

## **PRODUCT RELATED ENVIRONMENTAL LEGISLATION AND POLICY IN FINLAND**

### **1. Introduction**

Product related environmental issues are currently eagerly discussed in Finland. Also the Government of Finland has taken some actions (e.g. establishing a committee for sustainable consumption and production) or presented legislative proposals for the Parliament (e.g. producer responsibility reform of the Waste legislation) in this field quite recently. These matters are so fresh that final decisions are still to come.

The aim of this presentation is to give basic information related to policy, legislation and practice in the field of product related environmental matters in Finland.

### **2. Producer Responsibility**

#### **2.1 Legislation**

##### **2.1.1 Waste Act and Special Decrees**

In Finland, the producer responsibility matters are mostly regulated by waste legislation. The Waste Act (1072/1993) came into force in the beginning of year 1994 repealing the Waste Management Act (673/1978). From the producer responsibility point of view the most important provisions of the Waste Act that are currently in force are section 5, section 4, section 18 and section 27. It is very important to point out that the government of Finland has proposed a reform of the Waste Act to include e.g. more detailed producer responsibility provisions to the Waste Act (proposal of the government to the Parliament 152/2003). The Parliament will process the proposal on the first half of year 2004 and the new legislation would come into force as soon as possible after it has passed the Parliament. (See outlines of the new legislation later in 2.1.2.)

The general purpose of the Waste Act is to support sustainable development by promoting the rational use of natural resources, and preventing and combatting the hazard and harm to health and the environment arising from wastes (section 1). Waste is defined in section 3 (1) and according it waste means any substance or object which the holder discards or intends, or is required, to discard. Waste producer means any natural or legal person whose activities produce waste (section 3 (3)) and waste holder means the producer of the waste, property holder, or operator or any other natural or legal person who is in possession of the waste (section 3 (6)).

Section 4 of the Waste Act sets up general duties for different actors. According to this - very general provision - as far as possible, care shall be taken in all activities to minimize generation of waste and to ensure that waste does not significantly hamper or complicate the organization of waste management, or result in hazard or harm to health or the environment. The provision has also somewhat more detailed provision, according to which the producer shall use raw material sparingly in production and substitute waste for raw material used; the manufacturer of a product shall take care, and an importer likewise ensure, that the product is durable,

reparable or reusable, or recoverable as waste, and that the product does not, as waste, result in any hazard, harm, or complication referred to above; and the authorities shall promote fulfilment of the obligations referred to above, and use recyclable products or products manufactured from recycled materials in their own activities.

The main tools to reach these aims of Waste Act are special Waste Decrees. In order to implement the general provisions of the Waste Act, the Government can issue general regulations on labelling of the product or information to be attached to the product; a deposit on the product, or payments to be made for return of the product; prohibition or restriction of, or precondition for, the manufacture, import, export, release onto the market, transferral, sale, delivery or use of the product, if its production, use or discard is generating waste, which is known or can justifiably be expected to significantly hamper or complicate the organization of waste management, or result in hazard or harm to health or the environment (Waste Act section 18 (1)(5)).

The Waste Act also includes special provision concerning implementing of the provisions on the organization of waste management and also for these purposes special Waste Decrees are the main instruments. According to section 18 the Government can issue general regulations on e.g. the duty of the manufacturer, importer, placer on the market, dealer, seller, deliverer, packager or user of a product or a legally competent corporation formed by them (producer corporation) to partly or entirely organize waste management, or to answer for the costs arising from it, and the right or duty of the waste producer, the property holder or other waste holder to deliver the waste to the waste management system so organized or otherwise take part in it. The special Decrees of producer responsibilities have been given according to the this provision. (According to above mentioned reform proposal, this provision will be repealed and more specific provisions will added to the Waste Act.)

Section 27 of the Waste Act includes from the principal point view important provision of cost liability of waste holder. According to it, the waste holder or the previous holder shall be liable for costs arising from waste unless otherwise provided under section 18(1)(5).

Three special Decrees have been issued according to section 18 of the Waste Act regarding producer responsibility. (These decrees have been issued before the new Constitution of Finland, therefore they are called government decisions, not decrees of the Council of State, which is the exact wording according to the Constitution which came into force 1.3.2000.) The special Decrees are: the Decree on the Recovery and Disposal of Discarded Tyres (1246/1995), the Decree on Packaging and Packaging Waste (962/1997) and the Decree on the Collection and Recovery of Waste Paper (883/1998). These two last decrees has been issued mostly in order to implement EC packaging and packaging waste legislation (Directive 94/62/EC). (See more information related to these Decree later on 2.2.)

The End of Life vehicles Directive (00/53/EC) and Electrical and Electronic Waste Directive (02/96/EC) have not yet been implemented in Finland. (See more information on these later in 2.1.2.)

Directive on batteries (91/157/EC) has not been implemented in Finland based on producer responsibility. The special Decree on Batteries (105/1995) was issued according to section 5 of the Waste Act and it prohibits release on to market certain batteries that contains mercury. The special Decree on Waste Oil Management (101/1997) was implemented according to section 5 and 18 of the Waste Act. The Decree does not include idea of producer responsibility. According to section 3 of the Decree it the holder of the waste oil is obligated to deliver the appropriate receiver (Waste Act section 15 or section 78) to be recovered or disposed. The Decree has been issued in order to implement Waste Oil directive (75/439/EC).

## 2.1.2 Producer Responsibility Reform of the Waste Act in 2004

The provisions concerning producer responsibility will be clarified and tightened as a result of the Waste Act reform in 2004. The Parliament will start to process the reform proposed by the government (152/2003) and the new legislation would come into force in 2004 as soon as possible after it has passed the Parliament. There were general and technical motives for the reform, but the main reasons for the new provisions were producer responsibility related, namely implementing End of Life Vehicles Directive and Electrical and Electronic Equipment Directive. These directives will be finally implemented on special Decrees after in force coming of the Waste Act reform.

The proposal of the Waste Act reform includes a new specific Producer Responsibility Chapter 3 a to the Waste Act that would contain 8 sections (sections 18 a to h). Section 18 a would set up objectives for the producer responsibility and a short definition of the producer responsibility. According to section 18 b, the producer responsibility would be applied only certain products and producers that are:

- 1) motorized or hauled vehicles (producer: producers and importers),
- 2) newspapers, magazines, office paper or other similar paper products (producer: producers and importers),
- 3) packages (producer: commercial packer of a product or the importer of a packed product),
- 4) cars, vans and other comparable vehicles (producer: manufacturer or commercial importer or commercial supplier that imports in the name of domestic user),
- 5) electrical and electronic equipments (producer: producer and importer and vendor that sells equipment on own label).

According to section 18 g (1) of the proposal, the provisions would also be applied to certain redeemable beverage containers (glass and pet bottles and cans according to section 4 of the Soft Drink Tax Act (1474/1994) and section 7 of the Alcohol Tax and Alcoholic Beverage Tax (1471/1994)). These product packages (bottles and cans) have well working deposit system that has existed very long time Finland.

Section 18 c of the Waste Act, would include specific provisions on producer responsibilities concerning reuse, recycling and other waste management. The prevailing Waste Act contains very limited regulations on producer organisations, though these organisations are in practice very important. This weakness will be improved by introducing quite substantive provisions in section 18 d of the Waste Act. Section 18 d would include basic norms of this kind of cooperation of the producers. The obligations of other operators (vendors, suppliers, users, repairers and other operators, waste collectors, dissemblers, crusher and other waste management operators) would be regulated in section 18 e. Section 18 f would contain obligations and rights of the last holder of the product. The holder would have right to transfer the product to the waste management system of the producer without any charges. The special provisions on certain product groups would be taken into section 18 g of the Waste Act. These provisions would concern end of life vehicles and electrical and electronic equipments.

## 2.2 Producer Responsibility in Practice

### 2.2.1 General

In practice, the producer responsibilities are take care by specific producer organisations on behalf of the individual producers themselves. The legal basis of the producer organisations is

weak on the section 18 (1)(5) of the Waste Act, which - as described above - gives right to impose decrees by the Council of State (Government). The reform of the Waste Act will clarify the status, obligations and tasks of producer organisations in many ways.

From the competition point of view the Finnish system, which is mainly producer organisations based, can be criticized. In most of the cases there is no other option than joining into producer organization led system. The problems related to this are often met especially importers or new market enters and there has been arguments that some of the producer organizations can be discriminative. This discussion has mainly been related to glass bottles return system. On the other hand, in general producer organizations are quite effective mechanism to take care producer responsibilities in a relatively large country that is quite sparsely populated.

## **2.2.2 Car and Other Motor Vehicle Tyres**

The Finnish producer responsibility based system concerning car and other motor vehicle tyres has its legal ground in Decree on the Recovery and Disposal of Discarded Tyres (1246/1995). The Decree sets an obligation for tyre producers to take responsibility for used tyres. It also sets a goal to recycle 90 % of all tyres removed from use annually by the year 2000, which has been achieved.

The systematic recycling of used vehicle tyres in Finland was started in 1996. To fulfill this obligation the major importers and domestic manufacturers in the tyre business along with Autonrengasliitto (The Tyre Association) voluntarily set up an administrative company, Finnish Tyre Recycling Ltd, for this purpose. The owners of Finnish Tyre Recycling Ltd are Autonrengasliitto ry (The Finnish Tyre Association), Bridgestone/Firestone Finland, Continental Tires Finland, Goodyear Dunlop Tires Finland, Nokian Tyres Oy Sigma Ab and Michelin Finland. The company's objective is to take care of the collection and utilisation of used vehicle tyres in Finland. The operational part in the recycling process is run by Lassila & Tikanoja Ltd. The process starts with the consumers bringing their used tyres to their local tyre dealer. Lassila & Tikanoja Ltd then collects the tyres from local dealers into seven nationwide terminals where the best tyres are separated for retreading and the rest are cut into tyre chips and delivered to customers for further utilization.

Tyre recycling in Finland is funded by a recycling fee, which is paid when new tyres are purchased. Thus it is possible for the consumers to bring their used tyres to their local tyre-dealers free of charge. In this kind of system the fee falls on the actual user of tyres. Recycling fees (effective 1 January 2002, including VAT 22%) are for: moped and motorcycle tyres eur 1.85/each, passenger car tyres eur 1.85/each, delivery van tyres <17.5" eur 1.85/each, truck tyres >17.5" eur 8.30/each, industrial tyres <20.0" eur 2.45/each, agricultural machinery tyres <24" eur 4.20/each, agricultural machinery tyres >24" eur 8.30/each, forestry tyres <300 kg eur 12.60/each, forestry tyres >300 kg eur 50.50/each, machinery tyres <300 kg eur 12.60/each, machinery tyres >300 kg eur 50.50/each and retreaded tyres truck tyres >17.5" eur 2.45/each.

The Finnish market is producing approximately 30 000 tonnes of used vehicle tyres annually, equivalent to 2.4 million car tyres a year. At the moment over 90 % of these tyres are collected and recycled. In 2003, the system received 36156 tonnes of tyres (31986 tonnes in 2002 and 3230 tonnes in 2001). The received tyres are retreaded (meaning new coating to old tyre) (1329 tonnes in 2003, 1039 tonnes in 2002), utilized as material (29243 tonnes in 2003, 36674 tonnes in 2002) or utilized as energy (6 tonnes in 2003, 6 tonnes in 2002).

### 2.2.3 Packaging

The Decree on Packaging and Packaging Waste (962/1997) includes producer responsibility based system concerning packaging. The Decree imposes the obligation to attend to the recovery of packaging on every packer with a turnover of over 841.000 euros, who places packaging on the Finnish market with their products. In addition, companies have obligations concerning information and reporting with regard to recovery.

According to section 3 (1)(3) of the Decree, a packer is defined as "the commercial packer of a product or the importer of a packed product". The essential point is that packing is carried out for distribution and consumption taking place in Finland. Commercial in this context refers to an entrepreneurial activity as distinct from that of individual people. Recovery obligations apply to all companies with a turnover of 841.000 euros that fulfil the above mentioned criteria regardless of the quantity of products or used packaging.

Packers and importers of packed goods may transfer the recovery obligations mentioned above to the producer organisations in accordance with section 5 and 18(1) of the Decree. Economic operators - that is, the entire packaging chain - are for their part responsible for the establishment of producer organisations and their operations in accordance with section 6 of the Decree. In accordance with section 8 (2) of the Decree the producer organisations may assign the functions, conferred on them by packers and importers under contract pursuant to sections 16 and 17, to be implemented by a joint company or by some other legally competent corporation. In order to carry out these functions and the collection of data, provision of information and coordination activities related to the entire range of packaging recovery activities, the associations, representing the sector, have established the Environmental Register of Packaging PYR Ltd.

#### *Producer organisations*

The producer organisations - Suomen Aaltopahviihdistys ry (corrugated board), Suomen Kuluttajakuitu ry (consumer fibres), Suomen Teollisuuskuitu Oy (industrial fibres), Suomen NP-kierrätys Oy (liquid packaging), Suomen Uusiomuovi Oy (plastics), Suomen Keräyslasiyhdistys ry (glass), Mepak-Kierrätys Oy (metals) and Suomen Palautuspakkaus Oy (deposit bottles) - have assigned the functions mentioned in the previous paragraph to the Environmental Register of Packaging PYR Ltd.

The producer organisations for packaging were set up at the beginning of 1998. The basic principle has been in this system to avoid overlapping organisations and unnecessary costs incurred by them. The founders and in many cases the owners of the producer organisations is the entire packaging chain: the packaging industry, the packing industry, importers, the retail trade and often also manufacturers of raw packaging materials and packaging waste recovery firms. Each producer organisation is entered in the waste file of its own regional environment institute.

Joining a producer organisation is practically almost unavoidable, as only in exceptional cases can a packer or importer of packed products keep track of the packaging it has placed on the domestic market and take care of attaining recovery targets in addition to its information and reporting duties. By making a contract with the Environmental Register of Packaging PYR Ltd a firm transfers its recovery obligation to the producer organisations.

### *Corrugated paper*

The Finnish Corrugated Board Association is founded by its members Stora Enso Packaging Oy, SCA Packaging Finland Oy and Peterson Packaging Oy. The aim of the association is to support the use of corrugated board and its recovery. The association represents the corrugated industry both at domestic and at international official contacts and is active among the international industry forums. The association acts as a producer organisation in order to organise the recovery of corrugated packaging waste in Finland as required by the legislation. The association has an agreement with PYR and thus undertaken the responsibility, as required by this legislation, to organise the recovery of packaging submitted to the market by industries and importers who have also made agreement with PYR. The Finnish Corrugated Board Association is a nonprofit organisation.

### *Industrial fibres*

Suomen Teollisuuskuitu Oy was established in spring 1998 as the producer organisation for fibre-based industrial packaging. The company takes care of the recovery of such things as wrapping for the paper, timber, plywood and steel industries, paper sacks and cores. Its shareholders are UPM-Kymmene Oyj, Pyrollsack Oy, Plastiroll Oy, Corenso United Oy Ltd, Ahlström Cores Oy, Raisio Yhtymä, Oy Karl Fazer Ab and Korsnäs Finland Oy.

### *Consumer Fibres*

Suomen Kuluttajakuitu ry was established as the producer organisation for fibre-based consumer packaging in January 1998. The association was entered in the Pirkanmaa Regional Environment Centres waste file on 11.6.1998. The association has also made a contract with the Environmental Register of Packaging PYR Ltd. The packaging, which this producer organisation's activities deal with, comprises printed cardboard boxes, fibre packaging (such as egg boxes), paper bags and wrapping, disposable paper plates, cups and so on, and paper labels. It is estimated that some 42.000 tonnes of waste per year is generated from this material in Finland. Eighteen companies, broadly representing packaging manufacturers, packers, the retail trade and importers, are the members of this producer organisation at present.

### *Liquid packing cardboard*

Suomen NP-kierrätys Oy is the producer organisation taking care of used beverage cartons made of liquid-packaging board. This includes milk, yoghurt, juice, wine and syrup packaging as well as packaging for powdered spices and liquid washing agents, also aluminium laminated. The shareholders of the Suomen NP-kierrätys Oy are Elopak Oy, Tetra Pak Oy, Stora Enso Oyj and Valio Oy. A cooperation agreement has been made with all major users of liquid packaging board numbering 19. The smaller packers pay a recovery fee via PYR Ltd - Environmental Register of Packaging. An agreement has been made with Paperinkeräys Oy (paper collection company), which owns collection bins and takes care of collection itself or through outsourcing. Suomen NP-kierrätys Oy has signed a cooperation agreement with the Environmental Register of Packaging PYR Ltd. Suomen NP-Kierrätys Oy charges recovery fees from packers as before. The fee has been used since the beginning of 1995 and in 2003 amounts to euro 0.57/thousand package regardless of the packaging's size. The packers which have not made a contract with the company are charged 20 euros/tonne through PYR. The fee is used to cover costs incurred in recycling.

The recycling project for liquid-packaging board was started as a pilot scheme in east Helsinki in 1992. "Suomen NP-kierrätys Oy" - (beverage carton recycling company in Finland) was

established at the end of 1994 and organised recycling of milk and juice cartons started in Helsinki region and Kuopio in 1995. Collection is currently run as district collection each serving some 10000 residents in residential areas with a total population of about three million. In Finland are about 800 collection points.

### *Recycled Plastics*

Suomen Uusiomuovi Oy (the Finnish Plastics Recycling Ltd) is the producer organisation for recycled plastics. It was founded to promote recycling of used plastic products in Finland. The Finnish Plastics Recycling Ltd has about 50 shareholders (companies on plastics business). The recycled packages that has been recycled by Suomen Uusiomuovi Oy:n has mostly been PE-LD-, PE-LLD-, PE-HD-foils and PE-HD-canisters-, -bottles and boxes.

### *Glass*

Suomen Keräyslasiyhdistys ry (the Finnish Glass Recycling Association), that was founded in 1998, is the producer organisation for glass. The members of the Finnish Glass Recycling Association are Alko Oy (alcoholic retail monopoly), Elintarviketeollisuusliitto ry (food industry), Panimo- ja virvoitusjuomateollisuusliitto ry (beer and soft drink manufactures), Päivittäistavara-kauppa ry (retail commerce), Karhulan Lasi Oy (glass maker) and Saint-Gobain Isover Oy (fibre producer).

In Finland, most of the packaging glass runs through the deposit based return system. This system covers glass bottles (0,33 litres, 0,5 litres and 1 litres) PET-plastic bottles (0,5 litres, 1 litres and 1,5 litres). In 2002 there were approximately 8000 return points in Finland. The return automats are in generally owned by retail commerce (shops) and they also take care of the personnel that runs the return. The breweries pay fees to commerce of this service. On the other hand breweries and soft drink manufactures own the beer and soft drink bottles and bottle baskets, though A-pullo Ltd owns the bottles of Alko Oy. As a whole commerce and industry has invested about 600.000.000 euros to the system including sorting and washing machines. Reusable bottles are delivered to the breweries (and other manufactures), where they are sorted and washed. After that the bottles are refilled. Non reusable bottles will be crashed and the glass is used for manufacturing of package glass and glass based isolation material. The bottle return rate was 97.5% in 2001.

The main incentive for the return system is special taxation system for throwaway packages. The system is set up in section 4 of the Soft Drink Tax Act (1474/1994) and section 7 of the Alcohol Tax and Alcoholic Beverage Tax (1471/1994). The taxation has three tax classes: 0,67; 0,16 tai 0 euros per litre. The taxation covers alcoholic beverages, soft drinks and mineral water, but soft drinks (water and juices) without carbonic acid are excluded. The tax is 0 euros for those reusable packages that are part of the return system approved by the Ministry for the Environment. The ministry has made decision on this in 1994 (Decision of the Ministry for the Environment on approving soft drink and alcoholic beverages packages return system, 569/1994). According to legislation the tax is 0,67 euros/litre for throwaway packages and for packages that are recycled but not reused the tax is 0,16 euros/litre (e.g. wine bottles). Taxes on one-way beverage containers and the deposit is one reason why Finland produces the lowest amount of package waste in Europe (82 kilos/inhabitant in 1998, compared with 109 kilos/inhabitant in Sweden and an average of 159 kilos/inhabitant in the EU). A reform of this taxation system has been under preparation for couple of years and the system will be revised to be more objective (e.g. to include also very low volume alcoholic drinks, 0,5-1,2 %, and water products) and have re-evaluated tax levels.

### *Metal Packing*

The metal packaging recovery organization, Mepak-Kierrätys Oy (Mepak-Recycling Ltd ), was founded in 1997. The shareholders are metal packaging manufacturers, the packing industry and retail-wholesale trade organizations in Finland, amounting to 12 shareholders in all. Mepak coordinates the collection of metal packaging and carries out different kinds of studies and research to find out the best possible solutions for the recovery of packaging in Finland. Mepak is responsible for giving information and compiling statistics in conjunction with the Environmental Register of Packaging PYR Ltd. Mepak has the legal right to collect a recycling fee from the packing industry and importers of packed goods. Mepak has made a contract with Kuusakoski Oy (the biggest scrap company in Finland), Stena Metalliyhtymä Oy and Jylhän Metalliro-mu Oy to ensure the reuse of the tinsplate scrap. Mepak has also made a contract with the largest waste collector in Finland Lassila&Tikanoja Oy to improve the collection of metal packages.

### *Return packing*

Suomen Palautuspakkaus Oy (Palpa) administrates the return of redeemable beverage cans in Finland. The recycling system of deposit cans was started up in 1996. Palpa's shareholders are commercial groups Alko Oy, Inex Partners Oy, Ruokakesko Oy and Tuko Logistics Oy and Lidl Finland as well as breweries Oy Hartwall Ab, Olvi Oy and Oy Sinebrychoff Ab.

There are over 6000 return points in total, of which nearly 2000 have a reverse vending machine. Beverage cans are reimbursed at 0.15 euros per can. Palpa or Suomen Palautus-pakkaus Oy administrates the return of reimbursable beverage cans in Finland. Part of Palpa's work is also the development of the beverage packaging recycling system, and decreasing any harmful environmental effects. Empty cans are taken to inspecting and baling stations situated in 5 different locations in Finland where they are counted and checked. The return details are fed into Palpa's information system. After this the cans are baled and transported to the aluminium smelting plant. A total of 90 million deposit beverage cans are sold in Finland annually, 87 million cans were returned for recycling which of 76 million is deposit cans and 1 non-deposit cans. The rate of return for deposit cans is around 85 % and the total return rate was 97 %.

### *The Environmental Register of Packaging (PYR) as an umbrella organisation*

In most of the cases the easiest way for a company to fulfil its packaging recovery obligations in practice is to make a contract with Environmental Register of Packaging PYR Ltd (PYR). After the contract with PYR, the company is also registered with the producer organisations and is released from its recovery obligation. Then it does not need to organise recovery of the packaging placed on the market or to report on the effectiveness of recovery to the authorities. PYR centrally takes care of such matters as fee payments, compiling monitoring data and providing information on behalf of the producer organisations. A company that has made a contract with PYR gives packaging statistics directly to PYR, thereby avoiding the requirement to report the data on its recovery operations to the Finnish Environment Institute.

The Environmental Register of Packaging PYR Ltd is a non-profit company, which works in conjunction with producer organisations. It assists member companies and authorities in order that the recovery obligations may be fulfilled as economically and as smoothly as possible. By making a contract with PYR a company transfers its recovery obligation for the packaging it has placed on the market to the producer organisations. PYR collects recovery fees and deposits them without deductions into the accounts of the producer organisations, it maintains a register of members and takes care of statistics, reporting and providing information.



PYR contracts cover 97 % of the packaging companies with over 841.000 euros turnover and about 8000 locations. PYR covers 93 % of packaging on the Finnish market. So, only a few companies are taking care of recovery themselves, because it is quite costly to keep track of the packaging placed on the market and itself arrange for its recovery and the company will have to be able to prove the effectiveness of the system to the authorities.

Finnish business and packaging industry are joint owners of the Environmental Register of Packaging PYR Ltd. The shareholders are the Forest industry Federation, the Finnish Plastics Industry Federation, Technologies Industries of Finland, the Federation of the Consumer Goods and Speciality Goods Industry (KET ry), the Food Industry Federation, the Chemical Industry Federation, the Finnish Oil and Gas Federation, the Food Retail Federation, the Confederation of the Retail Trade and the Finnish Packaging Association.

The Ministry of the Environment has approved that the Environmental Register of Packaging PYR Ltd maintains the producer register in Finland. The Ministry of the Environment together with the Finnish Environment Institute monitors the activities of the producer organisations and has the authority to issue more stringent regulations and instructions. In practise e.g. PYR sends a list of members to the Finnish Environment Institute and PYR sends to the Institute regular intervals a list of contracted business locations under contract. In making a contract with PYR a firm is released from the recovery obligation stipulated by the Council of State decision by transferring this to the producer organisations through PYR. The Institute collects data on the amount and quality of used packaging from firms with a turnover of over 841000 euros that have not joined PYR, but the Institute does not release them from the recovery or information obligations.

### *Statistics*

The reuse (reuse of packaging is using packaging again for its original purpose, e.g. reuse of beverage bottles) percentages has been quite constant over the years 1998-2001. In total the it has been around 62%. The recycling percentage has less than 50% over the years 1998-2001.

#### REUSE OF PACKAGING IN FINLAND AS PERCENTAGE OF TOTAL USE

YEAR	TOTAL	FIBRE	GLASS	METAL	PLASTICS
1998	66 %	4 %	84 %	90 %	70 %
1999	64 %	4 %	83 %	90 %	69 %
2000	63 %	3 %	81 %	89 %	67 %
2001	62 %	3 %	81 %	88 %	69 %

#### RECYCLING OF PACKAGING MATERIALS(=PERCENT OF PACKAGING WASTE) IN FINLAND

YEAR	TOTAL	FIBRE	GLASS	METAL	PLASTICS
1998	45 %	57 %	62 %	16 %	10 %
1999	50 %	61 %	78 %	19 %	13 %
2000	50 %	62 %	64 %	25 %	14 %
2001	47 %	58 %	50 %	39 %	15 %

#### RECOVERY OF PACKAGING MATERIAL (RECYCLING + USE AS ENERGY) IN FINLAND AND THE TARGET AGREED UPON BY FINLAND WITH THE EU (=PERCENTAGE OF PACKAGING WASTE)

YEAR	TOTAL	FIBRE	GLASS	METAL	PLASTICS
1998	56 %	72 %	62 %	16 %	20 %
1999	60 %	72 %	78 %	19 %	30 %

2000	60 %	72 %	64 %	25 %	36 %
2001	62 %	74 %	50 %	39 %	44 %

Recovery of packaging waste comprises the reuse of packaging as raw material for new products, or the use of packaging as energy. Recovery of packaging does not comprise delivery of packaging to communal waste collection or sorting centres.

#### 2.2.4 Paper and Cardboard

Traditionally, collection and recycling of the paper and cardboard has operated business economy basis in Finland. In 1998, the Decree on the Collection and Recovery of Waste Paper (883/1998) was issued in order to make the system more effective from the environmental point of view and based on the producer responsibility. The target set in the Decree, is that at least 70% of waste paper should be collected and recovered by the year 2000 and at least 75% by the year 2005 and that the waste paper collected shall primarily be recovered as material.

According to the Decree, the property holders (households and enterprises) have an obligation to collect waste paper in their areas and the producers shall, at their own expense, organize the transport of waste paper from properties or areal collection sites (sections 4 and 5). The Decree also sets duty to cooperate to the producers and they shall cooperate with the municipality concerned in organizing the collection and recovery of waste paper and in providing relevant information and advice in the municipality.

The Decree allows the use of the producer organisations on behalf of the producer (section 12) and the duties of the producer can be transferred to producer organisation. Paperinkeräys Oy (Paper Collecting Ltd) is responsible for the implementation of the producer responsibility for printing and writing papers on behalf of the paper manufacturers. This involves organizing the collection and providing information about different collection services. Paperinkeräys Oy was established in as early as 1943 and it is the biggest recovered paper producer and merchant in Finland. The owners of Paperinkeräys Oy are Stora Enso Oyj (30.4%), UPM-Kymmene Oyj (23.0%), M-real Oyj (16.1%), Metsää Tissue Oyj (4,1 %), Ahlstrom Oyj (12.2%), Myllykoski Oyj (10.1%) and Georgia-Pacific Finland Oy (4.1%).

The collection rate, based on total consumption of paper and board, has been in Finland around 70% (63% in 1998, 65% in 1999, 67% in 2000, 74% in 2001 and 72% in 2002). Annually, the amount of the collected waste paper has been about 144 kilos per person (in 2002, 765000 tonnes). Because Finland is a major producer of pulp and paper, all of the collected waste paper is used as a raw material of paper. (The production of paper products is annually 12 to 13 million tonnes and the domestic consumption is about 1 million tonnes, therefore waste paper reuse rate related to total production is only 5 to 6 per cent.)

#### 2.2.5 Electricity and Electronic devices

Finland has not yet implemented the Electrical and Electronic Waste Directive (02/96/EC). There has been some pilot projects and other projects for electricity and electronic devices waste, but a nationwide systems has not yet been established. Some of the producers (e.g. Nokia) have been setting up systems of their own via their reseller channels. One of the purposes on reform of the Waste Act is to implement the Electrical and Electronic Waste Directive in Finland. According to explanations for the proposal, the Decree on electrical and

electronic waste producer responsibilities will be given in 2004. The producers are planning to start the system in the beginning of year 2005.

### **2.2.6 Motor Vehicles**

Finland has not yet implemented the End of Life vehicles Directive (00/53/EC). One of the purposes on reform of the Waste Act is to implement the End of Life vehicles Directive in Finland. The vehicle importers and dealers have made preparations to establish a producer organization or several producer organizations to fulfill producer responsibilities. The aim of the Finnish vehicle branch is to start the system in the beginning of year 2005.

## **3. Integrated Product Policy**

### **3.1 General**

Integrated product policy (IPP) issues have been discussed and examined in Finland in the last few years. As on the European level, the progress has been quite modest, though some interesting initiatives and projects have been carried out and the current government is facing the challenge of environmental product policy issues quite seriously. Main indication of this is that product policy issues have been contained in the present-day governments "Programme" (The Government Programme of Prime Minister Matti Vanhanen's Government on 24 June 2003). According to the Government Programme, a national intersectoral programme of ecologically, socially and economically sustainable production and consumption patterns will be drawn up.

As early as 1998, the Finnish Government's Programme for Sustainable Development (Council of State Decision-in-Principle on the promotion of ecological sustainability 1998) included also a strategic objective to support sustainable production and consumption.

In November 2003, a broad committee that was set up to prepare a national programme for sustainable consumption and production. The committee is represented by different stakeholders and it should complete its work by June 2005. The general task for the committee is to develop a national, crosscutting programme on sustainable consumption and production. The aim of the programme is to increase eco-efficiency of material and energy use throughout the whole lifecycle of products.

In terms of legal regulation, the IPP related development has been modest. However at the policy level there are some issues that are worth of little closer examination. These issues are ecolabelling and public procurement (which certainly has legal background).

### **3.2 Ecolabelling and Forest Certification in Finland**

#### **3.2.1 Swan label**

The most well known ecolabel in Finland is the Nordic Swan label. The Nordic ecolabel, the Swan Label, is used in the Nordic countries, Denmark, Finland, Iceland, Norway and Sweden. The Swan Label has a history of 14 years, beginning from the decision of the Nordic Council of Ministers in 1989 concerning positive and voluntary eco-labelling. The criteria work began in 1990/1991 and the first licences were granted in 1992. The current regulations for the Nordic

eco-labelling have been approved by the Nordic Ecolabelling Board in year 1997 (Regulations for Nordic Ecolabelling of products, Nordic Ecolabelling Board, 10 December 1997).

The Nordic ecolabel is parallel with the European Eco-Label, the Flower label. The article 11 of the European Eco-Label Regulation (1980/2000) ensures the parallel status as the existing as well as new eco-label schemes in the Member States may continue to co-exist with the EU-Scheme.

The swan is a "market leader" in the Nordic countries, since in the beginning of year 2002, there was only one company (paint manufacturer) in Finland that has awarded by the competent body of Finland, SFS-Ympäristömerkintä (Finnish Standards Association SFS - Environmental Labelling). At that time in Denmark there were 20 licences and 8 in Sweden. That meant that there were only 40 licences in total in the Nordic countries that are members of the EU and at the same time there were about 1000 Swan label licences granted. At the moment (beginning of 2004), 152 licenses (several hundred products) for the use of the flower logo have been granted in whole of the Europe.

The Nordic ecolabel is supranational and therefore all the essential decisions, e.g. rules, priorities, and criteria documents, concerning the Swan label system should be made on the Nordic level. The fundamental decisions are made by the Nordic Council of Ministers for Consumer Affairs, but the important decisions (criteria decisions, etc.) from the practical point of view are made by the Nordic Ecolabelling Board.

On the national level there are two kinds of organisations involved with the Swan label, namely the national Ecolabelling Boards and the ecolabelling bodies. The national boards will prepare national views for the decisions that will be decided by the Nordic Board and the national board has very little formal authority. The national body in Finland is SFS-Ympäristömerkintä (the SFS-Environmental labelling Finland).

The Swan label is - like other ecolabels - voluntary and aims to maximum reliability. The Swan label falls into category of life-cycle labels. In general, the Swan label indicates that the products burdens the environment less than other corresponding products. In the Swan system the target has been, that from the environmental point of view the best products, 5-40 % of the products in the same product category, could have the right to use the Swan label.

#### *The Criteria Documents for the Swan Label*

The criteria documents are a highly important part of the ecolabelling, because the criteria documents include those environmental requirements that the products will have to meet in order to have the permission to use the ecolabel. The preparation of the criteria for the Nordic Swan Label is a relatively demanding task and crucial from the environmental credibility point of view. As expressed previously, the criteria documents are common in all Nordic countries and the decision concerning them is made by the Nordic Ecolabelling Board. The initiative for the criteria document may rise from different sources (industry, trade, consumer, consumer or environmental organisation, Nordic Ecolabelling board, etc.) and the right of initiative is not limited.

Normally the criteria documents are prepared by Nordic expert groups, which are nominated by the Nordic Ecolabelling Board. National consumer organisations and environmental organisations (including non governmental organisations), organisations for trade and industry and experts of national authorities will be given chance to take part in the work of the expert group. The documents concerning criteria documents, statement proposals and progress of the work in the expert group is public. Before the decision of the Nordic Ecolabelling Board, the

proposal for a criteria document will be sent for an extensive statement round and all the relevant parts may give their statement.

When preparing criteria documents for a product group, the whole lifecycle of the product is a starting point and according to it the number of valid variables will be chosen. The important factors are normally connected with raw materials, energy consumption, consumption of resources, emissions into air, water and soil, noise factors, odours, and waste (on production, delivery, use and disposal). The criteria documents are in force for 3 years at most and after that the criteria documents will be revised.

The requirements for ecolabelling vary with product groups. There were criteria documents for about 60 different product groups in January 2004.

#### *Swan label licencing and the use of the label*

The licencing procedure begins from the application which shall be made on the form which is confirmed in the Regulations for Nordic ecolabelling of products. After the examination of the application the company can have the permission to use the Nordic ecolabel. The licence will be given, if the product conforms to the stipulated requirements. One licence may cover several products within a given product group if the products represent similar circumstances from the environmental aspect. The licence will be given by the national eco-labelling organisation, which is in Finland SFS-Ympäristömerkintä. The validity of the licence is restricted to the validity time of the relevant criteria document. A new application must be made to obtain a licence in accordance with the terms of a revised criteria document.

There are approximately 200 licences granted in Finland and in the Nordic countries the total number of Swan label licences is more than 1000. The label is connected with around 2000 products, because one licence may include several product names. It is possible to use the Nordic ecolabel in several Nordic countries. In order to use the Swan label in another Nordic country, registration is required at the Nordic eco-labelling organisation of the country in question. A licence that has been issued in the first country serves as a basis for registration in another country.

#### *Negative and Positive remarks*

In 2001 the Finnish paper and pulp companies (StoraEnso, UPM-Kymmene and M-Real), that are quite important players in the world market as well, made an important decision concerning the Swan label, as they stopped using Swan label in printing paper. In Finland the decision has also financial implications for the eco-labelling system, because the annual fees of those products has been quite significant. It makes sense, thinking the decisions of the companies from the market point of view, because those companies act in the global markets. If the decision is an implication of the new trend and implies that the companies do not benefit from the label, the decision is quite worrying from the ecolabel point of view. However it must be taken into account that the printing paper is completely a business-to-business product and the industry has certificated environmental management systems (ISO 14001 and/or EMAS), which is important in these relations. One tendency has also been that certain companies have developed a uniform declaration procedure for environmental product information (environmental product declarations). Pulp and paper companies have developed such a paper profiles.

There is also positive information to tell on Swan label. The Swan label is quite highly valued brand in Finland. According to research published in Finnish magazine *Markkinointi ja Mainonta* (Marketing and Advertising) the Swan label was valued sixth of the all brands that are used in Finland (it was even ahead of Nokia, which was 8th). The research covered over 1000

product and company brands. Swan label is very well known in Finland, 89% of the Finns recognize Swan label.

According to market research done by ACNielsen, the total sales of the Swan labelled products was about 126 million euros and the growth of the sales was 49% of Swan labelled products compared to 15% growth of the all products in those product groups from 1998 to 2002. The simplified interpretation of these figures shows that Swan labelled products sell better than "normal" products.

### **3.2.2 The Finnish Forest Certification System**

The general aim of forest certification is to promote ecologically, economically and socially sustainable forest management. The certification is used in an attempt to safeguard the competitive status of wood products in the market. On the other hand The Finnish Forest Certification System (FFCS) includes forest certification and wood chain of custody certification. Finnish system may be characterized as voluntary single issue certification scheme.

The forest certification begun from the need for certification for tropic timber in the beginning of the 1990's. In Finland the system building started in 1996 (10.4.1996), when the Ministry of Agriculture and Forestry set up a committee which had forest certification on their task list. The committee handed over their report to the Ministry of Agriculture and Forestry in 1997. In 1996 (24.6.1996) the Central Union of Agricultural Producers and Forest Owners and WWF-Finland and the Finnish Forest Industry Association and the Finnish Association for Nature Conservation made an initiative concerning a working group for the forest certification standards. The working group published a draft for standards in 1997 (16.4.1997). After the testing of these standards the Finnish Forest Certification Project started in 1998, which published the Finnish Forest Certification System (Development Process and Elements) in 1998 (November 19, 1998) and a Draft for Finnish Forest Certification Standards in 1999 (May 4, 1999). The forest certification itself begun in the autumn of 1999.

The Finnish system was planned to be compatible with the main principles of the Forest Stewardship Council (FSC), though there are differences between these systems. The Forest Stewardship Council, is an independent international organisation with its headquarters in Oaxaca, Mexico. The organisation was set up in 1993 by environmental and human rights organisations, timber producers and wood merchants in 25 different countries. The FSC has been established for the express purpose of promoting forest certification. The FSC's 10 principles of sound forest management (SFM) include economically, ecologically and socially sustainable forest management principles. The FSC logo may be used on products that have been manufactured from raw materials originating in forests certified by the FSC and whose chain of custody can be audited. In Finland FSC has not been significant in practice, only 93 hectares certificated according to FSC system by one forest owner. (In Sweden the situation is totally different.)

Internationally the Finnish standards are liked to the Pan European Forest Certification Scheme (PEFC). The Pan European Forest Certification Scheme approves national schemes and grants the right to use the PEFC label indicating certification. The FFCS was approved by the PEFC in May 2000. Timber from certified forests which meet the PEFC criteria will have access to a PEFC logo. The Finnish forest owner organisations have been actively in PEFC's work from the beginning of the system.

These international systems - FSC and PEFC - also incorporate a product label which can be used in the product market. The FFCS does not include product label. One idea of the Finnish

system has been that the system would be compatible with other systems (FSC and PEFC and even Swan label and EU eco-label).

The eventual target of forest certification is an ecolabel to be given to the final product requiring, in addition to forest certification, the chain of custody for the wood used as a raw material. The chain of custody for the wood means the progress of timber from the forest to harvesting, through the main haul log route and manufacturing processes, to the ready-made forest industry product. The management of the chain of custody at different stages can also be certified. The system was planned for Finland's small forest owner conditions. The requirements and rules of the system have been incorporated in eight standards and 37 forestry criteria for sustainable forest management have been laid down.

#### *Criteria: economic, ecological and social*

The Finnish system includes a total of 37 criteria which are applied at the regional level in certification. (The renewal of forest certification criteria started in autumn 2001 and it will be finished in the beginning of 2004.) At the forest holding level, 23 criteria are applied. The criteria are at least on the general level based on the following: the UNCED forest principles, the Pan-European criteria and indicators for sustainable forestry, the principles and criteria of the FSC scheme, the ISO and EMAS environmental management systems, the forestry environment programme, the Forest Act and Nature Conservation Acts and the principles of the Finnish forest management.

The certification criteria are divided into economic, ecological and social criteria. Two thirds of the criteria are more broad-ranging than the present Finnish legislation, while one third are compliant with the requirement level of the legislation if force. The Finnish system primarily makes use of group certification in which the criteria are applied at the regional level. The criteria are applied at both the Forestry Centre level and the Forest Management Association level. The criteria are the same in both cases but the details of their interpretation guidelines differ slightly from each other. If necessary, the forest holding level criteria can also be applied to the certification of a single owner's forests. The goal underlying the ecological criteria is to conserve biodiversity in the forest ecosystem. The economic criteria are aimed at sustainable timber production. The criteria of social and cultural matters are very diverse.

#### *Certification*

There are two forest certification bodies in Finland that are accredited by the FINAS (Finnish Accreditation Service): SFS-Certification Ltd and DNV Certification Oy/Ab. The accreditation is not obligatory in the FFCS and there are several other certification bodies active in Finland (e.g. SGS-Inspection Services Oy, Lloyd's Register Quality Assurance Ltd and Bureau Veritas Quality International).

The certification is based on the regional group certification. Regional group certification takes into account the regional diversity of the forests, since the ecological diversity of the forests does not conform to the boundaries of forest holdings based on ownership. Regional group certification is also very cost effective, enabling large amounts of certified timber to be brought in to the market. The certificate is valid for the maximum of five years.

In the regional group certification, certification is accomplished over the Forestry Centre areas or Forest Management Association areas. A certification applicant is thus a Union of Forest Owners or Association of Forest Owners of a particular region, or a Forest Management Association, all of which are forest owners' associations. At the regional level, in addition to forest owners, other parties engaged in forestry (organisations, enterprises, forest workers) are

required to commit themselves to the satisfying of the requirements of forest certification. The certification of one forest owner is also possible. In both cases (regional certification and individual certification) the certification is totally voluntary for forest owners. The forest owner can always decide whether he or she wishes to participate in regional group certification or to remain autonomous from it. In practise the participation to the certification was made so effortless for the private forest owners that majority of them took part of the certification.

All of the 13 Forestry Centre regions in the country possess a certificate for sustainable forest management according to the requirements of the Finnish national FFCS (Finnish Forest Certification System) -system. There are 21.9 million forest hectares, in January 2002, under the FFCS umbrella in Finland. That represents 95 per cent of the forests in Finland. These forests are owned by a total of 311.500 forest owners. There were around 70 granted chain of custody certificates in the beginning of 2004.

### **3.3 Public Procurement**

In Finland the total value of public procurement every year is about 15 milliard euros (about 14-15% of the gross national product). The obligations of the EC public procurement legislation (93/37/EC, 77/62/EC, 92/50/EC and 93/38/EC) have been brought into effect by the Public Procurement Act (1505/1992). This Act does not include special provisions related to environmental friendly procurement and the contract shall be awarded to the tender with the lowest price or to the one that is most economically advantageous as a whole. However, the Decree on the State Public Procurement (1416/1993) contains special provisions concerning environmental factors in public procurement. According section 8 of the decree, the contract shall be awarded to the tender with the lowest price or to the one that is most economically advantageous as a whole taking into account price, operating costs, operation features, environmental impacts or other grounds corresponding factors. The environmental factors are also similarly mentioned in section 8 of the Decree on Public Procurement in which Public Procurement Act is not applied (342/1994).

The Helsinki busses case – also on the European level – is most interesting related to public procurement and environment (ECJ C-513/99, 17.9.2002 in *Concordia Bus Finland Oy Ab*, formerly *Stagecoach Finland Oy Ab*, and *Helsingin kaupunki, HKL-Bussiliikenne*, in Finland Supreme Administrative Court case 2003:41). In this case ECJ ruled that environmental criteria is allowed in public procurement according to the EC law. Firstly ECJ pointed out in its ruling that article 36(1)(a) of Council Directive 92/50/EEC of 18 June 1992 relating to the coordination of procedures for the award of public service contracts must be interpreted as meaning that where, in the context of a public contract for the provision of urban bus transport services, the contracting authority decides to award a contract to the tenderer who submits the economically most advantageous tender, it may take into consideration ecological criteria such as the level of nitrogen oxide emissions or the noise level of the buses, provided that they are linked to the subject-matter of the contract, do not confer an unrestricted freedom of choice on the authority, are expressly mentioned in the contract documents or the tender notice, and comply with all the fundamental principles of Community law, in particular the principle of non-discrimination. Secondly ECJ ruled that the principle of equal treatment does not preclude the taking into consideration of criteria connected with protection of the environment, such as those at issue in the main proceedings, solely because the contracting entity's own transport undertaking is one of the few undertakings able to offer a bus fleet satisfying those criteria.

The environmental impacts of the goods and services purchased by public sector organisations are not yet given enough weight in many purchasing decisions. One reason for this is lack of information about the environmental aspects of certain products; but other barriers include



outdated and entrenched guidelines for purchasing, and a widespread desire to avoid taking decisions perceived as risky. EU regulations for public sector purchases do not exclude environmental considerations as factors in purchasing decisions, but there have been problems with their interpretation in this respect.

In order to assist purchasers of the public sector and private companies to make practical decisions, the Finnish company Efektia Oy have developed Hymonet - a web-based data bank ([www.hymonet.com](http://www.hymonet.com)), containing details of the environmental impacts of a wide range of products.

Many Finnish city councils have banded together to form a special eco-purchasing network, which serves as a discussion forum for representatives of the cities (Tampere, Espoo and Jyväskylä). The aim of this network is to promote co-operation between city councils on the incorporation of environmental considerations into purchasing decisions. The network involves city councils who are committed to environmental purchasing policies, and willing to share their experiences.

Finnish Environment Institute and the Ministry of the Environment are working with a handbook on Public Procurement, the Ministry and the Finnish Environment Institute have also supported Hymonet - environmental database for purchases produced by Effektia Oy (a development company).

### **3.4 Some Other Initiatives**

The energy conservation agreements with different sectors can be seen as part of the IPP toolbox, although the main motive has been reduction of the CO<sub>2</sub> emissions and the agreements are part of the national climate strategy. At the end of 2002, there were in force nine energy conservation agreements concluded between the Ministry of Trade and Industry and various branch associations with the aim of increasing the efficiency of the use of energy. Five of the agreements were signed in autumn 1997 with the Confederation of Finnish Industry and Employers TT, the Association of Finnish Local and Regional Authorities, the Finnish Energy Industries Federation Finergy, the Finnish District Heating Association FDHA, and the Finnish Electricity Association Sener. Two agreements were signed in 1999 with the Finnish Association of Building Owners RAKLI and the Finnish Trucking Association SKAL. In March 2001, an energy conservation agreement was also concluded for the bus and coach sector. In November 2002, the agreement practice was extended to cover municipal and non-profit housing properties of the Federation of Housing Property Owners and Developers ASRA. In this sector, the responsibility rests with the Ministry of the Environment. The new energy and climate agreement of the municipal sector was the first agreement, which at the level of an agreement was extended in autumn 2002, when the old conservation agreement was renewed, to apply to the use of renewable energy sources as well. As regards the agreement with industry, matters relating to the use of renewable energy are already included, e.g., in the annual reporting of enterprises, though the renewal of the actual agreement will only take place in 2005. In November 2002, RAKLI's property and building sector agreement was extended to also cover properties in the state sector. The extension replaces the co-operation programme, which was signed in 1997 and expired at the end of 2002.

The energy conservation agreements, which are mainly valid until 2005, are framework agreements by which branch associations undertake to further energy conservation and their members accession to the energy conservation agreement. ASRA's agreement on housing properties extends to the end of 2012. Companies and communities, which join the agreements undertake to carry out energy audits or analyses at their properties and production

plants, to draw up an energy conservation plan, and to implement cost-effective conservation measures. The Ministry of Trade and Industry, for its part, undertakes to support energy audits and analyses, as well as energy conservation investments fulfilling certain criteria. As regards housing properties, responsibility for audit subsidy rests with the Ministry of the Environment.

There is an investigation going on to find out possibilities to establish an organisation to promote efficient use and saving of natural resources and raw materials as well as eco-efficiency. The working title of this organisation has been "Service Centre for Material Efficiency". It has been outlined that the organization/ centre might have following forms of operation: to coordinate information dissemination, services and training in the field of material and eco-efficiency in cooperation with other relevant partners (e.g. different stakeholders in industrial production, companies, consumers and waste advisers as well as authorities); to give advice, to arrange seminars and to disseminate information on material and eco-efficiency; to organize campaigns for material and eco-efficiency; to further material and eco-efficiency surveys and analyses; and to start demonstration projects.

#### **4. Final Remarks**

Hardly any legal research has been focus on product related, environmentally orientated legal issues in Finland. Traditionally, environmental law related research activities have concentrated on the administrative control and legal issues related to it. The focus has been on very often legal relationships (public - private or private - private) related to environmental permit systems or environmental planning systems with some theoretical remarks. In some cases the policy related legal issues have been dealt with, but usually political views, policy goals and legal point of views have been mixed, though the research has been characterized as a legal study. The lines between different approaches - politics/policy/law - are not clear, but it is very important to keep in mind that this line do exist - even if drawn on water. Product related issues are highly policy orientated, but also legal issues are important as these policies are implemented and put into effect by various sets of instruments. Some of these instruments may be traditional, command and control based, but in many cases instruments are based on the market based guidance in the form of direct economic instruments (e.g. taxes or charges and subsidies) or in the form of information based guidance (e.g. ecolabelling, environmental management schemes and certification).