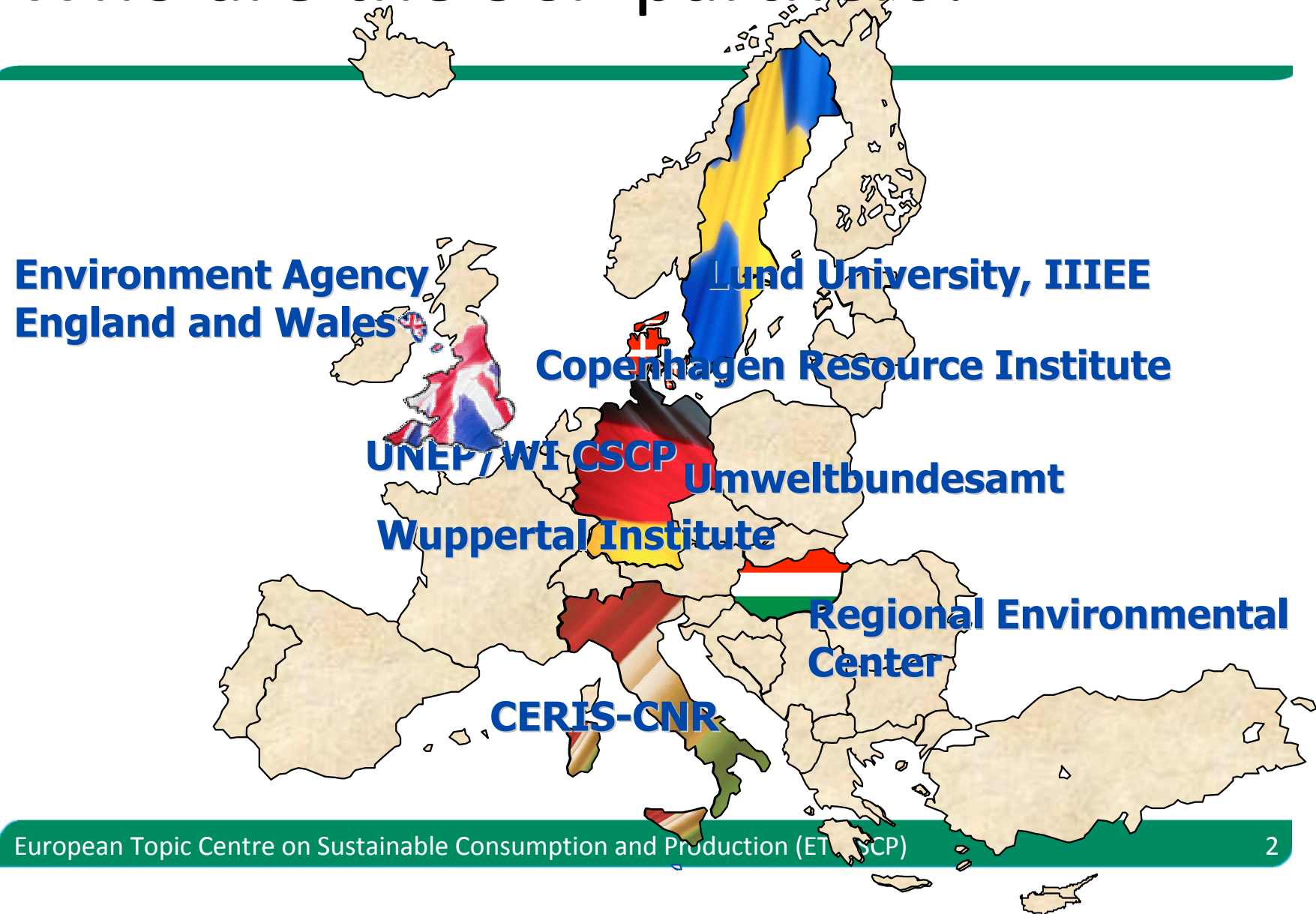




Better reporting about transboundary shipments of wastes is possible

Chief Consultant: Christian Fischer

Who are the SCP partners?



Main message

- Significant increase in shipments over last 10 years.
- Main drivers: economic factors, EU requirements on better waste management and treatment capacity.
- Better reporting is part of a better enforcement.
- Quality & reliability of data reported to EU inadequate:
 - Data are very old - MS do not report in time,
 - Codes applied for reporting are too general,
 - Not possible to identify shipments of specific waste streams,
 - Reporting to EU should instead be based on EWL codes,
 - Reliable information on the legal shipments required to get an idea about the illegal shipments .

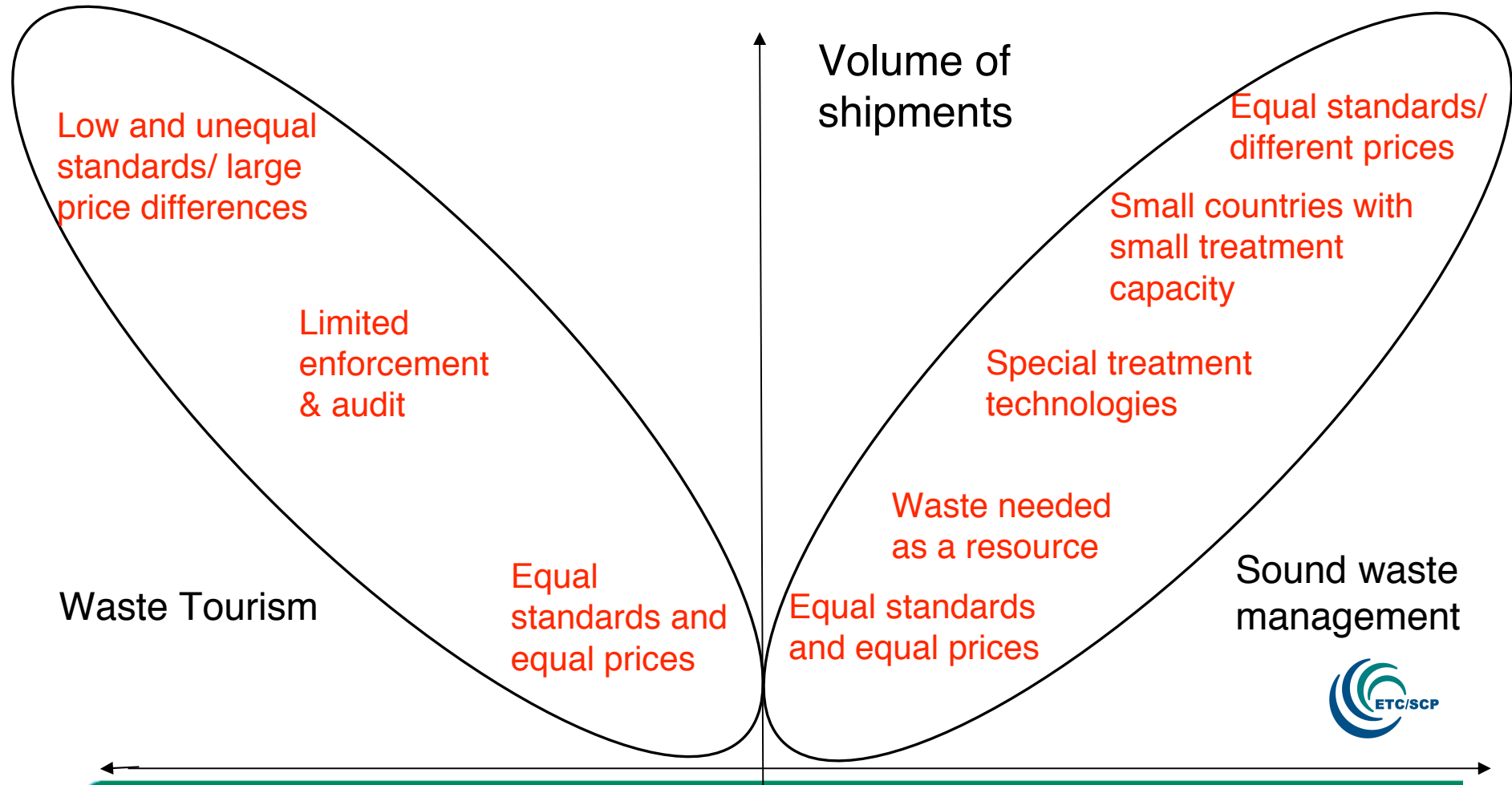


EEA and ETC/SCP work on shipments

- ETC/SCP, 2008: *“Transboundary shipments of waste in the EU- Developments 1995-2005 and possible drivers”*. Technical report 2008/1.
- EEA, 2009 *“Waste without borders in the EU”*, EEA Report, No 1/2009.
- ETC/SCP, 2009: *“Data availability on transboundary shipments of waste based on the European Waste List.”*
Working paper 3/2009.



Framework for evaluating shipments



Regulation of transboundary shipments

- International regulation
 - Basel Convention
 - EU: Waste Shipment Regulation
 - Notified, hazardous and problematic waste
 - Not notified, non-hazardous waste
- Reporting on notified waste
 - Annually to Basel Convention Secretariat
 - hazardous waste (code Y1-Y45) and other waste (code Y46-Y47)
 - Copy to EU together with report on certain additional waste streams (EU -Waste Shipment Regulation 1013/2006, Article 51 (1) and (2))



Only very general information is reported to EU

- Shipment application form applied in EU requires;
 - Detailed Basel code (120 numbers/60 hazardous)
 - Aggregated Basel Y code (47 numbers)
 - OECD (150 numbers/60 hazardous)
 - European Waste Catalogue code (850 numbers/325 haz.)
- Only the aggregate Y code is included in the reports to the Basel Secretariat and the EU.
- Many different waste types included in the same Y-code.

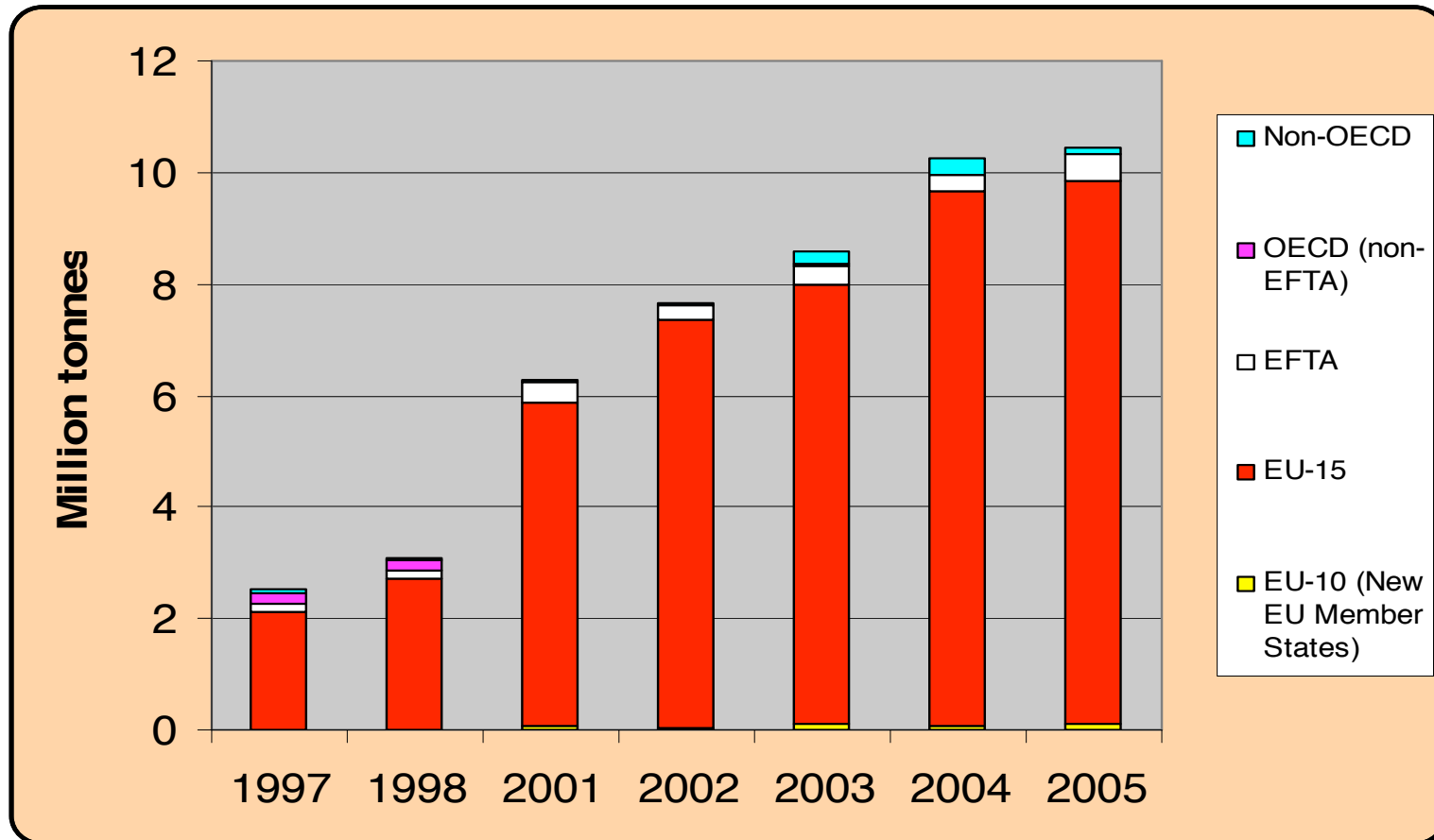


How many countries have reported to the EU?

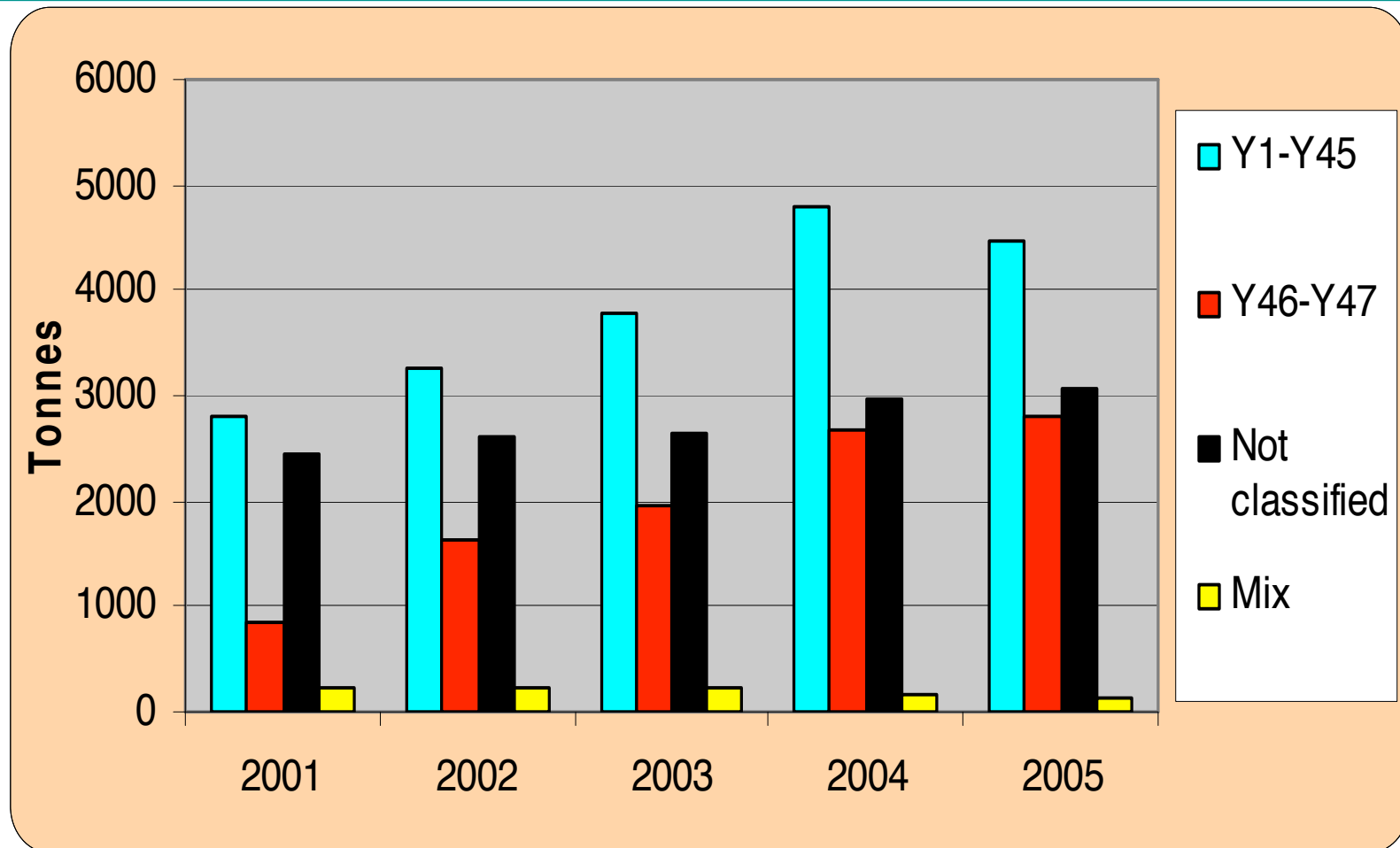
Status by the end of November 2009	Basel Convention Questionnaire			EU Questionnaire
	Part I	Part IIa (data)	Part IIb	
2007	13	14	11	16
2008	1	1	1	2



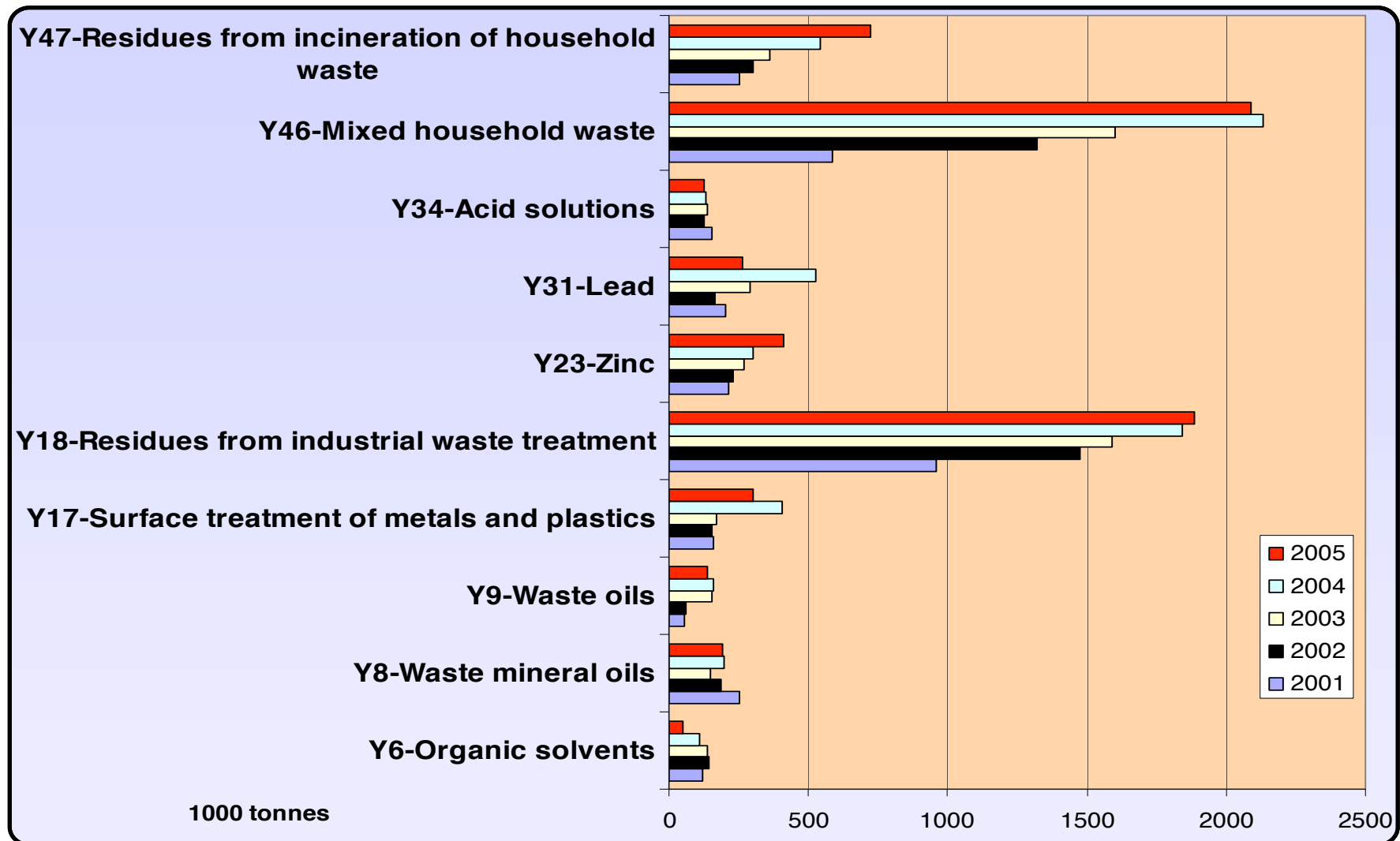
Shipments of notified waste from EU to other EU and non-EU countries



Development in shipment of notified waste in the EU distributed on Y codes



The largest exported waste fractions



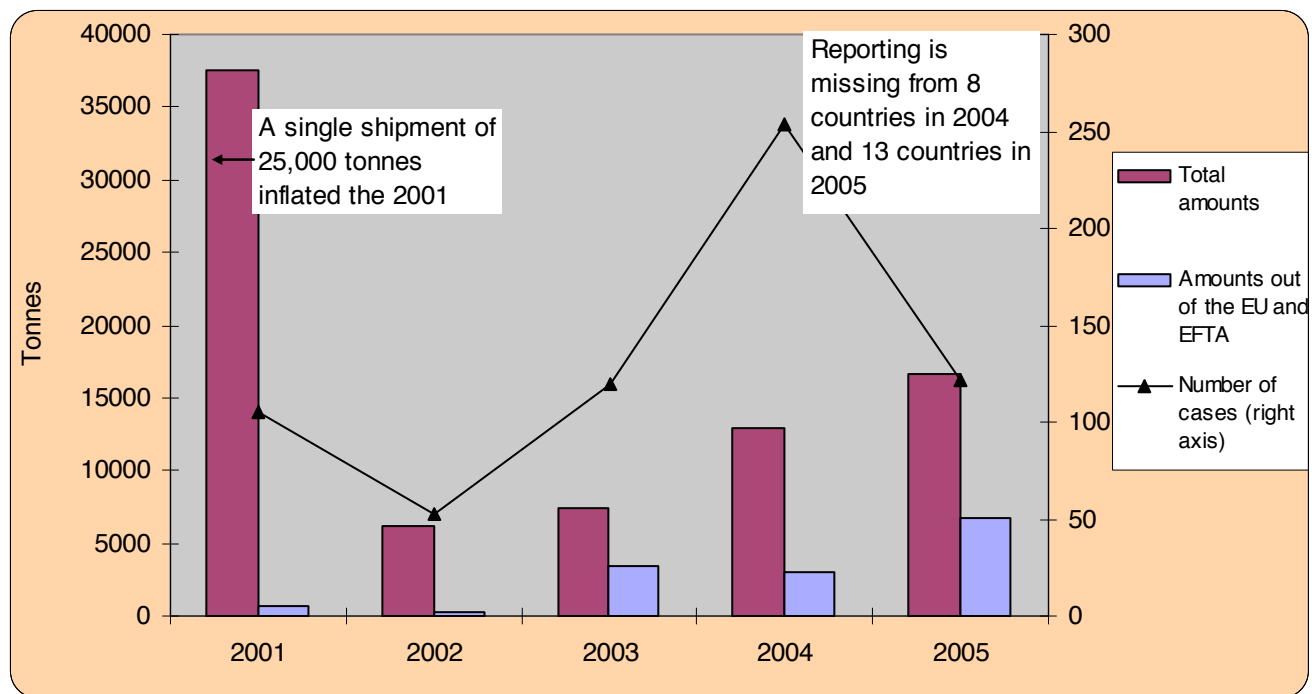
Illegal waste shipments

- Uncertain data/lack of information.
- Illegally shipped waste belongs to;
 - Ordinary waste types coming from households,
 - Very hazardous types from industrial processes,
 - Illegal shipments to EECCA countries concerns more hazardous waste types.
- The reported annual illegal shipments vary between 6,000 and 38,000 tonnes.
- Equivalent to 0.2 % of the notified waste.
- Number of cases has increased since 2001.



Illegal shipments in the EU

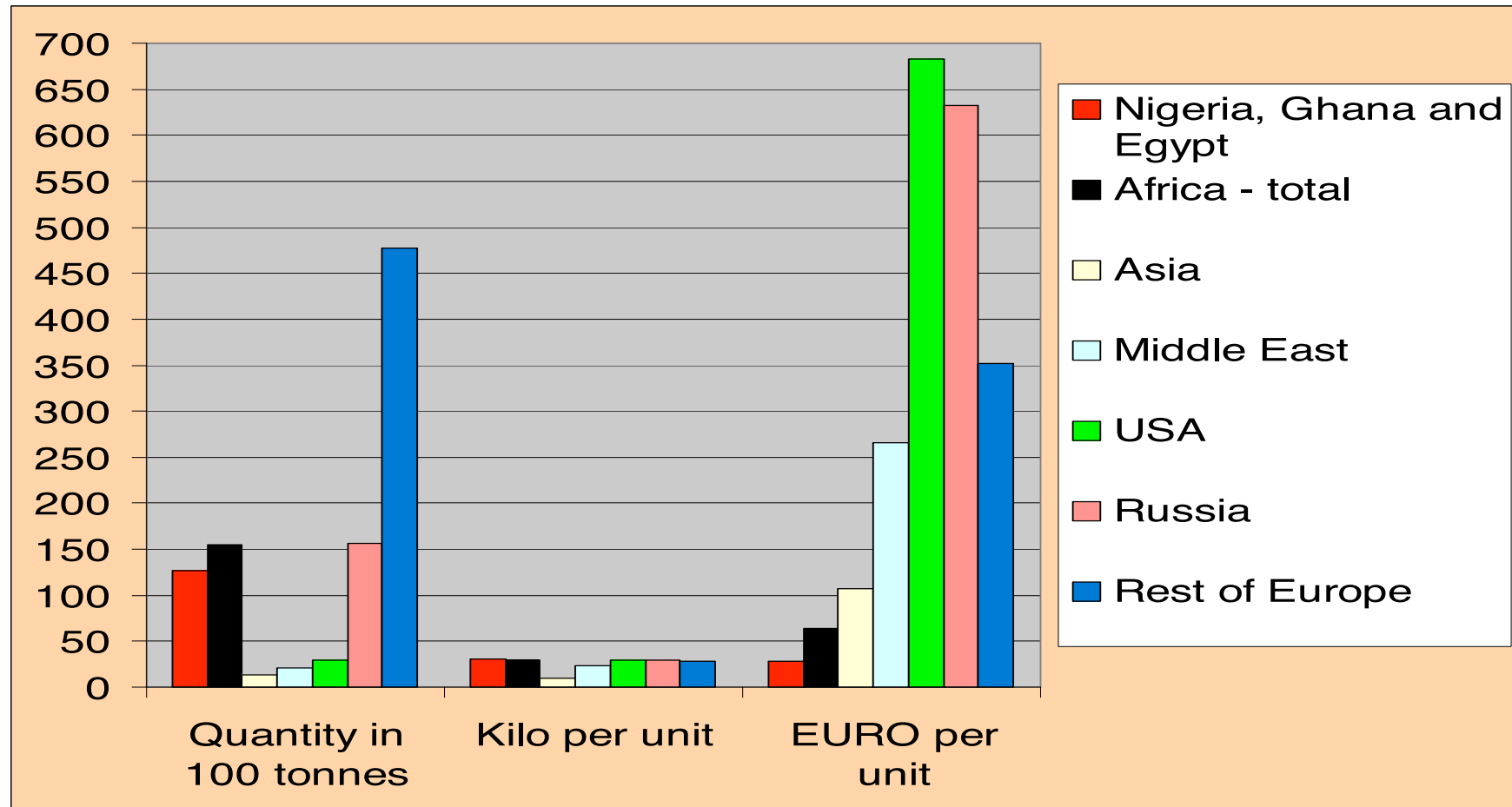
(Based on information received before 2007)



Source: EU-Commission



Export of TV sets from EU related to weight and Euro per unit



Main conclusions on work done in 2008

- The Member States report aggregated information to the EU Commission and not in time.
- Consequence of notified waste is not reported in detail;
 - Difficult to quantify environmental & economic impacts,
 - Difficult to conclude the extent to which notified waste expresses sound waste management or waste tourism.
- Very difficult to follow WEEE;
 - The data reporting to EU must be improved,
 - Trade statistics should differentiate between used products and new equipment.
- Reporting to EU should instead be based on European Waste List codes.



**Number of countries registering and publishing transboundary shipments of waste data according to the European Waste List?
(EU-27, Norway & Switzerland)**

Registration based on the EWL Survey made by ETC/SCP in 2009	Possible to get information based on the EWL code		Publish statistics on based on the EWL code		Reported data for 2006 and 2007	No answer at all
	Yes	No	Yes	No		
Total	22	7	11	9	16	2

Architecture of the European Waste List

- The 2-digit level - the most aggregated level
 - 20 main codes. Main industrial activity or group activity generating the waste.
- The 4 digit level includes 120 codes. Each code represents a process or a main waste type
 - wastes from thermal processes: e.g. aluminium or lead metallurgy.
- 6-digit level, where the very specific type of waste is indicated.



Examples of codes used in the European Waste List (2,4,6 digit)

- **10 WASTES FROM THERMAL PROCESSES**
 - **10 04 wastes from lead thermal metallurgy**
 - 10 04 01* slags from primary and secondary production
 - 10 04 02* dross and skimmings from primary and secondary production
 - 10 04 03* calcium arsenate
 - 10 04 04* flue-gas dust
 - 10 04 05* other particulates and dust
 - 10 04 06* solid wastes from gas treatment
 - 10 04 07* sludges and filter cakes from gas treatment
 - 10 04 09* wastes from cooling-water treatment containing oil
 - 10 04 10 waste from cooling-water treatment other than those mentioned in 10 04 09
 - 10 04 99 wastes not otherwise specified
- * = hazardous waste



Top 20 exported hazardous waste types (by weight) defined by activity in the EWL-2007: 1-10

4 digit code	Total amount (ton)	Description
1705	698,827	Soil (including excavated soil from contaminated sites), stones and dredging soil
1902	375,463	Wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
1901	356,504	Wastes from incineration or pyrolysis of waste
1002	313,548	Wastes from the iron and steel industry
1606	259,216	Batteries and accumulators
1903	249,981	Stabilised/solidified wastes
1912	217,896	Wastes from the mechanical treatment of waste (e.g. sorting, crushing, compacting, pelletising) not otherwise specified
701	216,745	Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
1003	172,328	Wastes from aluminium thermal metallurgy
1302	169,510	Waste engine, gear and lubricating oils

Top 20 exported hazardous waste types (by weight) defined by activity in the EWL-2007: 11-20

4 digit code	Total amount (ton)	Description
1702	152,095	Wood, glass and plastic
1706	148,023	Insulation materials and asbestos-containing construction materials
1101	143,104	Wastes from chemical surface treatment and coating of metals and other materials (eg. galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)
705	86,460	Wastes from the MFSU of pharmaceuticals
1004	81,127	Wastes from lead thermal metallurgy
1305	76,859	Oil/water separator contents
1602	76,560	Wastes from electrical and electronic equipment
2001	76,354	Separately collected fractions (except 15 01)
1406	57,454	Waste organic solvents, refrigerants and foam/aerosol propellants
1304	51,358	Bilge oils
Total	3,979,412	

Comparison of export of hazardous waste information based on the Basel code (2006) with the information based on the EWL (2007)

Reporting based on		Reporting based on the European Waste List code		
<i>Code and name</i>	<i>Tonnes</i>	<i>Code</i>	<i>Tonnes</i>	<i>Name</i>
Y-18	1,996,816	19	1,302,279	Waste management facilities
Of which		Of which		
				<i>1901 Wastes from incineration or pyrolysis of waste</i>
(Residues arising from industrial waste disposal operations)	1,996,816	190105	48456	Filter cake from gas treatment
		190106	2739	Aqueous liquid wastes from gas treatment and other aqueous liquid wastes
		190107	62465	Solid wastes from gas treatment
		190110	27	Spent activated carbon from flue-gas treatment
		190111	5510	Bottom ash and slag containing dangerous substances
		190113	207736	Fly ash containing dangerous substances
		190115	10708	Boiler dust containing dangerous substances
		190117	18863	Pyrolysis wastes containing dangerous substances
				<i>1902 Wastes from physico/chemical treatments of waste</i>
		190204	226644	Premixed wastes composed of at least one hazardous waste
		190205	90074	Sludges from physico/chemical treatment containing dangerous substances
		190207	1792	Oil and concentrates from separation
		190208	25121	liquid combustible wastes containing dangerous substances
		190209	30021	Solid combustible wastes containing dangerous substances
		190211	1811	Other wastes containing dangerous substances
				<i>1903. Stabilised/solidified wastes</i>
			249271	Wastes marked as hazardous, partly stabilised
		190306	710	Wastes marked as hazardous, solidified
				<i>1904. Vitrified waste and wastes from vitrification</i>
		190402	181	Fly ash and other flue-gas treatment wastes

Reporting based on Basel codes		Reporting based on the European Waste List code		
Code and name	Tonnes	Code	Tonnes	Name
				1908. Wastes from waste water treatment plants not otherwise specified
		190810	1344	Grease and oil mixture from oil/water separation other than those mentioned in 19 08 09
		190811	17751	Sludges containing dangerous substances from biological treatment of industrial waste water
		190813	23328	Sludges containing dangerous substances from other treatment of
				1910 Wastes from shredding of metal-containing wastes
		191003	29313	Fluff-light fraction and dust containing dangerous substances
		191005	3941	Other fractions containing dangerous substances
				1911. Wastes from oil regeneration
		191102	27	Acid tars
		191105	17	Sludges from on-site effluent treatment containing dangerous
		191107	8722	wastes from flue-gas cleaning
				1912. Wastes from the mechanical treatment of waste
		191206	126921	wood containing dangerous substances
		191211	90975	Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
				1913 wastes from soil and groundwater remediation
		191301	17811	Solid wastes from soil remediation containing dangerous substances

Main conclusions of EEA-ETC/SCP survey

- 4.7 million tonnes of HW based on EWL,
 - 80-90 % of the total transboundary shipped HW in Europe.
- 11 million tonnes of notified waste based on EWL was shipped in 2007.
 - includes both hazardous waste and non-hazardous waste types that might be problematic.



Main conclusions of EEA-ETC/SCP survey

- 30% of HW shipped waste comes from waste treatment facilities:
 - flue gas cleaning waste from incineration of waste,
 - waste from mechanical sorting of waste, especially contaminated wood,
 - waste from physical and chemical treatment of waste.
- 23% of HW shipped is C&D waste.
 - main part is polluted soil and asbestos.
- 100,000 tonnes of WEEE is exported.



Main conclusions of EEA-ETC/SCP survey

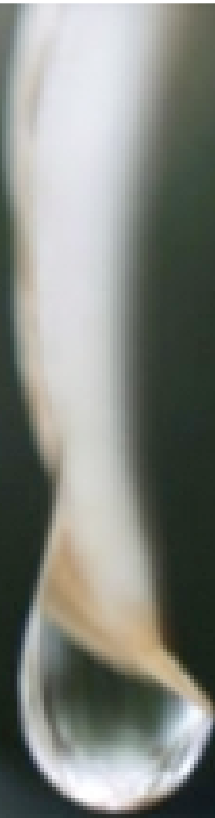
- Much of the shipped waste is generated by better waste management; mechanical sorting of mixed waste, recycling, composting, anaerobic digestion and incineration with energy recovery.
- These waste management processes generate recyclable materials and energy but generate also new waste types, which must be treated.
- Generation of these new wastes can be seen as a consequence of both EU and national initiatives introduced in the last 15-20 years.



Main conclusions of EEA-ETC/SCP survey

- The main benefit of using EWL codes when reporting to the EU is improved information on:
 - What specific type of waste is shipped,
 - Which processes are behind the generation of the wastes,
 - Which special hazardousness or hazardous substances are related to the waste.
- Detailed knowledge about the legal shipments of waste provides a better idea about the illegal ones.





Thank you for your attention

For more information please visit our website:

<http://scp.eionet.europa.eu/>