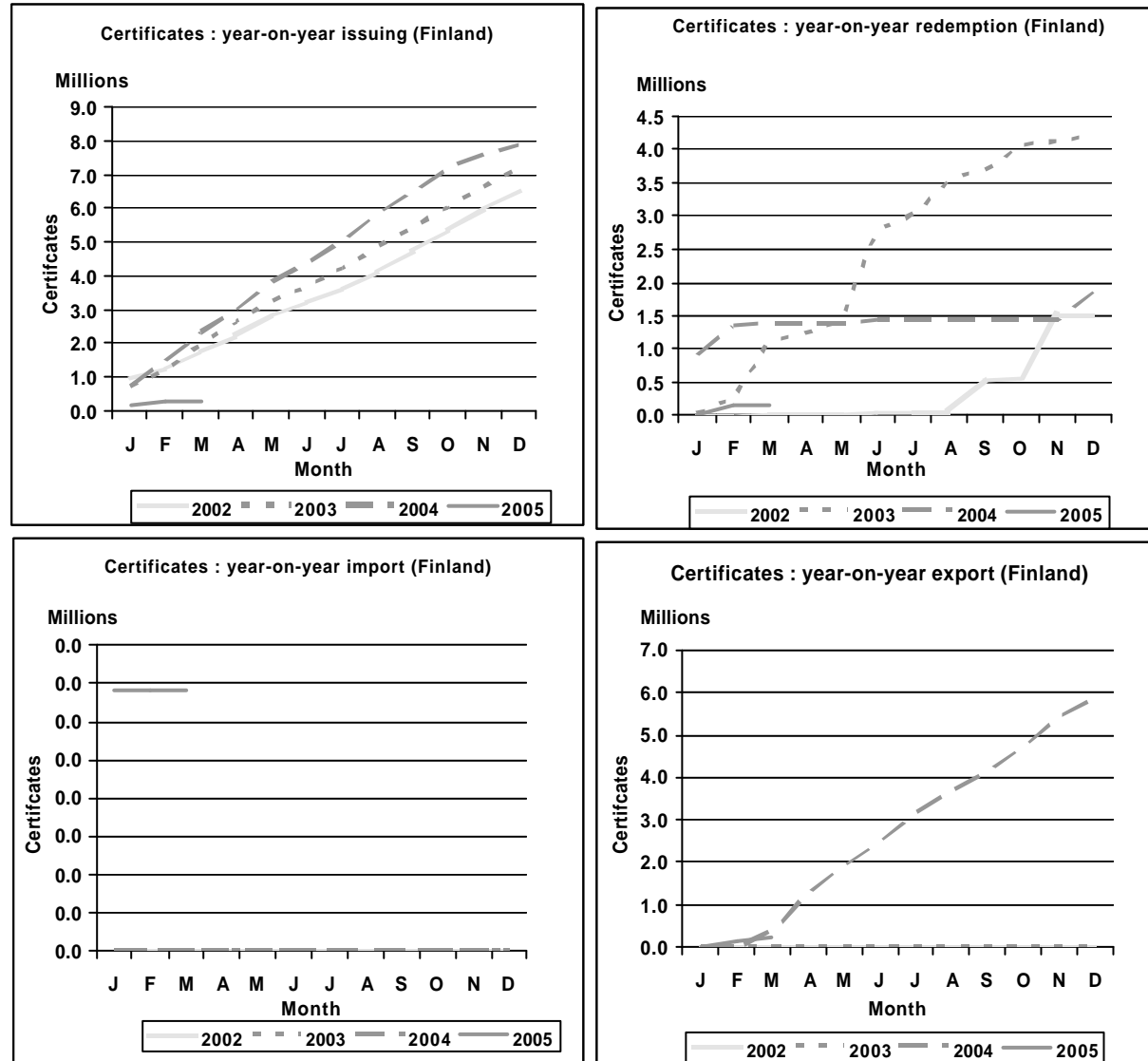
The behaviour of the eight most active countries is shown below – Slovenia, Spain and Switzerland have been added this month (the criteria is issuing, transferring or redeeming more than a million certificates a year).

- Austria has imported, exported and redeemed this year, but at a lower rate of activity that in the past. Issuing has been delayed for technical reasons this quarter, but is about to take place.



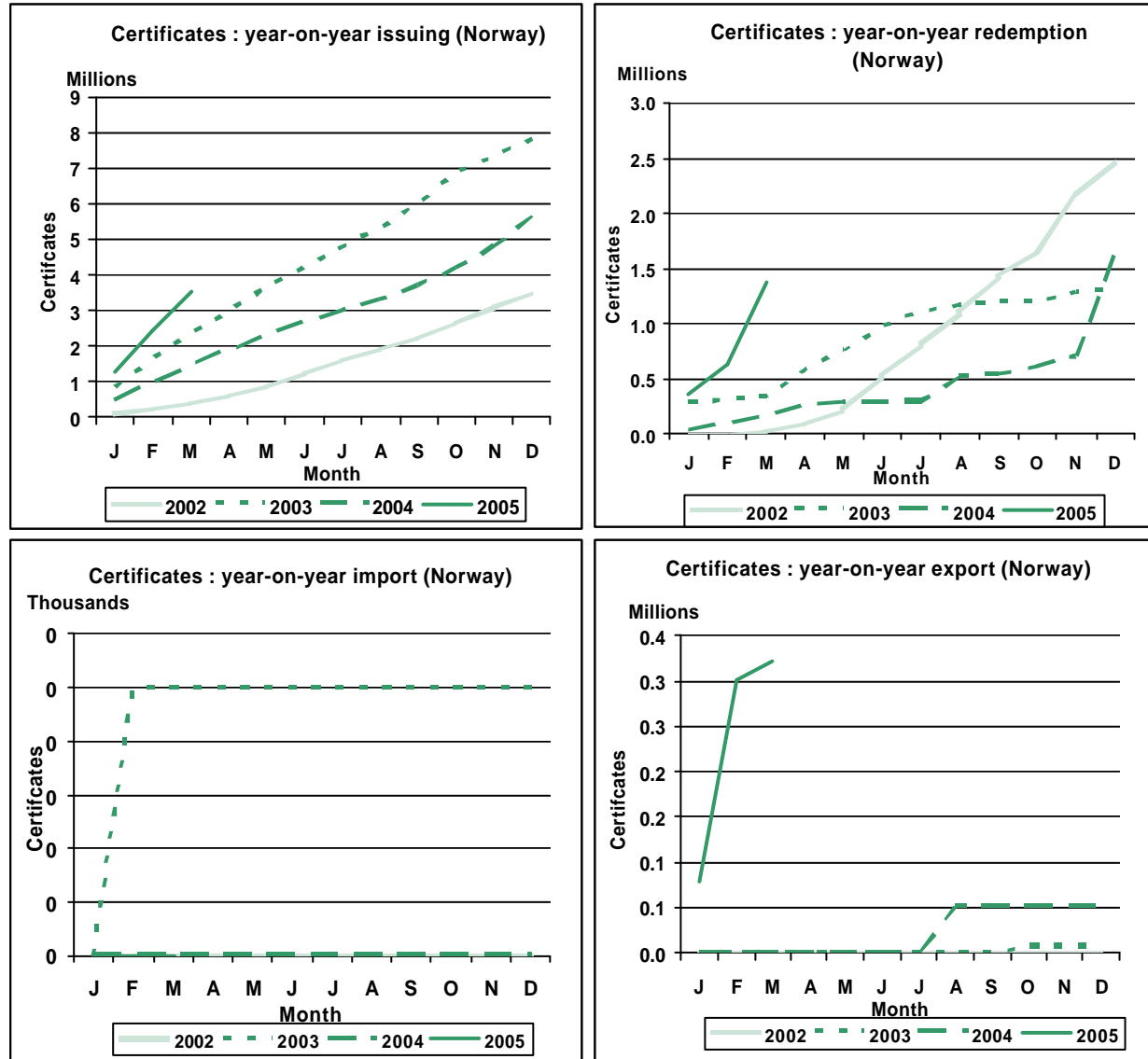


- Finland continues to issue at a lower rate, but is redeeming less than in the past, and has recently started to import (although this is believed to have been unsold certificates being returned).

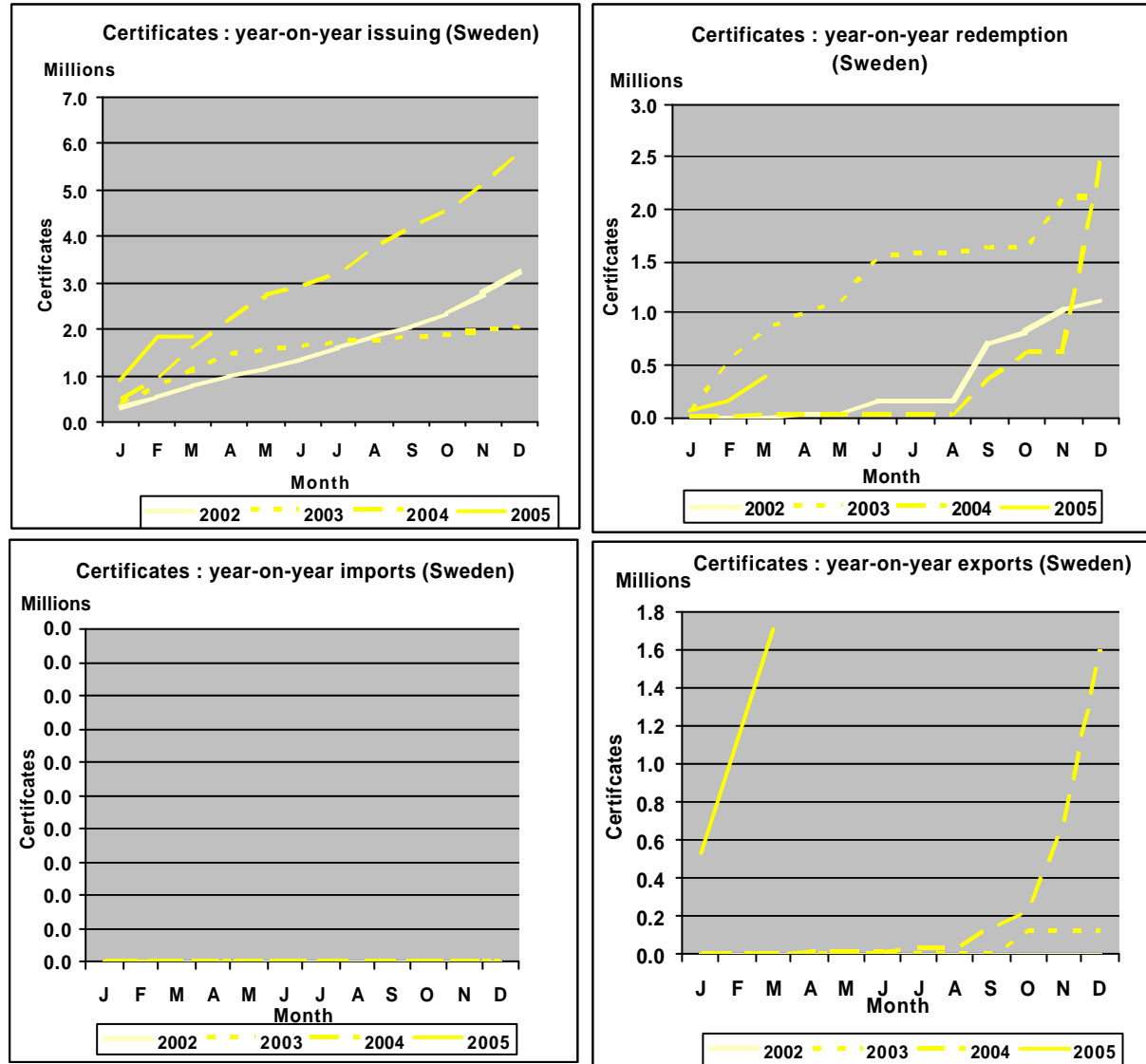




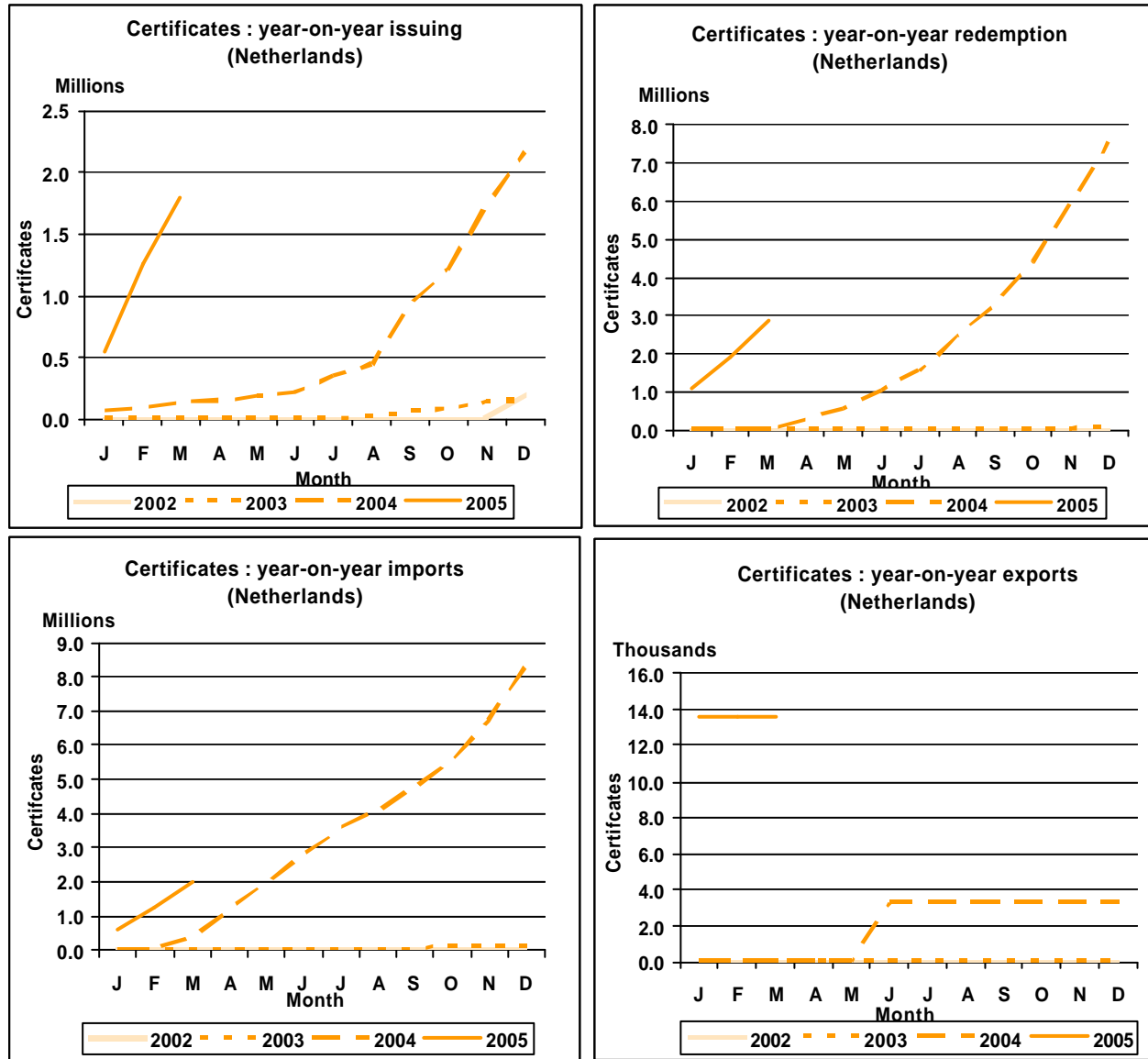
- Norway is now issuing, exporting and redeeming at a higher rate than ever before.



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

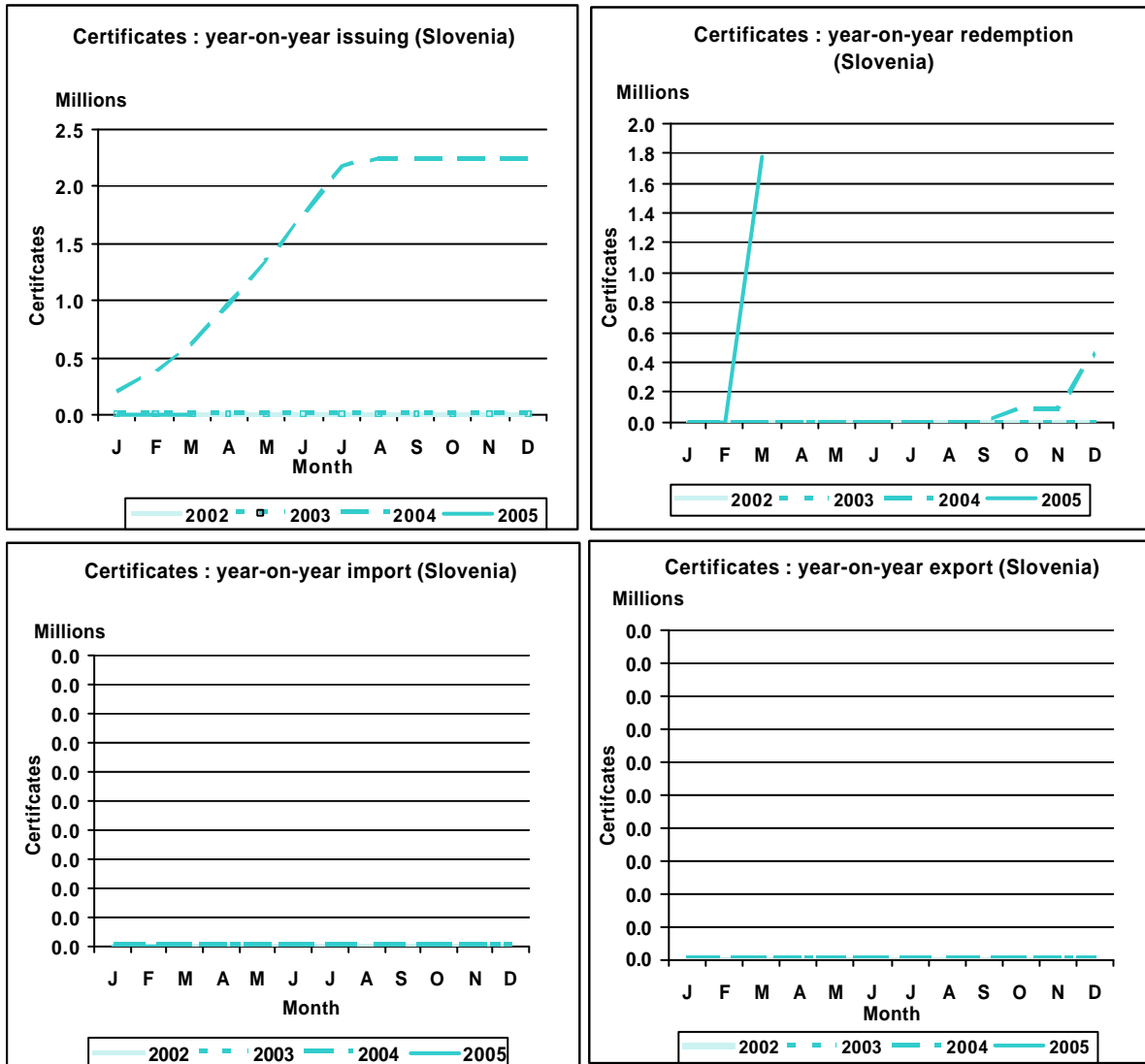


- The Netherlands continues its marked increase in all forms of activity.



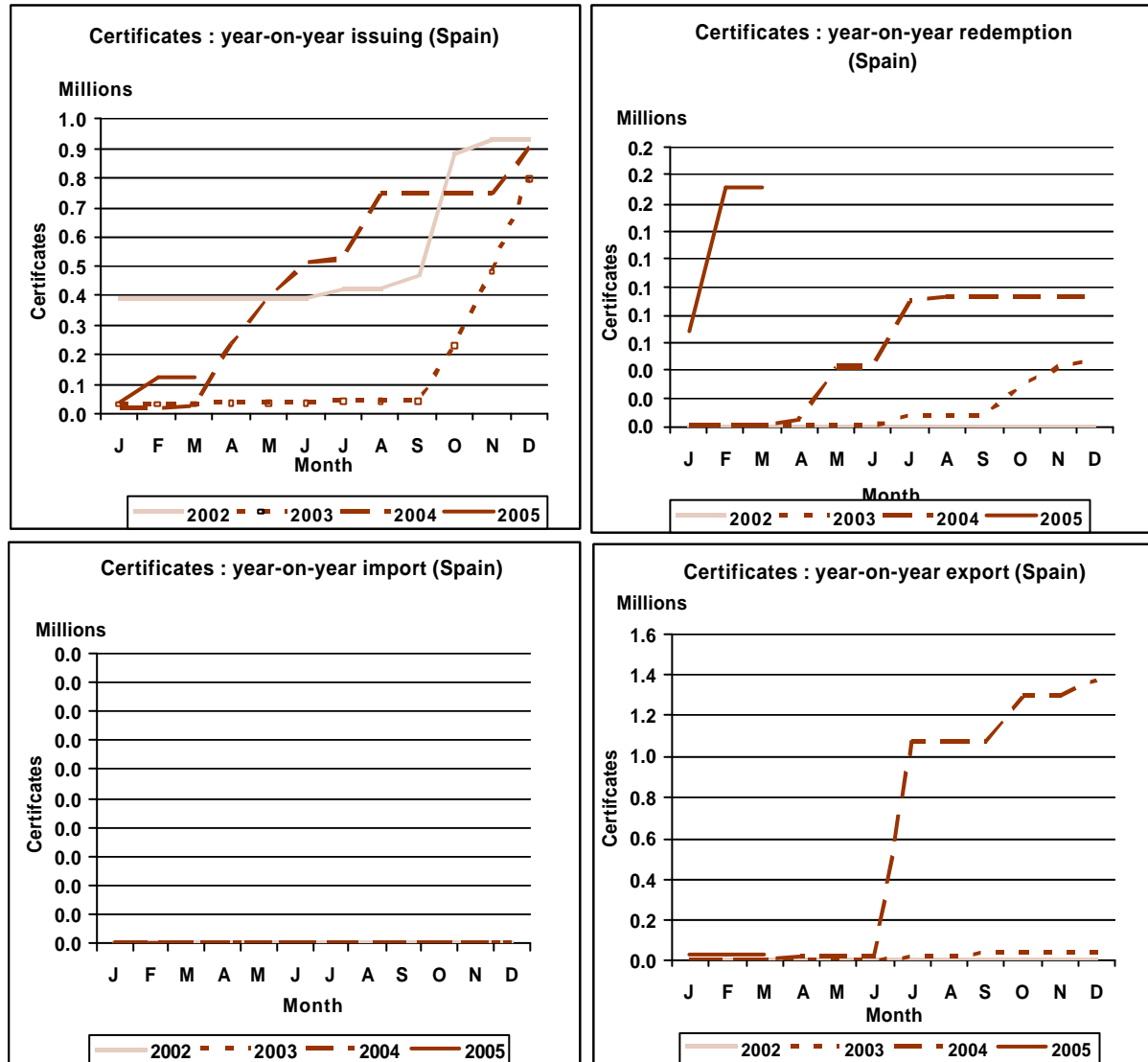


- Slovenia started and redeeming issuing last year, but has yet to participate in international trade. Redemption has increased markedly this quarter.



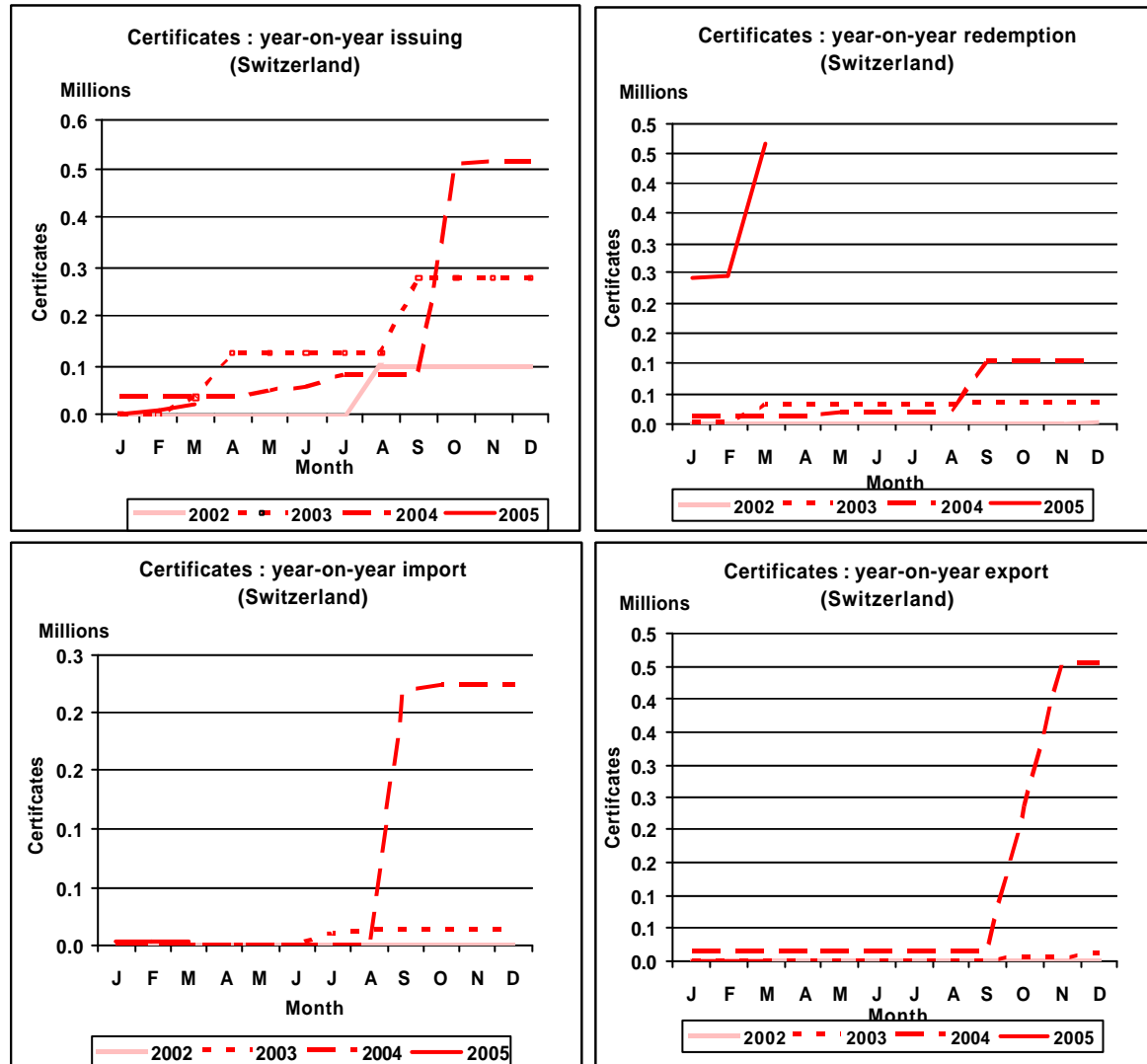


- Spain has increasingly issued certificates for energy generated since 2002, and redeemed and exported certificates since 2003. Redemption has increased markedly this quarter.



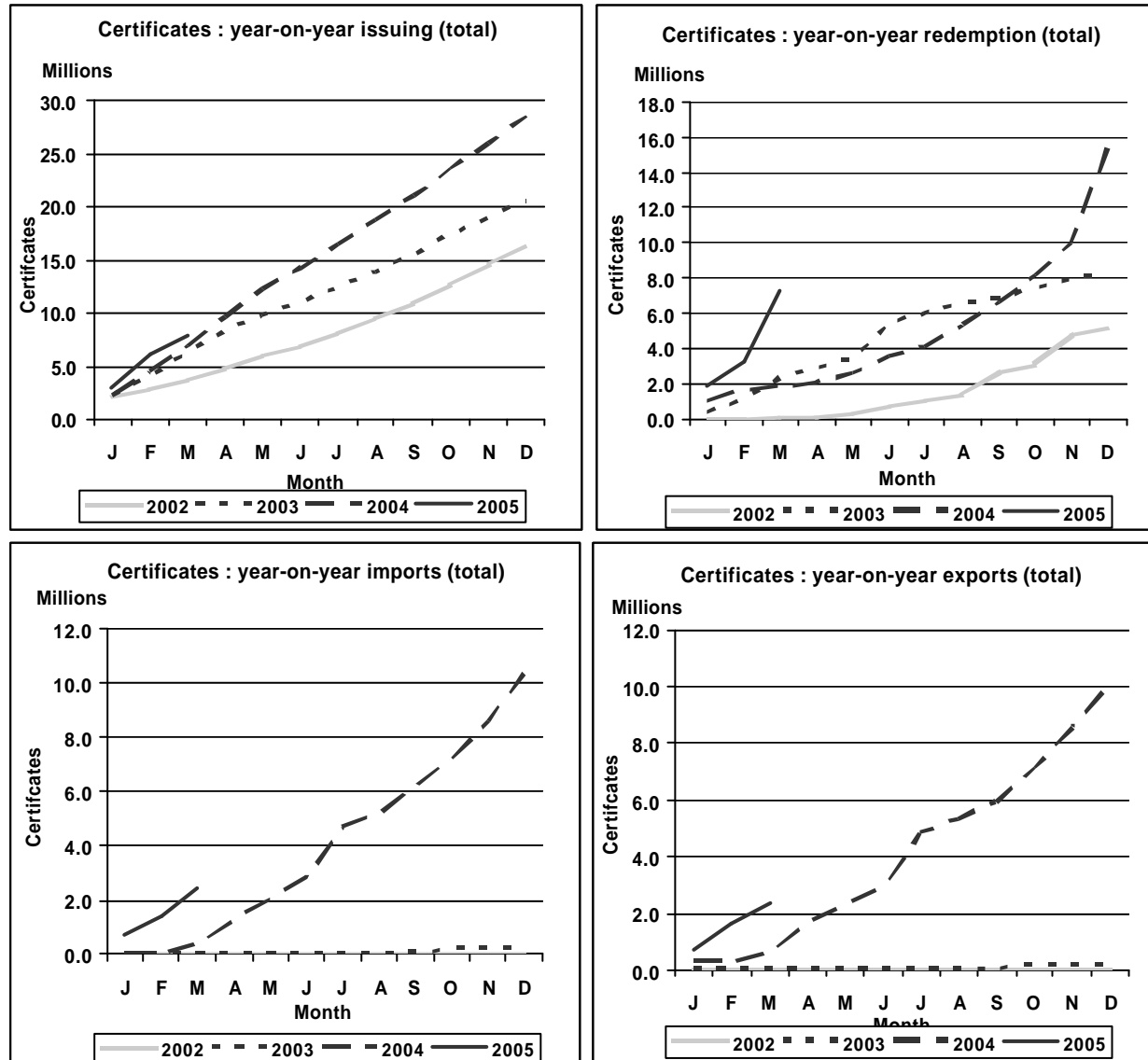


- Switzerland has increasingly issued certificates for energy generated since 2002, redeeming certificates since 2003 and entering into international trade during 2004. This quarter redemption has increased markedly.





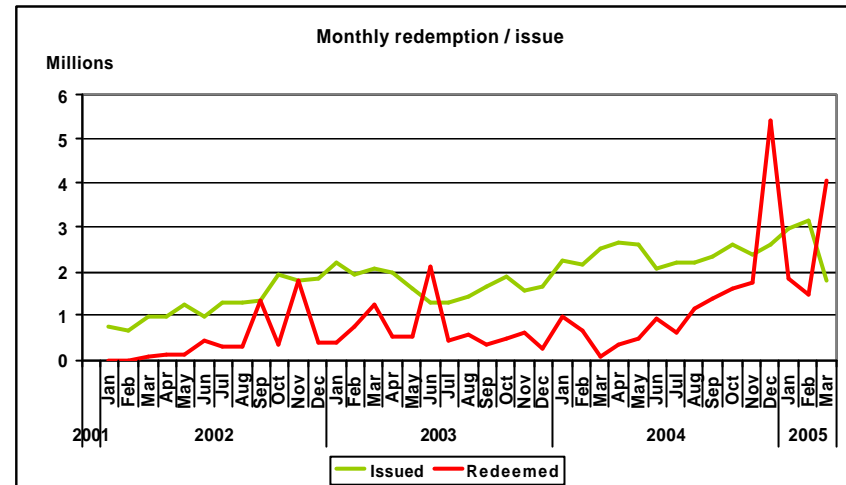
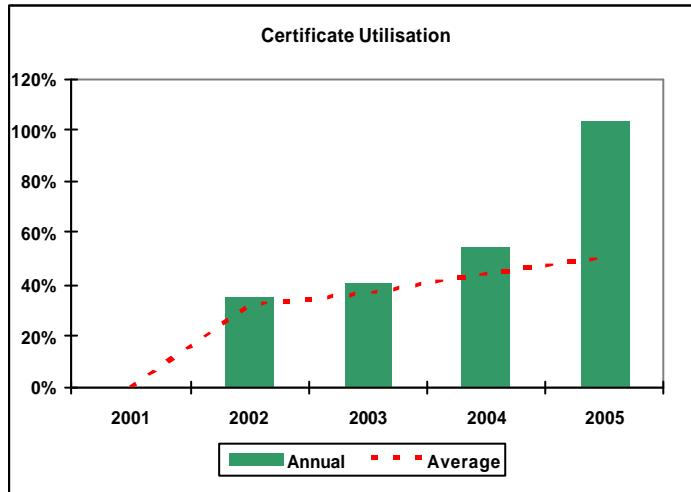
In summary, while issuing continues at a marginally increased rate, international trade is increasing and redemption has sharply increased.



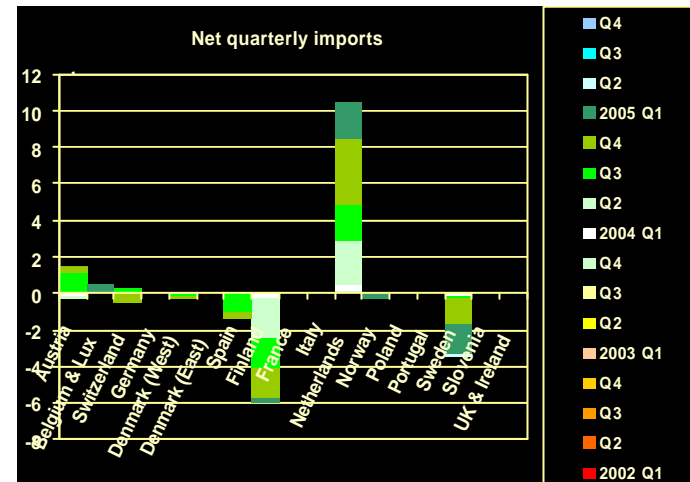
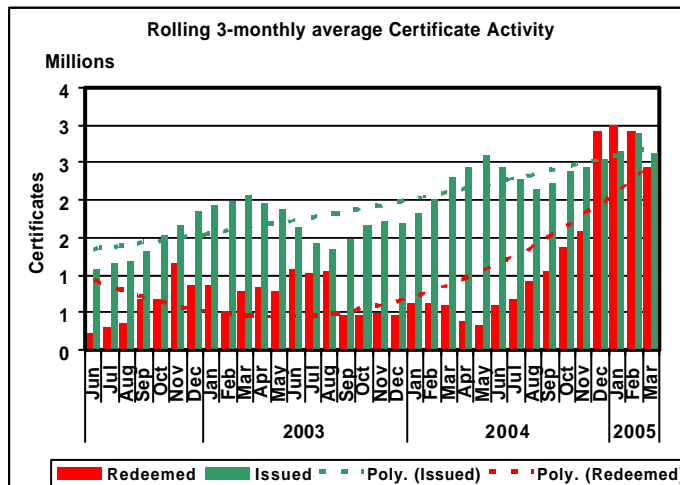


Summary

The proportion of certificates that are redeemed has risen sharply to 50% overall, due to the same numbers of certificates being issued and redeemed this year.



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





Finally, administrators of the governmental certificate schemes in UK and Ireland – Ofgem and CER – have been approached to invite them to join in the place of GCC.

