

EUROPEAN AND NATIONAL
**LEGISLATION ON PACKAGING
AND THE ENVIRONMENT**



EUROOPEN

THE EUROPEAN ORGANIZATION
FOR PACKAGING AND THE ENVIRONMENT

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European and National Legislation on Packaging and the Environment

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EUROPEN -- the European Organization for Packaging and the Environment -- is an EU industry association in Brussels presenting the opinion of the packaging supply chain in Europe on issues related to packaging and the environment, without favouring any specific material or system. EUROPEN members are comprised of multinational corporate companies spanning the packaging value chain (raw material producers, converters and brand owners) plus national packaging organizations all committed to continuously improving the environmental performance of packaged products, in collaboration with their suppliers and customers.

PREFACE



Dear Reader,

This updated 'legislation book' provides a comprehensive overview and analysis of the EU and national regulatory and policy framework for packaging and packaging waste. It explains the key laws related to environmental regulation at EU level and in the 28 Member States, affecting the packaging supply chain in Europe.

In particular, this publication aims to provide timely support to EUROOPEN members and other stakeholders amidst the ongoing EU waste legislation review, as part of the EU's Circular Economy Package.

Packaging needs to be able to fulfil its enabling role in a Circular Economy by optimising resource use, minimising waste and extending the value in a product and the economy. A life-cycle approach ensures this, taking into account the trade-offs as changes in one part of the value chain will inevitably affect another part.

This holistic approach is rightly reflected in the EU's Packaging and Packaging Waste Directive, covering all packaging materials, and safeguarding a well-functioning Internal Market for packaging and packaged goods. In the early 90s, ahead of any policy discussions related to the Circular Economy, EUROOPEN's supply

chain member companies understood that by teaming up material producers and packaging converters with brand owners, net environmental improvements can be made for individual packaged product value chains.

The Circular Economy Package offers a great opportunity to address remaining EU regulatory and market barriers as well as implementation and enforcement issues in the Member States. Along with a fully functioning and strengthened EU Internal Market for packaging and packaged goods, the EUROOPEN membership is committed to further transition to a resource efficient and competitive Circular Economy. To this end, we will further support the EU institutions to achieve an enhanced, clear, predictable and proportionate EU legal framework that protects the environment and helps deliver competitiveness, more jobs and growth in Europe.

We hope you will find this publication useful and relevant to help address the policy and market challenges our supply chain is currently facing at EU and/or national level, as well as to identify opportunities and solutions together with the broader value chain partners.



Virginia Janssens
Managing Director
EUROOPEN



Martin Reynolds
Chairman
EUROOPEN

Brussels, March 2016

ABOUT EUROPEN

EUROPEN – the European Organization for Packaging and the Environment - is the only pan-European organisation dedicated exclusively to issues concerning packaging and the environment, with membership open to all partners in the packaging value chain, being the producers of packaging materials, the converters and the brand owners using the packaging materials. EUROPEN works for the achievement of non-conflicting European and national packaging & packaging waste measures based on a full understanding of the issues, close co-operation between all sectors of the packaging value chain and avoidance of barriers to trade.

EUROPEN members are identified as companies which support a united industry and trade organisation, dedicated to satisfactorily resolving the environmental challenges facing the packaging chain in an active and co-operative manner without favouring any specific packaging material or packaging system. The five packaging materials are: Carton, Glass, Metal, Plastic and Wood.

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For further information about EUROPEN, please contact us or visit our website: www.europen-packaging.eu.

EUROPEN has its secretariat located in Brussels at the heart of the European Capital and home to the decision making bodies of the European Union.

The EUROPEN secretariat

Virginia Janssens is Managing Director with Gwendoline Riou fulfilling the role of EU Public Affairs and Communications Manager and Dara O'Flynn is the Membership and Administration Manager.

The EUROPEN Executive Committee (2015-2017)

The Executive Committee supervises the management of the organization and its members are selected to reflect the cross sectoral nature of EUROPEN. It is elected by EUROPEN's Council of Members every two years and is currently chaired by Martin Reynolds and two Vice-Chairs, Hans van Bochove and Erika Mink.

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EUROPEN membership is open to any company with an economic interest in packaging or packaged goods.



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NATIONAL ORGANIZATIONS

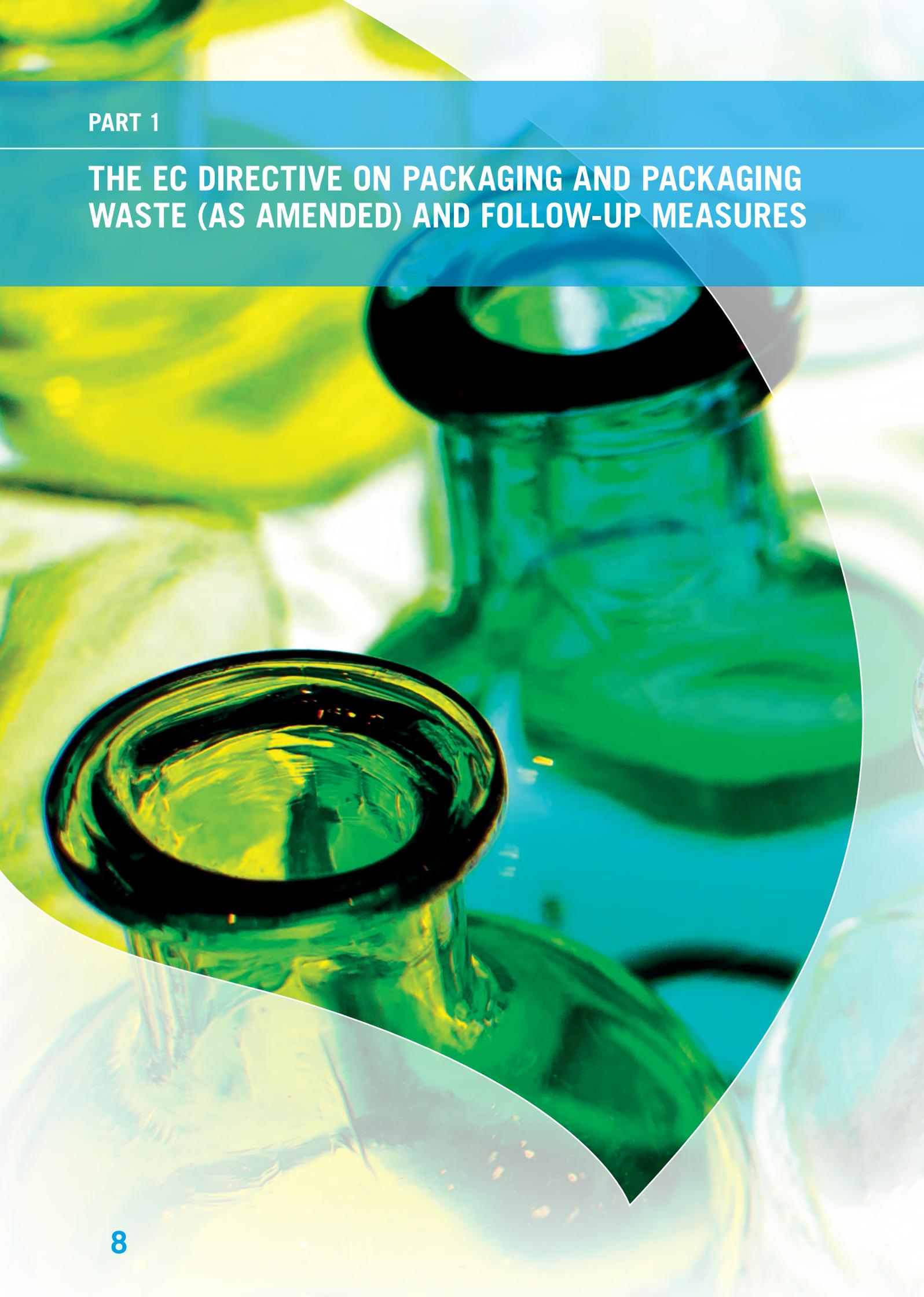
Bosnia and Herzegovina: Association for Packaging & Packaging Waste Management (**Bihpak**)
Czech Republic: Czech Industrial Coalition on Packaging and the Environment (**CICPEN**)
Finland: Finnish Packaging Association (**Pakkaus**)
Romania: Romanian Association for Packaging and the Environment (**ARAM**)
Russia: Russian Packaging and Environment Committee (**RusPEC**)
Slovakia: Slovak Industrial Coalition on Packaging and the Environment (**SLICPEN**)
Sweden: Trade and Industry Group (**MILJÖPACK**)

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PART 1

THE EC DIRECTIVE ON PACKAGING AND PACKAGING WASTE (AS AMENDED) AND FOLLOW-UP MEASURES



CURRENT STATUS OF THE DIRECTIVE

European Parliament and Council Directive 94/62/EC on Packaging and Packaging Waste¹ (the Packaging and Packaging Waste Directive, or PPWD) was adopted in December 1994. Amending Directive 2004/12/EC laid down a second set of targets, as well as expanding the definition of “packaging”. Commission Directive 2013/2/EU of 7 February 2013 updated and expanded the list of illustrative examples of items to be regarded either as packaging or as non-packaging in Directive 94/62/EC.

Since the original 1994 Directive was adopted, 13 more countries have joined the EU. Directive 2005/20/EC establishes deadlines for the ten Member States that joined in May 2004 to meet the recovery and recycling targets set out in Directive 2004/12/EC; and targets for Bulgaria and Romania, which joined the EU in January 2007, were set out in their accession agreements. Croatia’s accession agreement contained no special concessions relating to the PPWD, so the targets set by Directive 2004/12/EC already apply.

Directive 2004/12/EC also set the agenda for a review of other issues which was intended to lead to a further revision of the Directive at a later date. The main recommendation of the European Commission’s 2006 review was that certain provisions of the Directive needed to be clarified or amended in order to facilitate the free movement of goods within the Internal Market. It did not believe that any changes to the targets, or any new targets, were needed at that stage.

The most recent amendment to the PPWD was made by European Parliament and Council Directive (EU) 2015/720 of 29 April 2015 which seeks to reduce the consumption of lightweight plastic carrier bags.

However, in December 2015 the European Commission proposed changes to the PPWD and some of the pure “waste stream directives” to update and harmonise them with the Waste Framework Directive 2008/98/EC (the WFD), as part of the EU’s Circular Economy Package. These proposals are described in Part 2.

THE DIRECTIVE IN BRIEF

Article 2, Article 3 as amended Directive 94/62/EC covers **all packaging placed on the market within the EU and all packaging waste**, whether disposed of at industrial or commercial sites or in private homes. Directive 2004/12/EC sets out criteria to help decide whether an item is packaging or not, and Directive 2013/2/EU contains an updated list of illustrative examples of the application of these criteria.

Article 1 The Directive aims to harmonise national measures. It has two objectives:

- **To reduce the overall impact of packaging on the environment;** and
- **To bring national measures closer together** in order to remove obstacles to trade and distortions of competition.

Article 7, Article 22 as amended National governments must ensure that systems are set up for the return or collection of used packaging, so that it is effectively reused or recovered. Provided that the recovery and recycling targets are met, these systems may be based on agreements between the competent authorities and the economic sectors concerned rather than on legislation.²

Article 6 as amended Member States must take the necessary action to ensure achievement of the following targets by 31 December 2008:

¹ The full text of the original Directive was published in the Official Journal, no. L 365, on 31 December 1994. Alternatively, a consolidated version which incorporates the various amendments which have been made can be downloaded from <http://ec.europa.eu/environment/waste/packaging/legis.htm>.

² Any such agreements must be enforceable, must specify objectives and deadlines, and must be published in the national official journal or an equally accessible official document and transmitted to the Commission. The results achieved shall be monitored regularly, reported to the competent authorities and the Commission and made available to the public under the conditions set out in the agreement, and the competent authorities shall ensure that the progress achieved under the agreement is examined. In the event of non-compliance with the agreement, the relevant provisions of the Directive shall be implemented by legislative, regulatory or administrative measures.

- At least 60% by weight of packaging waste must be recovered or incinerated at waste incineration plants with energy recovery;
- At least 55% and no more than 80% by weight of packaging waste must be recycled;
- The following minimum recycling targets for materials contained in packaging waste must be attained:
 - 60% by weight for glass;
 - 60% by weight for paper and board;
 - 50% by weight for metals;
 - 22.5% by weight for plastics, counting exclusively material that is recycled back into plastics;
 - 15% by weight for wood.

By derogation, **Greece, Ireland and Portugal** were allowed until the end of 2011 to meet these targets, and **the Member States which joined the EU on or after 1 May 2004** were given various deadlines which ranged between 2012 and 2015.

Packaging waste exported out of the EU's internal market only counts towards achievement of the targets if there is sound evidence that recovery and/or recycling has taken place under conditions broadly equivalent to those prescribed by the relevant EU legislation.

Article 9, Annex II Member States must ensure that packaging complies with certain “Essential Requirements”. These include minimisation of packaging weight and volume to the amount needed for safety, hygiene and consumer acceptance of the packed product, minimisation of noxious or hazardous constituents, and suitability for reuse, material recycling, energy recovery or composting.

Article 18, Article 9 Packaging which complies with the Directive is guaranteed free access to the EU internal market – and packaging which does not comply was banned with effect from January 1998.

This “free movement guarantee” has now been limited by Directive (EU) 2015/720, which requires Member States to take measures to achieve a sustained reduction in the consumption of lightweight plastic carrier bags on their territory. Although plastic carrier bags fall within the definition of packaging, Member

States may (but are not compelled to) introduce marketing restrictions in derogation from Article 18, provided these restrictions are proportionate and non-discriminatory. Alternatively, Member States may discourage the consumption of plastic carrier bags by means of national reduction targets and/or economic instruments.

Article 10, Article 9 CEN, the European Committee for Standardization, was mandated by the European Commission to draw up **standards** relating to the Essential Requirements.

Article 4 as amended In addition to compliance with the Essential Requirements, **Member States are to ensure that other preventive measures are taken**, such as “collecting and taking advantage of the many initiatives being taken within Member States on packaging waste prevention.” The European Commission shall, as appropriate, present proposals for measures to strengthen and complement enforcement of the Essential Requirements and to ensure that new packaging is put on the market only if the producer has taken all necessary measures to minimise its environmental impact without compromising the essential functions of the packaging.

Article 5 Member States may “encourage” environmentally sound reuse systems, provided these conform with the EU Treaty.³

Article 6 as amended “Where appropriate”, **Member States are to “encourage” the use of materials recovered from recycled packaging waste** in the production of new packaging and other products by improving market conditions for such materials, and by reviewing existing regulations preventing the use of those materials.

Article 11 Member States are to limit the heavy metals present in packaging or packaging components. The combined concentration levels of lead, cadmium, mercury and hexavalent chromium must not exceed 100 ppm by weight.

Article 15 Until such time as **economic instruments** have been introduced at EU level, Member States may

³ The Treaty of Rome establishing the European Economic Community (1957), as amended by the Single European Act amending the basic treaties (1986), the Maastricht Treaty on European Union and Economic and Monetary Union (1991), the Treaty of Amsterdam (1997), the Treaty of Nice (2001) and the Treaty of Lisbon (2007).



adopt their own economic instruments to promote implementation of the objectives of the Directive.

Article 8 as amended, Annex I In order to facilitate collection, reuse and recovery by identifying the packaging material used, any **material identification system** is to be based on European Commission Decision 97/129/EC.⁴ This Decision says that use of the material identification system it describes is voluntary.

Article 12 Member States must set up **national databases** to provide information on the “magnitude, characteristics and evolution” of packaging and packaging waste flows at national level, so as to help Member States and the European Commission monitor implementation of the Directive.

Article 14, Article 16 Member States must include a chapter on packaging waste management in the **waste management plans** they have to submit to Brussels as required by the Waste Framework Directive.⁵ **They must also send the European Commission drafts of measures they intend to adopt** to implement the Directive so that the European Commission and the other Member States can examine and, if necessary, challenge them.

Article 19-21 A committee of national government representatives, chaired by a European Commission official, will meet to agree any technical measures needed to deal with **problems encountered in applying the Directive to certain categories of packaging** and to adapt the marking system and database requirements to **scientific and technical progress**.⁶

THE PPWD IN DETAIL

SCOPE OF THE DIRECTIVE (ARTICLES 2 AND 3)

The scope of the Directive as laid down in Article 2 obviously turns on the definition of “packaging” in Article 3. Directive 94/62/EC defines “packaging” as

“all products of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.”

Thus five functions are listed – containment, protection, handling, delivery **and** presentation of goods. Use of the word “and” suggests that packaging must fulfil **all of** these functions. This is clearly not the case: transport packaging is specifically included within the second part of the definition but does not have a “presentation” function. On the other hand, if it had been intended that packaging only has to fulfil one of these functions, one might have expected the legislators to have used “or” rather than “and”.

The Directive goes on to limit this definition by stating that packaging consists **only** of

- a) *Sales packaging or primary packaging;*
- b) *Grouped packaging or secondary packaging, [which] can be removed from the product without affecting its characteristics;*
- c) *Transport packaging or tertiary packaging.*

Specifically excluded from the definition of “packaging” in Article 3 of the Directive are “road, rail, ship and air containers”, but apart from this the original Directive offered no specific guidance on what is or is not packaging. Nor is there a definition of “road, rail, ship and air containers”.

Directives 2004/12/EC and 2013/2/EU offer some help in resolving the position of “borderline” items which may or may not be considered packaging. This is important for companies whose principal business may be in these items, and which need to know whether they should be paying fees to national compliance systems. In some cases decisions have already been taken at national level, either through definitions inserted into national legislation implementing the Directive, through informal guidance or policy statements from the national authorities, or through the operating rules of the national recovery systems.

There is still uncertainty and inconsistency, so Directive 2004/12/EC includes a set of principles to help decide what is packaging and what is not:

- i) *Items shall be considered to be packaging if they fulfil the abovementioned definition without prejudice to other functions which the packaging might also perform, unless the item is an integral part of a product and it is necessary to contain, support or preserve that product throughout its lifetime and all*

4 Commission Decision 97/129/EC, OJ No. L 50, 20.2.1997. (<http://ec.europa.eu/environment/waste/packaging/legis.htm>).

5 Directive 2008/98/EC on waste, OJ No. OJ L 312, 22.11.2008 (<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0098:EN:NOT>).

6 This committee is commonly known as the “Article 21 Committee”.

elements are intended to be used, consumed or disposed of together;

ii) Items designed and intended to be filled at the point of sale and “disposable” items sold, filled or designed and intended to be filled at the point of sale shall be considered to be packaging provided they fulfil a packaging function;

iii) Packaging components and ancillary elements integrated into packaging shall be considered to be part of the packaging into which they are integrated. Ancillary elements hung directly on, or attached to, a product and which perform a packaging function shall be considered to be packaging unless they are an integral part of this product and all elements are intended to be consumed or disposed of together.”

These principles are somewhat general, and Directive 2013/2/EU⁷ sets out some illustrative examples.

For criterion (i),

- The following are to be regarded as **packaging**: sweet boxes; film overwrap around a CD case; mailing pouches for catalogues and magazines (with a magazine inside); cake doilies sold with a cake; rolls, tubes and cylinders around which flexible material (e.g. plastic film, aluminium, paper) is wound, except rolls, tubes and cylinders intended as parts of production machinery and not used to present a product as a sales unit; flower pots intended to be used only for the selling and transporting of plants and not intended to stay with the plant throughout its life time; glass bottles for injection solutions; CD spindles (sold with CDs, not intended to be used as storage); clothes hangers (sold with a clothing item); matchboxes; sterile barrier systems (pouches, trays and materials necessary to preserve the sterility of the product); beverage system capsules (e.g. coffee, cacao, milk) which are left empty after use; and refillable steel cylinders used for various kinds of gas, excluding fire extinguishers;
- The following are to be regarded as **non-packaging**: flower pots intended to stay with the plant throughout its life time; tool boxes; tea bags; wax layers around cheese; sausage skins; clothes hangers (sold separately); beverage system coffee capsules, coffee

foil pouches, and filter paper coffee pods disposed of together with the used coffee product; cartridges for printers; CD, DVD and video cases (sold together with a CD, DVD or video inside); CD spindles (sold empty, intended to be used as storage); soluble bags for detergents; graveside lights (containers for candles); and mechanical querns (integrated in a refillable recipient, e.g. refillable pepper mill).

For criterion (ii),

- The following are to be regarded as **packaging**: if designed and intended to be filled at the point of sale: paper or plastic carrier bags; cling film; sandwich bags; aluminium foil; and plastic foil for cleaned clothes in laundries;
- The following are to be regarded as **non-packaging**: stirrers; disposable cutlery; wrapping paper (sold separately); paper baking cases (sold empty); and cake doilies sold without a cake.

For criterion (iii),

- The following are to be regarded as **packaging**: labels hung directly on or attached to a product;
- The following are to be regarded as **part of packaging**: mascara brushes which form part of the container closure; sticky labels attached to another packaging item; staples; plastic sleeves; devices for measuring dosage which form part of the container closure for detergents; and mechanical querns (integrated in a non-refillable recipient, filled with a product, e.g. pepper mill filled with pepper);
- The following are to be regarded as **non-packaging**: radio frequency identification (RFID) tags.

The European Commission examines and, where necessary, reviews the illustrative examples.

NATIONAL TARGETS AND SYSTEMS (ARTICLES 6 AND 7)

A first set of targets had to be achieved by 2001 (2005 for Greece), Ireland and Portugal and various dates between 2004 and 2011 for the Member States joining the EU on or after 1 May 2004.

A second set of targets had to be met by 2008, except by the Member States which had to meet the following deadlines:

⁷ This replaces the earlier list of illustrative examples in Annex I to Directive 2004/12/EC.



	Recovery	Recycling				
	60%	55%-80% overall	min 60% glass	min 60% paper/board	min 50% metals	min 22.5% plastics
Greece, Ireland, Portugal	2011	2011	2011	2011	2011	2011
Cyprus	2012	2012	2012	2012	2012	2012
Czech Republic	2012	2012	2012	2012	2012	2012
Estonia	2012	2012	2012	2012	2012	2012
Hungary	2012	2012	2012	2012	2012	2012
Latvia	2015	2015	2015	2015	2015	2015
Lithuania	2012	2012	2012	2012	2012	2012
Malta	2013	2013	2013	2013	2013	2013
Poland	2014	2014	2014	2014	2014	2014
Slovakia	2012	2012	2012	2012	2012	2012
Slovenia	2012	2012	2012	2012	2012	2012
Bulgaria	2014	2014	2013	2008	2008	2013
Romania	2013	2013	2013	2008	2008	2013

Although Directive 2004/12/EC said that by 31 December 2007, targets would be fixed for the third five year phase 2009-2014, it was later decided⁸ that it would be premature to propose new targets when the previous set had only recently been transposed and the last in the series of implementation deadlines was as late as 2015.

The Commission's Circular Economy package launched in December 2015 proposes new targets to be met by 2025 and 2030, and a new methodology for calculating the rates achieved. The current recycling targets would be replaced by combined targets for recycling and preparation for re-use. These proposals are discussed in Part 4.

The Directive currently says that Member States may set targets higher than the upper level in the ranges laid down, provided there is appropriate reprocessing capacity and these measures avoid distortions of the Internal Market and do not hinder other Member States' compliance with this Directive. Member States shall inform the European Commission of such measures, and the Commission shall verify that they are consistent with these considerations before confirming them, but no Member State has applied for permission to exceed the second-stage⁹ overall recycling target.

The targets set in each Member State apply to the packaging which becomes waste in that Member State, irrespective of where the packaging was first produced or sold. Packaging which is collected as waste in one Member State and is subsequently exported for reprocessing in another Member State or a non-EEA country,¹⁰ counts towards the recycling targets in the country where it was collected.

There has been some concern that packaging waste sent abroad ostensibly for recycling has in fact been dumped, and Directive 2004/12/EC says that packaging waste exported out of the EU in accordance with EC legislation¹¹ shall only count towards achievement of the targets if there is sound evidence that the recovery and/or recycling operation took place under conditions broadly equivalent to those prescribed by the relevant EU legislation.

Although the Directive applies to packaging arising in any waste stream, most of the attention has been given to its implications for packaging which becomes waste in households. This is the visible fraction, the packaging that consumers see and discard and so the most politically sensitive part of the waste stream. Also, household packaging waste is the hardest and most expensive fraction to deal with, so for those Member

8 Report from the Commission to the Council and the European Parliament on the implementation of Directive 94/62/EC on packaging and packaging waste and its impact on the environment, as well as on the functioning of the internal market, COM(2006) 767 final, 6.12.2006.

9 Second stage targets were set by the 2004 amended Packaging and Packaging Waste Directive, while first stage targets were set by the 1994 Directive.

10 Members of the European Economic Area (EEA) are the EU member states plus Iceland, Liechtenstein and Norway.

11 European Parliament and Council Regulation (EC) No. 1013/2006 on shipments of waste (OJ No. L 190, 12.7.2006), as amended. A consolidated text of the Regulations and amendments updated to 18 November 2014 can be downloaded from <http://ec.europa.eu/environment/waste/shipments/legis.htm>.

States that had not already taken action, the Directive needed to bring about greater changes in practice.

The variations between the Member States' approaches to implementation of the Directive extend beyond how the national targets are structured. There are also wide differences in the rules under which the national compliance systems operate, now known as Extended Producer Responsibility (EPR) schemes for packaging waste.

Some of the most important factors underlying these variations are:

- The basic legal obligations – which economic operators bear obligations and what the law says they must do;
- The time allowed to the recovery system(s) to meet targets and the extent to which recycling had to be increased to meet the targets;
- Whether compliance systems are required to operate in all parts of a regional or national territory or whether they can concentrate activities in selected areas;
- Whether they can concentrate on easy-to-recycle materials or waste streams from which collection is straightforward, or whether they have to achieve high recycling rates for packaging which is more difficult to recycle;
- Whether a single system operates or whether several systems operate in competition with each other;
- How tough the controls on free-riders¹² are, and how well they are enforced;
- Whether municipalities continue to pay for part or all of the collection and sorting costs, or whether the compliance system bears these costs in full.

Extended Producer Responsibility (EPR) is a policy approach which obliges producers to take some or all responsibility for its products and/or packaging during its life-cycle, including the post-consumer phase. This legal responsibility entitles industry to take an

¹² Free-riders are companies which benefit from the activities of a national compliance system but which fail to make an appropriate financial contribution to it.

active role in fulfilling this obligation and to control compliance costs.

The PPWD, although not explicitly mandating EPR, allowed Member States to use the approach at national level, and as a result it has become a central instrument of national packaging waste policies since the 1990s. EPR is now implemented in 25 of the EU's 28 Member States (Denmark, Hungary and Croatia being the exception), and producers and their packaging supply chains have responded by setting up EPR schemes - in particular compliance schemes - for the separate collection and sorting for recycling of packaging across Europe. EPR has proven to be successful both in its own right and as a tool for implementing the recycling and recovery targets set by the PPWD.

The first Member States to set up EPR systems often used the "Green Dot" as a mechanism for channelling the funds. The "Green Dot" is an on-pack symbol that shows that the brandowner or importer of the packaged product has paid a levy to the national compliance system to support recycling.¹³



The Green Dot symbol is used in this way in Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Estonia, France, Germany, Greece, Ireland, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden, as well as in Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Norway, Serbia and Turkey.

The role of EPR schemes is to take over obliged industry's' legal obligation, including the take-back obligation, and to meet current recycling and recovery targets. They do this typically by charging producers a fee on all the packaging they place on the market. This is used to pay private service providers or to compensate municipalities who collect and sort post-consumer packaging. Collected packaging is sold to recyclers or recovery plants.

¹³ Paying the Green Dot licence fee only entitles a packer/filler to use the logo in the country where the fee has been paid. If the company wishes to market its products in another member state it must comply with national law there, which will usually mean registering with (and paying any fees required by) a recovery system in the second country. The Green Dot is a proprietary, commercial logo, and the rules for its use are governed by the recovery system(s) in the countries where it is used - they are not necessarily the same in all countries. In some Member States, it is possible to pay a licence fee which is entirely separate from the service provided by the Green Dot system. The Green Dot symbol is only to be used on sales packaging intended for consumers.



In the 1990s, the vast majority of EPR schemes were operated nationwide by the obliged industry as ‘not-for-profit’ or ‘profit-not-for-distribution’ organisations. The original purpose of these schemes was purely for the obliged industry to secure compliance by transferring its legal obligations to a third party. However, throughout the years, EPR has been identified as a business opportunity for private waste management operators, investors and entrepreneurs. Thus in many countries we now find competing commercial EPR schemes owned by private waste management operators or investors offering their services to the obliged industry without a clear legal framework as the national legislation in most Member States did not foresee competing EPR schemes.

In EUROPEAN’s view, the revised PPWD should enhance industry’s capacity to carry out its EPR legal obligations Europe-wide. It should help to divert post-consumer packaging from landfill and ultimately drive higher recycling and recovery rates across the EU. Ensuring a minimum level of EU harmonisation in the area of EPR can help where this cannot be achieved through individual national measures alone.

To this end, the Commission’s current Circular Economy proposals include EU minimum requirements for all EPR schemes (regardless of their ownership) in the Waste Framework Directive. If in addition the roles and responsibilities of all actors are defined at national level, these requirements would facilitate compliance monitoring for Member States, ensure fair competition between multiple schemes, and discourage free riding. The proposed minimum rules for EPR schemes cover issues such as transparency in scope (geographic scope, types of packaging material to be covered), material flows, cost, tendering procedures, as well as monitoring, reporting and audits, and financial solidity requirements.

Part 7 of this publication describes the arrangements in these countries in more detail, as well as the systems in place in the Member States which have adopted different approaches to fund-raising.

It is worth noting, however, that there is no funding mechanism in Denmark, where the costs of packaging waste management are internalised. In Croatia and Hungary, producers make payments to a state-run Fund rather than to a private-sector compliance system.

In some Member States, legislation transposing the Directive imposes different rules on packaging in

the industrial waste stream from those applicable to household packaging. These rules principally affect packaging which usually becomes waste at factories and other industrial sites – large drums and intermediate bulk containers (IBCs), for example – and items such as corrugated boxes, pallets and film which could become waste either on commercial sites, such as supermarkets, or on industrial sites.

The demarcation between packaging which becomes waste in households and on commercial and/or industrial sites, varies between the Member States. In some countries some commercial waste is collected together with household waste and is subject to similar rules as household waste.

As with household packaging, there is a wide variation both in the legal requirements applicable to non-household packaging waste, and in the systems available to help businesses meet these requirements. These national variations are probably even wider for non-household than for household packaging waste. This is in part because systems to collect used commercial and industrial packaging for re-use, recycling or recovery were already in place before the Directive was adopted and existing practice has continued, though with some adjustments.

New obligations may have affected the economics of recovering industrial packaging, or may shift costs to different operators, but costs are not transparent as business-to-business arrangements are subject to contract and negotiation rather than being fixed in advance through a set tariff.

The Directive does not exclude packaging containing hazardous substances from its provisions, but it does acknowledge that there may be a conflict between its requirements and those of the relevant hazardous waste legislation.¹⁴ There are two reasons for this: first, it is more important to ensure that packaging contaminated with hazardous residues is treated and disposed of safely than to recycle it; and second, such contaminants could adversely affect recovery operations. Each Member State has dealt with this issue differently.

¹⁴ At the time the Packaging and Packaging Waste Directive was adopted, this was Directive 91/689/EEC on hazardous waste, but that directive was repealed at the end of 2010 as requirements relating to hazardous waste have been incorporated into the Waste Framework Directive 2008/98/EC.

ENERGY RECOVERY (ARTICLE 6 AS AMENDED)

Directive 2004/12/EC says that Member States shall, “where appropriate”, encourage energy recovery where it is preferable to material recycling for environmental and cost benefit reasons. It suggests that this could be done by considering a sufficient margin between national recycling and recovery targets.

However, two judgements in the Court of Justice of the EU have effectively redefined when the incineration of waste is considered as “recovery”.¹⁵ The Court’s criteria for determining whether waste management operations meet the definition of recovery, namely “use principally as a fuel or other means to generate energy”, are that the principal objective must be to produce energy; more energy is generated than is consumed and the surplus energy is put to effective use as energy or heat; and the majority of the waste must be consumed during the operation and the majority of the energy produced must be recuperated and used.

On this basis, the incineration of unsorted mixed waste in municipal waste incinerators is to be regarded as a disposal operation, not as energy recovery. This would have upset the balance of the calculations on which the 2001 and 2008 recovery and recycling targets are based, and would have meant that some Member States missed the 2001 targets. Directive 2004/12/EC restored the status quo by setting a target for packaging “recovered or incinerated at waste incineration plants with energy recovery”.

PLASTIC BAGS AND THE FREE MOVEMENT OF GOODS (ARTICLE 18 AND DIRECTIVE (EU) 2015/720)

According to Article 18 of the PPWD, Member States are not allowed to impede the placing on the market of packaging which satisfies the provisions of the Directive. This means that packaging must satisfy the Essential Requirements laid down in Article 9 (see below).

However, following pressure from certain Member States which sought to ban plastic carrier bags, Directive (EU) 2015/720 was adopted which requires all Member States to take measures to achieve a sustained reduction in the consumption of lightweight plastic carrier bags on their territory. “Lightweight plastic carrier bags” are those with a wall thickness of less than 50 microns. Although plastic carrier bags fall within the

definition of packaging, Member States may (but are not compelled to) introduce marketing restrictions in derogation from Article 18, provided these restrictions are proportionate and non-discriminatory. Alternatively, they may discourage the consumption of plastic carrier bags by means of national reduction targets and/or economic instruments.

Member States must either take measures to ensure that annual per capita consumption does not exceed 90 lightweight plastic carrier bags by the end of 2019 and 40 such bags by the end of 2025, or equivalent targets set by weight; and/or ensure that, by the end of 2018, lightweight plastic carrier bags are not provided free of charge at point of sale unless equally effective instruments are implemented.

Member States may choose to exempt plastic carrier bags with a wall thickness below 15 microns (“very lightweight plastic carrier bags”) provided as primary packaging for loose food when required for hygiene purposes or when their use helps prevent food wastage.

Some Member States wish to see a shift towards the use of biodegradable plastic bags, and Directive (EU) 2015/720 calls upon the Commission to adopt an implementing measure by 27 May 2017 which will specify labels or marks to enable biodegradable and compostable bags to be recognised.

It also calls upon the Commission to examine and report on the impact of the use of oxo-degradable plastic carrier bags on the environment and if necessary, propose measures to limit their consumption or to reduce any harmful impacts.

THE ESSENTIAL REQUIREMENTS AND THE FREE MOVEMENT OF GOODS (ARTICLES 9 AND 18 AND ANNEX II)

The Packaging and Packaging Waste Directive lays down Essential Requirements which all packaging placed on the market within the European Economic Area must comply with:

- Packaging weight and volume shall be minimised to the amount needed for safety and acceptance of the packed product;
- Noxious and other hazardous constituents of packaging shall have minimum impact on the environment at end of life; and

¹⁵ Rulings in Cases C-228/00 (*Commission v. Germany*) and C-458/00 (*Commission v. Luxembourg*) were delivered on 13 February 2003. Judgements and opinions of the Court of Justice of the EU can be downloaded from http://curia.europa.eu/jcms/jcms/j_6/.



- Packaging shall be suitable for material recycling, energy recovery or composting, or for reuse if reuse is intended.

All EU Member States, as well as the EFTA countries Iceland, Liechtenstein and Norway and a number of countries which have applied to join the EU (Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Serbia and Turkey), have adopted legislation requiring packaging to comply with the Essential Requirements. In its 2006 report on the implementation and impacts of the Directive, the European Commission stressed that proper enforcement of the Essential Requirements would further contribute to the creation of a level playing field for all economic operators,¹⁶ but it is still the case that there has been very little monitoring of compliance by the authorities in the Member States.

The Directive requires Member States to presume that packaging produced in accordance with the relevant harmonised European standards, the reference numbers of which have been published in the Official Journal of the EU, is in compliance with the Essential Requirements. However, use of these standards is voluntary, and companies are free to find alternative ways of satisfying the enforcement authorities that their packaging complies with the Essential Requirements. This may be done by adapting the procedures in the European standards to make them fit better with the company's existing management systems, or it may be done by finding a completely different way of demonstrating conformity.

THE CEN STANDARDS (ARTICLES 9 AND 10)

The European Commission mandated CEN (the European Committee for Standardisation) to prepare a set of standards to give effect to the Essential Requirements in the Directive. The full set of standards was adopted in 2004 and the references were published in the Official Journal in February 2005.¹⁷

Packaging that conforms to the standards whose references appear in the Official Journal is deemed to be in conformity with the Essential Requirements and is thus guaranteed free circulation throughout the European Economic Area.

The standards are summarised in Part 2 of this Guide, but two other EUROPEN publications describe them in more detail and explain how to use them.¹⁸

PREVENTION (ARTICLE 4)

Most of the Directive's provisions can be regarded as contributing to meeting the "prevention" objectives in some way or other. Directive 2004/12/EC added that the European Commission and the Member States shall, as appropriate, encourage studies and pilot projects on "prevention measures, packaging environment indicators, packaging waste prevention plans, encouragement of reuse and cost-benefit analysis of reuse versus recycling, producer responsibility and other prevention instruments."¹⁹

In Part 5 of this publication, the initiatives some Member States have taken to promote either "qualitative prevention" (measures designed to reduce the harmfulness of packaging or packaging waste) or "quantitative prevention" (measures designed to reduce the quantity of packaging or packaging waste) are described.

Legislation in Belgium, The Former Yugoslav Republic of Macedonia, Slovakia and Spain requires companies or, more usually, their sectoral trade associations to submit "prevention plans" at regular intervals (every three or four years). These plans must describe the measures to be taken and the quantified objectives, and later there must be a report to the authorities on how the plans have been implemented.

16 The authorities in many Member States have said that they have not been monitoring compliance with the Essential Requirements because of other priorities (e.g. food safety), lack of resources and lack of understanding of how to assess compliance. In 2011 the European Commission published a review of the state of implementation and enforcement of the Essential Requirements at http://ec.europa.eu/environment/waste/packaging/pdf/packaging_final_report.pdf, but no action has been taken pending further amendment of the Directive.

17 Commission Communication in the framework of the implementation of the European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (2005/C44/13), OJ no. C 44, 19.2.2005 (http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_2005.044.01.0023.01.ENG).

18 *Understanding the CEN standards on packaging and the environment – some questions and answers*, available free of charge from EUROPEN in English, French and Dutch, and *Essential Requirements for Packaging in Europe: A Practical Guide to using the CEN Standards*, available in English. Both can be downloaded from <http://www.europen-packaging.eu/library/publications.html?start=10>.

19 Not everybody would agree that re-use should necessarily be regarded as a form of prevention. In EUROPEN's view, "prevention" applies only when re-use systems consume fewer resources than alternative forms of packaging. Re-use may not even prevent waste – it depends on the relative weights of the reusable and non-reusable items, the re-use rates actually achieved and the recycling rates achieved for non-reusable items and for reusables at end of life. In Germany, refillable bottles for beer and carbonated soft drinks bear a lower deposit than non-refillable bottles and cans, with the result that people have been buying refillables and treating them as non-refillables. See also the discussion on the relationship between the Packaging and Packaging Waste Directive and the Waste Framework Directive on page 32.

There is some overlap between these requirements and the CEN standard on prevention (see page 26). Prevention plans are normally public documents, whereas the assessments that companies make of their own packaging under the CEN standard are not (companies only have to make these assessments available to the enforcement authorities on demand). On the other hand, sectoral prevention plans are much less specific, since it is impossible to guarantee that the decisions made by individual companies will lead to the packaging reductions targeted for the sector as a whole. The CEN standard is based on the principle of continuous improvement: packaging systems should be reassessed regularly so that the factor that prevents further minimisation can be identified.

The European Commission's 2006 report on the implementation and impacts of the Directive noted that the weight of the packaging is not necessarily a good indicator of its environmental impact. Weight-related targets disadvantage heavier packaging materials, but not necessarily those with a higher environmental impact, and percentage reduction targets applying equally to every producer put at a disadvantage those already using the minimum possible amount of packaging. For such producers, further reductions may lead to product damage or spoilage which would often cause significantly more environmental damage than the possible environmental benefits related to savings on packaging.

The European Commission suggested that policy should focus more on sustainable production and consumption than on packaging prevention per se, since the demand for packaging is driven by the demand for packaged goods. Thus, packaging should be addressed as part of the waste prevention programmes which Member States would be drawing up in the context of the EU Thematic Strategy on the prevention and recycling of waste. The revised Waste Framework Directive 2008/98/EC (see page 32) requires all Member States to develop national prevention programmes, and these must include a chapter on packaging.

RE-USE SYSTEMS (ARTICLE 5)

The PPWD says that Member States *may* encourage re-use systems; they are not obliged to do so. Anything not specifically forbidden by this Directive, the Treaty itself

or any other EU rules is allowed.²⁰ This means that any measures taken must not discriminate against imports and any aid granted through state resources must not distort or threaten to distort competition by favouring certain companies or the production of certain goods.

Although the Directive is fairly specific in some areas – for instance the targets and the Essential Requirements provide a benchmark of environmental acceptability – there is still very little clarity with regard to the acceptability or otherwise of measures to encourage re-use. This presents some difficulty, for as the European Commission's 2006 report pointed out, while re-use systems operate very successfully for transport packaging, the evidence suggests that refillable beverage container systems are no longer commercially viable without political support. And while national measures to promote the re-use of beverage packaging may in certain circumstances serve environmental goals, they can also fragment the Internal Market, since products have to be adapted to the requirements of individual Member States.

In May 2009 the European Commission issued a Communication²¹ on beverage packaging, deposit systems and free movement of goods. The aim was to clarify the rules on mandatory deposit systems and on what Member States may and may not do to promote re-use in the light of developing case-law. Although this is only an interpretative Communication, a guidance document which is non-binding and adopted internally by the Commission, it has been very successful – there have been no challenges relating to beverage container re-use since it was issued.

The Communication says that

- National provisions linking the proportion of refillable packaging used for specific beverages and the need to establish a deposit and return system for one-way packaging have to be regarded with particular caution from an Internal Market perspective;

²⁰ The Treaty (*Article 174*) says that Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community; it shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay. The Treaty adds that environmental protection requirements must be integrated into other Community policies.

²¹ *Communication from the Commission, Beverage packaging, deposit systems and free movement of goods* (2009/C 107/01), OJ No. C 107, 9.5.2009. (http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2009.107.01.0001.01.ENG).



- Member States are not allowed to ban the marketing of certain types of beverage container that comply with the Essential Requirements of the Directive;
- National systems that require prior authorisation before goods can be placed on the market not only contravene the Essential Requirements but also contravene Article 28 of the Treaty, as a measure having an effect equivalent to a quantitative restriction on imports;
- Deposits have traditionally been charged on refillables in order to get the bottles back: voluntary arrangements of this nature are unlikely to create barriers to trade;
- Making non-refillable beverage containers subject to a mandatory deposit system creates barriers to trade, since deposit systems require substantial modifications and investment for imported products and thus hamper their access to the market. Nevertheless, deposit requirements may be justified on grounds of protection of the environment – by increasing the proportion of empty packaging returned and leading to more targeted sorting of packaging waste, or by helping to prevent littering. But such systems must use means which do not go beyond what is necessary for the purpose envisaged;
- Any differentiation between exempt and non-exempt products must be based on objective criteria, e.g. on the material used, as this may affect economic impact, and not on beverages contained in the pack;
- The costs of complying with national environment-driven tax systems are often lower than the additional costs linked to mandatory deposit systems, but packaging taxation is not Internal Market-neutral. Taxes related to specific materials could cause material switching, since beverage packaging materials are normally effective substitutes for each other. And if taxes are passed on, they increase the retail price and thus may influence consumer choice. Member States may, in pursuit of legitimate economic, social or environmental policy objectives, adopt tax arrangements which differentiate between similar products on the basis of objective criteria such as the nature of the raw materials used or the production processes employed, but environmental criteria need to be applied in a consistent manner. *“Where taxes are levied on account of the non-reusable character of the packaging, differentiations according to its content, a factor which in itself is*

independent from the environmental impact of the packaging, have to be seen with particular caution.”

The Court of Justice of the EU has ruled that the PPWD does not establish a hierarchy between re-use of packaging and recovery of packaging waste.²² However, there is a hierarchy in the Waste Framework Directive (WFD) which places reuse above material recycling and material recycling above energy recovery, and this is reflected in the Commission’s proposed amendments to the Packaging and Packaging Waste Directive issued as part of the Circular Economy package. The Circular Economy proposals are discussed in Part 4.

EUROPEN believes that the particular properties of packaging make it inappropriate to give precedence to re-use, and in any case the legal basis of the PPWD is primarily a single market measure whose legal base is Article 95 of the Treaty. As the European Commission has noted, rules which give a market advantage to reusable packaging potentially fragment the Internal Market.

USE OF RECYCLED PACKAGING MATERIAL (ARTICLE 6)

The Directive says that Member States *may* “encourage” the use of recycled materials in new packaging, but this is not mandatory.

The European Commission asked CEN to prepare a report on *Criteria for a minimum content of recycled material*. The CEN experts identified the primary considerations to be taken into account as fitness for purpose of the packaging containing the recycled material; environmental benefit; the ability to monitor and assess the conformity of a defined minimum recycled content; and the constituents of recycled content. They concluded that although the use of recycled material should be strongly encouraged, the concept of a mandatory stated minimum recycled content in packaging is unsound.

Belgium’s experience demonstrates the difficulty of reconciling recycled content provisions with EU and international trade rules. In 2002 Belgium adopted legislation which would have imposed an eco-tax on non-refillable beverage containers, except where the packaging contained a minimum proportion of recycled material. Following objections from the EU that the

²² Case C-309/02, Radlberger and Spitz vs. Land Baden-Württemberg (<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?isOldUri=true&uri=CELEX:62002CJ0309>).

recycled content criterion for exemption was distortive and unworkable, the eco-tax that finally came into force included no special provisions for containers with a minimum recycled content. When the eco-tax law was amended in 2004, the revised text still provided for the possibility of introducing exemptions for non-refillable containers containing more than a specified proportion of recycled material, but it said that any such exemptions would have to be approved by the European Commission.

EUROPEN believes that packaging must first and foremost be fit for its intended purpose; all else is secondary. Where the use of recycled material is feasible, we recommend that companies evaluate it carefully and use the maximum amount of recycled material consistent with the production of good quality packaging at a realistic price; but recycled material should **not** be used if it would jeopardise performance standards.

HEAVY METALS LIMIT (ARTICLE 11)

The combined concentration levels of lead, cadmium, mercury and hexavalent chromium shall not exceed 100 ppm by weight. These limits are in line with the CONEG (Coalition of Northeastern Governors) standards in the US, the *de facto* US standard.

The Directive provides for the possibility of exemptions for recycled materials and for product loops which are in a close and controlled chain, and **European Commission Decision 2009/292/EC**²³ exempts plastic crates and pallets used in closed product loops from the heavy metals limit, subject to specific conditions. This extends the previous exemption indefinitely. Decision 2009/292/EC said that the Commission was intending to review the functioning of this system after 5 years and to consider the progress made in phasing out plastic crates and pallets with a high heavy metals content, but no such review has as yet taken place.

European Commission Decision 2001/171/EC²⁴

permits packaging glass to exceed the 100 ppm heavy metal limit, provided that no heavy metals are intentionally introduced during manufacture and that the material only exceeds the concentration limit because of the addition of recycled materials.

²³ Commission Decision 2009/292/EC, OJ No. L 79, 25.3.2009 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009D0292:en:NOT>).

²⁴ Commission Decision 2001/171/EC, OJ No. L 62, 2.3.2001 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001D0171:EN:NOT>).

The Decision also sets out the control mechanisms required. This derogation would have expired in June 2006, but **Commission Decision 2006/340/EC**²⁵ prolongs it for an indefinite period.

Directive 2004/12/EC called upon the European Commission to report to the European Parliament and Council on whether heavy metals and other hazardous substances in packaging could be reduced or even phased out completely by 2010. The Commission concluded that since there were no indications that the current levels of heavy metals and other hazardous substances present in packaging posed any particular risks to health and the environment, there was no need for any further reduction of the heavy metals limit.

ECONOMIC INSTRUMENTS (ARTICLE 15)

Member States **may** adopt economic instruments; they are not obliged to do so.

The Directive confines itself to economic instruments designed to promote implementation of the objectives of the Directive. In the absence of a Europe-wide measure, Member States may adopt their own, provided they are “in accordance with the principles governing European Community environmental policy”. That above all means respecting the principle of proportionality – major distortions of competition for minor environmental benefits are not acceptable.

Packaging waste recovery fees have been used in almost every European country to fund recycling, and this has been a complete success. Other forms of environmental tax or charge on packaging have been introduced in 21 European countries, including 15 EU Member States.²⁶ Some have been intended to promote reusable packaging, others to discourage the use of certain items, to reflect the environmental impact of the packaging, to create an incentive to recycle or to use recycled material – or simply to raise revenue, either for environmental purposes or to fill a hole in the national budget.

²⁵ Commission Decision 2006/340/EC, OJ No. L 125, 12.5.2006 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006D0340:EN:NOT>).

²⁶ Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Denmark, Estonia, Finland, Hungary, Iceland, Latvia, Lithuania, the Former Yugoslav Republic of Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Romania, Serbia, Slovakia and Slovenia. In addition, Ireland and the constituent parts of the UK have a tax on shopping bags only, and in some other Member States the free distribution of single-use shopping bags are banned.



The European Commission's 2006 report warned that “the use of taxation to drive packaging policy can potentially disrupt the Internal Market if the taxes are applied in a way that protects local producers,” and this has already happened.

For instance, Hungary used to impose a tax on beverage producers unable to meet market share quotas for refillable containers. Since the Hungarian quotas related to each producer's output rather than to the market as a whole, importers drew no benefit from the actual refill shares held by their local competitors. Refillable beer bottles predominated on the domestic market so the Hungarian brewers were all eligible for exemption, whereas importers of canned German beer were not. The European Commission challenged the tax, stating that any environmental tax had to be “objective and non-discriminatory”, and with effect from 2009 beverage producers were able to claim exemption from the tax if they met the recycling targets laid down. This was the first time that the European Commission had taken action against a Member State in respect of discriminatory taxation on packaging.

On the other hand, many of the Member States which joined the EU in 2004 or later have packaging taxes or charges which are either payable on the difference between the recovery/recycling targets laid down by law and those actually achieved, or else are imposed only on producers who have not joined a packaging compliance system. This tax is in effect an enforcement mechanism for producer responsibility, and it is an effective instrument provided the tax is set at the right level: if it is too low, it is an incentive not to join a packaging compliance system.

A full discussion of these issues appears in the EUROOPEN publication, *Economic Instruments in Packaging and Packaging Waste Policy*, which can be downloaded from the EUROOPEN website.²⁷

PACKAGING MARKING AND IDENTIFICATION OF PACKAGING MATERIAL (ARTICLE 8 AND ANNEX I)

The original Directive promised two sets of rules designed to facilitate packaging waste management – a European Commission Decision to enable the identification of the material or materials used, and a Marking Directive with unspecified goals.

27 EUROOPEN: Economic Instruments in Packaging and Packaging Waste Policy, September 2014 (<http://www.europen-packaging.eu/library/publications.html>).

A European Commission Decision on Material Identification (97/129/EC) came into force in February 1997²⁸. It lays down an identification system for packaging made from plastics, paper or fibreboard, metal, wood, textiles, glass or composites.

Use of the numbering²⁹ and abbreviations are voluntary, though this is not entirely clear from the ambiguous wording of Directive 2004/12/EC. That Directive provides that “packaging shall indicate for the purposes of its identification and classification by the industry concerned the nature of the packaging material(s) used on the basis of Commission Decision 97/129/EC.” This has been interpreted in some quarters as meaning that material identification is mandatory, but this is not the case. Decision 97/129/EC states that use of the numbering and abbreviations is voluntary, and the purpose of this provision of Directive 2004/12/EC is to ensure that if material identification is provided, it is done in accordance with the harmonised EU system.

In 1996, the European Commission put forward a **proposal for a directive on marking of packaging and on the establishment of a conformity assessment procedure for packaging**.³⁰ This proposal introduced entirely new symbols for “recyclability” and “reusability”. It said that producers could choose not to use these marks, but they would not be allowed to use any other marks intended for the same purpose. The aim was to prevent confusion caused by use of the same mark for different purposes or different marks for the same purpose. The proposal received no support and the Commission formally withdrew it in 2004, but it has been taken up by legislation in Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia,³¹ Kosovo³² and Serbia, non-EU countries which have made these symbols mandatory.

Nothing in any EC legislation affects companies' use of anti-litter markings or the Green Dot symbol or any other compliance system symbol, provided these are

28 Commission Decision 97/129/EC on Material Identification, OJ No. L 50, 20.2.1997 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997D0129:EN:NOT>).

29 In the Decision, the numbers for plastics appear in single-digit form, i.e. “2” for HDPE. The Commission's Legal Service advised the Article 21 Committee in November 2003 that double digits (e.g. “02”) could be used where necessary for technical reasons.

30 The “conformity assessment procedure” was a way of testing whether packaging complied with the Essential Requirements. Nothing has been done to progress this idea since the proposal for a directive on marking and conformity assessment was abandoned.

31 However, in FYR Macedonia imported products are exempt from the requirement to display the on-pack symbols for reusability (if applicable) and recyclability.

32 In Kosovo, only the recyclability symbol is mandatory.

THE EC DIRECTIVE ON PACKAGING AND PACKAGING WASTE (AS AMENDED) AND FOLLOW-UP MEASURES

2013	PER CAPITA CONSUMPTION (kg per head)	RECOVERY Total	RECYCLING				
			Total	Glass	Paper	Metal	Plastics
Austria	150	96%	67%	85%	84%	88%	34%
Belgium	155	97%	79%	100%	89%	97%	39%
Bulgaria	48	66%	66%	61%	89%	70%	41%
Croatia	47	59%	59%	65%	88%	12%	45%
Cyprus	91	57%	57%	32%	97%	71%	45%
Czech Republic	96	75%	70%	75%	88%	59%	60%
Denmark	170	86%	65%	78%	85%	57%	36%
Estonia	170	78%	58%	72%	76%	58%	28%
Finland	132	93%	58%	77%	98%	82%	23%
France	185	75%	66%	74%	96%	76%	26%
Germany	210	98%	72%	89%	88%	93%	49%
Greece*	70	59%	59%	55%	84%	38%	32%
Hungary	103	60%	49%	32%	78%	95%	31%
Ireland	189	88%	70%	80%	79%	79%	40%
Italy	190	77%	67%	71%	85%	75%	37%
Latvia	114	55%	51%	55%	75%	57%	25%
Lithuania	108	54%	54%	55%	87%	66%	43%
Luxembourg	206	92%	63%	95%	74%	84%	32%
Malta	135	38%	38%	49%	48%	34%	23%
Netherlands	167	94%	71%	79%	89%	93%	46%
Poland	127	50%	36%	44%	50%	35%	20%
Portugal	149	65%	62%	56%	73%	76%	35%
Romania*	53	57%	57%	66%	70%	56%	51%
Slovakia	82	70%	66%	73%	80%	69%	55%
Slovenia	97	93%	69%	86%	79%	58%	82%
Spain	144	73%	67%	67%	75%	81%	41%
Sweden	109	87%	72%	89%	78%	77%	46%
UK	162	73%	65%	68%	89%	57%	32%

* 2012 data



used in compliance with any rules laid down by the systems owning the rights to their use.

DATA (ARTICLE 12)

The Directive says that Member States must ensure that a statistical database is set up so that progress towards meeting the national targets can be monitored, and a **European Commission Decision on Database Formats** came into force in 1997 to firm up the reporting requirements. The original Decision, 97/138/EC, was subsequently replaced by **Commission Decision 2005/270/EC**.³³ The aim of the new measure was to simplify data-gathering requirements in the light of experience, and to bring about a greater degree of harmonisation so as to guarantee the comparability of data between the Member States.

Within 18 months of year end, Member States are required to send the European Commission qualitative information on “packaging waste generated”³⁴ (i.e. packaging placed on the market) in the Member State concerned and data on packaging waste recovered or incinerated at waste incineration plants with energy recovery within or outside the Member State.

A rising population, smaller households and increasing prosperity means that the demand for packaged goods is still increasing, though at a considerably slower rate than the growth in GDP. According to the data submitted by the Member

States, average per capita consumption in the 15 countries in membership of the EU at the beginning of 2004 fell from 160 kg in 1997 to 147 kg in 2012, a reduction of 8.1%. Meanwhile, the quantity of packaging for final disposal fell from 28.5 million tonnes in 1997 to 13.2 million tonnes in 2012, a reduction in packaging waste of 53.7%.

This table shows big differences in packaging consumption levels, even between adjacent countries such as Austria and Germany or Ireland and the UK where the smaller country imports large quantities of packaged goods from its larger neighbour. It is now generally accepted that national data are still not strictly comparable due to the use of inconsistent methodologies, and this is being addressed in the new Circular Economy package.

APPLYING THE DIRECTIVE TO SPECIAL CATEGORIES OF PACKAGING (ARTICLE 20)

The Directive suggested that the problem areas for its application might be primary packaging for medical devices and pharmaceutical products, small packaging, luxury packaging and “inert packaging materials, put on the market in very small quantities (i.e. approximately 0.1% by weight of all packaging) in the European Union.” This last category was intended to protect ceramic containers from being banned under Article 9 of the Directive because they are not energy recoverable and because no recycling system existed for them.

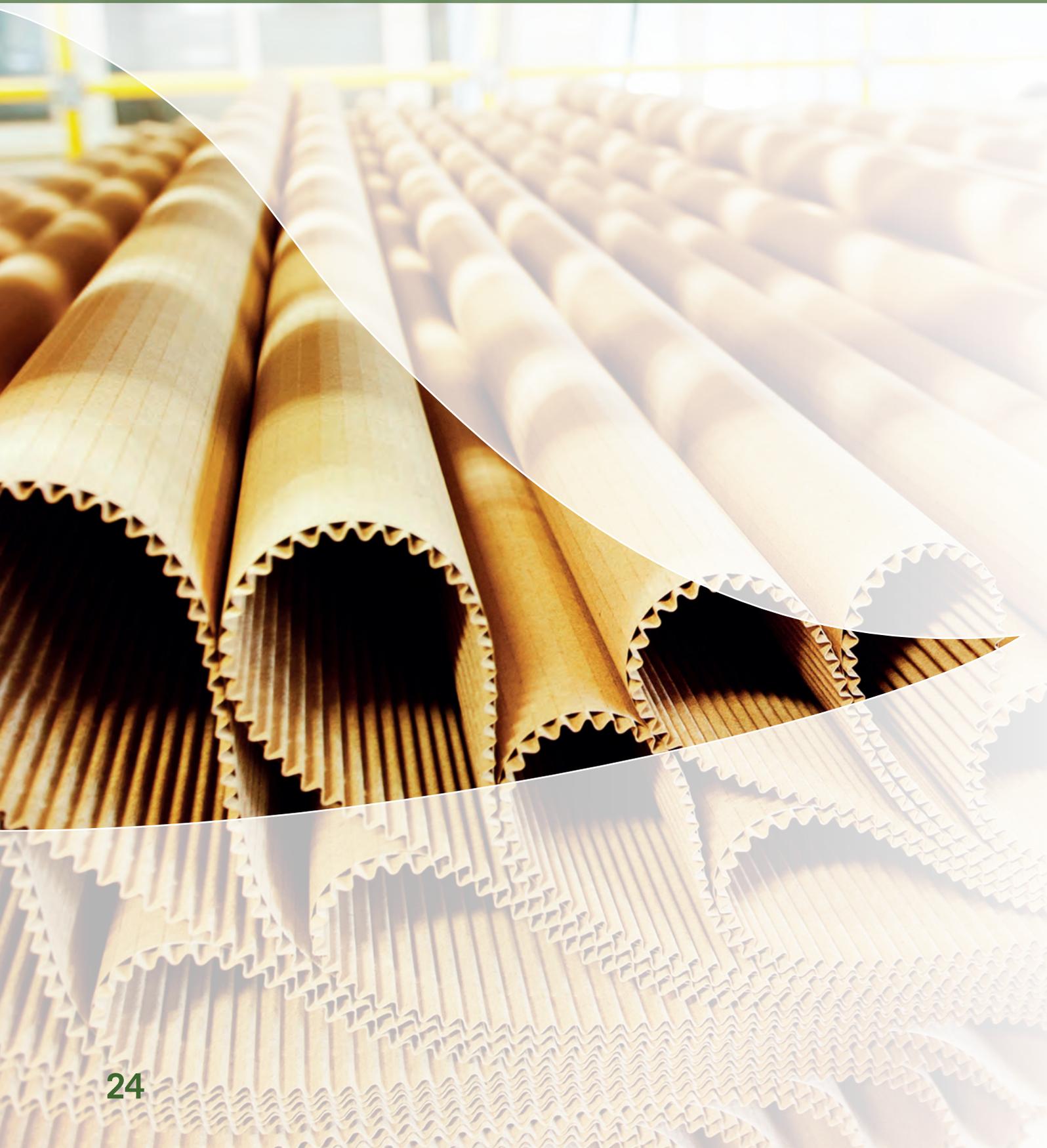
This list of problem areas does not exclude the possibility that there might be other categories needing special treatment. The Commission took the view that problems must be demonstrated before it would consider exemptions, and no exemptions have as yet been granted.

³³ Commission Decision 2005/270/EC, OJ No. L 86, 5.4.2005 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32005D0270:EN:NOT>).

³⁴ The WFD defines ‘waste’ as ‘any substance or object which the holder discards or intends or is required to discard.’ Since most packaging is discarded once its contents have been removed, ‘packaging waste generated’ is legally synonymous with packaging placed on the market.

PART 2

**THE ESSENTIAL REQUIREMENTS
AND THE CEN STANDARDS**





THE “NEW APPROACH” TO TECHNICAL HARMONIZATION

Under the so-called “New Approach”, which dates from 1985, the EU institutions speed up agreement on technical harmonisation issues by agreeing Essential Requirements which define the results to be attained and the risks to be dealt with, and delegate to CEN (the European Committee for Standardisation) the task of specifying the technical solutions needed.

In the case of packaging, the Essential Requirements appear in Annex II of Directive 94/62 on packaging and packaging waste, and the scope of CEN’s follow-up work was defined in a Mandate issued by the European Commission in March 1996. Most of the standards were subsequently revised under a second Mandate issued in November 2001.

STATUS OF THE CEN STANDARDS

The following mandated standards³⁵ have been adopted by CEN as harmonised national standards and published by the national standards bodies of the 28 Member States of the enlarged EU and those in Iceland, Norway and Switzerland:

- EN 13427:2004, *Packaging – Requirements for the use of European Standards in the field of packaging and packaging waste*;
- EN 13428:2004, *Packaging – Requirements specific to manufacturing and composition – Prevention by source reduction*;
- EN 13429:2004, *Packaging – Requirements for relevant materials and types of reusable packaging*;
- EN 13430:2004, *Packaging – Requirements for packaging recoverable by material recycling*;
- EN 13431:2004, *Packaging – Requirements for packaging recoverable in the form of energy recovery, including specification of minimum interior calorific value*;

³⁵ The standards can be purchased from the national standards bodies: Appendix III lists their contact details.

- EN 13432:2000, *Requirements for packaging recoverable through composting and biodegradation – Test scheme and evaluation criteria for the final acceptance of packaging*.

The references to the full set of standards have been published in the Official Journal,³⁶ which means that packaging produced in compliance with them cannot be excluded from any market in the European Economic Area for reasons related to the Essential Requirements.³⁷

PHILOSOPHY UNDERLYING THE CEN STANDARDS

To comply with the standards, packaging designers and specifiers should work methodically through a checklist to ensure that their decisions take account of the often conflicting social, environmental and economic factors affecting the choice of packaging, and find a solution that is right for the product, for the distribution system and for how it will eventually be stored and used.

The supplier is recommended to apply these principles as an integral part of his formal management system in order to improve the environmental performance of his operation and to provide the opportunity for continuous improvement.

THE CEN “UMBRELLA STANDARD” (EN 13427:2004)

The “umbrella standard” (*Standard on Requirements for Use of European Standards in the Field of Packaging and Packaging Waste*) guides users through the texts, indicating which standards are applicable to each type of pack.

To comply with the Essential Requirements, the supplier must carry out up to seven assessment procedures

³⁶ Commission Communication in the framework of the implementation of the European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (2005/C44/13), OJ No. C 44, 19.2.2005 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2005:044:0023:0023:EN:PDF>)

³⁷ There is now one exception to the free movement principle. Directive (EU) 2015/720 amending the Packaging and Packaging Waste Directive as regards reducing the consumption of lightweight plastic carrier bags allows Member States to introduce marketing restrictions on the distribution of these bags in derogation from Article 18 of the PPWD.

before placing the packaging or packed product on the market. These procedures are not all necessarily applicable to the same unit of packaging, so the “umbrella standard” has been introduced to establish an overall methodology:

- All packs must be assessed against the standard on prevention by source reduction and the report on heavy metals and other dangerous substances;
- Where reuse is claimed, packs must be assessed against the standard on reuse; and
- Packs must be assessed against at least one and if appropriate all of the standards on material recycling, energy recovery, and organic recovery.

Usually a number of components will be brought together to form a functional unit of packaging and these may in turn be brought together in a complete packaging system which could comprise primary, secondary and tertiary packaging:

- Packaging components should be assessed for prevention of noxious and hazardous substances;
- The minimum functional unit of packaging should be assessed for reuse, material recycling, energy recovery and/or organic recovery (as appropriate);
- The complete packaging system should be assessed for prevention by source reduction.

Having identified the appropriate standards, suppliers must work through a series of checklists to ensure that all relevant factors have been taken into account in the design of the packaging system. For instance, in terms of product protection there may be trade-offs between the primary packaging and the transport packaging. An important element in selecting and applying the standards is to determine the most appropriate balance between them for any particular application.

By applying the requirements of the selected standards to the packaging he places on the market, the supplier is to ensure that:

- The packaging system contains the minimum adequate amount of the chosen material;
- The packaging components contain less than the maximum permitted levels of heavy metals and other noxious and hazardous substances, and only

the minimum amount when used for functional purposes;³⁸ and

- The functional packaging is reusable, recoverable by material recycling, recoverable in the form of energy and/or compostable in accordance with the relevant standards.

A summary of the assessment results must be prepared. Records of the assessments and supporting documents must be retained by the supplier for at least two years after the relevant packaging has been placed on the market. These records must be available for inspection.

The standard stresses that suppliers need to co-operate with all other entities in the packaging chain to ensure that the Essential Requirements are respected. This is necessary because minimisation of heavy metals and dangerous substances must be assessed at the component level, recoverability at the level of the functional unit, while prevention by source reduction can only be assessed on the whole packaging system, which will usually be by the packer/filler.

Since there is a national conflict between French law, which places the legal responsibility (as opposed to operational responsibility) on to the packaging supplier, and British law, which imposes legal responsibility on the packer/filler, it was thought necessary to remind standards users that these legal duties cannot be fulfilled without co-operation within the packaging chain.

THE CEN STANDARD ON PREVENTION (EN 13428:2004)

This text consists of two parts. The first covers “prevention by source reduction” (minimising the weight and/or volume of the packaging) and the second “qualitative prevention” (minimising the presence of noxious and hazardous substances in packaging).

The basis for complying with the first part of the standard is identification of the “critical area” which governs the achievable limit for source reduction. That is to say, if the packaging is reduced further, it will fail to meet the listed performance criteria such as product protection; the packaging manufacturing process; the

³⁸ When the heavy metals or noxious/hazardous substances content is outside the supplier's direct control, he should ensure that his specifications and orders require this action by his own suppliers and that appropriate evidence of conformity is provided.



packing/filling process; logistics (including transport, warehousing and handling); product presentation and marketing; consumer acceptance; provision of the necessary instructions for use and other relevant information; safety; compliance with legislation; and any other relevant issues.

If no critical area is identified, there may be potential for further source reduction. If however tests show that further source reduction will result in an unacceptable increase in the packaging failure rate, the critical point has already been reached.

An “unacceptable” failure rate must be a matter of commercial judgement – it may be different for a high-value product than a low-value item, and for products where leakage could endanger people or property – and this judgement must be shared between the producer, the customer and possibly the end-user.

The packaging manufacturing or packing/filling process also has to be taken into account. It may be possible for the producer to reduce his packaging further, but only by purchasing new machinery. This may not be economically practicable, and it may not be environmentally desirable for the existing equipment to be scrapped before it reaches the end of its life.

If the packaging is source reduced to the point where the product is unacceptable to the consumer, it will not sell, and there is no point producing it. Consumer acceptability is listed among the Essential Requirements.

The enforcement authorities can verify compliance with the standard by asking the producer to demonstrate the steps that have been taken to identify the “critical area”. If this cannot be done, the packaging fails the standard.

The standard also explains how to determine the presence of any dangerous substances or preparations as well as how to minimise them if present. Users are required to determine, with the aid of Safety Data Sheets, whether dangerous substances or preparations which have been used in the manufacturing process are present in the packaging placed on the market.

Dangerous substances or preparations are those classified ‘N’ in the relevant EC Directives.³⁹

If any are present – irrespective of whether they were intentionally introduced or not – the user must evaluate the possibility of their release into the environment, and if release into emissions, ash or leachate is possible, the user must document the substances or preparations identified and demonstrate that they are used to the minimum necessary for achievement of the performance criteria listed in the standard. An appendix provides a decision tree for minimisation of dangerous substances or preparations and demonstration of conformity.

Further details can be obtained from the two-part CEN report CEN-CR 13695 on *Requirements for measuring and verifying heavy metals and other dangerous substances present in packaging, and their release into the environment*.⁴⁰

THE CEN STANDARD ON REUSABLE PACKAGING (EN 13429:2004)

This standard contains a checklist by which the packer or filler can assess “reusability”. For a pack to qualify as reusable, the following “enabling conditions” must all be met:

- Reusability of the packaging must be a deliberate objective;
- The design of the packaging must enable the principal components to accomplish a number of trips or rotations in normally predictable conditions of use (it is accepted that certain components, such as sealable closures, may have to be discarded into the recovery stream, but such items will not constitute a significant proportion of the weight of that packaging);

39 Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (OJ No. 196, 16.8.1967), as amended. The CEN standard has not yet been updated to correspond with Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (“the CLP Regulation”). The “N” symbol in Directive 67/548/EEC has been replaced by the UN Globally Harmonized System (GHS) which has been incorporated into Regulation (EC) No. 1272/2008.

40 CEN/CR 13695-1:2000, *Requirements for measuring and verifying heavy metals and other dangerous substances present in packaging, and their release into the environment – Part 1: Requirements for measuring and verifying the four heavy metals present in packaging*. CEN/TR 13695-2:2004, *Requirements for measuring and verifying heavy metals and other dangerous substances present in packaging, and their release into the environment – Part 2: Requirements for measuring and verifying dangerous substances present in packaging and their release into the environment*.

- The packaging must be capable of being successfully reconditioned in accordance with the requirements of the standard;
- The packaging must be capable of being refilled/reloaded;
- An appropriate collection and reconditioning system to support reuse is available in markets onto which the packer/filler is responsible for placing the packed product. This may be
 - A ‘closed loop’ system (in which reusable packaging is circulated by a company or an organised group of companies);
 - An ‘open loop’ system (in which reusable packaging circulates amongst unspecified companies); or
 - A ‘hybrid’ system (in which reusable packaging stays with the end-user and is replenished by means of one-way packaging which is used as an auxiliary product to transport the contents to the reusable packaging).

The standard requires packer/fillers to obtain written confirmation from their supplier(s) that the packaging is capable of reuse, and confirmation from their customers that they intend to place the packaging into a reuse circuit. The packer/filler shall confirm and record that an organised system exists to provide return facilities for packaging that is emptied by consumers, and that suitable reconditioning systems are available.

Packaging complying with the reuse standard must still be recoverable through material recycling, energy recovery and/or organic recovery.

THE CEN STANDARD ON MATERIAL RECYCLING (EN 13430:2004)

The material recycling standard formalises a procedure by which design, production and use of packaging can be checked against the requirements of various material recycling systems.

For material recyclability to be claimed, those responsible for placing packaging and/or packaged products on the market must ensure that packaging design takes account of the recyclability of the materials from which it is produced; control the choice of raw materials used, to ensure that they do not adversely affect recycling processes; ensure that the design of

packaging makes use of materials or combinations of materials which are compatible with known and relevant recycling technologies;⁴¹ and establish a system to ensure that new developments in relevant recycling technologies are monitored and recorded and that such records are made available to the design function.

The standards user must declare the percentage by weight of the functional unit available for recycling and identify the material recycling stream(s) intended. He/she must examine each component separately, and indicate its weight and whether it is suitable for recycling.

For example, if a beverage container consists of a recyclable PET bottle (85% of the total weight of the pack), a recyclable PP closure (10% of the weight) and a foil label (5%) for which no recycling stream exists, the standards user can declare that the pack is 95% recyclable.

Those constituents likely to cause problems at the collection, sorting or recycling stage, or liable to have a negative influence on the quality of the recycled material, are to be classified as material not available for recycling. By adding together the weights of the components in the recyclable and non-recyclable categories, the standards user can calculate the overall percentage by weight of the pack which is recyclable.

Where the format and material of the functional unit of packaging and/or components conform to national European, international or commercial standards or specifications suitable for collection, sorting and recycling, this may be used as a basis for demonstration of recyclability. *This avoids the need for a complicated assessment procedure for packaging that fits into existing recycling systems.*

THE CEN STANDARD ON ENERGY RECOVERY (EN 13431:2004)

The energy recovery standard sets out the requirements for packaging to be considered as suitable for energy recovery and identifies the necessary procedures for a supplier placing packaging on the market to claim conformity with these requirements. The scope is limited to factors under the control of the supplier.

⁴¹ Except that new packaging materials and systems may be regarded as recyclable until there has been time to develop processes and infrastructure.



Packaging claimed to be suitable for energy recovery must be combustible and capable of providing calorific gain, as determined by the method specified. Calorific gain is assumed to be fulfilled when the net heat of combustion exceeds the amount of energy required to raise the temperature of the post-combustion substances from ambient temperature to the specified final temperature, without heat entering or leaving the system. To claim energy recoverability, the net calorific value must be at least 5 MJ/kg. *(This is a conservative assumption which allows for a safety factor of 2, since the theoretical net calorific value sufficient for calorific gain is in fact only 1.5-2.5 MJ/kg.)*

The standard provides a formula for calculating the net calorific value of a packaging consisting of different constituents. However in most cases it will not be necessary to make any calculations, since the standard provides that

- Packaging composed of over 50% by weight of organic materials (e.g. wood, cardboard, paper and other organic fibres, starch, plastics) provides calorific gain and shall be considered recoverable in the form of energy;
- Packaging composed of over 50% by weight of inorganic material (e.g. ceramic, glass, clay, metals) may be declared recoverable in the form of energy when supported by evidence of the calorific gain;
- Thin gauge aluminium foil (up to 50 microns thick) shall be considered recoverable in the form of energy.

The standard contains a table which shows, for a number of commonly-used packaging materials, the net calorific value, the energy required to operate the energy recovery process, the calorific gain, the available thermal energy, and the percentage of ash or solid residues which will arise from the combustion process in each case. The table also shows which packaging constituents do not fulfil the requirement for energy recovery, and why they do not.

An appendix addresses substances and materials liable to have a negative influence on the energy recovery process, and materials, combinations of materials or design of packaging liable to create problems during energy recovery.

THE CEN STANDARD ON ORGANIC RECOVERY (EN 13432:2000)

The organic recovery standard defines packaging as recoverable through composting and biodegradation when each packaging material and its significant organic constituents fulfil the criteria laid down:

- As demonstrated in laboratory tests, they are inherently and ultimately biodegradable to the criteria and pass levels laid down; and
- They disintegrate in a biological waste treatment process to the criteria and pass levels laid down (90% biodegradation within 6 months), without any observable negative effect on the process; and
- When submitted to a biological waste treatment process, no negative effect on the quality of the resulting compost is recorded.

Packaging or packaging components intended for the biowaste stream must be recognisable by the end-user as compostable or biodegradable.

The standard covers the compostability of the packaging itself but does not address regulations that may exist regarding the compostability of any residual contents.

The standard is only intended to obtain information on the processing of packaging in controlled waste treatment plants, and does not take into account packaging waste which may end up in the environment through littering or other uncontrolled means.

Constituents known to be or expected to be harmful to the environment during the biological treatment process, in excess of the limits laid down, may not be introduced into packaging or packaging materials intended to be designated as suitable for organic recovery.

If a packaging material is demonstrated to be organically recoverable in a particular form, the same packaging material in another form, having a smaller mass to surface ratio or wall thickness, is also regarded as organically recoverable. Chemically unmodified packaging materials of natural origin (e.g. wood, wood fibre, cotton fibre, paper pulp or jute) can be accepted as biodegradable without testing, but have to be chemically characterised and must fulfil the criteria for disintegration and compost quality.

The evaluation criteria laid down include pass levels for Zn, Cu, Ni, Cd, Pb, Hg, Cr, Mo, Se, As and F. It is assumed that 50% of the original weight of the packaging or packaging material will remain in compost after biological treatment together with 100% of the original amount of hazardous substances.

EUROPEN GUIDANCE ON USE OF THE STANDARDS

EUROPEN has published a question-and-answer booklet⁴² and a detailed Guide⁴³ to help companies that want to apply the six CEN standards on packaging and the environment. The Guide includes a set of supporting assessment record forms which companies can copy and use as part of their assessment routine.

GLOBAL PACKAGING STANDARDS

ISO has developed global standards on packaging and the environment:

- ISO 18601:2013, Packaging and the environment -- General requirements for the use of ISO standards in the field of packaging and the environment;

- ISO 18602:2013, Packaging and the environment -- Optimization of the packaging system;
- ISO 18603:2013, Packaging and the environment -- Re-use;
- ISO 18604:2013, Packaging and the environment -- Material recycling;
- ISO 18605:2013, Packaging and the environment -- Energy recovery;
- ISO 18606:2013, Packaging and the environment -- Organic recycling.

The CEN texts were the starting-point for ISO's work, and the basic principles and structure of the CEN standards have been retained together with much of the detail. Thus, these standards will facilitate global trade and a harmonised approach to environmental protection.

Unfortunately, although the ISO standards benefit from a decade of practical experience of use of the CEN standards and are to be preferred, it is not yet possible to transpose them into European (EN/ISO) standards. As the CEN standards were mandated by the Commission, the Commission's agreement is needed before they can be amended, and the Commission is of the view that it is necessary to await the outcome of the current process of updating EU packaging and waste legislation before any decision can be taken on possible adoption of the ISO standards.

42 *Understanding the CEN standards on packaging and the environment – some questions and answers*, available free of charge from EUROPEN in English, French and Dutch <http://www.europen.be/index.php?action=onderdeel&onderdeel=6&titel=EUROPEN+Publications&categorie=0&item=11&back=%3Faction%3Donderdeel%26onderdeel%3D6%26titel%3DEUROPEN%2BPublications%26page%3D1>.

43 *Essential Requirements for Packaging in Europe: A Practical Guide to using the CEN Standards*, available in English at <http://www.europen.be/index.php?action=onderdeel&onderdeel=6&titel=EUROPEN+Publications&categorie=0&item=29&back=%3Faction%3Donderdeel%26onderdeel%3D6%26titel%3DEUROPEN%2BPublications%26page%3D1>.



THE WASTE FRAMEWORK DIRECTIVE

Directive 2008/98/EC on waste⁴⁴ – the “Waste Framework Directive” (WFD) – updated and simplified the rules on how waste should be managed in the EU. It aims to reduce the environmental impact of waste and to encourage efficient use of resources through prevention as well as re-use, recycling and other forms of recovery. Directive 2008/98/EC replaced an earlier Waste Directive which dated from 1975 and a 1991 Directive on hazardous waste.

12 December 2010 was the deadline for transposing the WFD into national laws, regulations and administrative provisions.

- Separate collection of paper, metals, plastics and glass had to be in place in all Member States by 2015, and by 2020, 50% by weight of the waste paper, metals, plastics and glass from households and possibly from other similar waste streams must be recycled or prepared for re-use.

To ensure they meet the WFD’s targets, some Member States, particularly those granted later deadlines for meeting the PPWD’s second-stage targets, have had to introduce requirements such as increasing the focus on household packaging waste, or allowing the collection systems for household packaging waste to collect non-packaging items also;

- The WFD specifically allows Member States to take measures to ensure that anybody who produces products on a professional basis has “extended producer responsibility”. The WFD says that “such measures may include an acceptance of returned products and of the waste that remains after those products have been used, as well as the subsequent management of the waste and financial responsibility for such activities;
- The WFD requires Member States to prepare waste prevention programmes. These may either be free-standing or incorporated into national waste management plans;
- The WFD lays down a “hierarchy” of waste management options for the first time. It says that Member States’ national policies and legislation should

give preference to waste prevention, then to re-use, then recycling, then other forms of recovery, with disposal (i.e. landfill or incineration without energy recovery) as the least favoured option. However, Member States may depart from this hierarchy when defining policies on specific waste streams if it makes environmental sense to do so.

This is not in line with the Packaging and Packaging Waste Directive. In 2004 the European Court of Justice ruled that the PPWD does not give preference to reuse over recovery (including recycling, energy recovery, etc.) of used packaging, so there is no hierarchy of treatment options for packaging. In addition, the WFD says that the hierarchy applies to waste prevention and management legislation – but the PPWD is fundamentally a harmonisation measure which establishes common rules to help enable goods to be traded freely and easily throughout the EU;

- The WFD has set efficiency targets for municipal waste incinerators and will not count material processed in these facilities as energy recovery unless the efficiency standards are met, but this does not apply to packaging as the legislation currently stands. The targets in the PPWD were set before the efficiency standards were devised, and to avoid having to restructure them, it was decided that the recovery target would apply to packaging waste “recovered or incinerated at waste incineration plants with energy recovery”.

Specific measures such as the PPWD are *lex specialis*, and are not overridden by the provisions of framework legislation. However, the European Commission is now proposing amendments to the PPWD and the other “recycling directives” to bring them into line with the WFD.

In the case of packaging, this is not straightforward, as the aims and objectives – and the legal bases – of the Directives are not the same. The PPWD has a dual objective: Internal Market harmonisation and environmental protection. Its legal base is Article 100a of the Treaty establishing the European Community, which deals with the Single Market. The WFD, which was made under Article 175(1) of the Treaty, is purely an environmental protection measure and does not address trade issues. Article 175 is about the establishment of minimum environmental standards, not harmonised standards.

⁴⁴ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, OJ No. L 312, 22.11.2008 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0003:EN:PDF>).



THE LANDFILL DIRECTIVE

Directive 99/31/EC on the landfill of waste⁴⁵ regulates landfill management standards. It imposes stringent operational and technical requirements on waste and on landfills, so as to prevent or minimise negative effects on the environment (in particular the pollution of surface water, groundwater, soil and air) and on the global environment (including the greenhouse effect), as well as risks to human health.

The Directive also aimed to bring about a reduction in the tonnage of biodegradable solid waste (BMSW) disposed of in landfill in order to promote recycling, composting and incineration. It set Member States the target of reducing biodegradable waste in landfill to:

- 75% of 1995 levels in 2006;
- 50% of 1995 levels in 2009; and
- 35% of 1995 levels in 2016.

Any country which in 1995 was landfilling more than 80% of its collected municipal waste may delay the targets by four years – this derogation was granted to Bulgaria, Cyprus, the Czech Republic, Estonia, Greece, Ireland, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and the UK.

Member States must set up a national strategy to implement the reduction of biodegradable waste going to landfills, and must notify it to the European Commission. This strategy should include measures to achieve the targets laid down, by means of recycling, composting, biogas production or materials/energy recovery.

This has encouraged the development of compostable packaging. Legislators have been looking for ways to encourage a switch from conventional plastics to bioplastics, partly because it is compostable and partly because it is made from renewable resources. It is important to ensure that compostable bioplastics are not mixed with recyclable plastics.

In November 2009 the European Commission reported⁴⁶ that implementation of the Landfill Directive remained highly unsatisfactory. Ten years after its adoption, not all Member States reported having transposed and implemented all its provisions. There were still a large number of illegal landfills, and only nine Member States reported having met the 2006 targets for the diversion of BMSW from landfills.

THE WASTE INCINERATION DIRECTIVE

Directive 2000/76/EC on the incineration of waste⁴⁷ regulates both municipal waste incineration and hazardous waste incineration, and covers co-incineration, the recovery of energy by burning waste in a cement kiln or boiler not designed as an incinerator. It sets tight limit values for air emissions and discharges into water, and stipulates that residues from the combustion process must be minimised and recycled where possible.

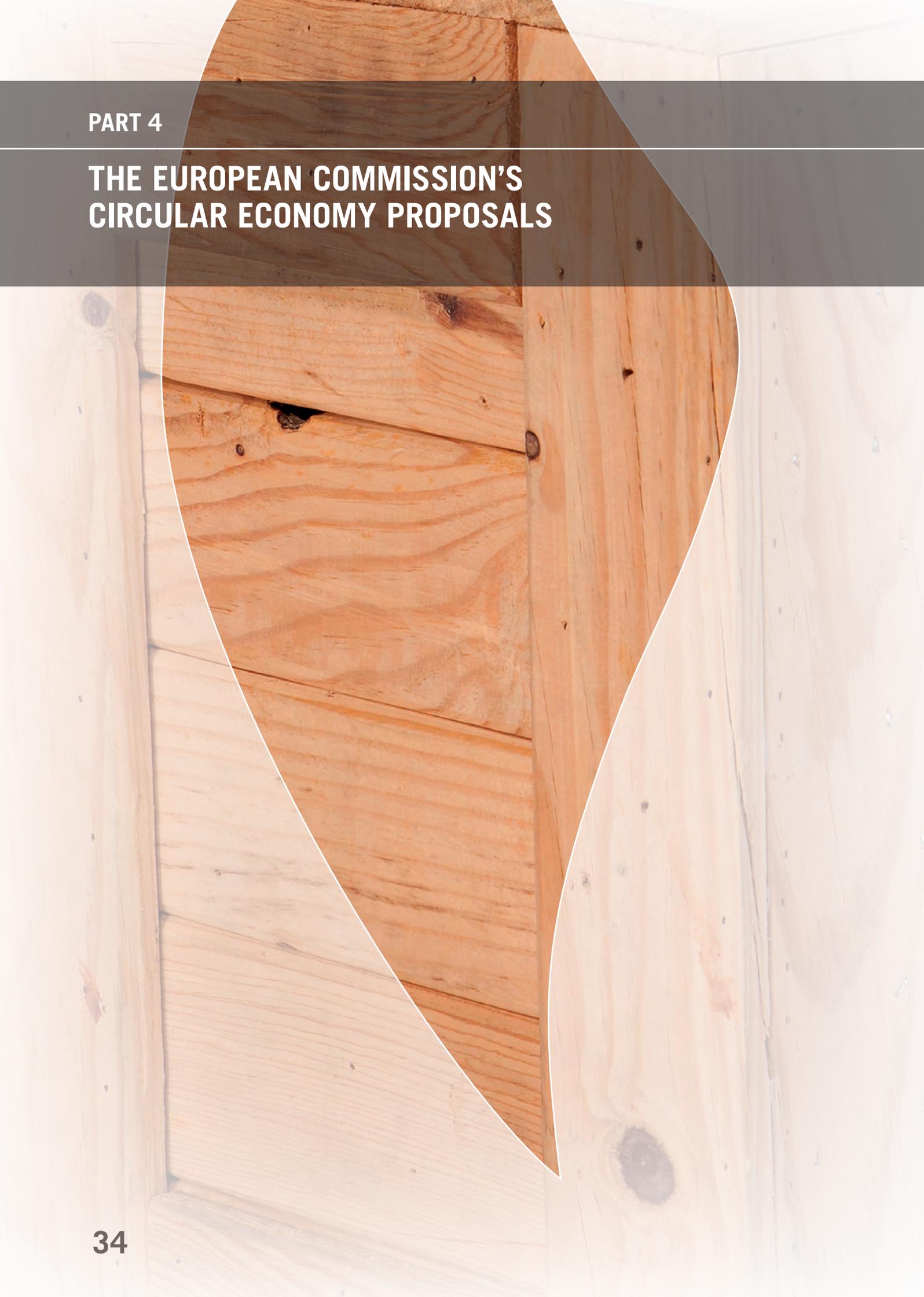
Although the volume of waste incineration was expected to increase across the EU, the Directive would lead to significant reductions in emissions of acid gases such as nitrogen oxides (NO_x), sulphur dioxide (SO₂) and hydrogen chloride (HCl) as well as heavy metals. The Explanatory Memorandum attached to the European Commission's original proposal⁴⁸ said that emissions of dioxins and furans from incineration of non-hazardous waste were expected to fall from an annual 2400g in 1995 to only 11g after full implementation in 2005.

45 Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, OJ No. L 182, 16.7.1999 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0031:EN:HTML>).

46 Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on implementation of the community waste legislation Directive 2006/12/EC on waste, Directive 91/689/EEC on hazardous waste, Directive 75/439/EEC on waste oils, Directive 86/278/EEC on sewage sludge, Directive 94/62/EC on packaging and packaging waste, Directive 1999/31/EC on the landfill of waste and Directive 2002/96/EC on waste electrical and electronic equipment for the period 2004-2006, COM(2009) 633 final, 20.11.2009 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0633:FIN:EN:PDF>).

47 Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste, OJ No. L 332, 28.12.2000 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32000L0076:en:HTML>).

48 Commission proposal for a Council Directive on the incineration of waste, COM(1998) 558 final, 7.10.1998.

The background of the page is a close-up photograph of light-colored wood planks. A large, dark grey circular graphic element is overlaid on the right side of the page, partially obscuring the wood. The text is positioned within this dark grey area.

PART 4

**THE EUROPEAN COMMISSION'S
CIRCULAR ECONOMY PROPOSALS**



OBJECTIVES AND CONTENTS OF THE PROPOSED CIRCULAR ECONOMY PACKAGE

Note that this section addresses the Commission's current proposal for the Circular Economy Package. The co-legislators, i.e. the European Parliament and the Council, are currently assessing the proposals which might be subject to changes at the end of the legislative process, envisaged in 2017.

On 2 July 2014 the European Commission adopted a Communication,⁴⁹ *Towards a circular economy: a zero waste programme for Europe*, together with an annex,⁵⁰ to establish a common and coherent EU framework to promote the circular economy.

The Commission said that “turning Europe into a more circular economy” means:

- Boosting recycling and preventing the loss of valuable materials;
- Creating jobs and economic growth;
- Showing how new business models, eco-design and industrial symbiosis can move us towards zero-waste; and
- Reducing greenhouse emissions and environmental impacts.

As part of the circular economy package, the Commission also adopted a legislative proposal to review recycling and other waste-related targets in the EU. This was the outcome of the Commission's “single, comprehensive and coherent” review of waste policy which covered the following elements:

- A review of key targets in the Waste Framework Directive (WFD),⁵¹ the Landfill Directive⁵² and the Packaging and Packaging Waste Directive (PPWD);⁵³
- An ex-post evaluation (“fitness check”)⁵⁴ of the directives dealing with various waste streams – packaging and packaging waste, end-of-life vehicles, batteries, sewage sludge and PCBs/PCTs (the WEEE and RoHS Directives⁵⁵ had recently been reviewed, and were not considered);
- An assessment of how plastic waste could best be tackled in the context of the current waste policy framework. (The Green Paper on Plastic Waste⁵⁶ had launched a public consultation⁵⁷ on this).

A parallel exercise was carried out on the development of guidelines on Extended Producer Responsibility (EPR),⁵⁸ and some new provisions on EPR were incorporated into the proposed amendments to the WFD.

49 http://eur-lex.europa.eu/resource.html?uri=cellar:50edd1fd-01ec-11e4-831f-01aa75ed71a1.0001.01/DOC_1&format=PDF.

50 [http://ec.europa.eu/environment/circular-economy/pdf/Annex-COM\(2014\)398.pdf](http://ec.europa.eu/environment/circular-economy/pdf/Annex-COM(2014)398.pdf).

51 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0030:EN:PDF>).

52 Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, OJ No. L 182, 16.7.1999 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0031:EN:HTML>).

53 European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, as amended (<http://ec.europa.eu/environment/waste/packaging/legis.htm>).

54 Commission Staff Working Document: Ex-post evaluation of Five Waste Stream Directives, accompanying the proposal for a Directive of the European Parliament and of the Council reviewing the targets in Directives 2008/98/EC on waste, 94/62/EC on packaging and packaging waste, and 1999/31/EC on the landfill of waste, amending Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EC on waste electrical and electronic equipment, COM(2014) 397 final (<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01994L0062-20150526>).

55 Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) and Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

56 Green Paper on a European Strategy on Plastic Waste in the Environment, COM(2013) 123 final of 7 March 2013 (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013DC0123&from=EN>).

57 Analysis of the public consultation on the green paper, “European Strategy on Plastic Waste in the Environment”, DG Environment, 28 November 2013 (http://ec.europa.eu/environment/waste/studies/pdf/green_paper_plastic.pdf).

58 Development of Guidance on Extended Producer Responsibility (EPR), bio by Deloitte report for DG Environment, 2014 (http://ec.europa.eu/environment/waste/pdf/target_review/Guidance%20on%20EPR%20-%20Final%20Report.pdf).

However, the new Commission that took office in November 2014 conducted a review of all active dossiers and decided to withdraw the circular economy package pending the development of a “new, more ambitious” proposal. The new package, which was released on 2 December 2015, took into account input from the Member States, the European Parliament and from a three-month public consultation⁵⁹ in 2015, as well as further modelling work by a consultancy.

The new package consists of the following papers:

- Proposals for Directives amending the Waste Framework Directive,⁶⁰ the Packaging and Packaging Waste Directive⁶¹ and Landfill Directive,⁶² and minor technical amendments to the Directive on Waste Electrical and Electronic Equipment (WEEE);
- A Communication⁶³ entitled *Closing the loop – An EU action plan for the circular economy*, together with an Annex⁶⁴ setting out the planned timetable;
- A Q&A document⁶⁵ on the circular economy package, together with supporting Staff Working Documents;
- Additional analysis to complement the 2014 Impact Assessment supporting the review of EU waste management targets,⁶⁶ and
- An Implementation Plan.⁶⁷

59 <https://ec.europa.eu/eusurvey/publication/circular-economy>.

60 Proposal for a Directive of the European Parliament and of the Council amending Directive 2008/98/EC on waste, COM(2015) 595 final (http://eur-lex.europa.eu/resource.html?uri=cellar:c2b5929d-999e-11e5-b3b7-01aa75ed71a1.0018.02/DOC_1&format=PDF).

61 Proposal for a Directive of the European Parliament and of the Council amending Directive 94/62/EC on packaging and packaging waste, COM(2015) 596 final (http://eur-lex.europa.eu/resource.html?uri=cellar:b68494d2-999f-11e5-b3b7-01aa75ed71a1.0019.02/DOC_1&format=PDF).

62 Proposal for a Directive of the European Parliament and of the Council amending Directive 1999/31/EC on the landfill of waste, COM(2015) 594 final (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=COM:2015:594:FIN>).

63 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *Closing the loop – An EU action plan for the Circular Economy*, COM(2015) 614 final (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0614&from=EN>).

64 http://eur-lex.europa.eu/resource.html?uri=cellar:8a8ef5e8-99a0-11e5-b3b7-01aa75ed71a1.0012.02/DOC_2&format=PDF.

65 http://europa.eu/rapid/press-release_MEMO-15-6204_en.htm.

66 Commission Staff Working Document: Additional analysis to complement the impact assessment SWD (2014) 208 supporting the review of EU waste management targets, SWD/2015/0259 final (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015SC0259&from=EN>).

67 Commission Staff Working Document: Implementation Plan, SWD(2015) 260 final (http://ec.europa.eu/environment/circular-economy/pdf/implementation_plan_sw_d_260_en.pdf).

Launching the package, the Commission's First Vice-President Frans Timmermans said that with huge demands on water and energy, the European economy needed to be reinvented so that materials are reinjected into the economy instead of being landfilled or incinerated. The Commission was now proposing a comprehensive set of measures which, unlike the now-withdrawn 2014 package, was focusing on the entire lifecycle and not just the waste phase. Europe cannot compete on wage costs or cheap natural resources, so it must build a competitive edge through resource-efficiency. The circular economy was not just about the environment, but especially about the economy.

Jyrki Katainen, Vice-President for Jobs, Growth, Investment and Competitiveness, stressed that the package was about the Single Market and competitiveness. The Single Market would be deepened by the establishment of an Internal Market and quality standards for recycled materials, and the recyclability of products would be improved through eco-design. There would be circular economy criteria in public procurement, which currently represented nearly 20% of the EU's GDP.

It is unlikely that amendments to the PPWD and the other waste directives will be adopted until 2017, so the changes finally agreed are not expected to come into force at national level until 2018 or perhaps even later.

ALIGNMENT OF DEFINITIONS IN THE PPWD AND THE AMENDED WFD

One of the aims of the Circular Economy Package is to tidy up targets and definitions in the various waste stream directives. They were introduced at different times, and are not consistent with each other. The Commission intends to establish one single approach in all these directives.

The proposed amendment to the PPWD says that the definitions of ‘waste’, ‘waste producer’, ‘waste holder’, ‘waste management’, ‘collection’, ‘separate collection’, ‘prevention’, ‘re-use’, ‘treatment’, ‘recovery’, ‘preparing for re-use’, ‘recycling’, ‘final recycling process’ and ‘disposal’ laid down in the amended WFD shall apply.

The definitions in the existing WFD (2008/98/EC) are unchanged, with the single exception of ‘bio-waste’, but new definitions have been added:



- ‘Preparing for re-use’ [see below]; and
- ‘final recycling process’, which means “the recycling process which begins when no further mechanical sorting operation is needed and waste materials enter a production process and are effectively reprocessed into products, materials or substances.”

The definition of ‘packaging’ remains in the PPWD and is unchanged, but the cross-reference to the WFD means that the following definitions will be amended:

Current PPWD	Proposed amendments
<p>‘prevention’ shall mean the reduction of the quantity and of the harmfulness for the environment of:</p> <ul style="list-style-type: none"> – Materials and substances contained in packaging and packaging waste; – Packaging and packaging waste at production process level and at the marketing, distribution, utilization and elimination stages, in particular by developing ‘clean’ products and technology. 	<p>‘prevention’ means measures taken before a substance, material or product has become waste, that reduce:</p> <ol style="list-style-type: none"> a) The quantity of waste, including through the re-use of products or the extension of the life span of products; b) The adverse impacts of the generated waste on the environment and human health; or c) The content of harmful substances in materials and products.
<p>‘reuse’ shall mean any operation by which packaging, which has been conceived and designed to accomplish within its life cycle a minimum number of trips or rotations, is refilled or used for the same purpose for which it was conceived, with or without the support of auxiliary products present on the market enabling the packaging to be refilled; such reused packaging will become packaging waste when no longer subject to reuse.</p>	<p>‘re-use’ means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.</p>
<p>‘recovery’ shall mean any of the applicable operations provided for in Annex II.B to Directive 75/442/EEC [the previous Waste Directive].</p>	<p>‘recovery’ means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Annex II sets out a non-exhaustive list of recovery operations.</p>
<p>‘recycling’ shall mean the reprocessing in a production process of the waste materials for the original purpose or for other purposes including organic recycling but excluding energy recovery.</p>	<p>‘recycling’ means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.</p>
<p>‘disposal’ shall mean any of the applicable operations provided for in Annex II.A to Directive 75/442/EEC.</p>	<p>‘disposal’ means any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy. Annex I sets out a non-exhaustive list of disposal operations.</p>

LEGAL BASE OF THE PPWD

The new proposal, like the current PPWD, is based on the Internal Market provisions of the Treaty – Article 114 of the Treaty on the Functioning of the European Union⁶⁸ (originally Article 100a of the Treaty establishing the European Community). Thus the TRIS system⁶⁹ of prior notification of draft national measures, which allows the Commission and the other member states to challenge proposals which might fragment the

Internal Market or give rise to restriction or distortion of competition, will remain in effect.

The WFD, Landfill Directive, WEEE Directive and (in most respects) the Batteries Directive are environmental measures based on Article 192(1) of the Treaty. The TRIS system does not apply, so there is no opportunity to correct possible breaches of the Treaty before they take effect. National measures may be challenged once they have come into force and there is evidence that they conflict with EU rules, but legal action takes time and significant commercial damage may already have been done before the situation is rectified.

68 Article 114 TFEU:

1. Save where otherwise provided in the Treaties, the following provisions shall apply for the achievement of the objectives set out in Article 26. The European Parliament and the Council shall, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market.
2. Paragraph 1 shall not apply to fiscal provisions, to those relating to the free movement of persons nor to those relating to the rights and interests of employed persons.
3. The Commission, in its proposals envisaged in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection, taking account in particular of any new development based on scientific facts. Within their respective powers, the European Parliament and the Council will also seek to achieve this objective.
4. If, after the adoption of a harmonisation measure by the European Parliament and the Council, by the Council or by the Commission, a Member State deems it necessary to maintain national provisions on grounds of major needs referred to in Article 36, or relating to the protection of the environment or the working environment, it shall notify the Commission of these provisions as well as the grounds for maintaining them.
5. Moreover, without prejudice to paragraph 4, if, after the adoption of a harmonisation measure by the European Parliament and the Council, by the Council or by the Commission, a Member State deems it necessary to introduce national provisions based on new scientific evidence relating to the protection of the environment or the working environment on grounds of a problem specific to that Member State arising after the adoption of the harmonisation measure, it shall notify the Commission of the envisaged provisions as well as the grounds for introducing them.
6. The Commission shall, within six months of the notifications as referred to in paragraphs 4 and 5, approve or reject the national provisions involved after having verified whether or not they are a means of arbitrary discrimination or a disguised restriction on trade between Member States and whether or not they shall constitute an obstacle to the functioning of the internal market.
In the absence of a decision by the Commission within this period the national provisions referred to in paragraphs 4 and 5 shall be deemed to have been approved.
When justified by the complexity of the matter and in the absence of danger for human health, the Commission may notify the Member State concerned that the period referred to in this paragraph may be extended for a further period of up to six months.
7. When, pursuant to paragraph 6, a Member State is authorised to maintain or introduce national provisions derogating from a harmonisation measure, the Commission shall immediately examine whether to propose an adaptation to that measure.
8. When a Member State raises a specific problem on public health in a field which has been the subject of prior harmonisation measures, it shall bring it to the attention of the Commission which shall immediately examine whether to propose appropriate measures to the Council.
9. By way of derogation from the procedure laid down in Articles 258 and 259, the Commission and any Member State may bring the matter directly before the Court of Justice of the European Union if it considers that another Member State is making improper use of the powers provided for in this Article.
10. The harmonisation measures referred to above shall, in appropriate cases, include a safeguard clause authorising the Member States to take, for one or more of the non-economic reasons referred to in Article 36, provisional measures subject to a Union control procedure.

69 <http://ec.europa.eu/growth/tools-databases/tris/en/about-the-20151535/>.

PROPOSED NEW PACKAGING WASTE TARGETS

The Commission is proposing to restructure the recovery and recycling targets currently applicable:

- There will be no longer a recovery target. The preamble to the 2015 proposal explains that it is necessary to avoid locking-in recyclable materials through creation of structural overcapacity “at the bottom of the waste hierarchy”. The Commission is concerned that since there is a long pay-back period before investment in waste-to-energy incinerators can be recouped, there is a danger that material that would otherwise be recycled will go to incineration in order to feed these facilities.

Thus, the provision in the current PPWD which says that “*member states shall, where appropriate, encourage energy recovery, where it is preferable to material-recycling for environmental and cost-benefit reasons*” has been deleted;

- There will also be no upper limit to the recycling target;
- The recycling targets have been changed to targets for “preparing for re-use and recycling”. ‘Preparing for re-use’ is defined as “*checking, cleaning or repairing recovery operations, by which waste, products or components of products that have been collected by a recognised preparation for re-use operator or deposit-refund scheme are prepared so that they can be re-used without any other pre-processing.*” (Further clarification is needed to understand the new definition and which packaging will be accounted for under the combined target as we currently proceed in the legislative process);
- There will be separate targets for ferrous metal and aluminium, and metals extracted from incineration



plants can count towards the targets provided the recycled metals meet quality requirements.⁷⁰

The proposed targets and deadlines are as shown in the table below.

Whereas Greece, Ireland, Portugal and the Member States that joined the EU in 2004 and 2007 have previously been granted later deadlines for meeting the targets than 12 of the front-running Member States, the 2015 proposal contains no derogations from the packaging waste targets for any Member State, even though the proposed amendments to the WFD allow seven Member States⁷¹ to apply for a five-year delay in reaching the targets for the preparation and re-use of municipal waste.

The Commission has explained that the proposed targets have been set on the basis that Member States' performances over the past 15 years had shown that packaging recycling could be increased by 2 or 3 percentage points each year and landfilling reduced by 4 percentage points each year. Thus, it believes that all Member States should be able to meet these targets.

However, a proposed addition to the PPWD (and to the WFD) provides for an early warning system which will give the Commission the opportunity to recommend remedial action to help any Member State likely to miss the targets. Three years before each deadline, the Commission will publish a report assessing whether each Member State will achieve the targets, a list of Member States at risk of not meeting the targets by

the deadlines laid down, and recommendations for the Member States concerned.

The Commission has defended the reduction in the targets by explaining that it has examined the existing situation in the Member States and the improvements that would be feasible, based on the rate of increase that Member States have achieved over the previous 15 years. But the Commission would be monitoring progress and would propose more ambitious targets if the current proposals seemed to be too easily achievable.

The proposal sets no 2030 target for plastic packaging, explaining in the preamble that the Commission “*may propose revised levels of the targets for plastics for 2030 based on a review of progress made by Member States towards reaching those targets, taking into account the evolution of the types of plastics placed on the market and the development of new recycling technologies and the demand for recycled plastics.*”

PROPOSED NEW WFD TARGETS

The current WFD requires at least 50% by weight of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, to be prepared for re-use or recycled by 2020.

This target remains, but there are new targets for preparing for re-use and recycling of municipal waste – 60% by weight by 2025 and 65% by 2030.

Whereas Commission Decision 2011/753/EU gave member states four choices as to how they define the WFD's 2020 target, the 2025 and 2030 targets will be based on a new definition of municipal waste:

⁷⁰ The proposed amendment to the WFD requires a delegated act to be issued to establish a common methodology for determining how the weight of metals recycled in conjunction with incineration should be measured. This is also relevant to the PPWD.

⁷¹ Estonia, Greece, Croatia, Latvia, Malta, Romania and Slovakia.

	RECYCLING		PREPARATION FOR RE-USE OR RECYCLING	
	2008 targets	2012 achievement	2025 targets	2030 targets
Plastics	22.5%	35.5%	55%	<i>to be reviewed</i>
Ferrous metal	50%	72.3%	75%	85%
Aluminium			75%	85%
Glass	60%	72.2%	75%	85%
Paper & board	60%	83.9%	75%	85%
Wood	15%	37.9%	60%	75%
All Packaging	55%	64.5%	65%	75%

- a) Mixed waste and separately collected waste from households including
- Paper and cardboard, glass, metals, plastics, bio-waste, wood, textiles, waste electrical and electronic equipment, waste batteries and accumulators;
 - Bulky waste, including white goods, mattresses, furniture;
 - Garden waste, including leaves, grass clippings;
- b) Mixed waste and separately collected waste from other sources that is comparable to household waste in nature, composition and quantity;
- c) Market cleansing waste and waste from street cleaning services, including street sweepings, the content of litter containers, waste from park and garden maintenance.

Member States which in 2013 recycled less than 20% of their municipal solid waste – Estonia, Greece, Croatia, Latvia, Malta, Romania and Slovakia – would be permitted, if necessary, to reach 50% preparation for re-use and recycling by 2025, 60% by 2030 and 65% by 2035. They must notify this two years before the deadline, accompanied by an implementation plan presenting the measures needed for achievement of the targets.

Member States not offered this derogation may however benefit from the early warning system to be set up. This will give the Commission the opportunity to recommend remedial action to help any Member State likely to miss the targets.

By the end of 2024, the Commission shall report to the Council and Parliament on whether these targets should be increased, and whether targets should be set for other waste streams.

CALCULATION METHODOLOGY

The new PPWD and WFD proposals set out identical rules on how achievement of the targets is to be calculated. The weight of the waste recycled shall be understood as the weight of the input waste entering the final recycling process. However, Member States will be allowed to report the weight of the output of any sorting operation as the weight of the waste recycled, provided that this output waste is sent into the final recycling process, and that the weight of materials

not targeted either by separate collection or the final recycling process that are disposed of or subject to energy recovery remains below 10% of the total weight to be reported as recycled.

Member States *may* include products prepared for re-use by deposit-refund schemes, using verified data from the operators applied according to the formula set out in a new Annex. Detailed rules on reporting these data will be set out in a delegated act.⁷²

Member States shall establish an effective system of quality control and traceability of municipal waste to ensure that recycling tonnages are correctly reported. The system may consist of electronic registries, technical specifications for the quality requirements of sorted waste or any equivalent measure to ensure the reliability and accuracy of the data gathered.

Member States *may* count the recycling of metals in incinerator bottom ash towards the preparation for re-use and recycling targets, provided the recycled metals meet quality requirements. Detailed rules on calculating the weight of metals recycled in this way, and the quality criteria to apply, will also be set out in a *delegated act*.

NEW RESTRICTIONS ON LANDFILLING

The Commission proposes a ban on the landfilling of waste that has been separately collected. This ban would come into effect 18 months after the amending Directive is published in the Official Journal.

‘Separate collection’ is defined as “*the collection where a waste stream is kept separately by type and nature so as to facilitate a specific treatment.*” The current WFD

⁷² New rules established by the Treaty of Lisbon establish the role of delegated acts. Delegated acts supplement or amend non-essential elements of directives. The Commission does not need to consult the Article 21 Committee, but the Parliament and the Council can veto a delegated act on any ground, not just on specific legal grounds such as that the Commission has exceeded its mandate. A delegated act enters into force only if neither the European Parliament nor the Council objects within two months of its being notified to them. That period can be extended by a further two months at the initiative of the Parliament or of the Council.

The European Parliament or the Council may at any time revoke the power of the Commission to adopt delegated acts, but this would not affect the validity of any delegated acts already in force.

The Commission proposes that the PPWD should be supplemented by delegated acts in the case of

- Minimum quality and operational requirements for re-use operators and deposit-refund schemes, including specific rules on data collection, verification and reporting;
- Exemptions from the heavy metals limit;
- The illustrative examples of packaging and non-packaging; and
- Specific measures to deal with any difficulties in applying the Directive, e.g. to “inert packaging materials placed on the EU market in very small quantities, primary packaging for medical devices and pharmaceutical products, small packaging and luxury packaging.”



already requires Member States to set up separate collection for paper, metal, plastic and glass by 2015, “where technically, environmentally and economically practicable and appropriate to meet the necessary quality standards for the relevant recycling sectors.”

The 2015 proposal goes on to say that Member States are to take measures to ensure that by 2030, no more than 10% of the municipal waste generated is landfilled. Estonia, Greece, Croatia, Latvia, Malta, Romania and Slovakia have an additional 5 years to meet this target, but they must ensure that by 2030, no more than 20% of the municipal waste generated is landfilled.

Thus, for the 21 Member States without a derogation there would in effect be a 90% recovery target by 2030, and for the remainder there would be an 80% recovery target by 2030 and a 90% recovery target by 2035.

By the end of 2024, the Commission shall report to the Council and Parliament on whether the amount of landfilling permissible should be reduced further, and whether there should be restrictions on the landfilling of non-hazardous waste other than municipal waste.

EXTENDED PRODUCER RESPONSIBILITY (EPR)

The proposed amendments to the WFD include a new article which applies to EPR schemes for any waste stream. The aim is to improve transparency, accountability and enforcement.

Member States will remain free not to impose EPR, but where EPR is in place, they shall ensure that any system set up to implement producers' EPR obligations

- Defines clearly the roles and responsibilities of all public and private sector players;
- Defines measurable waste management targets, in line with the waste hierarchy;
- Establishes a reporting system;
- Ensures equal treatment of all producers, including SMEs; and
- Ensures that waste holders are informed about collection systems and the prevention of littering.

Also, Member States shall

- Take measures to create incentives for waste holders to take part in the separate collection systems in place, “notably through economic incentives or regulations, when appropriate”;
- Ensure that EPR compliance schemes have a clearly defined geographical, product and material coverage; have the necessary operational and financial capacity; have an adequate self-control mechanism supported by regular independent audits; and make publicly available information about their ownership and membership, the financial contributions paid by producers, and the selection procedure for waste management operators;
- Ensure that producers' contributions cover the entire cost of managing the waste from their products, including the net cost of separate collection, sorting and treatment necessary to meet the targets, taking account of revenues from reuse or sale of secondary materials; the costs of providing information to waste holders; the cost of data gathering and reporting; are modulated on the basis of real end-of-life costs of individual products or product groups, taking into account their reusability and recyclability; and are based on the optimised cost of services where operations are carried out by the public sector.

['Treatment' is defined in the current WFD as “recovery or disposal operations, including preparation prior to recovery or disposal.”

‘Optimised cost’ is not defined, but in France, where it already applies, it means the cost of an efficient system.];

- Establish an adequate monitoring and enforcement framework, including an independent authority to oversee the implementation of EPR obligations where multiple compliance systems are operating; and
- Establish a platform to ensure regular dialogue between all public and private sector players.

“Member States shall take measures to ensure that extended producer responsibility schemes established within 18 months of entry into force of the Directive comply with these provisions within 24 months of its entry into force.”

Another proposed amendment to the WFD says that the Commission will organise an exchange of information between member states and those involved in EPR schemes on the practical implementation of these requirements and on best practices to ensure adequate governance and cross-border cooperation of EPR schemes. The Commission will publish the results of this exchange of information.

The provisions in the WFD automatically apply to packaging, and no packaging-specific EPR requirements have been proposed. However, the one mention of EPR in the proposed amendments to the PPWD retains the link to the PPWD's objective of ensuring the functioning of the internal market and avoidance of obstacles to trade and distortion and restriction of competition within the Community.

LITTER

Litter is not mentioned in the proposed amendments to the PPWD, but the WFD proposal requires member states to include *“measures to combat all forms of littering and to clean up all types of litter”* in their waste management plans.

The preamble to the proposed amendments to the WFD comments that *“littering has direct detrimental impacts on the environment and the wellbeing of citizens, and high clean-up costs are an unnecessary economic burden for society. The introduction of specific measures in waste management plans and proper enforcement by competent authorities should help eradicate this problem.”*

REPORTING

As before, Member States would be required to report within 18 months of the end of the year for which the data are collected. A new format for reporting data will be established by the Commission in implementing acts.

The Commission is keen to tighten up enforcement. It proposes that the data submitted by the Member States shall be accompanied by a quality check report and a report on the implementation of the system of quality control and traceability adopted to ensure that recycling tonnages are correctly reported.

The Commission will review the data submitted by the Member States, and every three years it will publish an assessment of how the data collection is organised, the sources of data and the methodology used in the member states as well as the completeness,

reliability, timeliness and consistency of that data. This assessment may include recommendations for improvement.

THE ACTION PLAN FOR THE CIRCULAR ECONOMY

The non-legislative Action Plan reflects ideas that have been previously discussed at EU level, and it is expected to be adopted in mid-2016. However, it sets the agenda for further legislative work which will be rolled out throughout the mandate of the current Commission, whose term of office ends in October 2019.

Closing the loop – the EU Action Plan for the circular economy – “focuses on action at EU level with high added value”, and does not specifically mention packaging. However, some aspects of it are relevant:

- The section on product design focuses on electrical and electronic products, and there is no indication that the Commission intends to propose eco-design rules for packaging;
- Under the Consumption heading, the Commission notes that it is testing the Product Environmental Footprint⁷³ and will explore its use to measure or communicate environmental information. The voluntary EU Ecolabel identifies products that have a reduced environmental impact throughout their lifecycle, and the Commission will examine how to increase its effectiveness and contribution to the circular economy;
- The Action Plan adds that price is a key factor affecting purchasing decisions, both in the value chain and for final consumers. Member States are therefore encouraged to provide incentives and use economic instruments, such as taxation, to ensure that product prices better reflect environmental cost;
- One of the barriers faced by operators who want to use secondary raw materials is uncertainty as to their quality. In the absence of EU-wide standards, it can be difficult to ascertain impurity levels or suitability for high-grade recycling (e.g. for plastics). The development of such standards should increase trust in secondary raw materials and in recycled materials, and help support the market. The Commission will therefore launch work on EU-wide quality standards

73 See Part 5.



for secondary raw materials where needed, in consultation with the industries concerned;

- Also, the revised legislative proposals on waste establish more harmonised rules to determine when a secondary raw material should no longer be legally considered as ‘waste’, by clarifying existing rules on ‘end-of-waste’;
- The Action Plan says that it is essential to facilitate the cross-border circulation of secondary raw materials to ensure that they can be traded easily across the EU. The Commission is examining barriers to the smooth circulation of waste in the EU;
- The role of the private sector in creating demand and helping to shape supply chains will be essential; a number of industrial and economic actors have already given public commitment to ensuring a certain level of recycled content in products they put on the market for both sustainability and economic reasons;
- Increasing plastic recycling is essential for the transition to a circular economy. About 50% currently goes to landfill, and large quantities of plastics end up in the oceans. The presence of hazardous chemical additives can pose technical difficulties and the emergence of innovative types of plastics raises new questions, e.g. as regards plastics biodegradability. However, innovation in plastics can contribute to the circular economy by better preserving food, improving the recyclability of plastics or reducing the weight of materials used in vehicles. A strategy will be proposed in 2017;
- Food waste is an increasing concern, and the Commission will create a platform dedicated to food waste, bringing together Member States and all actors in the food chain. This platform will support the achievement of the food waste reduction target under the Sustainable Development Goals through appropriate steps, the involvement of stakeholders, the sharing of valuable and successful innovation and relevant benchmarking.

PART 5

RESOURCE MANAGEMENT AND SUSTAINABILITY





SUSTAINABLE PRODUCTION AND CONSUMPTION

Food and drink is a particular target, as European Commission studies have shown that this sector accounts for a large proportion of the environmental impact on consumption in the EU.

The European Commission takes the view that economic instruments and environmental labelling can stimulate changes in behaviour, and its Communication on a Sustainable Development Strategy⁷⁴ proposed that Member States and the Commission should exchange experiences and best practice on shifting taxation from labour to consumption and/or pollution in a revenue-neutral way. It returned to this theme in its Green Paper on market-based instruments for environment and energy related purposes, which specifically commended the use of packaging taxes differentiated according to the material used.⁷⁵

Sustainable consumption and production cannot be regulated in detail, so the EU and individual Member States are moving on to a complex mix of framework conditions for continuous environmental improvement of products throughout their lifecycle; wide-ranging environmental information requirements; and “soft law”, where implementation of public policy is driven through by the big retailers providing environmental information and through “choice editing”, where products deemed environmentally inferior are removed from the shelves.

An Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy (the “SCP-SIP Action Plan”)⁷⁶ was published in July 2008. It set out an integrated series of measures to “green” European manufactured products, among them the creation of a multi-stakeholder platform, the Retail Forum, designed to influence more sustainable consumption.

The Action Plan noted that retailers are in a strong position to influence more sustainable consumption through their own operations, through their influence on supply chains, and their ability to communicate with consumers and influence their behaviour. A Retail Forum was set up under the Action Plan to identify key areas to be tackled and define the baseline of existing initiatives; share best practices; extend the geographical coverage of existing initiatives and look to launch new initiatives; and report on the progress of individual retailers. Other stakeholders, such as producers, consumers and other NGOs are also involved in the Retail Forum.

The objective was that individual large retailers would commit to a series of ambitious and concrete actions with clear objectives, timelines, deliverables, and monitoring indicators. The first set of commitments was published in May 2010.

These commitments obviously have an impact on their suppliers, firstly through “choice editing” but also through policies developed by individual retailers or individual Member States which may not necessarily be consistent with one another – on labelling requirements, for example.⁷⁷

The SCP-SIP Action Plan also proposed strengthening Green Public Procurement (GPP). The European Commission is providing guidance and tools for public authorities to “green” their procurement practices through *voluntary* measures such as model tender specifications and common GPP criteria for products and services. These must be consistent with Internal Market rules.

74 The latest information on the EU Sustainable Development Strategy can be downloaded from <http://ec.europa.eu/environment/eussd/index.htm>.

75 The latest information on the Green Paper on market-based instruments can be downloaded from http://ec.europa.eu/environment/enveco/green_paper.htm.

76 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, COM(2008) 397 final, 16.7.2008.

77 However, the Consumer Goods Forum, a high-level group involving 650 of the world’s leading retailers and manufacturers from 70 countries, has published a set of packaging sustainability indicators and metrics to facilitate informed debate between and within companies through use of a common language. This will help provide the public with information expressed in a consistent fashion. Further information can be downloaded from <http://www.theconsumergoodsforum.com>.

ROADMAP TO A RESOURCE EFFICIENT EUROPE

The European Commission's *Roadmap to a Resource Efficient Europe*,⁷⁸ published in September 2011, aimed to ensure that by 2020 “citizens and public authorities are well informed of the true full life cycle impacts, and costs, of the products and services they buy. Their purchasing choices stimulate companies to innovate and to supply more resource efficient products and services. Minimum performance standards will have been set to remove the least resource efficient products from the market”. Measures to improve products and changing consumption patterns include:

- Strengthening green public procurement criteria;
- Entering into new voluntary agreements with business and/or legislation to improve the resource-efficiency of certain products;
- Establishing a common methodological approach to enable Member States and the private sector to assess, display and benchmark the environmental performance of products, services and companies based on a comprehensive assessment of environmental impacts over the life-cycle;
- Expanding the scope of the Eco-design Directive⁷⁹ to cover non-energy related products and to include material aspects (e.g. recycled content, reusability, recyclability and durability);
- Informing consumers about the environmental performance of products;
- Ensuring producers take full responsibility for the complete life-cycle of the products they make; and
- Assessing actions to optimise the resource efficiency of packaging.

The Roadmap also aimed to ensure that waste is treated as a resource, which means that “*much higher priority needs to be given to prevention, reuse and recycling*”. By 2020, waste generated per capita should be in absolute decline, with recycling and reuse of waste economically attractive options due to widespread separate collection and the development of functional markets for secondary raw materials. Energy recovery should be limited to non-recyclable materials and landfilling virtually eliminated.

To achieve these objectives, Member States were to ensure that EU waste legislation is fully implemented through their waste management strategies.

The paper suggested actions to boost efficiency of production, support research and innovation, phase out inefficient subsidies, and “get the prices right” (through fiscal reform).

The Roadmap identified food, buildings and transport as key sectors for action, as they are typically responsible for 70-80% of all environmental impacts.

The focus on consumption, rather than water or land, is reflected in the Roadmap's key indicator of resource efficiency, namely the ratio of GDP to “Domestic Material Consumption” (expressed in euros per tonne). This was intended to be only a provisional indicator because, as the European Commission acknowledged, it does not capture other resources or the potential shift of burden across countries. The Commission said that this indicator should in future be complemented by a “dashboard” of indicators on water, land, materials and carbon.

Measures adopted by the EU and/or by individual Member States to implement the Roadmap could include higher recycling targets for packaging waste, recycled content requirements for packaging and measures to promote reuse systems for packaging.

And national measures to implement the Roadmap may also have a knock-on effect on existing arrangements for packaging waste, with Member States expanding their existing collection systems for household packaging waste to include non-packaging items of the same materials.

78 http://ec.europa.eu/environment/resource_efficiency/about/roadmap/index_en.htm.

79 Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ No. L 285 of 31.10.2009) does not introduce directly binding requirements for specific products, but does define conditions and criteria for setting requirements regarding environmentally relevant product characteristics (such as energy consumption) and allows them to be improved quickly and efficiently. It is to be followed by implementing measures which will establish the eco-design requirements. In principle, the Directive applies to all energy using products (except vehicles for transport) and covers all energy sources. See http://ec.europa.eu/energy/efficiency/ecodesign/eco_design_en.htm for further information.



EUROPEN and ECR Europe have published *Packaging in the Sustainability Agenda: A Guide for Corporate Decision Makers*⁸⁰ to help corporate decision makers form balanced and informed views about the role of packaging in sustainable development. When put into practice, this guide will help deliver tangible benefits: more efficiency, better cost control, and easier relationships with a multitude of stakeholders.

THE PRODUCT ENVIRONMENTAL FOOTPRINT (PEF)

Production and consumption trends can have a direct impact on sustainable development and the environment. The European Commission's 2013 Communication on Building the Single Market for Green Products,⁸¹ a follow-up to the 2008 Sustainable Consumption & Production Action Plan, aims at facilitating more sustainable consumption and production through a higher uptake of so-called green products and greener practices by companies in the EU market.

Companies are increasingly reporting environmental information on their production processes, but the results are not comparable due to the wide range of different methodologies used to assess the environmental footprint of products and systems. This, the Commission has said, has led to confusion and mistrust in environmental performance information. It also may lead to additional costs for business if they are requested to measure the environmental performance of the product or the system based on different methods by public authorities, business partners, private initiatives and investors. Such costs reduce the opportunities for cross-border trading of green products.

The Communication has therefore introduced the Product Environment Footprint (PEF), an EU harmonised methodology for measuring the environmental impact of products. The Commission

has also adopted a Recommendation⁸² that encourages Member States and the private sector to use this tool, together with a set of principles for communicating the environmental performance of products. Annex 2 to the Recommendation provides guidance on how to calculate a PEF, as well as how to develop product category-specific methodological requirements for use in Product Environmental Footprint Category Rules (PEFCRs).

Draft methodologies have been developed based on existing methodological standards and guidance documents, and between 2013 and 2016 more than 260 companies and systems have been participating in a pilot phase aimed at understanding the real potential of the methods before proposing new policies. The pilot phase is testing:

- The process for developing product- and sector-specific rules;
- Different approaches to verification; and
- Communication vehicles for communicating life cycle environmental performance to business partners, consumers and other company stakeholders.

The Commission has published successive versions of a guidance document⁸³ for the implementation of the PEF during the Environmental Footprint (EF) pilot phase.

The pilots include a number of packaged products.⁸⁴ Packaging is part of the value chain of a product and in some pilots, it has been identified as a "hotspot"; in others, however, it only has a minor impact compared with other parts of the chain.

EUROPEN is contributing to the development of harmonised metrics in the EU and globally. Our aims are to allow for the optimisation of every kind of packaging material and packaged product and to support

80 *Packaging in the Sustainability Agenda: A Guide for Corporate Decision Makers* (2009) can be downloaded free of charge from <http://www.europen.be/index.php?action=onderdeel&onderdeel=6&titel=EUROPEN+Publications>.

81 Communication from the Commission to the European Parliament and the Council: Building the Single Market for Green Products and Facilitating better information on the environmental performance of products and systems, SWD(2013) 111 final and SWD(2013) 112 final, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013DC0196&from=EN>.

82 Commission Recommendation 2013/179/EU of 9 April 2013 on the use of common methods to measure and communicate the life-cycle environmental performance of products and systems (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013H0179&from=EN>).

83 Product Environmental Footprint Pilot Guidance, version 4.0: Guidance for the implementation of the EU Product Environmental Footprint (PEF) during the Environmental Footprint (EF) pilot phase (http://ec.europa.eu/environment/eussd/smgp/pdf/Guidance_products.pdf).

84 There are pilots on beer, coffee, dairy, feed for food-producing animals, marine fish, meat (bovine, pigs, sheep), olive oil, packaged water, pasta, petfood (cats and dogs), wine, batteries and accumulators, decorative paints, hot and cold water supply pipes, household detergents, intermediate paper products, IT equipment, leather, metal sheets, footwear, photovoltaic electricity generation, thermal insulation, T-shirts and uninterruptible power supply.

continuous environmental improvement, and we have published guidance on how to consistently address packaging in the context of the PEF methodology,⁸⁵ based on an international consensus of the packaging supply chain.

EUROPEN recommends using the Global Protocol on Packaging and Sustainability (GPPS),⁸⁶ in line with the other existing guidance for packaging in life-cycle approaches listed in its guidance document, to address packaging in the PEF methodology and its ongoing pilots. EUROPEN played a key role in developing the GPPS, which enables the global packaging value chain to assess the relative sustainability of packaging as part of the product, with one harmonised tool and common language.

It is important that packaging is not considered in isolation when assessing its environmental performance.

A life-cycle approach is needed that takes into account the functions and role of packaging as well as the integrated packaging system. This comprises all stages of a packaged product's lifecycle, from responsible sourcing, processing, packaging, distribution, use-phase to the end-of-life stage.

To develop a life-cycle approach to measuring the environmental performance of food and drink products, EUROPEN joined other food supply chain partners as a founding member of the European Food Sustainable Consumption and Production Round Table⁸⁷ since packaging is considered to be part of the product and hence contributes towards its environmental performance. Through the Round Table, we have played a key role in coordinating the packaging sector's contribution to the ENVIFOOD Protocol,⁸⁸ a harmonised environmental assessment methodology for (packaged) food and drink products.

85 <http://www.europen-packaging.eu/component/downloads/downloads/1694.html>.

86 <http://www.theconsumergoodsforum.com/download-global-protocol-on-packaging-sustainability-gpps>.

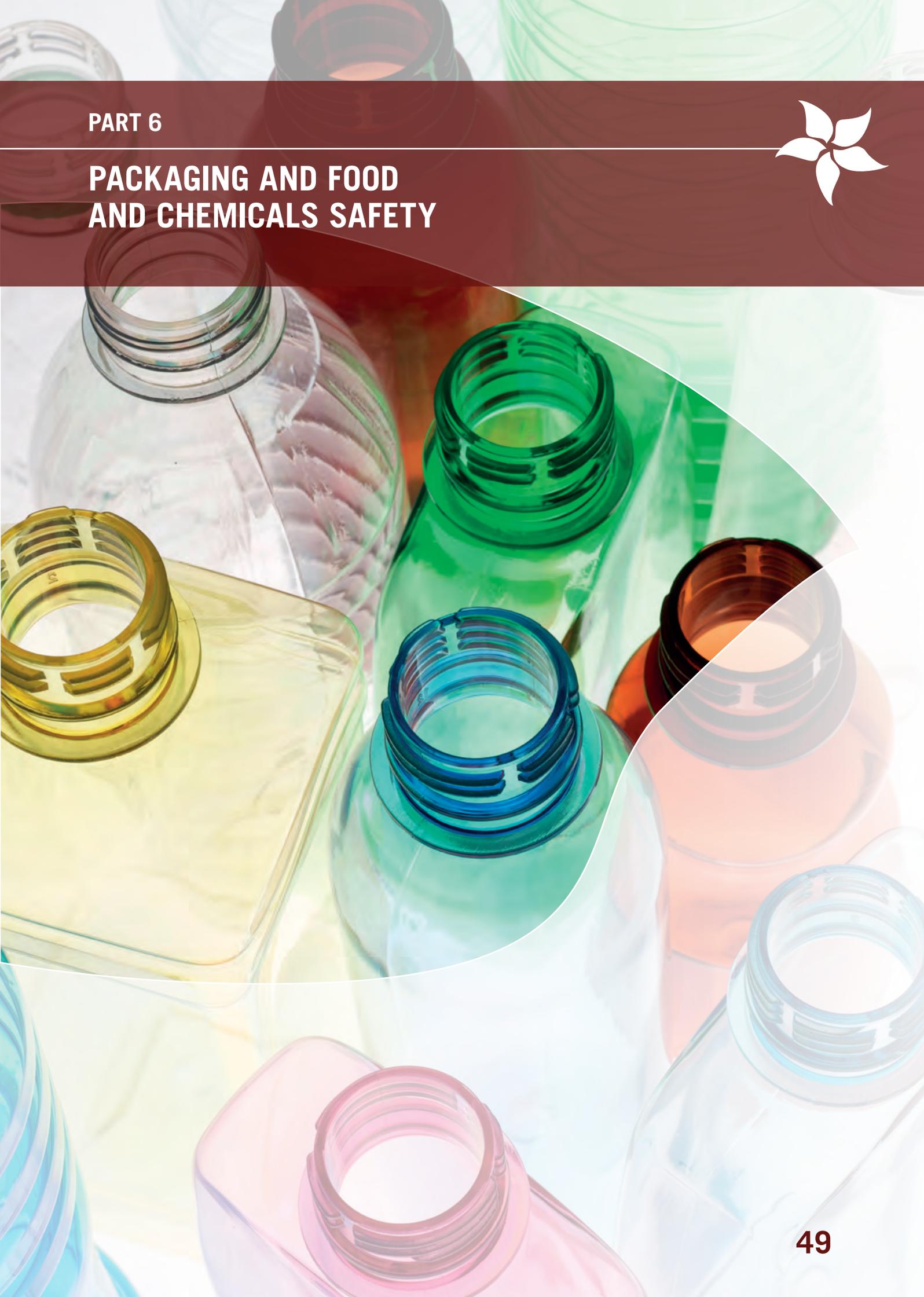
87 <http://www.food-scp.eu>.

88 http://www.food-scp.eu/files/ENVIFOOD_Protocol_Vers_1.0.pdf.

PART 6



**PACKAGING AND FOOD
AND CHEMICALS SAFETY**



MATERIALS AND ARTICLES IN CONTACT WITH FOODSTUFFS

European Parliament and Council Regulation (EC) No. 1935/2004⁸⁹ establishes basic rules applicable to all food contact materials. The main purpose of food packaging is to protect the food against physical, biological and chemical risks. Food packaging materials have traditionally been developed to avoid interactions with food and in particular to minimise the release of their components (“migration”) into the food. Thus, a long-established principle is that materials must be sufficiently inert to preclude substances from being transferred to food in quantities large enough to endanger human health or to bring about an unacceptable change in the composition of the food or a deterioration in its organoleptic characteristics.

“**Active materials and articles**” are relatively new packaging concepts, designed to interact with food in order to maintain or improve its condition during storage and prolong its shelf life. Such applications include oxygen scavengers, flavourings, preservative or antioxidant emitters and ethylene absorbers from fresh food.

Another innovative packaging category, “**intelligent materials and articles**”, has been developed to provide information about the actual condition of the food.

Regulation 1935/2004 provides a legal framework for these new technologies and sets some basic requirements for their use. Compositional and organoleptic changes brought to the food by active materials and articles are allowed, provided these changes comply with any other EU legislation applicable to food. Labelling will inform the user of active materials and articles (food packers) about the safe and correct use of active materials. Active and intelligent materials should not mislead consumers about the condition of the food, for instance by masking signs of spoilage.

Specific measures may be adopted to regulate in more detail on particular materials and articles. In the absence of such specific measures, Member States may maintain or adopt national provisions so long as they do not conflict with the Regulation.

⁸⁹ Regulation (EC) No. 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC (OJ No. L 338, 13.11.2004), as amended. The Commission has published an unofficial consolidated text at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02006R1907-20150323&from=EN> which covers amendments up to Commission Regulation (EU) 2015/326 of 2 March 2015.

The groups of materials and articles which may be covered by specific measures are active and intelligent materials and articles, adhesives, ceramics, cork, rubber, glass, ion-exchange resins, metals and alloys, paper and board, plastics, printing inks, regenerated cellulose, silicones, textiles, varnishes and coatings, waxes and wood.

Where a specific measure lays down a positive list of authorised substances, those interested in placing a new substance for a food contact material on the market must submit an application to the national competent authority of a Member State, which takes the application forward to the European Food Safety Authority (EFSA). Based on the opinion of the Authority, the European Commission will propose a draft measure. Sensitive data will be kept confidential if the applicant requests this.

Specific measures currently exist for several groups of materials and articles:

- Council Directive 84/500/EEC⁹⁰ on the approximation of the laws of the Member States relating to **ceramic articles** intended to come into contact with foodstuffs, as amended by European Commission Directive 2005/31/EC.⁹¹

This sets migration limits for cadmium and lead and lays down the analytical method for determining such migration;

- European Commission Directive 2007/42/EC⁹² relating to materials and articles made of **regenerated cellulose film** intended to come into contact with foodstuffs.

This lists authorised substances and prescribes conditions for their use, including provisions for plastic coated regenerated cellulose film;

⁹⁰ Council Directive 84/500/EEC of 15 October 1984 on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs (OJ no. L 277, 20.10.1984), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1984L0500:20050520:EN:PDF>.

⁹¹ Commission Directive 2005/31/EC of 9 April 2005, amending Council Directive 84/500/EEC as regards a declaration of compliance and performance criteria of the analytical method for ceramic articles intended to come into contact with foodstuffs (OJ No. L 110, 30.4.2005), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:110:0036:0039:en:PDF>.

⁹² Commission Directive 2007/42/EC of 29 June 2007 relating to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs (OJ No. L 172, 30.6.2007), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:172:0071:0082:EN:PDF>.



- European Commission Regulation (EC) No. 282/2008⁹³ on **recycled plastic materials and articles** intended to come into contact with foods and amending Regulation (EC) No. 2023/2006.⁹⁴

This sets requirements for recycled plastics to be used in food contact materials, and introduces an authorisation procedure of recycling processes used in the manufacture of recycled plastics for food contact use. It updates Regulation No. 2023/2006 on rules on good manufacturing practice which remains in force;

- European Commission Regulation (EC) No. 450/2009⁹⁵ on **active and intelligent materials and articles** intended to come into contact with food.

This supplements the requirements of Regulation No. 1935/2004 on the safe use of active and intelligent materials and articles, and introduces an authorisation scheme for substances used for this purpose.

The substances responsible for the active and/or intelligent function may be housed in a separate sachet or other container, or may be directly incorporated into the packaging material. Those substances, responsible for creating the active and/or intelligent function should be evaluated in accordance with Regulation No. 450/2009, while the passive parts, such as the container, the packaging into which that container is placed and the packaging material in which the substance is incorporated, should be covered by the specific EU or national provisions applicable to those materials and articles;

- European Commission Regulation (EU) No. 10/2011⁹⁶ on **plastic materials and articles** intended to come into contact with food – which sets the rules for

plastic food contact materials and consolidates a number of earlier directives.

This covers printed or coated plastic materials and articles; printed or coated plastic multi-layer materials and articles; plastic layers or coatings forming gaskets in caps and closures that make a set of two or more layers of different types of materials; and plastic layers in multi-material, multi-layer materials and articles.

The Regulation lists the authorised monomers and additives for use in plastics manufacture, and sets out restrictions and migration limits applicable to authorised substances. It also establishes the rules on non-intentionally added substances (i.e. impurities and reaction products). For substances for which no specific migration limit or other restrictions are provided, there is a generic migration limit of 60 mg of substance per kg of food.

Non-authorised substances may be used behind a functional barrier (a layer within food contact materials or articles which prevents the migration of substances from behind that barrier into the food), provided they fulfil certain criteria and their migration remains below 0.01 mg/kg. Nano-materials must be authorised before use.

Regulation No. 10/2011 also includes rules on compliance, especially migration testing, and the documentation required.

Regulation No. 10/2011 has been amended by Regulations 1282/2011,⁹⁷ 1183/2012,⁹⁸ 202/2014⁹⁹ and 2015/174,¹⁰⁰ as well as by Regulation

93 Commission Regulation (EC) No. 282/2008 of 27 March 2008 on recycled plastic materials and articles intended to come into contact with foods and amending Regulation (EC) No. 2023/2006 (OJ No. L 86, 28.3.2008), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:086:0009:0018:EN:PDF>.

94 Commission Regulation (EC) No. 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food (OJ No. L 384, 29.12.2006), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:384:0075:0078:EN:PDF>.

95 Commission Regulation (EC) No. 450/2009 of 29 May 2009 on active and intelligent materials and articles intended to come into contact with food (OJ No. L 135, 30.5.2009), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:135:0003:0011:EN:PDF>.

96 Commission Regulation (EU) No. 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food (OJ No. L 12, 15.1.2011), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:012:0001:0089:EN:PDF>.

97 Commission Regulation (EU) No. 1282/2011 of 28 November 2011 amending and correcting Commission Regulation (EU) No. 10/2011 on plastic materials and articles intended to come into contact with food (OJ No. L 328, 10.12.2011), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32011R1282>.

98 Commission Regulation (EU) No. 1183/2012 of 30 November 2012 amending and correcting Regulation (EU) No. 10/2011 on plastic materials and articles intended to come into contact with food (OJ No. L 338, 12.12.2012), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R1183>, and Corrigendum, OJ No. L 349, 19.12.2012, [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R1183R\(01\)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R1183R(01)).

99 Commission Regulation (EU) No 202/2014 of 3 March 2014 amending Regulation (EU) No. 10/2011 on plastic materials and articles intended to come into contact with food (OJ No. L 62, 4.3.2014), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014R0202>.

100 Commission Regulation (EU) 2015/174 of 5 February 2015 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (OJ No. L 30, 6.2.2015), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015R0174>.

321/2011¹⁰¹ which restricts the use of Bisphenol A use in plastic infant feeding bottles.

REGISTRATION, EVALUATION, AUTHORISATION AND RESTRICTION OF CHEMICALS (REACH)

The REACH Regulation¹⁰² was the outcome of a major overhaul of the EU's chemicals policy. It entered into force in June 2007 and affects the entire packaging supply chain from suppliers of pulp and paper, plastics, metals, glass, coatings, printing inks and adhesives, to converters and packer/fillers.

Although the main focus of REACH is on manufacturers and importers of substances as such and in preparations, it also imposes responsibilities on:

- Companies which use articles to make another article or are importers of articles, and on
- Downstream users¹⁰³ who use substances and/or mixtures to make another preparation or an article.

Packaging falls within the definition of an article,¹⁰⁴ so many of the Regulation's requirements apply to companies within the packaging supply chain. Packaging is always to be treated as an article or articles separate from the contents of the packaging.

REACH transfers responsibility for managing chemicals from public authorities to industry. It requires about 30,000 chemical substances to be registered over a period of eleven years. Manufacturers and importers must gather information on the properties of their chemical substances, and register the information in a central database run by the European Chemicals Agency (ECHA). The most dangerous chemicals are to be progressively substituted when suitable alternatives have been identified.

The deadline for registering substances supplied at between 1 and 100 tonnes per annum (tpa) was 1 June 2013, and substances supplied at 1 tpa or less must be registered by 1 June 2018. Substances supplied at 1000 tpa or more; or those supplied at more than 100 tpa which are classified as very toxic to aquatic organisms; or substances supplied at more than 1 tpa which are classified as Category 1 or 2 carcinogens, mutagens or reproductive toxicants should already have been registered.

Companies which are "downstream users" of substances or preparations/mixtures should inform their suppliers of how they use them, so that this identified use can be incorporated in the supplier's registration dossier and in their Safety Data Sheet. If suppliers receive too little support from downstream users to justify creating a registration dossier, they will not apply for registration and the substance will be lost.

It should be noted that

- Substances exempt from *registration* include **cellulose pulp**;
- Substances in **food contact materials** have to be registered if they are produced in quantities above 1 tonne. The risk related to food packaging and possible transfer to food and potential negative health effects is already regulated¹⁰⁵ and exempt, but all other risks (e.g. environment, worker safety, etc.) have to be assessed under REACH;
- **Polymers** are exempt from provisions on *registration* (but the European Commission has a mandate to propose specific legislation for their registration). Monomers must be registered if manufactured in the EU or imported as such in quantities greater than 1 tonne per year per legal entity. A monomer which is part of an imported polymer will also have to be registered if it is present at a concentration of more than 2% and if the total quantity of the monomer placed on the market per legal entity is 1 tonne per year or more;
- **Waste** is not considered a substance, preparation or article, but the waste stage within the normal life cycle of a substance should be taken into account

101 Commission Implementing Regulation (EU) No. 321/2011 of 1 April 2011 amending Regulation (EU) No. 10/2011 as regards the restriction of use of Bisphenol A in plastic infant feeding bottles (OJ L 87, 2.4.2011), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32011R0321>.

102 Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, OJ No. L 396, 30.12.2006.

103 The REACH Regulation defines a 'downstream user' as "any natural or legal person established within the Community, other than the manufacturer or the importer, who uses a substance, either on its own or in a preparation, in the course of his industrial or professional activities. A distributor or a consumer is not a downstream user. A re-importer exempted pursuant to Article 2 (7)(c) shall be regarded as a downstream user."

104 The REACH Regulation defines an 'article' as "an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition."

105 Regulation (EC) No. 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC, OJ No. L 338, 13.11.2004.



to assess whether the corresponding uses of this substance are safe. Also, waste that is recycled and put back on the market as a product is covered by REACH. The plastics sector has decided that as recyclers of plastics will not receive any data (i.e. a Safety Data Sheet) with the waste they use as their raw material, they will compile a special Safety Data Sheet-Recycling (SDS-R) using generic data. This is a voluntary decision and not a legal requirement;

- **Substances occurring in nature** are exempt from Titles II (Registration), V (Downstream User) and VI (Evaluation) of the REACH Regulation, unless they meet the criteria in Directive 67/548/EEC for classification as dangerous.

EUROPEN has published a booklet entitled *The Impact of REACH on the Packaging Supply Chain*¹⁰⁶ which sets out the relevant duties and requirements and suggests the implementation steps that companies should take.

Close study of the European Chemicals Agency's REACH and CLP website (<http://guidance.echa.europa.eu/>) is also strongly recommended, and in particular the Agency's updated *Guidance on Requirements for Substances in Articles*.¹⁰⁷ This includes a decision tree to help companies decide whether an object is an article or not.

REGULATION ON THE CLASSIFICATION, LABELLING AND PACKAGING OF SUBSTANCES AND MIXTURES

REACH is complemented by Regulation (EC) No. 1272/2008 on the Classification, Labelling and Packaging of Substances and Mixtures (the so-called CLP Regulation)¹⁰⁸ which was adopted in 2009. The

CLP Regulation replaces certain provisions of the directives related to the classification, packaging and labelling of dangerous substances (Directive 67/548/EEC) and preparations (Directive 1999/45/EC). Those Directives were finally repealed on 1 June 2015 at the end of a transition period.

The CLP Regulation aligns the EU's system with the UN's Globally Harmonised System of Classification and Labelling of Chemicals (GHS).¹⁰⁹ This is based on the principle that hazards should be described and labelled in the same way all around the world in order to facilitate trade and to contribute towards global efforts to protect humans and the environment from any hazardous effects of chemicals.

The CEN standard on prevention by source reduction (EN 13428) requires suppliers to be able to demonstrate that substances or preparations classified as dangerous to the environment, and assigned the symbol "N" shall be minimised. The "N" classification is referred to in Annex I of the Dangerous Substances Directive 67/548/EEC which has been repealed and replaced by Part 3 of Annex VI to the CLP Regulation. Safety Data Sheets issued before 1 June 2015 must include both the old Dangerous Substances Directive / Dangerous Preparations Directive classifications and the new CLP classifications.

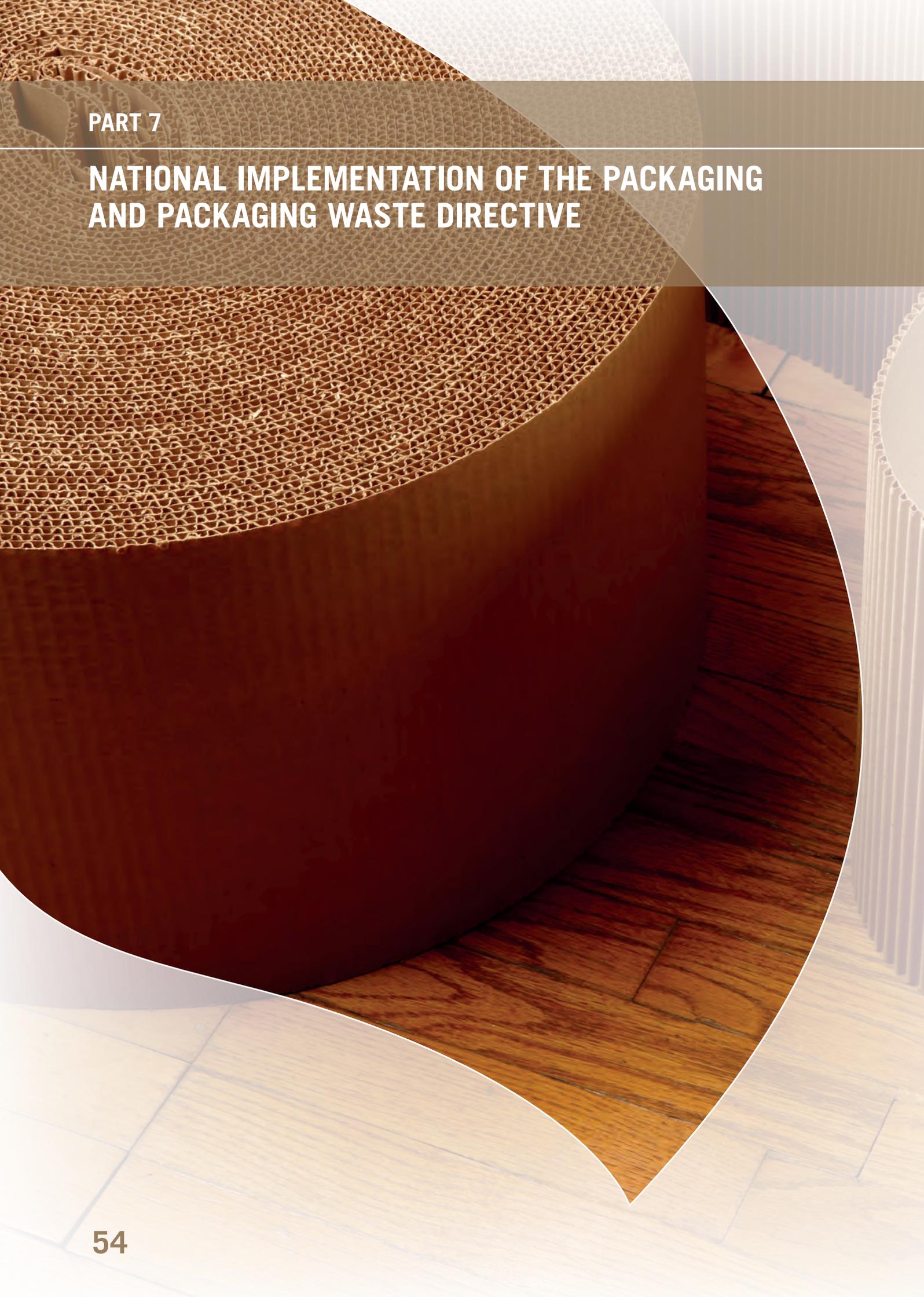
The European Chemicals Agency's *Introductory Guidance on the CLP Regulation* explains the new system in some detail.

106 *The Impact of REACH on the Packaging Supply Chain* (December 2007), <http://www.europen.be/index.php?action=onderdeel&onderdeel=6&titel=EUROPEN+Publications>.

107 *Guidance on Requirements for Substances in Articles*, version 3.0 (December 2015), http://echa.europa.eu/documents/10162/13632/articles_en.pdf

108 Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, OJ No. L 353, 31.12.2008.

109 See http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html for further information.



PART 7

NATIONAL IMPLEMENTATION OF THE PACKAGING AND PACKAGING WASTE DIRECTIVE



The countries whose packaging legislation is discussed below fall into five categories:

EU – EEA Member States: Members of the EU play a full part in negotiating Directives or amendments to Directives, and are part of the European Economic Area (EEA);

EFTA – EEA Member States: Members of the European Free Trade Association (EFTA) which have opted to join the European Economic Area have only observer status in the formulation of Directives and amendments to Directives, but are bound to implement EU legislation relating to the free movement of goods. Thus, they are obliged to transpose the provisions of the Packaging and Packaging Waste Directive into their national legislation and administrative procedures;

EFTA – non-member of the EEA: Switzerland is a member of EFTA, but opted out of the European Economic Area. It therefore has no obligation to implement the Packaging and Packaging Waste Directive;

EU accession candidates: The countries applying to join the EU are obliged to adopt all existing EU legislation, though the timetable for implementing targets is sometimes open to negotiation;

Potential EU accession candidates: Countries which have applied to join the EU but which have not achieved the necessary degree of compliance with EU membership criteria for accession negotiations to begin. Potential accession candidates are taking steps to align their legislation with the EU's.

Although packaging waste management legislation and systems have been in place in most European countries for many years now, there is a constant process of updating, transposition and amendment. The following summary relates to the situation as it was in February 2016.

“The PPWD” means Directive 94/62/EC on Packaging and Packaging Waste, as amended by Directive 2004/12/EC. “The targets” are the second-stage recovery and recycling targets set by Directive 2004/12/EC. “The WFD” is the Waste Framework Directive, 2008/98/EC.

ALBANIA (EU ACCESSION CANDIDATE)

Albania submitted its application for EU membership in 2009, and was granted EU candidate status in June 2014.

A Decision of June 2014 transposed the PPWD into Albanian law. 30 June 2017 is the deadline for achievement of the PPWD's first-stage targets, and 31 December 2019 was the deadline for the second-stage targets. Within four years of the Decision's entry into force, packaging manufacturers and manufacturers of packaged goods must cover all costs arising from the establishment and operation of separate collection and recovery systems for packaging waste.

There has been an environmental tax on beverage containers since 1993, and there is now a tax on non-reusable plastic packaging for a specified range of beverages, food and non-food products and glass packaging for specified food and beverages. The tax on recycled plastic packaging is 50% of that on other plastic packaging.

To comply with the Essential Requirements of the PPWD, packaging manufacturers and packer/fillers must use the best-practice techniques set out in a 2011 Law. Manufacturers and importers of packaging or packaging materials must sign statements of conformity with the Essential Requirements and the heavy metals limit.

The use and sale of non-biodegradable plastic bags in all commercial units was banned with effect from January 2013.

It is mandatory for packaging to be marked with a number and abbreviation identifying the material used, an indication of recyclability or reusability, and an indication that the used packaging is to be collected separately.

AUSTRIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packer/fillers with a legal presence in Austria are responsible for the packaging they place on the market except for point-of-sale packaging. Producers and importers of point-of-sale packaging which have a legal presence in Austria are responsible for this. Importers with a legal presence in Austria are responsible for the packaging of the packaged products they import, including producers who import packaged products for their own use.

Distance sellers not based in Austria and who do not have a subsidiary in Austria are responsible for the packaged products or packaging they supply to private end-users in Austria.

Producers and importers with primary responsibility for household packaging must participate in an approved compliance system for all their household packaging, including point-of-sale packaging.

The obligation to participate in an approved system does not apply:

- Where an upstream supplier participates on behalf of his customer, a producer with primary responsibility for packaging. The producer with primary responsibility must have a legally binding agreement with the relevant supplier (manufacturer, importer, packer/filler or distributor), as evidence that the supplier is responsible for compliance;
- In the case of deposit-bearing refillable packaging, non-deposit refillable packaging that is collected for refilling when deliveries are made, or packaging contaminated with hazardous residues that hinder refilling or recycling or make refilling disproportionately difficult.

The Waste Management Law defines “household waste” by its size, type and where it becomes waste. Household packaging waste management compliance has now been opened up to competition, so it is important to ensure that commercial packaging waste is not used to meet targets for household packaging waste, and to establish the boundary between household packaging waste and commercial packaging waste. A Packaging Demarcation Ordinance therefore defines the relative shares of each material in each product category which are attributable to household or commercial packaging.

The Waste Management Law and the Packaging Ordinance set out requirements governing the approval and operation of compliance systems. These detailed requirements aim to ensure that segregated collection continues to operate in every part of the country, and that to avoid duplicating facilities, there will still be only one collection contract for each material group per municipality or collection area. Competing systems share the collected material (including mis-sorted materials and non-packaging), based on their market shares for each material category, calculated according to the data reported by producers. A packaging coordination office manages this process.

Obligated parties can split their obligated tonnage for one fee category between several systems, but if they do so they must provide the systems in advance with verifiable criteria for how they will separate the participating tonnages. Obligated parties are only permitted to change between different systems or to amend the criteria within a fee category at the end of each calendar year.

Compliance systems for both household packaging waste and commercial packaging waste must publish uniform fee rates for each fee category – discounts are not permitted. Fees must be based on transparent cost calculations whereby the projected costs of collection (both separate collection and collection together with municipal waste) in a calendar year for each collection category, together with the costs of sorting and recovery, are allocated to the total tonnage placed on the market in the same calendar year in that collection category, *pro rata* to what is participating in the system.¹¹⁰ Systems must give reasonable notice to the Ministry of any planned fee changes before they take effect, and must submit the calculations on which the changes are based.

For packaging waste that is collected together with municipal waste, each approved system must refund “reasonable costs” to the municipalities in proportion to its market share. For packaging waste collected by a private contractor, collection contracts must be awarded by competitive tender. Every five years the Ministry will allocate collection territories between the recovery systems by drawing lots based on their market share. A municipality can insist that the system allocated to

¹¹⁰ However, producers placing less than 1500 kg of household packaging on the market in a calendar year may be offered flat-rate fees. Also, small packer/fillers and distributors of commercial packaging are exempted from reporting and some other requirements.



its territory uses its collection infrastructure, subject to certain conditions and procedures set out in the Law. The intention is that all systems will have contracts with all collection operators to ensure that all operate in the market on equal terms.

Packaging and packaged goods producers, distributors and importers must take back used commercial packaging waste free of charge. Used packaging taken back, and packaging waste arising on company premises, must either be passed to a company upstream with a take-back obligation or be reused or recovered.

Producers who import for their own use either household packaging or commercial packaging have a choice between collecting and recycling this material

themselves or participating in a compliance system. If they opt to comply individually, they must report annually to the Ministry.

Any company registering as a “large waste holder” is responsible for reusing or recycling the packaging waste arising on its premises, and suppliers have no obligations in respect of packaging supplied to it.

TARGETS

The PPWD’s targets must be met each calendar year in respect of all packaging placed on the Austrian market.

There are also:

- Collection and recycling targets applicable to compliance systems handling household packaging:

Targets for household packaging	Collection targets to be met by compliance systems (% of participating tonnage)	Recycling targets to be met by compliance systems (% of tonnage collected)
Paper, board, corrugated board	80%	95%
Glass	80%	100%
Metals	50%	100%
Plastics (recycled into new plastics)	60%	50%
Beverage composite board	50%	60%
Other composite materials	40%	40%
Wood (from segregated collection)	-	15%

- Collection and recycling targets applicable to individual compliers and compliance systems handling commercial packaging:

Targets for commercial packaging	Collection targets to be met by recovery systems (% of participating tonnage)	Recycling targets to be met by individual compliers and recovery systems (% of tonnage taken back/collected)
Paper, board, corrugated board	90%	95%
Glass	90%	100%
Metals	60%	100%
Plastics (recycled into new plastics)	85%	75%
Wood	25%	60%
Beverage cartons	-	No target
Other composite materials	40%	40%
Ceramics	-	No target

BEVERAGE CONTAINERS

A voluntary agreement, the *Sustainability Agenda for Beverage Containers*, contains a 55% material recycling target for PET bottles, a target to recycle 9,000 tonnes of PET into new bottles by 2012, and a target to recycle 70% of beverage cans by 2013. There is also a target to reduce net greenhouse gas emissions by 10% by 2017 (against a 2007 baseline).

The agreement requires the market share of beverages in refillable containers in the retail trade to be maintained, so that consumers can choose between refillables and non-refillables. Beverages will be available in “sustainable containers” (i.e. with recycled content, reusable, recyclable) at major events.

COMPLIANCE SYSTEMS



ARA was founded by the packaging manufacturers, branded goods manufacturers and retailers to organise the collection of used sales, secondary and transport packaging from private, commercial and industrial end-users. Around 40% of the packaging handled by ARA comes from commercial and industrial sources.

ARA pays the full cost of collection by municipalities. It is funded from weight-based material-specific fees and uses the on-pack Green Dot symbol. There are special simplified payment arrangements for specific product sectors and for small companies.

A number of waste management companies and some systems approved as compliance systems collect and recycle used packaging from commercial and industrial premises, as an alternative to ARA. The Packaging Ordinance says that compliance systems will generally be approved only if they collect at least 60% of the quantity of each packaging material covered by the system. At least 55% overall and at least the percentages set in the material-specific targets must be recycled. Exceptions to these requirements will be permitted only for systems that cover packaging from a single material or if meeting them would be economically and technically disproportionate.

Before 2015, ARA was the only compliance system approved to handle all household packaging waste, but some systems that previously handled only transport packaging are now approved to handle household packaging waste. Bonus Holsystem, Interseroh Austria, Landbell Austria and Reclay UFH have been approved to handle all materials, and AGR, which is owned by the glassmakers, retains its existing approval to take over

obligations for glass in the household and commercial sectors. Another system, GUT, is also approved to continue operating its existing system but only for its existing clients, which are mainly in the catering sector.

The Waste Management Law sets out detailed approval requirements. Each compliance system must publish on its website each month a list of system participants, classified according to fee category and business sector, and its fee rates.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Packaging Ordinance transposes the Essential Requirements and heavy metals limit. Companies must produce evidence of compliance on request, and the Environment Ministry reported in 2011 that 100-150 companies are audited each year.

BELGIUM

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Waste management is the responsibility of the three Belgian Regions, but they negotiated an Inter-regional Co-operation Agreement to ensure consistency in the transposition of the PPWD's recovery and recycling requirements.

The Agreement requires packer/fillers and importers placing more than 300 kg of packaging on the market each year to take back as much used packaging as is necessary to meet the recovery and recycling targets. For packaging supplied at the point of sale, the Belgian producer of the packaging or the importer of the packaging is responsible.

Businesses can entrust recovery of their packaging waste to waste management companies or municipalities, but the most common choice is to contract with an “approved system” such as FOST Plus. Small retailers may get a third party (such as a trade association) to represent them with the approved system. A contract with the approved system is sufficient to prove that the person responsible for packaging has fulfilled his obligations. The targets applicable to the household packaging compliance system FOST Plus are an aggregate of the targets imposed on its members.

Industrial end-users have a choice between giving used packaging back to the person responsible for it, giving it to a municipality, private company or approved



system contracted by them, or themselves recovering or recycling it. If they recover or recycle it themselves, they must provide evidence of this to the person responsible for the packaging, either directly or via the seller of the packaged goods.

The Inter-regional Agreement also requires companies placing more than 300 tonnes of non-reusable packaging on the Belgian market each year (or using more than 100 tonnes of non-reusable packaging to repackage imports) to prepare a “prevention plan” for packaging minimisation. This must be submitted to the authorities for approval, and producers must report back on how their plans have been implemented. Most companies opt to submit sectoral plans through their trade associations.

TARGETS

The current Inter-regional Co-operation Agreement, which came into force in 2009, sets higher recycling targets for some materials than those in the current PPWD. 30% of plastics packaging must be recycled (22.5% in the PPWD), and there is a separate 60% recycling target for beverage cartons.

In addition, there are separate overall recovery and recycling targets for household and for non-household packaging waste: 80% recycling and 90% recovery for household waste, and 80% recycling and 85% recovery for non-household waste. The PPWD’s targets – 55% recycling and 60% recovery – apply to all packaging waste.

COMPLIANCE SYSTEMS



The main compliance system, FOST Plus, handles household packaging only. It bears the full cost of collection, recovery and disposal of packaging waste.

FOST Plus is funded from licence fees and uses the on-pack Green Dot symbol. About 80% of its members use one of several simplified payment arrangements for small companies, other companies which are low packaging users or companies which are part of certain sectoral agreements.

A separate system, VAL-I-PAC, takes responsibility for transport packaging and for commercial and industrial sales packaging. Businesses joining VAL-I-PAC must delegate to it responsibility for all the non-household packaging they place on the market: they cannot for example handle paper themselves. Members are responsible not only for the operating costs of VAL-I-

PAC but also for the additional administrative costs of the collectors; end-users are expected to make a financial and logistical contribution to managing the packaging waste.

In practice, VAL-I-PAC’s role is largely administrative. Previous recovery arrangements continue unchanged, apart from subsidies to encourage end-users to make their packaging waste available for recycling.

PACKAGING TAXES AND LEVIES

There is an eco-tax of €9.8600 per 100 litres on non-refillable beverage containers;¹¹¹ the rate for refillable beverage containers is one-seventh of that, i.e. €1.4100 per 100 litres. The tax covers containers for beers, still and sparkling wines, intermediate products, ethyl alcohol, mineral and drinking waters, lemonades and other soft drinks and other similar drinks, and for fruit and vegetable juices. Milk is excluded.

There are also eco-taxes on disposable plastic or partly plastic shopping bags supplied by retail stores, including biodegradable bags (€3.00 per kg), on disposable tableware (€3.60 per kg) and on foodservice disposables – €2.70 on cling film and €4.50 on aluminium foil.

Finally, there is an eco-tax on packaging for inks, glues, oils and solvents in large sizes (i.e. intended for professional use). These containers may be exempted from the eco-tax provided the return rates laid down are achieved, and provided they are part of an organised deposit system.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements were transposed by the Products Standards Law. The heavy metals limit was transposed via a Decree enacted pursuant to this Law.

The Product Standards Law does not specify any compliance procedure. However companies above a certain size are required by the Co-operation Agreement to prepare and submit packaging prevention plans, which fulfil much the same purpose. These plans must address prevention in its broadest sense (i.e. not merely reduction at source). However both the Law

¹¹¹ The beverage containers covered by the Belgian eco-tax in force from April 2004 are non-refillable containers for beers, still and sparkling wines, intermediate products, ethyl alcohol, mineral and drinking waters, lemonades and other soft drinks and other similar drinks, and for fruit and vegetable juices. Milk has been excluded because it is not principally a drink but a foodstuff.

and the requirements for prevention plans cover issues beyond those in the Essential Requirements.

BOSNIA AND HERZEGOVINA (POTENTIAL EU CANDIDATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The country is divided into two “entities” – the Federation of Bosnia-Herzegovina (FBiH) and the Bosnian Serb Republic (Republika Srpska), each with its own political structure. In addition, the district of Brčko is a self-governing administrative unit.

The **FBiH** Ordinance on Packaging and Packaging Waste came into effect in January 2011, but only on the territory of the Federation, and not in Republika Srpska or Brčko District. Producers (at all stages of the chain) are required to take back packaging waste and to sort it, and “producers, importers, fillers, packers, distributors and end-suppliers” must take part in the packaging waste management system and meet the targets. There are *de minimis* exemptions for those handling only small amounts of packaging. *De minimis* exemptions do not apply for point-of-sale packaging, packaging containing chemicals subject to chemicals legislation and packaging for plant protection products.

Obligated companies can transfer their obligations to an approved compliance system, or to a state-run Environmental Protection Fund. The 2011 Ordinance specified that the fees paid into the Fund should be dedicated to packaging waste management, but in 2013 this was amended to say that the Fund’s expenditure plans will be agreed with the Ministry each year.

Final suppliers must take responsibility for the packaging of private label products and for packaging around products that they directly import, and to obtain evidence that all other traded products have been included in the system. If they do not do this, they must pay a fee to the Fund.

Individual compliers must arrange for household and non-household packaging waste to be collected and sent for recovery, recycling or disposal. The Ordinance stresses that this obligation applies even to retail stores selling goods in primary packaging.

Compliance systems must arrange for household and non-household packaging waste to be collected and sent for recovery or recycling through contracts

with authorised facilities or for disposal in authorised municipal landfills.

Republika Srpska enacted a Packaging and Packaging Waste Regulation in May 2015 on broadly similar terms to that in FBiH, and with *de minimis* exemptions and material fees for packaging waste at the same level.

TARGETS

The overall *recovery or recycling* target in **the FBiH Federation** rose year by year from 8% in 2012 to 35% in 2016. The 2016 material-specific targets are 12% for glass, 10% for metals, 30% for paper & board, 16% for plastics, 12% for wood, 10% for multilayered and other materials, and 10% for packaging containing and/or contaminated with hazardous materials.

Republika Srpska has so far only set an overall packaging *recovery or recycling* target. As in FBiH, this is 35% in 2016.

COMPLIANCE SYSTEMS



There is one approved compliance system, EKOPAK, which operates throughout the country. It is licensed to use the on-pack Green Dot symbol.

A 2013 amendment to the **FBiH** Ordinance specifies that no individual shareholder or member of the same group as a shareholder may hold more than 33% of the shares of an authorised compliance system. Participants in the system must place at least 5000 tonnes of packaging on the FBiH market per year. There are also conditions relating to conflicts of interest, staffing requirements and size of business premises. The Ministry may retract the authorisation to operate as a compliance system if the number of obligated participants falls below 30, if the annual amount of packaging waste managed falls below 30,000 tonnes, or if any of the other criteria for authorisation cease to be met.

The **Republika Srpska** Regulation requires compliance systems to ensure that a utility company or an authorised collector regularly collects municipal packaging waste, regularly collects non-municipal packaging waste from end-users, and ensures that the collected waste is re-used, recycled or disposed of in accordance with the law.

PACKAGING TAXES AND LEVIES

The **FBiH** Ordinance creates packaging “fees” that will be paid to the Environmental Protection Fund in respect



of any shortfall against the targets. The **Republika Srpska** Regulation sets similar fees, which are paid in this case into the Republika Srpska Environmental Protection and Energy Efficiency Fund.

However, it is much less expensive to pay Green Dot fees to EKOPAK.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The **FBiH** Ordinance and the **Republika Srpska** Regulation both transpose the Essential Requirements in abbreviated form, together with the 100 ppm heavy metals limit.

SPECIAL LABELLING RULES

The **FBiH** Ordinance and the **Republika Srpska** Regulation both require mandatory material identification with the EU numbers and/or abbreviations.

In **FBiH**, the EU numeric identification code must be used on plastics whereas other materials must use the abbreviation or full name as specified in the text. This should be followed by one of the recycling symbols shown below:



Any special restrictions relating to treatment or storage after the packaging becomes waste must be included on the packaging. Additionally, certain phrases can be used to indicate specific disposal instructions. These include phrases such as 'separate bottle/cap' in the case of plastic bottles, or 'do not mix with other colours' in the case of glass bottles. Symbols can also be used to convey this information. The declaration **POVRATNA AMBALAŽA (KAUCIJA __ km)** (RETURNABLE PACKAGING (DEPOSIT __km)) should also be used where applicable.

Republika Srpska requires packaging to be marked to indicate that it may be reused or recycled:

Reusable packaging:



Recyclable packaging:



BULGARIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Producers and importers of packaged goods are responsible for the separate collection of packaging waste and for meeting the targets laid down. Where the manufacturer of packaged goods or his authorised representative cannot be identified, the distributor is responsible.

The introduction of systems for separate collection of packaging waste must not obstruct the functioning of the existing household waste collection systems. Individual compliers may carry out separate collection, transportation, sorting and recovery of packaging waste if licensed to do so or if they have contractual agreements with companies or persons who are so licensed; they must also prepare a packaging waste management plan which includes measures for reducing packaging waste through packaging minimisation and increasing the share of reusable packaging.

Alternatively, producers and importers may join one of the licensed collective systems. Members of a collective compliance system must mark their packaging with that system's trademark so as to demonstrate that it is covered by that system. Where used packaging does not bear a compliance system's mark, consumers and distributors are entitled to return it free of charge to any supplier of packaged goods of the same type.

Consumers may leave secondary or transport packaging at the point of sale if it has not been marked with the logo of an approved Bulgarian compliance system.

Waste from paper & board, glass, plastic and metal generated by users of retail, industrial, commercial and administrative buildings must all be collected separately. Under the Waste Management Act, industrial waste must be submitted to a licensed waste handler on the basis of a written contract, or handled through a compliance system.

It is forbidden to dispose of, including via landfill or incineration without recovery, any packaging waste which can be recovered or recycled.

TARGETS

The recovery and recycling targets are as in the PPWD.

COMPLIANCE SYSTEMS

The licensed compliance systems are Bulekopak, Ecopack Bulgaria, EkoBulPack and Ekokollekt.

PACKAGING TAXES AND LEVIES

“Product charges” apply to packaging if the recovery and recycling targets in the Waste Management Law were not met in the previous year. If the recycling target for any material is not met, the product charge is paid for all packaging on the market, regardless of the type of material.

Some Bulgarian companies choose to pay product charges instead of paying fees to an approved compliance system.

There is a tax on non-degradable plastic bags with a thickness of less than 15 microns, except for bags provided at point of sale as primary packaging.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The legal obligation for ensuring compliance with the Essential Requirements falls on producers and importers of packaging, but producers and importers of packaged goods may only use packaging which complies and must obtain a copy of the appropriate declarations of conformity from the producer or importer of the packaging or packaging material.

Producers and importers of packaging materials shall certify conformity with the 100 ppm heavy metal limit through a declaration which includes the number and date of the test report, issued by an accredited laboratory, the name and address of the accredited laboratory, the date of the test and the name and signature of the person who has signed the declaration. Producers and importers of packaged goods must hold copies of such declarations of conformity.

SPECIAL LABELLING RULES



The packaging compliance systems encourage their members to mark their packs with their separate collection trademark. The compliance system ECOPACK Bulgaria AD uses the Green Dot symbol, and the other approved compliance systems have their own symbols.

Reusable packaging must be marked with the words **3a** **многokratна употреба** (“for multiple use”).

CROATIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Producers and importers of packaged goods are obliged to bear the costs of the collection and reprocessing of waste sales packaging from the products they have put into circulation by paying a fee to the Environmental Protection and Energy Efficiency Fund. They are however exempted from paying the waste management fee or incentive fee [see below] if they place on the market no more than 300 kg of glass, 100 kg of paper and board and 50 kg of each of the other materials (including wood) in a given year.

Distributors must provide special containers for separate collection at business premises whose selling area exceeds 200 square metres. They must also collect separately all secondary and tertiary packaging arising as waste on their premises. If they sort the non-reusable packaging taken back into the various packaging materials, they are entitled to be reimbursed part of the cost of take-back.

Sellers of products in packaging which becomes hazardous waste at the end of its life (i.e. packaging containing hazardous residues) must provide separate containers in sales areas and inform consumers of their right to return it.

TARGETS

The PPWD’s targets apply.

BEVERAGE CONTAINERS

There is a mandatory deposit of 0.50 kuna (€0.065) on non-refillable glass, PET and metal containers for beer, carbonated and still soft drinks and water, juices, wines and spirits.

The Environmental Protection and Energy Efficiency Fund manages the deposit system, and the Fund retains unredeemed deposits.

COMPLIANCE SYSTEMS

The State-run Environmental Protection and Energy Efficiency Fund is responsible for packaging waste management activities, including making payments to waste collectors. It is funded by a quarterly weight-based fee which packers and fillers pay to cover part of the waste management costs of the sales packaging they place on the market, and by various additional charges on non-refillable beverage containers [see below].



A “Green Dot system”, Eko-Ozra, was registered by the Ministry of Environmental Protection, Physical Planning and Construction in 2006 as an “intermediary for waste recovery”. It cannot operate in the same way as other Green Dot systems, as all fees for packaging waste recovery are controlled, charged and collected by the Environmental Protection and Energy Efficiency Fund.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Packaging and Packaging Waste Ordinance transposes the Essential Requirements and heavy metals limit, including the exemptions provided for in Commission Decisions.

The producer or importer is legally responsible for ensuring that the combined concentrations of lead, cadmium, mercury and hexavalent chromium do not exceed 100 ppm. He must obtain a declaration to this effect from his packaging supplier, and must provide the necessary evidence on request.

SPECIAL LABELLING RULES

Contrary to the European Commission Decision on marking, the Ordinance requires mandatory marking and material identification. The EU numbers and abbreviations must be placed in the centre or under the symbol for reusable packaging or recyclable packaging, which is also mandatory:

Reusable packaging:



Recyclable packaging:



Deposit-bearing beverage containers must be marked with the words **RETURNABLE DEPOSIT** and the amount of the deposit, e.g. **POVRATNA NAKNADA 0,50 kn**.

With effect from 1 September 2016, it will also be mandatory to mark packaging with a bar-code.

CYPRUS (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Pending a comprehensive constitutional settlement, EU law does not yet apply to the northern part of the island.

The Packaging and Packaging Waste Law makes producers, importers or distributors of packaged goods (“packaging managers”) responsible for collecting and sorting packaging waste and for bearing the cost of treating the packaging after use. However the text also refers to “co-responsibility of public and private operators involved”. Companies placing less than 2 tonnes of packaging on the market each year are exempted from these obligations.

A Regulation says that packers and importers of packaged goods must collect and sort packaging waste and ensure that it is directed to reuse or to authorised treatment facilities. “Providers and manufacturers” (i.e. people who manufacture packaging in Cyprus) are required to collect packaging waste from authorised facilities and use the secondary material in the manufacture of new products. Distributors must collect used packaging, while local authorities must treat packaging waste in line with the law.

“Packaging managers” must deal with packaging waste either individually or by joining a compliance system. Both individual compliers and collective systems must be approved by the authorities. Collective systems are organised by “packaging managers” along with local authorities and are operated on a not-for-profit basis. “Packaging managers” who participate in a collective system transfer their obligations to the system.

TARGETS

The Packaging and Packaging Waste Law transposes the PPWD’s recovery and recycling targets. It also empowers the Cabinet of Ministers to set higher recycling targets and to enact special measures to enable the targets to be met.

COMPLIANCE SYSTEM

The legislation says that collective systems’ fee structures must reward lightweight packaging (lower weight per product unit) while avoiding penalising heavier material if the packaging has a higher proportion of recycled material. It should penalise a shift from reusable to disposable packaging and from recyclable to non-recyclable packaging. Support payments to the municipalities should be based on the real cost of the total management of municipal solid waste, taking account of any disposal cost savings.



The Cyprus Package Recovery and Recycling Co. Ltd. (Green Dot Cyprus) provides a compliance service for household packaging

waste. It is licensed to use the on-pack Green Dot symbol.

Green Dot Cyprus is currently the only collective system active in the local market, though two companies' individual compliance systems have been approved.

Agreements for the management of commercial and industrial packaging waste are made directly between the contractors and the end-users, and Green Dot Cyprus does not get involved in these agreements.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements and heavy metals limit have been transposed.

CZECH REPUBLIC (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Those placing packaging or packaged goods on the market are required to guarantee take-back by providing an adequate number of collection points and suitable access to them, taking account of local conditions and population size. They must also guarantee recovery of the taken-back packaging waste to the extent necessary to meet the targets.

Companies can either pay a registration fee and organise take-back themselves, or they can delegate responsibility to an approved compliance system. The criteria for authorisation are set out in the Packaging Act.

Operators placing less than 300 kg of packaging on the market each year, and whose annual turnover does not exceed 4.5 million koruna (€166,000) per year, are exempted from the take-back and recovery requirements.

TARGETS

Material-specific packaging recovery and recycling targets have been set for each year up to 2016. Both the overall and the material-specific targets are higher than those specified by the PPWD, and now they also include a separate target for packaging waste from consumer sales. This is waste which is assumed to mostly become municipal waste, and represents progress towards the WFD target of 50% recycling/preparation for re-use of household waste by 2020.

		2016
Plastics		45%
Metals		55%
Paper & board		75%
Glass		75%
Wood		15%
Recycling	Total	60%
	Consumer sales	40%
Recovery	Total	65%
	Consumer sales	45%

For the purposes of the targets and data reporting, packaging is considered to be a single material rather than a composite if at least 70% of the weight is derived from the principal material.

BEVERAGE CONTAINERS

The Act empowers the Government to specify products or types of packaging on which deposits must be charged, and an implementing Regulation lists six types of refillable bottle on which a standard deposit must be charged.

The deposit is 3 koruna (€0.11) for the following bottles: 0.33 litre mineral water bottle, 0.33 litre soft drink bottle, 0.5 litre beer bottle with crown closure, 0.7 litre fruit syrup bottle and 1 litre wine bottle. The deposit is 1 koruna (€0.04) for the 0.7 litre mineral water bottle.

The purpose of the Regulation is to ensure that a uniform deposit rate is charged on standard bottles used by fillers in a pool arrangement. There is however no obligation to use the refillable bottles specified.

The Act also says that those distributing beverages in non-deposit containers shall also offer the same beverages in deposit-bearing returnable containers, "should such beverages be marketed in such containers". Shops with a sales area smaller than 200 square metres are exempt from this requirement.

COMPLIANCE SYSTEM



EKO-KOM was set up in 1997 and is the longest-established of the Green Dot compliance systems in the EU's 2004 intake. Uniquely in the countries which joined the EU on or after 1 May 2004, no competitor organisations have been approved. Any company placing packaging or packaged goods on the Czech market is able to join.

EKO-KOM's main focus is on household packaging, but it also has contracts with waste management companies which collect used packaging from



businesses. Municipalities are obliged to provide a waste management service including separation of waste. The majority of municipalities contract out these obligations to EKO-KOM, which pays the municipality to collect the packaging waste before EKO-KOM assumes responsibility for its reprocessing and recycling.

In the Czech Republic, the take-back obligation applies to all stages of the supply chain from producers of packaging raw materials through to supply to the final user. For imports of final products, the obligation starts from the moment of import.

This means that all stages of the chain must report to EKO-KOM, but it does not mean that all stages in the chain pay fees to EKO-KOM for the same items. Individual companies decide who will pay the fee, though in practice it is usually the brandowner who pays.

If a member of EKO-KOM supplies a company outside the system or is supplied by a company outside the system, the member must pay the fee for the packaging in full.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

Those placing packaging, packaging components or packaged goods on the market must provide to the inspection authorities all technical documentation necessary to prove that the Essential Requirements have been met if this information is requested. It is understood that the state authorities give importers reasonable time to obtain documentation from their foreign suppliers, but there have been prosecutions for failure to produce this evidence.

Manufacturers and importers must also prepare a written declaration of compliance for their customers. The purpose of the conformity declaration is to provide assurance that the packaging is in compliance and to clarify who was responsible for carrying out this assessment.

Manufacturers and importers must report to the authorities if the 100 ppm heavy metals concentration limit is exceeded.

DENMARK (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Denmark is now the only Member State opting for internalisation of packaging waste management costs

rather than construction of a fee-based or tax-based funding system.

Municipalities remain responsible for collecting non-beverage packaging from households and ensuring that it is recycled or prepared for recycling. Beverage containers are subject to mandatory deposits.

Businesses must source-separate their waste so that significant fractions are sorted for recycling. They must ensure that it is collected and delivered to a registered recycling plant or to an approved and registered collector who will deliver it to a registered recycling plant. Municipalities must ensure that businesses have access to the same local waste recycling sites as households, though they may charge for this.

There is a voluntary agreement to recycle 80% of paper and board transport packaging and 40% of plastics transport packaging. Business end-users are responsible for the costs involved.

TARGETS

The deposit system, Dansk Retursystem (DRS) is required to ensure that at least 98% of refillable bottles are collected. 1 January 2013 was the deadline for collection of 95% of non-refillable containers.

BEVERAGE CONTAINERS

Containers for beer and other drinks with an ethanol content of less than 10%, carbonated and uncarbonated soft drinks and water and iced tea are subject to mandatory deposits, unless packed in beverage cartons or plastic containers with a capacity greater than 10 litres.¹¹²

All manufacturers, importers, wholesalers and others who sell deposit-bearing products to the retail food trade must register with DRS and pay a fee (on both refillable and non-refillable containers) to subsidise the supply of reverse vending machines to retailers. They must also pay fees to DRS to cover the cost of registering bar-codes and programming the reverse vending machines in stores, the handling allowances

¹¹² For many years, refillable bottles (glass or PET) were mandatory for domestic production of beer and carbonated soft drinks in Denmark, and domestic production had to be in bottles of an approved design. Cans were banned for carbonated soft drinks in 1977, and for beer in 1981. The European Commission started discussing the legality of the can ban with the Danish authorities in 1996, and it launched an action in the European Court of Justice (ECJ) in 1999. However, the government elected in 2001 repealed the can ban with effect from January 2002, and the Court eventually removed the case from the register after the Commission withdrew its action. Canned beer and carbonated soft drinks finally appeared on Danish shelves on 23 September 2002.

paid to retailers and the system's collection and transport costs.

PACKAGING TAXES AND LEVIES

There are taxes on:

- Beverage containers (at reduced rates for drinks subject to mandatory deposits) – the tax is charged per unit of packaging. The tax rate depends on the size of the container and the material it is made from; and
- Paper and plastic carrier bags with handles, disposable tableware and vending cups, and on specified PVC film packaging.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements and heavy metals limit were transposed by a Statutory Order. No detailed conformity procedure is specified, but producers or importers must submit documentation to demonstrate compliance if requested by the enforcement authorities. Where there are grounds to suspect that packaging does not comply, the company can be forced to stop selling the packaging until evidence of compliance is submitted.

SPECIAL LABELLING RULES

All non-refillable beverage containers participating in the deposit and return system must be marked with a special deposit logo, depending on the level of deposit.



There is no obligation to mark refillable containers.

ESTONIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packer/fillers and importers must collect and recover the packaging waste from packaged goods placed on the market in such a way that the recovery targets are achieved, and must bear the resulting costs. The municipalities determine how packaging waste is to be collected locally.

There is an exemption from take-back obligations for packer/fillers and importers placing on the national

market each year less than 100 kg of plastic packaging or less than 200 kg of any other packaging material.

Obligated packer/fillers and importers may delegate their packaging waste collection and recovery obligations to a compliance system. Compliance systems must be controlled by companies which are part of the packaging chain. They must have an operating licence from the Ministry of Environment and must meet the conditions for approval laid down in the Act.

Individual compliers who place more than five tonnes of packaging on the market per annum and who have not joined a compliance system must organise the collection of their packaging waste from each selling point and must report the quantities collected and recovered from each selling point. Information on take-back facilities must be readily available at the point of sale.

They must take back free of charge their own transport and grouping packaging and sales packaging and packaging waste from the end-user and consumer either at the point of sale or in the immediate vicinity. This take-back obligation applies only to packaging which is of a similar type, design and size to the packaging sold. Mail-order suppliers must inform end-users and consumers about the possibility of handing the packaging over to the deliverer of the goods. Producers of packaging which includes hazardous materials must guarantee end-users and consumers the possibility of returning it.

TARGETS

Estonia was the only one of the new member states that did not negotiate a concession on the implementation deadline for the PPWD's targets. Thus, the overall recovery and recycling targets (60% and 55%-58% respectively) had to be met from 2009.

However, some of the Estonian material-specific recycling targets are higher than are required by EU legislation – 70% for glass, 60% for paper & board, 60% for metals and 20% for wood. Also, there are two plastics recycling targets – 22.5% for mechanical recycling and 45% for mechanical and feedstock recycling. Although the PPWD does not set material-specific recovery targets, Estonian law requires 70% recovery of paper & board, 55% recovery of plastics and 45% recovery of wood. Estonia does not have municipal waste incinerators to recover energy.



BEVERAGE CONTAINERS

There is a mandatory deposit of €0.10 on refillable and non-refillable containers of up to 3 litres for beer, low-alcohol beverages, carbonated and uncarbonated soft drinks, water, juice, cider and perry.

The operator of the beverage container deposit system is EPP (Estonian Deposit Packaging). EPP operates along similar lines to deposit systems in the Nordic countries – fillers pay fees (together with the deposit) to the deposit system. Consumers return empty containers to retailers, and EPP ensures that the containers are either recycled or returned to the fillers for refilling.¹¹³ EPP pays retailers a handling fee. The deposit is in principle paid by the fillers to EPP, but EPP says that mutual clearing arrangements between individual fillers and retailers are used where it is the “most rational solution”.

COMPLIANCE SYSTEMS

The Packaging Act requires all compliance systems to be not-for-profit. Participants must be charged fees on equal terms, i.e. no discounts.

Three compliance systems are operating. As required by law, they are all not-for-profit. They handle both household and non-household packaging.



ETO (Eesti Taaskasutusorganisatsioon, otherwise known as ERO Estonia) is licensed to use the Green Dot symbol.

EPC (Eesti Pakendiringlus or Estonian PackCycling) was set up by two Estonian producers and a Georgian company.

TVO was set up by a group of local companies.

PACKAGING TAXES AND LEVIES

There is a weight-based excise tax on all non-deposit packaging, payable on the difference between the recycling target and the rate actually achieved. Importers are exempt if they place less than 25 kg of plastic packaging and less than 50 kg of other packaging on the market per quarter.

¹¹³ Retailers with a sales area larger than 200 square metres must take back deposit-bearing containers on their premises; outlets with a sales area of between 20 square metres and 200 square metres may, if the local municipality agrees, arrange for off-premise take-back within retail hours. Where the population is less than 500 inhabitants per square km, there must be a collection point at least in the centre of the district.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Packaging Act transposes the Essential Requirements and heavy metals limit.

SPECIAL LABELLING RULES

Packaging participating in a compliance system must be marked with a bar-code registered with that system.



Deposit-bearing beverage containers must be marked with a special logo which incorporates an A, B, C or D code which indicates the appropriate deposit rate (deposits are currently €0.04 for non-refillable plastics of 0.5 litres or less and €0.08 for larger non-refillable plastic bottles, metal cans and non-refillable glass). There is a special K symbol for refillable containers.

Showing a code rather than the amount of the deposit makes it easier to adjust the deposit rates.

FINLAND

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packer/fillers and importers whose annual turnover is €1 million or more must organise the reception of separately collected packaging waste. They are responsible for ensuring an adequate network of collection facilities so that waste holders can deliver discarded products, including packaging, for re-use and recovery.

They can transfer their obligations for meeting the targets to a registered “producer organisation”. There are a number of material-specific producer organisations, co-ordinated by a central organisation formerly called PYR but now known as RINKI. RINKI handles both household and non-household packaging.

Entering into a contract with RINKI releases businesses from their producer responsibility obligations in respect of packaging they place on the market, but it does not cover any packaging waste generated by the business itself. The business is responsible for sorting and transporting this type of packaging waste to a collection point.

Individual compliers must register with the Pirkanmaa Centre and report how they are recovering their packaging. The Pirkanmaa Centre is responsible nationally for monitoring compliance with the producer responsibility requirements.

Finnish producer responsibility requirements do not apply in the self-governing Åland islands, which have their own broadly similar legislation and compliance system.

TARGETS

Finland’s recycling targets for packaging other than glass, metal and plastic packagings handled through an approved deposit system are significantly higher than those set by the current PPWD:

	From 2016	From 2020
Paper & board	80%	-
Glass (non-deposit only, until 2020)	27%	40%
Metals (non-deposit only, until 2020)	75%	80%
Plastics (non-deposit only, until 2020)	16%	22%
Wood	17%	-
Total	-	65%

The Decree also requires at least 90% of all packaging placed on the market to be re-used or recycled. Achievement of these targets is the responsibility of the administrators of compliance systems for packaging and return systems for beverage containers.

Compliance systems must also ensure that by 1 January 2020 they are recycling more than in previous years, by the following amounts:

- At least 5% more metals, paper & board and wood than in 2012;
- At least 10% more glass than in 2012; and
- At least 20% more plastics than in 2012.

BEVERAGE CONTAINERS

The producer responsibility provisions of the Packaging and Packaging Waste Decree do not apply to deposit-bearing beverage containers. However, the provisions on Essential Requirements, the heavy metals limit and packaging marking do apply, and beverage containers are included in the overall 2020 targets for recycling and recovery.

There is a tax of €0.51 per litre on both refillable and non-refillable containers for beer, and carbonated and still soft drinks and water, and alcoholic drinks containing 0.5-1.2% alcohol. Beverage cartons are

exempt. However, containers are exempt from the tax if they participate in an approved deposit and return system.

An Order which sets minimum deposit rates¹¹⁴ also specifies that deposit systems must ensure that 90% of refillable beverage containers are returned for refilling, and 90% of non-refillable beverage containers are returned for recycling.

An association called Ekopullo manages the deposit system for refillables, and Palpa manages the system for cans and non-refillable PET and glass. Authorised deposit systems are also operated by six individual producers or distributors.

Unless the Pirkanmaa Centre has granted an exemption, deposit-bearing beverage containers must indicate on-pack the level of the deposit and that they participate in an approved return system, for example:



COMPLIANCE SYSTEMS

Finnish Packaging Recycling RINKI Ltd collects licence fees from packer/fillers and importers on behalf of the various material-specific systems or recycling companies. It has contracts with the material-specific recycling systems and acts as the interface with the upstream players. There are recycling companies for deposit-bearing beverage containers, paper & board, glass, metal, plastic and wood packaging.

Packer/fillers and importers pay RINKI a one-off joining fee and an annual membership fee based on company turnover. They also pay material-specific weight-based recovery fees which RINKI has agreed with the recycling systems.



RINKI has a co-operation agreement with PRO Europe, the association of Green Dot and similar compliance systems, but does not use the Green Dot symbol. Marking packaging with RINKI’s own logo is voluntary.

Åland has its own compliance system, Producentansvar Åland AB (Proans). It ensures that producers in the archipelago meet their legal obligations, which apply to

¹¹⁴ €0.15 for cans, €0.20 for plastic containers up to 1 litre, €0.40 for larger plastic containers and €0.10 for any other type of beverage container.



packaging that is filled in Åland or imported into Åland (including imports from the Finnish mainland).

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

Legal responsibility for complying with the Essential Requirements and heavy metals limit falls upon the packers and fillers and cannot be delegated, but no particular compliance procedure is specified.

FRANCE (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packaged goods manufacturers and importers are responsible for the recovery of packaging waste from households through an approved compliance system. For private-label products, this obligation falls upon the contract packer. Companies not joining a compliance system must either introduce a deposit scheme or else set up their own government-approved collection system.

End-users rather than suppliers are responsible for the recovery of industrial and commercial packaging.¹¹⁵ They must either re-use, recover or recycle it in approved installations, or hand it over under contract either to the operator of an approved installation, or to an intermediary offering transport or brokerage service for waste.

Holders of such waste must keep it separate from other waste which cannot be recovered using the same channel or channels.

TARGETS

The targets for recycling and recovery of all packaging have been transposed as they appear in the PPWD.

A Framework Environmental Law (the so-called “Grenelle 1” Law) requires 75% of household packaging waste to be recycled or composted.

COMPLIANCE SYSTEMS

Eco-Emballages is the principal compliance system for household packaging. It is required to fund 80% of the net reference costs of an optimised municipal collection and sorting service for household packaging waste.

Material-specific fees are charged by weight, and there is an additional charge per unit of packaging.¹¹⁶ Multi-material flexible packaging is charged according to the principal material by weight. Eco-Emballages’ fee structure penalises hard-to-recycle items and incentivises source reduction (the “eco-modulation” principle).¹¹⁷

Eco-Emballages says that fees must be paid on packaging that typically becomes waste in the home, including packaging of free samples or packaging of products sold through distance sales to private homes. Fees must also be paid on packaging of items sold through channels that are accessible both to households and to businesses unless the producer has robust evidence of the proportion of products sold to businesses, and fees must be paid on packaging of items supplied to businesses who may then sell the items on to private consumers.

Eco-Emballages has merged its operations with Adelphe, a smaller compliance system set up by the wines and spirits sector which mainly handles glass packaging. A proportion of the fees paid to Adelphe for the management of the packaging of medicines is passed to CYCLAMED, which collects used packaging from pharmacists in addition to its main function of collecting unused medicines and destroying them.

Adivalor, which operates independently, handles packaging waste from plant protection products, fertilisers, seeds, and from the dairy sector. It also handles agricultural films.

The Environment Ministry is currently considering whether and how to authorise other organisations to compete with Eco-Emballages to handle household packaging waste.

CARRIER BAGS

Primary legislation has been adopted which will ban the distribution of single-use plastic carrier bags, whether free-of-charge or paid for, intended to wrap goods at

¹¹⁵ Though final users of packaging generating no more than 1100 litres of packaging waste per week are allowed to put it into the household packaging waste recovery system.

¹¹⁶ Producers placing less than 180,000 sales units on the French market annually pay a fixed fee per sales unit. The fee is set for each product category.

¹¹⁷ Discounts are currently available for paper & board packaging composed of at least 50% recyclate, if a pack is made lighter (provided the material is the same and the pack contains the same amount of product), or if the producer puts a message on the pack, on the instruction leaflet or in an advertisement to encourage the consumer to recycle and/or to tell consumers how to recycle the packaging.

Surcharges are paid on materials which are unrecyclable or which disrupt the recycling process.

point of sale, except for bags that can be composted in household composting and made partially or fully from bio-sourced materials. However, this ban cannot come into effect until an implementing decree has been adopted.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Environmental Code contains the Essential Requirements and heavy metals limit transposed by the Environmental Requirements Decree. There is a conformity assessment procedure: legal responsibility for carrying out this procedure is placed on the packaging manufacturers.

The French authorities assume that most companies will comply through the CEN standards and they make it clear that the whole packaging supply chain is involved in demonstrating compliance.

SPECIAL LABELLING RULES



Since January 2015 it has been mandatory to mark with the “Triman” logo household packaging waste (other than glass containers) that is collected separately for recycling.¹¹⁸ Alternatively, the Triman logo may be applied to an instruction leaflet or communicated electronically.



All packaging that participates in Eco-Emballages must also be marked with the Green Dot – France is one of the few EU member states that makes it mandatory for packaging in an EPR system to be identified as such.

The National Environment Commitment Law (the “Grenelle 2” Law) initiated an experiment under which certain producers are providing environmental information about their products, either on-pack or off-pack. A one-year trial began in July 2011, but it was finally decided that at least for the time being, provision of environmental information should be voluntary.

GERMANY

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Germany was the first European country to adopt legislation imposing producer responsibility on all

packaging waste. The 1991 Packaging Ordinance has been amended several times, but the emphasis on recycling household packaging waste and protection for refillable beverage containers remains unchanged.

Non-reusable sales packaging for products typically supplied to “private end-users” must participate in one or more approved “dual systems”, systems which collect money from the company that first places the packaged products on the market in Germany (the “first supplier”) and disburses it to cover the cost of managing the waste from this packaging.

Producers can join an approved “branch solution” (*Branchenlösung*) which arranges for used sales packaging to be collected from “commercial private end-users” and recycled. “Commercial private end-users” are establishments which generate packaging waste similar to that arising from households, such as catering establishments, cinemas, leisure facilities and motorway service stations.¹¹⁹ “Branch solutions” are a cheaper option than dual systems, as material is collected in larger quantities, but packaging waste from “commercial private end-users” cannot be used to meet the targets for sales packaging supplied to households (see below). Only packaging supplied to a “commercial private end-user” directly by the first supplier or by a third party appointed by him can be exempt from the dual system.

Special obligations apply to sales packaging that does not become waste at “private end-users”, i.e. sales packaging arising as waste on commercial and industrial sites outside the definition of “private end-users”, such as factories. Final distributors of such packaging must take it back and ensure that it is recycled.

An Ordinance on Commercial Waste requires business end-users to sort their waste and to make it available for recycling or energy recovery. Fractions suitable for material recycling (paper, glass, metals, plastics, textiles and organic waste) must be sorted. Waste for energy

¹¹⁸ The Triman logo is a sorting instruction intended to be used on all recyclable products covered by EPR and collected separately for recycling. However, it does not apply to glass (the policymakers regarded the Triman as unnecessary for glass) or to WEEE, batteries and packaging for household chemicals, which already bear the crossed-through bin logo.

¹¹⁹ The Ordinance lists the following as “private end-users”: households and comparable places where packaging becomes waste, in particular pubs, hotels, canteens, offices, barracks, hospitals, educational establishments, charitable establishments, professional premises and typical cultural sites such as cinemas, opera houses and museums, and leisure sites, such as holiday parks, leisure parks, sports stadia and motorway service stations. Comparable places where packaging becomes waste also include agricultural businesses and craft businesses [e.g. building trades] whose packaging waste can be collected in typical household collection bins for paper/board and lightweight packaging with a capacity per material not exceeding 1100 litres given typical emptying frequency.



recovery must not contain glass, metals, “minerals” or biodegradable waste.

The Packaging Ordinance establishes a preference for material recycling, but other recovery techniques (energy recovery and feedstock recycling) are permitted for a proportion of plastics, and incineration with energy recovery is permitted for transport packaging and sales packaging directly made from “renewable” materials (wooden pallets and crates, jute sacks and cotton netting).

Distributors must remove secondary packaging (multi-packs or outer layer of consumer packaging) before offering products for sale, or provide facilities for purchasers to leave it at the store. Secondary packaging taken home by purchasers is treated as sales packaging.

TARGETS

The Ordinance transposes the targets in the PPWD to be met by the end of 2008. The overall recycling target is the minimum in the PPWD (55%), and the material-specific targets are at the levels prescribed in the PPWD. However, the overall recovery target is a minimum of 65% (rather than the minimum 60% in the PPWD).

The annual average percentages by weight of **sales** packaging from “private end-users” which must be directed to material recycling are unchanged from those in effect in Germany since 1999 – 75% for glass, 70% for steel and for paper & board, and 60% for aluminium and composites¹²⁰ – but a 15% recycling target for wood has been added.

For plastics, the target is structured differently, with a 60% recovery target and a stipulation that 60% of the recovery rate must be achieved through mechanical recycling (feedstock recycling and energy recovery can be used for the remainder).

BEVERAGE CONTAINERS

A deposit-and-return system is mandatory for all beverage containers except those deemed to be “environmentally favourable” – namely refillable

containers, beverage cartons (including cylindrical cartons), polyethylene pouches and foil pouches.

All non-refillable container types and all drinks exempt from the deposit, must participate in a dual system.

The deposit system now covers beer and beer mixes; low-alcohol drinks; waters; and carbonated and non-carbonated soft drinks. It does not however cover fruit and vegetable juices and nectars; beverages containing at least 50% milk or milk-based products; baby drinks; and drinks consumed under medical supervision.

Distributors must take back and refund the deposit on all containers made of the same material as those they sell, but not those of other materials.



Companies which place deposit-bearing drinks on the German market must register with DPG, the not-for-profit company that manages the system. All containers must be marked with the DPG security logo and an EAN code unique to deposit drinks in Germany.

COMPLIANCE SYSTEMS

Industry set up DSD (Duales System Deutschland) in 1990 to take over companies’ obligations for sales packaging. It decided that brandholders (branded goods manufacturers and retailers for private label) were the most appropriate stage in the chain to pay fees.



The payment mechanism was a licence fee for use of an on-pack logo, the Green Dot, to demonstrate that a pack was participating. DSD registered the on-pack Green Dot symbol as a trademark, and licensed it to similar industry-run not-for-profit compliance systems in other countries.

A 1998 amendment to the Packaging Ordinance opened the way for third parties to offer a compliance service for non-household sales packaging, but DSD still had to provide the more expensive option of a collection service from all households until 2009, when the take-back obligation in the Ordinance was replaced by an obligation to participate in a dual system. This amendment also created conditions for competing dual systems to operate, and nine systems are currently operating throughout Germany in competition with DSD – BellandVision, ELS Europäische LizenzierungsSysteme, INTERSEROH Dienstleistungs, Landbell, NOVENTIZ Dual, Reclay Vfw, RKD Recycling Kontor Dual, Veolia Umweltservice Dual and Zentek.

¹²⁰ The “composites” recycling target applies to those composites directed towards their own recovery route. Where composites are collected with the principal material, the recycling rate must be verified by sampling. Composites do not necessarily have to be recycled with the major material if it would make more sense to recycle the pack with a subsidiary material (for example with the aluminium rather than with the plastic).

Producers are allowed to split their obligations between more than one dual system, for example one dual system to handle paper and another to handle plastics, or different dual systems for different retail customers.

For transport packaging, the Ordinance places legal responsibility for take-back on the companies that supplied it. Collection systems operate for particular types of commercial and industrial packaging, and for specific product sectors.

Otherwise, end-users organise collection and recycling themselves and claim back the cost from their suppliers. Sometimes end-users deduct an appropriate amount from suppliers' invoices.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The 1998 Packaging Ordinance introduced an abridged version of the Essential Requirements and heavy metals limit. The text provides for an exemption from the heavy metals limit for packaging in reuse systems. There is no established procedure for demonstrating compliance.

SPECIAL LABELLING RULES

It is no longer mandatory for manufacturers and distributors to show their participation in a dual system in Germany by marking their packaging with the Green Dot. DSD now licenses the Green Dot separately for producers whose packs are marked but who do not use DSD's recycling service.

GREECE

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The Law on Packaging and Other Waste requires a National System for the Alternative Management of Packaging and Other Waste to be set up to bring together central government, private industry, the municipalities and environmental and consumer systems to administer its implementation. EOAN, the National Recycling Agency, is responsible, in collaboration with the economic operators, for designing and carrying out national programmes to fulfil the requirements of the PPWD.

Packaging raw materials suppliers, converters, packer/fillers, importers and distributors must organise "alternative packaging management" systems as laid down in the PPWD. Members of a collective system can delegate their obligations to the system and have the right to mark their packaging with the system's symbol,

as a proof of participation. Collective systems must be approved by EOAN.

Companies may choose to implement their own system on an individual basis or operate a deposit system. Packaging raw material suppliers and converters must take back secondary materials and use them for the production of new products; packer/fillers and importers must take responsibility for the collection and separation at source of packaging waste and direct it towards re-use or recovery; distributors must collect packaging waste or used packaging and ensure that the products they distribute meet the requirements of the law.

The Development and Environment Ministers may, on a proposal from EOAN, ban or minimise the use of certain materials or mandate the use of a certain composition of materials or re-use or take-back, "provided that these measures do not hinder or distort competition".

TARGETS

The PPWD allowed Greece until 2011 to reach its targets. The Law on Packaging and Other Waste empowers Ministers to make amendments to incorporate any updated EU targets.

COMPLIANCE SYSTEMS



HE.R.R.CO (the Hellenic Recovery & Recycling Corporation) handles household, commercial and industrial packaging waste, but is focusing on household packaging waste. Members must use the on-pack Green Dot symbol on sales packaging.

Antapodotiki Anakiklosi S.A. (Reward Recycling S.A.), which was established in 2009, installs and operates high-tech Recycling Centres which sort and compact or shred the various fractions of packaging waste automatically. The machines offer consumers financial incentives, such as money-off vouchers, for depositing containers at the Recycling Centres.

There is one other sectoral compliance system (KEPED, which handles waste packaging from machine oil) and one individual complier (AB Vasilopoulos, a supermarket chain which offers consumers money-off rewards).

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Law requires packaging manufacturers and packer/fillers to submit an annual report to EOAN on the



implementation of the Essential Requirements, which are reproduced in the text.

HUNGARY

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Decree 442/2012 on Packaging and Packaging Waste offers producers two ways of complying with their collection, recovery and recycling obligation – through individual compliance, or by paying a product charge to the National Waste Management Directorate (NHI), a unit within the National Inspectorate for Environment and Nature.

NHI's role is to arrange for waste collection and recovery; implement the annual National Collection and Recovery Plan; support the development of a state fund to ensure sustainable resource management and eco-innovation in the waste management sector; improve the public's environmental awareness; and participate in international fora such as the International Solid Waste Association.

NHI has contracts with local waste management companies and with recyclers who carry out operations on its behalf.

TARGETS

The recovery and recycling targets are laid out in the same form as in the amended PPWD, but Act LXXXV/2011 on the product charge specifies that for each packaging material, 75% of the weight of the waste collected must be recycled.

REFILLABLE BEVERAGE CONTAINERS AND OTHER REUSABLE PACKAGING

In the case of packaging manufactured in Hungary, no product charge is payable on reusable components provided the first distributor of the packaging material can prove that more than 75% of the material is reused. A statement to this effect must be provided to the company that would otherwise pay the product charge.¹²¹

COMPLIANCE SYSTEMS

Until the end of 2011, producers and importers had the right to delegate their obligations to the Green Dot system Öko-Pannon or one of its competitors. This has

not been an option since January 2012, when the role of the compliance systems has been taken over first by the National Waste Management Agency OHÜ and then in 2015 by NHI.

PACKAGING TAXES AND LEVIES

A weight-based “product charge” on packaging has been payable to the state since 1996. The conditions for exemption have varied over the years, but they have always been linked to the recovery and recycling rates achieved.

Since January 2012 there have been no exemptions. The producer of the packaging material pays the product charge if the packaging has been produced in Hungary; the packer/filler pays if he imports packaging from abroad to be filled in Hungary; and the importer or distance seller registered for Hungarian VAT pays for imported packaged goods.

Companies that manage their own packaging waste pay a lower product charge. Whereas those opting to comply through NHI pay the product charge at a flat rate, individual compliers' payments depend on their packaging waste management performance.

As amended, the law contains no commitment as to the proportion of product charge revenues which is spent on packaging waste management.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The PPWD's heavy metals limit and Essential Requirements have been transposed, and a Decree sets out a procedure for demonstrating compliance. Packaging can only be distributed by persons who can certify compliance with the Essential Requirements.

ICELAND

(EFTA – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The PPWD was transposed through a Regulation which follows the text of the Directive very closely.

TARGETS

A Regulation set 2011 as the deadline for meeting the PPWD's targets.

BEVERAGE CONTAINERS

There is a deposit of 16 krónur (€0.11) on non-refillable glass, aluminium and plastic beverage containers.

¹²¹ In the case of imported reusable packaging, no product charge is payable if the obligated company can prove that it re-exported the packaging material within one year of the date of importation so that it could be reused.

COMPLIANCE SYSTEM

There are no private-sector compliance systems. This role is fulfilled by the Recycling Fund (*Úrvinnslusjóður*), which is managed by a board whose chairman is appointed by the Environment Minister. The other members are nominated by the Confederation of Icelandic Fisheries and Agriculture, the Confederation of Trade and Industry, the Retailers Confederation, and the Association of Municipalities.



The Recycling Fund is however licensed to use the on-pack Green Dot symbol.

The Recycling Fund charges a levy on plastics and on paper & board to cover the cost of handling sorted waste at a collection point, transporting the waste from the collection point and recovering or disposing of the waste.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The PPWD's heavy metals limit and Essential Requirements have been transposed, and a Decree sets out a procedure for demonstrating compliance.

The Regulations also transpose the Essential Requirements and heavy metals limit.

IRELAND (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

“Major producers” – importers, manufacturers and distributors of packaging material, packaging or packaged products, who place more than 25 tonnes of packaging on the Irish market and have a turnover exceeding €1 million – must either take back used packaging or join an approved compliance system.

Those opting for individual compliance must register each year with the municipality where each of their sites is located; pay the municipality an annual fee per tonne of packaging handled; submit plans to the municipalities showing how the company proposes to comply with the Regulations and prevent or minimise packaging waste; and provide the municipality with statistics on each type of packaging placed on the market from each site.

Individual compliers must also provide facilities for customers to return used packaging at no net cost to themselves, and must display a notice at their premises

to this effect. They may also be required to arrange for the collection of packaging waste from any other producer to whom they supply packaging or packaged goods.¹²² No producer may dispose of the used packaging taken back and/or collected without first making it available for reuse or recovery.

Major producers are exempt from these obligations if they participate in an approved packaging waste compliance system.

TARGETS

Ireland was given until the end of 2011 to meet the PPWD's second-stage targets. However, as the country had already met these targets, it chose not to take advantage of this derogation.

Compliance systems have to agree targets with the Government as part of the approval procedure. Repak – the only packaging compliance system operating in Ireland – has agreed with the Government that it would ensure that the national targets are met, and not only the obligations of its members.

COMPLIANCE SYSTEM



Repak is licensed to use the on-pack Green Dot symbol. Brandholders and importers of packaged goods pay weight-based, material-specific fees, and companies operating at other levels in the packaging supply chain pay a participation fee based on the total tonnage of packaging placed on the Irish market. Fees apply both to consumer and to transport packaging.

PACKAGING TAXES AND LEVIES

A levy on plastic shopping bags came into effect in 2002.¹²³ The charge is currently €0.22 per bag, but legislation provides for it to be increased by up to 10% each year to a maximum of €0.70. The levy applies at the point of sale in retail outlets. Retailers are obliged under law to pass on the full amount as a charge to customers at the check-out.

¹²² The requirement to accept waste from third parties applies only to major producers, but smaller manufacturers and retailers placing packaging on the market must segregate the packaging waste arising on their own premises, and either send it or have it collected for recovery.

¹²³ The levy does *not* apply to plastic bags used solely to contain fresh fish and fresh fish products, fresh meat and fresh meat products, or fresh poultry and fresh poultry products, whether packaged or not, and provided such bags are not larger than 222mm in width (excluding any gussets), 345mm in depth (including any gussets) and 450mm in length (including any handles); plastic bags of the same maximum dimensions which are used solely to contain non-packaged fruit, nuts or vegetables, confectionery, dairy products, cooked food, whether cold or hot, or ice; plastic bags used to contain goods or products sold on board ships or aircraft or in ports or airports; or reusable shopping bags sold for €0.70 or more.



THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Regulations incorporate the heavy metals limit and Essential Requirements, but no procedure is specified for demonstrating compliance.

ITALY

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packaging producers (suppliers of packaging materials and manufacturers, converters or importers of empty packaging and packaging materials) and users (wholesalers, distributors, fillers, users of packaging and importers of filled packaging) are responsible for the take-back of packaging waste collected by the public authorities.

Packaging users must take back used secondary packaging and transport packaging free of charge and send it to a collection point organised by the producer. Producers and users are responsible for the costs of taking-back used packaging and collecting secondary and tertiary packaging waste, separate collection of packaging waste from the public authorities, re-use of used packaging, recycling and recovery of packaging waste and the disposal of secondary and tertiary packaging waste.

The 2007 finance law imposed a ban on single-use, non-biodegradable shopping bags with a gauge of less than 400 microns, originally with effect from 2011. The ban was postponed several times, and was challenged under the EU Single Market legislation, but since Directive (EU) 2015/720 was adopted, marketing restrictions on lightweight plastic carrier bags are now permitted. The ban finally came into effect in August 2014. However, any such restrictions must be proportionate and non-discriminatory: infringement proceedings are still open and it remains to be seen whether a ban limited to non-biodegradable bags will be permitted by the EU.

TARGETS

The recovery and recycling targets are laid out in the same form as in the amended Packaging and Packaging Waste Directive, but the targets for plastics recycling and for wood recycling are higher.

COMPLIANCE SYSTEMS

It is no longer mandatory for producers and users of packaging to participate in the National Packaging Consortium (CONAI). A deregulating decree-law of

January 2012 allows producers to comply individually or collectively other than through CONAI, but they must still submit waste prevention plans to CONAI, and must also pay the eco-contribution if they fail to achieve the targets.

CONAI is an umbrella body and there is also a separate consortium for each of the major material groups. Subject to the unanimous approval of the existing members, collectors and recyclers who are not producers are also permitted to join a material consortium.

CONAI handles both household and commercial and industrial packaging waste; it does not use the Green Dot or any other on-pack symbol.

The CONAI joining fee is based on turnover (for companies with a turnover below €516,457), packaging sales revenues (in the case of manufacturers and importers of empty packaging), packaging purchase costs (packer/fillers and importers of packaged goods) or total sales revenue (retailers and distributors). Members also pay weight-based material-specific fees (eco-contributions), which vary according to the material used. For packaging produced and sold in Italy, converters pay the material-specific fees in the first instance, the idea being that they will pass the cost on to their customers. For imported packaging, the importer pays in the first instance.

Foreign producers are not permitted to join CONAI unless they appoint an agent in Italy who would participate on the company's behalf, or if they are registered for VAT in Italy.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements and heavy metals limit have been transposed, but there is no procedure for demonstrating compliance.

KOSOVO

(POTENTIAL EU CANDIDATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packer/fillers and importers must inform retailers and consumers about the end-of-life requirements for packaging, and must cover the costs of collecting and processing the waste from packaging of products that they have placed on the market.

TARGETS

The Minister of Environment and Spatial Planning is empowered to set recovery and recycling targets, but has not yet done so.

COMPLIANCE SYSTEMS

Legislation provides for collective compliance via contractual arrangements between producers and licensed waste system operators, but as yet no compliance systems have been approved.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

Packaging must comply with the Essential Requirements and heavy metals limit.

SPECIAL LABELLING RULES

It is *mandatory* to mark packaging with a material identification mark as specified in Annex IV of the Administrative Instruction no. 27/2014 of 3 December 2014 on packaging waste management, using the numbers and abbreviations in the *voluntary* packaging marking scheme in European Commission Decision 97/129/EC and the ISO recyclability symbol.



LATVIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packer/fillers and importers placing more than 300 kg of packaging on the market annually are responsible for management of the packaging waste they place on the market. To do this, they may either join an approved system, or register with the State Environmental Service as individual compliers, organise their own packaging waste collection and recovery and report annually to the Ministry of Environmental Protection and Regional Development on progress with implementation of their corporate action plan.¹²⁴

TARGETS

The PPWD's current recovery and recycling targets have applied since 2015. There are also material-specific recovery targets – 83% for paper & board, 41%

for plastics, 50% for metals, 65% for glass and 29% for wood.

COMPLIANCE SYSTEMS



The Green Dot compliance system, Latvijas Zalais Punkts (LZP), has two competitors, Zalais centrs and Zaļā Josta.



PACKAGING TAXES AND LEVIES

Packaging and disposable tableware are subject to a Natural Resources Tax, which includes a material-specific tax charged per weight of packaging material.

There is a tax of €3.70 per kg on plastic shopping bags weighing 3g or less, and of €1.14 per kg on heavier bags. There is an exemption for bags made from biodegradable plastics whose components are completely or almost completely obtained from renewable resources.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Packaging Law transposed the Essential Requirements and heavy metals limit.

SPECIAL LABELLING RULES

There is a special symbol for deposit-bearing reusable packaging.

Compostable packaging and disposable tableware must be certified as such and marked with a compostability mark. Oxodegradable materials must be marked 'OKSOPLASTMASA'.

LIECHTENSTEIN

(EFTA – EEA MEMBER STATE)

The Principality of Liechtenstein has a population of only 36,600, but as a member of the European Economic Area, it is required to transpose the PPWD. However, it also has a Customs Agreement with Switzerland (which opted out of the EEA), is more or less part of the Swiss market and is in practice part of the Swiss waste management regime.

LEGAL OBLIGATIONS – PACKAGING WASTE

A Packaging Ordinance partially transposes the PPWD, and says that the relevant EEA legislation is “directly applicable and generally binding”. However, as the Swiss Beverage Containers Ordinance also applies

¹²⁴ Fillers, importers and systems placing less than 300 kg of packaging on the market per calendar year do not need to take part in packaging waste management activities, but do still have to register and report on packaging volumes.



in Liechtenstein, the Principality has also introduced Switzerland's Advance Recycling Fee on glass.

TARGETS

The PPWD's material-specific recycling targets and 55% overall packaging recycling target have been transposed, but not its overall recovery target of 60%. The Liechtenstein Ordinance says that all non-reusable packaging must be either recovered as energy or recycled.

COMPLIANCE SYSTEMS

There is no private-sector compliance system and industry does not have to pay fees, other than the Advance Recycling Fee on glass.

All municipalities operate "bring" systems for recyclables, and most materials are shipped to Switzerland for recycling or energy recovery.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Packaging Ordinance has transposed the Essential Requirements and heavy metals limit.

LITHUANIA (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The Packaging and Packaging Waste Law requires packaged goods producers and importers placing more than 500 kg of packaging on the national market to ensure that targets for collection, recycling and reuse of packaging and packaging waste are attained. They may either organise packaging waste management systems themselves, or delegate this to a compliance system. Individual compliers must register with the Environmental Protection Agency.

Sellers must take back the packaging of the products they sell if it is covered by a deposit system. They may organise systems for collection and sorting of packaging waste, or may make use, under contracts, of organised waste management systems. Sellers must provide point-of-sale information on how consumers may return packaging and packaging waste. Reusable packaging needs not be accepted and the deposit refunded if the packaging has been damaged or contaminated to such an extent that reuse is impossible.

A 2011 amendment to the Waste Act says that producers are responsible for waste management costs.

TARGETS

Material-specific recovery and recycling targets have been set from 2016. They are higher than the targets in the PPWD:

	2016	2017	2018	2019	2020
Glass recycling	65%	65%	68%	68%	70%
Plastics recovery, including PET	50% →				
Plastics recycling, including PET	45%	37% →			
Recovery of composites made predominantly from paper & board	25% →				
Recycling of composites made predominantly from paper & board	20% →				
Recycling of other composite packaging	25% →				
Metals recycling	54% →				
Paper & board recovery	80% →				
Paper & board recycling	76% →				
Wood recovery	45% →				
Wood recycling	35% →				
Recovery of other materials	45% →				
Recycling of other materials	22% →				

BEVERAGE CONTAINERS

A mandatory deposit of €0.10 came into effect from 1 February 2016 for non-refillable glass, PET and metal beverage containers of up to 3 litres.¹²⁵ Containers covered by the deposit can be taken back, but without a deposit being refunded, if:

- They do not bear a clearly visible mark identifying them as part of the non-refillable container deposit system; and/or
- they do not bear an undamaged bar code identifying the manufacturer or importer, and/or they have not been fully emptied; and/or
- their shape has been changed so that it is technically impossible to identify them.

Refillable containers can be accepted, but without a deposit being refunded, if the container cannot be identified as part of the refillable bottle return system,

¹²⁵ The products covered by the mandatory deposit are beer, beer cocktails, cider, alcoholic cocktails and non-alcoholic beverages (soft drinks, table water, kvass, a traditional Slavic and Baltic fermented beverage), natural mineral water, spring water, pre-packaged drinking water, juices and nectars. However, there is no deposit on fruit wine, fruit wine-based drinks and fruit wine cocktails packaged in non-refillable glass containers.

or if it has been damaged or contaminated to the extent that it can no longer be re-used.

Deposits can be redeemed during normal commercial working hours, either at the store or at a redemption point within 150 metres of it. Deposits must be redeemable in cash, though at the request of the consumer they may be used to purchase goods or services or to support charities.

There are also collection and recycling targets for deposit-bearing glass, plastic (including PET) and metal containers:

2016	2017	2018	2019	2020
55%	70%	80%	85%	90%

COMPLIANCE SYSTEMS



A Green Dot system *Zalasis taškas* (ZT) was founded in 2002 to organise the collection, sorting and recycling of used packaging on behalf of Lithuanian industry.

Eko-taskas operates buy-back centres for packaging.

Individual compliers meet their obligations by contracting with waste management companies who provide recycling certificates as proof of compliance. The rates for certification set by the recyclers are regulated by the market.

The Deposit System Administrator (USAD) is a not-for-profit body set up by the Lithuanian Brewers' Guild, the Lithuanian Retail Trade Association and the Lithuanian Natural Mineral Water Producers Association. These associations represent more than 80% of the packaging covered by the system.

PACKAGING TAXES AND LEVIES

Producers who do not meet the targets must pay a weight-related 'pollution tax'. They are exempted from the tax if the recovery target has been achieved; there is a 75% exemption if at least 75% of the targeted recovery rate has been achieved, a 50% exemption if at least 50% of the targeted recovery rate has been achieved; and a 25% exemption if at least 25% of the targeted recovery rate has been achieved.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Packaging and Packaging Waste Law transposes the Essential Requirements. Producers and importers

must be able to produce documents certifying that packaging does not exceed permissible levels of noxious substances.

SPECIAL LABELLING RULES

Although the Packaging and Packaging Waste Law says that packaging must be marked to identify the material used, no procedure for this has been established.



There is a special symbol for deposit-bearing containers.

LUXEMBOURG

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The Packaging Regulation imposes a basic obligation on packer/fillers or importers to take back used packaging and to achieve the recovery and recycling targets, either individually or by joining an approved compliance system.

It also provides for voluntary agreements to be concluded between the government and industry to promote the use of reusable packaging. Once concluded, these agreements would be binding on signatories.¹²⁶

Compliance systems may handle both household and non-household packaging waste but must obtain Government approval for their activities.

TARGETS

The Regulation incorporates the PPWD's material-specific targets, but its overall targets – 60% for recycling and 65% for recovery – are 5% higher than the minimum levels set by the PPWD.

However, the Waste Management Law says that these targets do not exempt producers from taking measures to ensure that recovery and recycling rates are maximised.

COMPLIANCE SYSTEM

The Waste Management Law requires compliance systems to represent at least 20% by weight of the total products placed on the national market annually

¹²⁶ There is an agreement to increase the market share of reusable shopping bags.



in the sector(s) for which the organisation has applied for accreditation.



Valorlux asbl is the only compliance system in Luxembourg. It uses the on-pack Green Dot symbol, and charges weight-based material-specific licence fees. There are simplified reporting procedures for smaller companies.

Its main focus is on household packaging waste, but Valorlux also handles “similar packaging waste” from commercial end-users on request.

Fees for grouping and transport packaging are paid by packer/fillers and importers of packaged goods, and are much lower than the Green Dot fees for sales packaging.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements and heavy metals limit were transposed faithfully by the Luxembourg Regulation, but the Regulation does not specify any compliance procedure nor say which operators are legally responsible for demonstrating compliance.

MACEDONIA (THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA) (EU ACCESSION CANDIDATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

FYR Macedonia's Law on Packaging and Packaging Waste generally follows the PPWD. Packer/fillers and importers of packaged products and of empty packaging must ensure that packaging waste is collected from households and from business end-users for reuse or recovery.¹²⁷

Packaging and packaged goods producers and importers who place more than 30 tonnes of packaging on the national market each year must prepare a prevention plan every four years. The plan must include quantitative reduction targets. The first plan had to be prepared by the end of 2012.

There is a ban on the free distribution of lightweight plastic shopping bags for food and other small items intended for personal consumption, such as cosmetics

¹²⁷ However, producers who place on the market less than 800 kg of glass, less than 300 kg of paper & board or fibre-based composites, and less than 100 kg of plastics, metal, wood or other packaging material are exempt from all obligations other than data reporting.

and cigarettes, but retailers may still provide plastic bags to pack foodstuffs such as vegetables, fruit, meat, flour and other products which are weighed and packed on the premises. Nevertheless, retailers may sell bags which have a thickness of more than 21 microns and a carrying capacity of more than 5 kg.

TARGETS

The Law on Packaging and Packaging Waste transposes the PPWD's overall recovery and recycling targets and the material-specific recycling targets, and says that they must be met by 2020. However, the 22.5% recycling target for plastics must be met by 2018. Interim targets will be set later.

COMPLIANCE SYSTEMS

Packers and fillers have the option of either meeting their recycling obligations through individual compliance or by membership of an approved compliance system.



The first packaging compliance system to be approved was Pakomak, which is licensed to use the on-pack Green Dot symbol. Three other compliance systems have subsequently been approved – Euro-Ekopak, Eko-Pak Hit and Ekosajkl.

PACKAGING TAXES AND LEVIES

In principle, producers must pay taxes on packaging placed on the national market. If they contract with a compliance system or are registered as individual compliers they are exempt from the taxes unless they fail to meet the targets, in which case they are taxed on the shortfall.

For the purposes of an exemption from the packaging taxes, the law sets a target of 20% overall recovery and recycling for 2011, and 30% overall recovery and recycling in 2012.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Law sets out the Essential Requirements, and stipulates that packaging produced and placed on the market in the Republic of Macedonia must comply with the relevant CEN standards.

The PPWD's heavy metals limit also applies.

SPECIAL LABELLING RULES

The 2004 Law on Waste Management requires an on-pack indication of reusability (if applicable), recyclability and how to dispose of the used packaging. To avoid creating a trade barrier, this does not apply to imports.

This provision is still in force, but the Law on Packaging and Packaging Waste and a subsequent Regulation have added additional labelling requirements.



With effect from January 2012, packaging must be marked to show the material it is made from and to show that it is reusable or recyclable. The numbers and abbreviations which enable the packaging material to be identified are reproduced from European Commission Decision 97/129/EC, but the Regulation also includes the Mobius Loop as a recyclability symbol. The numbers can be printed between the three arrows, or the abbreviations can be printed below the symbol. The Regulation does not mention a reusability symbol, however.

Distributors who are also end suppliers must ensure that packaging is marked with the symbol of the relevant compliance system which offers a packaging waste management guarantee.

MALTA (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Producers and importers placing on the Maltese market 100 kg or more of packaging or packaging material each year must take the measures necessary to achieve the recovery and recycling targets laid down.

It is mandatory for producers to join an authorised packaging waste recovery system for all consumer packaging.

They may opt to be self-compliant for all packaging waste remaining at the warehouse, store or manufacturing facility, but must have this packaging waste collected under contract. If no such contract is in place, the “back-end store” packaging will be deemed to be consumer packaging waste and in that case, participation in a packaging waste compliance system for all “back-end store” packaging would be required. Producers opting to join an authorised packaging waste recovery scheme for “back-end store” packaging must do so for all packaging waste streams.

TARGETS

The amended Regulations set year-by-year material-specific recycling targets and overall recovery and recycling targets for each year up to 2013, the deadline for achieving the PPWD’s targets.

COMPLIANCE SYSTEMS

There are two competing compliance systems, GreenPak, which has been licensed to use the on-pack Green Dot symbol, and Green MT Ltd, a wholly-owned subsidiary of the GRTU (General Retailers and Traders Union), Malta’s national system of independent private businesses.



Imports account for some 90% of the packaging placed on the national market, and either the original manufacturer or the local importer can register the use of the Green Dot in Malta.

PACKAGING TAXES AND LEVIES

There is an eco-tax on some types of packaging – containers for beer, cider, soft drinks, water and wine and spirits, and for various personal care products, as well as fast-food “clamshells” and plastic shopping bags and rubbish bags.

The Eco-Contribution (Exemptions) Regulations regulate the granting of exemptions for producers participating in packaging compliance systems. The exemptions are related to the recovery rates achieved. There is no exemption for a recovery rate of 40% or less. For an exemption to be granted, at least 60% of the total packaging waste recovered must be collected from households, through kerbside collection or “bring” facilities.

No exemption can be claimed in respect of plastic shopping bags.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Regulations reproduce the Essential Requirements, but do not however specify any compliance procedure nor say which operators are legally responsible for demonstrating compliance.

The heavy metals limit and the Decisions permitting derogations from them have also been transposed.

SPECIAL LABELLING RULES

Markings to indicate the “identification and classification” of the packaging are mandatory.

MONTENEGRO (EU ACCESSION CANDIDATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The Waste Management Law requires manufacturers and importers of packaging and packaged products



to take part in an organised system of take-back, collection and treatment of packaging waste, and to bear the costs of this system.

The Packaging Regulation sets out a series of definitions based on those in the PPWD, and sets out the take-back requirements in more detail.

TARGETS

The Waste Management Law incorporates the targets in the WFD, PPWD and other EU waste directives. However, it does not set a deadline for achievement of the PPWD targets.

COMPLIANCE SYSTEM

None. Manufacturers and importers of packaging and other products subject to EPR are to pay a Special Waste Management Fee. This is to be paid into a Government account and used to co-finance the implementation of waste management projects and the costs of take-back, collection and treatment of wastes from these items.

PACKAGING TAXES AND LEVIES

There is a waste management tax of on foodservice disposables, point-of-sale packaging and shopping bags, except for plastic bags used exclusively for meat and dairy products. This is charged at a base rate of €0.01 per kg, multiplied by a factor representing unit load of environmental impact. For most items, the unit load is 100, so the charge is €1.00, but the charge for biodegradable materials is €0.01 (the unit load is 1) and for PVC it is €15.00 (the unit load is 1500).

A waste management tax will be imposed on other types of packaging from the date of Montenegro's accession to the EU.¹²⁸ The base rate will again be €0.01 per kg, and the unit load will be 1 for all packaging materials except PVC.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

Not mentioned in the Packaging Regulation.

NETHERLANDS

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Producers and importers are responsible for separate collection, or separation after collection, of packaging, paper and board they have made available to third parties in the Netherlands, and packaging they have imported and discarded in the Netherlands, insofar as this is necessary in order to be able to meet the recovery and recycling targets laid down.

Municipalities' packaging waste management costs are financed from a Packaging Waste Fund (StAV) which receives its revenues from producers' mandatory "waste management contributions", and producers' obligations are delegated to StAV. Producers and importers placing less than 50 tonnes of packaging on the Dutch market each year are exempt.

TARGETS

Dutch law sets higher targets than those required by the PPWD. The material-specific recycling targets are 90% for glass, 85% for metals and 75% for paper & board. The recycling target for plastic packaging rises by 1% each year from 45% in 2015 to 51% in 2021, and will be 52% from 2022; the target for wood rises by 2% each year from 31% in 2015 to 43% in 2021, and 45% from 2022.

The overall targets to be achieved each year are 75% recovery and 70% recycling, both 15% higher than the current PPWD's targets.

BEVERAGE CONTAINERS

A deposit must be charged on all non-refillable PET beverage containers with a capacity greater than 0.5 litres. The deposit is currently €0.25.

The Decree on the Management of Packaging and Packaging Waste contains provision for mandatory deposits for smaller PET bottles and other beverage containers, but this part of the legislation will not be activated unless Parliament votes to introduce an Implementing Decree.

A Framework Agreement between the Government, industry and the municipalities signed in 2012 provided for the abolition of the deposit on large PET bottles on condition that industry meets certain performance guarantees. In 2014 the minister announced that the abolition of the deposit on large PET bottles would be postponed because one of the conditions for

¹²⁸ The tax applies only to producers placing more than 3 tonnes of packaging on the national market per quarter-year, except in the case of PVC and other plastics, where no *de minimis* exemption applies.

its abolition – that supermarkets would not sell any products in PVC packaging – had not been met.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Decree on the Management of Packaging and Packaging Waste prohibits the placing on the market of packaging that does not comply with the Essential Requirements or with the heavy metal limits, and establishes a procedure for demonstrating compliance.

A Framework Agreement between the Government, industry and the municipalities includes specific commitments designed to make packaging more sustainable, including the establishment of the Knowledge Institute for Sustainable Packaging (KIDV). KIDV will develop new specifications for selected product-packaging combinations in each product sector, and these may be adopted as ministerial decrees. Any such decrees will be linked with compliance with the relevant Essential Requirements, but producers and importers will still be able to demonstrate compliance through other methods.

**NORWAY
(EFTA – EEA MEMBER STATE)**

LEGAL OBLIGATIONS – PACKAGING WASTE

As a member of the European Free Trade Association (EFTA), Norway is bound by European Economic Area (EEA) rules and so has had to implement the PPWD.

It has chosen to do so through a series of voluntary agreements and a deposit system.

TARGETS

Signatories to the voluntary agreements undertook to meet high material-specific recovery and recycling targets by 1999. These agreements were renewed in 2003.

	Recovery	Recycling
Corrugated board	80%	65%
Cartonboard	60%	50%
Expanded polystyrene	60%	50%
Other plastics	80%	30%
Metals	-	60%
Beverage cartons	-	60%
Overall recovery	75%	

No agreement was made for glass, so there is no target for this material.

BEVERAGE CONTAINERS

There are separate legislative requirements for beverage containers. These predate the PPWD. Return systems have to be approved by the State Pollution Control Authority.

Several return systems have been approved, including traditional deposit refund systems in operation for refillable glass and PET containers for beer and carbonated soft drinks. Some small return systems operated by individual producers have been approved, and Grønt Punkt Norge (GPN), the general packaging compliance system, has been approved in respect of the non-deposit beverage containers that it handles.

Deposits are not mandatory, but the tax system provides a strong incentive for them.

COMPLIANCE SYSTEMS

Material recovery companies operate for corrugated board (Norsk Resy), glass (Norsk GlassGjenvinning) and metals (Norsk MetallGjenvinning A/S). GPN collects fees on behalf of these three and for the other packaging materials. Norsk GlassGjenvinning and Norsk MetallGjenvinning co-operate to organise the collection of glass and metal packaging, using the name Syklus for the joint operation.

As there are no statutory recycling obligations on producers, GPN has devised various strategies to encourage producers to participate. Key among these is “control membership”, whereby producers who opt to be control members undertake to purchase only from suppliers who participate in GPN (or can demonstrate that they are meeting the targets in other ways). Control members also send GPN a list of all their suppliers.

Control membership initially focused on the grocery trade, but an increasing number of national and local public purchasers have become control members.

Paying GPN fees is the responsibility of the first importer of packaged goods or the company which actually puts the products into packaging. Thus in principle it is the packer/fillers and importers of filled packaging who pay. However for corrugated board, glass and metals, the converters pay GPN and pass the cost on to their customers as a separate invoice item. This is for administrative simplicity because there are very few converters in Norway. Converters or importers of empty packaging pay for point-of-sale packaging and packaging of agricultural produce.



Retailers make no direct payments, even for their own brand goods: their contribution comes through the fees being internalised within the prices of the packaged products they purchase from their suppliers.

Foreign producers are allowed to report and pay on behalf of their Norwegian customers.

Fees are material-specific and are either charged per unit or by weight, according to the type of packaging.



Sales packaging covered by the GPN system should be marked with the Green Dot symbol.

GPN does not cover beverage cans or non-refillable PET beverage containers. Infitum, which is owned by the relevant trade associations, operates a deposit system for these containers. Retail outlets take back deposit-bearing containers, mainly through reverse vending machines. The system relies on bar codes for identification, and participating containers are also marked to show the amount of the deposit. Infitum members (fillers and importers of filled beverages) pay a one-off joining fee, a one-off fee for each EAN code supplied and annual material-specific fees, which are adjusted from time to time in line with the value of the secondary raw material.

PACKAGING TAXES AND LEVIES

There is a basic tax on non-refillable beverage containers, and a packaging material tax on both refillables and non-refillables. The packaging material tax is subject to a discount proportionate to the return rates achieved by each approved return system.

Beverage cartons are also subject to the tax. These are not deposit-bearing but are handled through GPN.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

Regulation T1202 implements the heavy metals limits in the PPWD. There is an exemption for lead crystal and provision for specific exemptions for other categories of packaging.

The Essential Requirements in the PPWD have not been transposed, but Norway participated with Denmark, Finland, Iceland and Sweden in the three-year Opti-pack programme funded by the Nordic Industrial Fund to develop a guide to help companies comply with the CEN standards and the PPWD's Essential Requirements; support national authorities

in the implementation and auditing of the PPWD and standards; and develop methods for the assessment of the CEN prevention standard (EN 13428).

SPECIAL LABELLING RULES



Deposit-bearing beverage containers must be marked to show the level of the deposit charged and that the pack is returnable.

POLAND

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

For many years, manufacturers and importers of packaged products have been obliged to inform the provincial authority when they begin or cease trading. According to the 2013 Packaging and Packaging Waste Act, a national register of producers, recyclers and waste exporters would be in operation by the end of 2015 but this has been delayed.

Packaged goods producers and importers are responsible for meeting the recovery and recycling targets and must finance separate collection by the municipalities.

They can do this in one of three ways: they can contract with one of the many compliance systems operating in the packaging sector; they can opt for self-compliance; or they can simply report the tonnage placed on the market and pay a “product charge” to the National Fund for Environmental Protection and Water Management.

While the targets set by the Packaging and Packaging Waste Management Act [see below] apply to packer/fillers who can prove that he has a dedicated system to collect and recycle only packaging of his own brand, individual compliers collecting similar waste from other packer/fillers' packaging must meet a 100% target – a major disincentive to individual compliance.

Individual compliers and systems which fail to meet their recovery and recycling obligations must pay a product charge based on the difference between the recovery and recycling levels required and those actually achieved.

Packaging of chemical substances defined as extremely toxic, toxic, carcinogenic, mutagenic or harmful to the environment must carry a deposit which cannot be lower than 10% or higher than 30% of the price of the contents. Sellers of these substances must accept them

back from end-users in order to pass them back to the producer or importer.

Entirely separate producer responsibility regimes now apply to “multi-material packaging” (i.e. composites) and to packaging used for “hazardous products, including plant protection products”. Sellers of these products are no longer able to participate in the compliance systems set up to fulfil the obligations of producers of other packaged products, but must either organise collection and provide recovery for their waste or else enter into a voluntary agreement.

TARGETS

The deadline for meeting the PPWD’s targets was 2014. The 2013 Packaging and Packaging Waste Management Act sets targets for subsequent years which are slightly higher and exclude waste from “multi-material packaging” and from packaging of hazardous products. The targets applicable from 2015 onwards are as follows:

Plastics recycling	23.5%
Aluminium recycling	51%
Steel recycling	51%
Paper & board recycling	61%
Glass recycling	61%
Wood recycling	16%
Overall recycling	56%
Overall recovery	61%

Regulation 412/2014 set annual targets for the proportion of the overall recovery and recycling targets that a packaging compliance system must achieve via collection of packaging waste from households:

	2015	2016	2017	2018	2019	2020
Recovery	35%	38%	41%	44%	47%	50%
Recycling	35%	38%	41%	44%	47%	50%

Thus in 2016, (56% x 38% =) 21.28% of the packaging placed on the market must be collected from households and recycled.

Regulation 618/2014 sets minimum annual targets for recovery and recycling of waste from ‘multi-material packaging’ (i.e. composites which cannot be separated manually or through simple mechanical methods) and from packaging of hazardous products. These targets also apply to multi-materials covered by an authorised voluntary agreement unless the agreement contains different targets:

Recycling targets for multi-material packaging: predominant material

	2016	2017	2018	2019	2020
Plastics	18%	20%	21%	22%	23.5%
Aluminium	20%	25%	32%	41%	51%
Steel	20%	25%	32%	41%	51%
Paper & board	20%	30%	40%	50%	61%
Glass	20%	30%	40%	50%	61%
Wood	16%	16%	16%	16%	16%

Recovery targets for multi-material packaging: predominant material

	2016	2017	2018	2019	2020
Plastics	25%	30%	40%	50%	61%
Aluminium	25%	30%	40%	50%	61%
Steel	25%	30%	40%	50%	61%
Paper & board	25%	30%	40%	50%	61%
Glass	25%	30%	40%	50%	61%
Wood	25%	30%	40%	50%	61%

COMPLIANCE SYSTEMS



More than 20 packaging compliance systems have been registered, but not all are active.

RekoPol, which was set up by the packers and fillers, has the licence to use the on-pack Green Dot symbol. Fillers contracting with a competitor system for fulfilment of their recovery and recycling obligations can still obtain a licence from RekoPol for use of the Green Dot.

Polski System Recyklingu is run by the major paper producers and recyclers and other waste collectors and recyclers, and KOBA and RECAL are run by aluminium can producers. The first agreement for multi-material packaging to be approved is a continuation and extension of the Rekarton programme, a voluntary initiative of the juice, dairy and packaging sectors which has been supporting the collection and recycling of milk and juice cartons in Poland since 2007.

Other compliance systems have originated as municipalities’ waste management operators, recyclers, producers’ systems and entrepreneurial companies set up for this specific purpose. Many of them operate on a regional rather than a national scale.

Producers are permitted to participate in different systems for different materials, but they are not permitted to split their obligations for any material between systems.



THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Act on Packaging and Packaging Waste transposes the Essential Requirements and heavy metals limit from the PPWD.

Regulation 170/2015 defines the methodology for measuring heavy metals content. The aim is to harmonise testing methods so that an objective assessment of test results can be made.

SPECIAL LABELLING RULES

Regulation 1298/2014 provides specimen labelling indicating the materials from which the packaging is made, applicable to plastic; paper & board; steel; aluminium; wood, including cork; cotton and jute; glass; and multi-material packaging. It also specifies symbols for reusable packaging and for suitability for recycling.

In accordance with EU rules, use of these symbols is not mandatory, but if there are material identification markings, those shown in Regulation 1298/2014 must be used.

PORTUGAL (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The packaging chain is responsible for funding the additional costs associated with the separate collection and sorting of packaging waste. This is done through contracts or voluntary agreements with the municipalities which actually carry out collection and sorting, and by guaranteeing take-back and recovery of the collected used packaging.

The compliance options open to packer/fillers and importers of packaged goods are to

- Join an integrated system in which they pass their packaging waste management responsibility to an approved system. The “integrated system” (compliance system) can include industrial packaging;
- Comply individually; or
- Come to a voluntary agreement with the National Waste Authority.

Packaging converters and raw material producers are responsible for recovering the packaging waste fraction of municipal solid waste, either by doing this themselves or by arranging for it to be done by material systems set up for that purpose.

End-users are responsible for the recovery of commercial/industrial packaging. This can be done directly in specially licensed plants or through a deposit system or an integrated recovery system. End-users generating less than 1100 litres of commercial/industrial packaging waste per week can have it collected as household waste.

TARGETS

The second-stage recovery and recycling targets set by the PPWD are in force. In addition, legislation requires the municipalities to meet material-specific selective collection targets.

BEVERAGE CONTAINERS

Fillers must ensure that the market share of refillables in the take-home trade¹²⁹ are at least 80% for beer, 65% for table wine (except regional and VQPRD wines), 30% for soft drinks and 10% for packaged water. Retailers selling these products in non-refillable packaging must also offer the same product categories in refillables. Fillers and importers must report to the Environment Ministry on the quantities of refillable packaging placed on the market, returned, refilled and sent for recovery or disposal. In practice these requirements have not been enforced.

The catering trade has three choices – either use only refillable containers for soft drinks, beer and mineral water, or recycle all non-refillable beverage containers, or take back all used packaging.

Membership of SPV’s special system for this sector, Verdoreca, is free of charge to the outlets concerned. A contract is granted provided the outlet either has a “bring” facility nearby, or is covered by kerbside collection. The outlet must undertake to sort all its waste, not just beverage containers, and provide Verdoreca with annual data on the relevant one-way packaging purchased each month. Verdoreca provides these establishments with a certificate declaring that they have complied with their obligations, and they are then allowed to continue selling beverages in non-refillable containers.

¹²⁹ Drinks that are taken home for consumption there or out-of-doors rather than being drunk on-premise.

COMPLIANCE SYSTEMS



A “Green Dot” system, Sociedade Ponto Verde (SPV), handles sales and transport packaging from commercial sites such as supermarkets and shopping centres as well as household packaging.

A subsidiary, Verdoreca, handles beverage containers from catering outlets. Outlets signing a contract with Verdoreca must undertake to sort all their waste, not just beverage containers, and take it to a collection point. Legislation required Verdoreca to sign contracts with 70% of Portugal’s catering outlets by 2011.

SPV charges weight-based, material-specific licence fees to packer/fillers and importers, with one set of rates for household packaging and another for commercial and industrial packaging.

The law requires sales packaging participating in a recovery system to be marked to identify it, unless special permission has been granted not to do this. Thus SPV members must mark their sales packaging with the Green Dot.



There are also dedicated packaging compliance systems for two sectors –

Valorfito for the packaging of plant protection products and Valormed for medicine packaging.

A possible competitor to SPV, Novo Verde, has applied for approval as a packaging compliance system. Due to a change of government, new approvals for compliance systems have been delayed. Approval of Novo Verde and renewal of SPV’s approval is now expected by midsummer 2016.

CARRIER BAGS

A charge of €0.10 per bag has been imposed on lightweight plastic shopping bags on the Portuguese mainland since February 2015. There is a charge of €0.05 in the Azores and of €0.08 in Madeira.

PACKAGING TAXES AND LEVIES

A waste management tax which took effect in 2007 is designed to cover the costs incurred by public bodies in monitoring the activities of systems that manage specific waste fractions and in ensuring that relevant targets are met. SPV levies the tax as a supplement to its annual fees. The tax is paid only on the difference between the tonnages of packaging waste reported by SPV members and the tonnage not recovered, so it varies from material to material.

There is an eco-tax on non-refillable packaging containing beer and other alcoholic beverages intended for consumption in the Autonomous Region of Madeira. The eco-tax does not cover still wines and intermediates.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements and heavy metals limit have been transposed. Packer/fillers and/or those responsible for placing packaging on the market as well as packaging producers are responsible for ensuring that packaging complies with the Essential Requirements.

ROMANIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Companies may fulfil their recovery and recycling obligations by delegating their obligations to an approved compliance system or through individual compliance. All approved compliance systems must contract with municipalities to ensure collection of household packaging waste.

TARGETS

The recovery and recycling targets set by the PPWD apply in Romania until further notice. However, within the overall metals and plastics targets there are additional recycling targets for aluminium (21%) and PET (55%).

COMPLIANCE SYSTEMS



The “Green Dot” system Eco-Rom Ambalaje has a number of competitors – Eco Pack management, ECO-X, Ekologik 3R, Intersemat (an Interseroh subsidiary), RespoWaste, EC ECOPIM Recycling, SC ROM PACK and SOTAGRUP 21.

Under Romanian law, all compliance systems must cover both the household and the commercial and industrial sectors – and at least 20% of a compliance system’s obligated tonnage of primary packaging must be recovered from the household waste stream.

PACKAGING TAXES AND LEVIES

A tax of 2 lei (€0.44) per kg, levied on producers and importers, is payable on any shortfall against the recovery and recycling targets laid down.

There is a tax of 0.2 lei (€0.04) per bag on non-biodegradable plastic shopping bags.



THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements have been transposed exactly as they appear in the PPWD.

The heavy metals limit has also been transposed, and the law empowers the Government to transpose EU Decisions permitting derogations from it. The enforcement authority is entitled to ask for documentation to prove that the heavy metals content is below the limits set by law, and in case of doubt may send the product to an accredited laboratory for testing.

SERBIA (EU ACCESSION CANDIDATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The packaging manufacturer, importer, packer/filler or distributor is obliged to ensure that household packaging waste is regularly collected; collect or accept non-household packaging waste from end-users regularly; and provide for re-use, recycling or disposal in accordance with national the Packaging and Packaging Waste Law. Retailers have similar responsibilities in respect of the transport packaging arising as waste on their premises, unless a system for collecting or taking back this type of packaging is in place.

These obligations may be delegated under contract to a third-party system.

Producers and importers opting for individual compliance must be licensed by the authorities for this purpose.

TARGETS

A Regulation sets annual overall recovery and recycling targets for each year up to 2019:

Overall targets

	2016	2017	2018	2019
Recovery	44%	50%	55%	60%
Recycling	36%	42%	48%	55%

Material-specific targets

	2016	2017	2018	2019
Paper & board	42%	47%	53%	60%
Plastics	17%	19%	21%	22.5%
Glass	25%	31%	37%	43%
Metals	29%	34%	39%	44%
Wood	12%	13%	14%	15%

COMPLIANCE SYSTEMS



Sekopak has been approved as a packaging compliance system. It is licensed to use the Green Dot symbol.

Five competitors have been established – Cenex, Delta-Pak, Ekopak System, Ekostar pak and Techno Eko Pak.

CONTAINER DEPOSITS

The national Packaging and Packaging Waste Law requires manufacturers and importers of goods packaged in reusable packaging to establish a deposit-refund system, but the system itself is not regulated by law.

The Law empowers the Government to impose a deposit system on single-use packaging if this has been shown to be necessary for the purposes of reaching the national targets.

The Law imposes a deposit-refund scheme for packaging used for chemicals. The deposit may not be less than 10% or greater than 30% of the sales price of the chemicals contained in the packaging, unless the Minister in charge of environmental protection determines otherwise. Manufacturers or importers of chemicals shall be obliged, at their own expense, to collect the reusable packaging and packaging waste related to such products. The chemicals to which the deposit-refund obligation applies are listed in a Regulation.

PACKAGING TAXES AND LEVIES

A packaging levy is payable to the national Environmental Protection Fund on any shortfall against the targets. The levy is in two parts – one based on the overall targets, and the other on the material-specific targets.

If a collective packaging recovery scheme fails to meet its targets, its members would have to pay the levy on 80% of the shortfall.

There is also a tax on plastic bags. The tax on conventional plastic bags is 20 times higher than that on bags with additives which promote bio- and oxo-degradation. Ordinance 110-00-00129 of 30 December 2011 defines the requirements which must be met by plastic bags containing additives. These bags must be labelled as biodegradable, and must indicate the additives used for biodegradation and the month and year of manufacture.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

Manufacturers and importers of packaging must issue or provide a declaration of conformity with the PPWD's Essential Requirements. Packaging is deemed to comply if it has been manufactured in accordance with the CEN standards, but producers are free to choose an alternative method of demonstrating conformity.

One provision in the CEN standard on prevention by source reduction (EN 13428) has been incorporated into the Serbian Law even though it does not appear in the PPWD. That is, when assessing that the volume and/or weight of the packaging used is the minimum possible, a critical area must be identified which is the factor preventing further minimisation. If no critical area has been identified, the packaging is not in conformity with the Serbian Law on Packaging and Packaging Waste.

The PPWD's 100 ppm heavy metals limit applies, and there are exemptions for glass containers and plastic crates and pallets based on the European Commission Decisions.^{130,131}

SPECIAL LABELLING RULES

It is mandatory to mark packaging to indicate the materials used, reusability (if applicable) and recyclability (if applicable).

The numbers and abbreviations are those in European Commission Decision 97/129/EC, and the reusability and recyclability symbols are as follows:

Reusable packaging:



Recyclable packaging:



¹³⁰ Commission Decision 2001/171/EC of 19 February 2001 establishing the conditions for a derogation for glass packaging in relation to the heavy metal concentration levels established in Directive 94/62/EC on packaging and packaging waste.

Commission Decision 2006/340/EC of 8 May 2006 amending Decision 2001/171/EC of the European Parliament and of the Council for the purpose of prolonging the validity of the conditions for a derogation for glass packaging in relation to the heavy metal concentration levels established in Directive 94/62/EC.

Commission Decision 2009/292/EC of 24 March 2009 establishing the conditions for a derogation for plastic crates and plastic pallets in relation to the heavy metal concentration levels established in Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste.

¹³¹ However, the exemption for plastic crates and pallets does not reproduce the EU stipulation that new plastic crates or pallets containing the regulated metals must be marked in a "controlled and visible way" or that a return rate of at least 90% must be achieved for plastic crates and pallets containing an excessive amount of the regulated metals.

SLOVAKIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packer/fillers and importers are obliged to ensure the collection of packaging waste and to meet the recovery and recycling targets.

They have a choice between participating in an approved compliance system or individual compliance. At the time of writing, there is a third option – paying contributions to the Recycling Fund – but this will end when the Fund is dissolved at the end of 2016. The Government believes that the Recycling Fund, which was used to finance reprocessing capacity, is no longer necessary.

Approved compliance systems and individual compliers must register with the authorities. Anybody putting into circulation packaged products originating from obliged parties not on the Register is liable for the fulfilment of the obligations of the unregistered company.

From 1 July 2016, all financial costs associated with the collection, sorting and recycling of selected waste streams will be transferred from municipalities to producers and importers.

EPR also covers certain 'non-packaging items' for which there are no specific recycling targets. These include laminated paperboard-based materials such as beverage cartons. Producers of 'non-packaging products' can only fulfil their obligations collectively, by joining a compliance system for packaging.

TARGETS

Recycling targets for 2015 and subsequent years are as in the PPWD, except that higher targets are set for plastics (45%) and wood (25%).

BEVERAGE CONTAINERS

There is a dual stocking requirement for beverage containers. Outlets selling beverages to consumers in non-refillables must also offer at point-of-sale the same types of beverage in refillables, if they are produced in refillables in the Slovak Republic.¹³²

The EPR Regulation lists deposit rates for refillable beverage containers (€0.27 for refillable beer bottles, €0.13 for other reusable beverage packaging with a

¹³² This does not apply to retail outlets with a sales area less than 200 square metres.



capacity of up to 2 litres, and €40.00 for reusable beverage containers with a capacity of more than 2 litres).

COMPLIANCE SYSTEMS



The compliance system with the largest market share is Natur-Pack, but it is ENVI-PAK which holds the licence to use the Green Dot symbol.

11 smaller compliance systems have also been approved. Most specialise in Waste Electrical and Electronic Equipment and its associated packaging, but one, Renviro, collects PET bottles in Bratislava.

Producers whose packaging is marked with the Green Dot but do not participate in ENVI-PAK must sign a licensing agreement for use of the symbol.

PACKAGING TAXES AND LEVIES

If they do not meet the recycling targets laid down, packer/fillers or importers of packaged goods must make contributions to the Recycling Fund based on the shortfall against the targets. If they have met the targets, they make no payments to the Fund. Manufacturers and importers of empty packaging must also pay the product fee on all packaging they place on the Slovak market, but in this case they pay irrespective of the recycling rates achieved.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements and heavy metals limit have been transposed, but Slovak legislation adds some new requirements relating to reuse. For example, the container must have integrity and its original shape, and there must be no mechanical weaknesses.

SPECIAL LABELLING RULES

Deposit-bearing reusable packaging must be marked with the words '*Zálohovaný obal*' (returnable packaging). Deposit-bearing packaging marked with the words '*Návratný obal*' (reimbursable packaging) as required by Ordinance 81/2011 may continue to be marketed until 31 December 2016.

SLOVENIA

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Manufacturers and importers of packaging and of packaged goods, brandholders, wholesalers and retailers placing more than 15 tonnes of packaging on the national market annually must pay the cost of taking back municipal packaging waste from public service providers and its reuse, recovery or disposal. Brandholders are responsible even if the branded products were placed on the market by another company, unless that company also has producer responsibility obligations under the national regulations.

They can meet these requirements by contracting with an approved packaging compliance system. Compliance systems must ensure the regular removal of municipal and non-municipal packaging waste from collection points and from distributors, and its subsequent re-use, recycling or recovery.

Distributors (suppliers to end-users, including retailers) must take back grouped and transport packaging free of charge if the customer wishes, as well as sales packaging that also serves the purpose of grouped or transport packaging. Take-back requirements also apply to non-municipal packaging waste, if no special collection arrangements are specified.

Individual compliance is permitted for non-household packaging waste, but obliged operators must obtain a certificate of registration from the Ministry of Environment and Spatial Planning.

Packer/fillers are exempt if they place less than 15 tonnes of packaging on the market in a given year. Retailers are exempt provided their suppliers issue a written declaration that this has already been taken care of, or if the packaging bears a special symbol to denote that it is included in a compliance system.

TARGETS

The current PPWD's second-stage targets apply.

COMPLIANCE SYSTEMS

Where more than one compliance system is operating, the municipalities must ensure that each system gets its appropriate share of packaging waste. The shares for the current year are published by decree in mid-year, based on the compliance systems' reports for the first quarter of the year.

Six compliance systems are operating - Embakom, Gorenje Surovina, Interseroh, Recikel, Slopak and Unirec.



Slopak is licensed to use the on-pack Green Dot symbol.

PACKAGING TAXES AND LEVIES

An environmental tax on the generation of packaging waste is charged on packaging (empty or filled) placed on the Slovenian market for the first time, and on disposable plates, cups and foodservice packaging. The tax applies only to non-refillable packaging.¹³³

The tax is paid in two parts, an annual flat rate charge per producer, intended to cover the cost of keeping records, and a material-specific charge per kg of packaging which is intended to reflect the environmental impact of 1 kg of packaging after use.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements have been transposed. The test methods used must be equivalent to those set out in CEN standard EN 13427:2004. Brandowners must obtain a certificate of conformity and make this available to the enforcement authorities on request.

Importers of packaging and packaged goods from outside the European Economic Area must provide evidence that packaging meets the Essential Requirements and heavy metal limits by means of a declaration of conformity signed by the producer in the country of origin and supporting documentation. This must be made available to the packaged goods producer or retailer who distributes the packaging, and to the enforcement authorities on request. Packer/fillers may only use packaging imported from outside the EEA if they have evidence of its conformity with the Essential Requirements.

The heavy metals limit and the derogations from them have also been transposed.

SPAIN

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Packer/fillers and sellers of packaged goods, or where it is not possible to identify these, “the persons responsible for first placing the packaged goods on the market” must either take back packaging and get it recovered, join an “integrated waste management system” (i.e. a compliance system) or operate a deposit and return system.

Commercial and industrial packaging is in principle excluded from the requirement to impose deposits and take back used packaging or to join an integrated system, unless those responsible voluntarily submit to these obligations.



Packaging subject to mandatory deposits or take-back (i.e. not part of an integrated system) must be marked to indicate this. In practice, however, no deposit systems regulated by the law are in operation, so this symbol is not in use.

Similarly, primary, secondary and tertiary packaging participating in an integrated system must be marked as appropriate (i.e. with the Green Dot) – though in order to avoid conflict with the rules governing use of the Green Dot in other Member States, marking the Green Dot on transport packaging in Spain is voluntary.

To make it easier for packer/fillers to pass the cost on to the retail trade, the cost of the Green Dot must be shown on invoices.

Businesses which do not join an integrated system must notify the relevant Autonomous Region(s) that they are opting for individual compliance or operating a deposit system. They must meet certain conditions, including being able to show that the company has adequate systems to take back used packaging.

Companies must produce “prevention plans” aimed at minimising packaging waste, unless the tonnages of packaging waste they generate fall below the thresholds for each material laid down in the Decree.¹³⁴ Integrated systems or trade associations may prepare collective plans on their members’ behalf, but individual companies remain ultimately responsible

¹³³ There is an exemption for producers responsible for less than 15 tonnes of packaging per annum, other than PVC packaging where the exemption does not apply.

¹³⁴ The thresholds are 250 tonnes for glass, 50 tonnes for steel, 30 tonnes for aluminium, 21 tonnes for plastics, 14 tonnes for board or composites, 16 tonnes for wood and 350 tonnes for all materials.



for implementing the plans. Prevention plans must contain quantified prevention targets and measures to achieve them.

TARGETS

The current PPWD's targets have applied since 2008.

BEVERAGE CONTAINERS

Refillable beer, soft drinks and water containers subject to special Orders are excluded from the mandatory deposit and take-back obligations and from the option to participate in an "integrated system".

As amended in 2012, the Waste Law transposing the Waste Framework Directive says that the establishment of a deposit system is voluntary, except where the following criteria apply: deposit systems would be established for 'waste that is hard to recover or dispose of, for products or waste whose hazardous characteristics are such that the establishment of the system is necessary for their proper management or when management objectives established in current legislation are not met.'

However, it added a reference on deposits for refillables to provisions enabling the national government to impose specific requirements on particular types of waste: "specific rules may be drawn up for the establishment of a deposit system for reusable products and, in particular, for reusable containers of beer, soft drinks and packaged waters."

In October 2014 the regional parliament of the Canary Islands adopted an amendment to the Canary Islands Waste Law which required official data on the collection rates for packaging waste in each of the Canary Islands to be published in August 2016, three years from the date of the current operating approval of Ecoembes. If the archipelago has not reached the Spanish average packaging recovery rate, there shall be a pilot test of a system of deposit, refund and return in one of the smaller islands.

COMPLIANCE SYSTEMS



Ecoembes is the main compliance system. Its Green Dot licence fees, levied on packer/fillers and importers, are charged per kg and are material-specific. Members also pay a one-off joining fee.

Ecoembes concentrates on household packaging waste but also handles commercial and industrial packaging collected by municipalities, i.e. from

small business sites. Such packs should be licensed through Ecoembes but not marked with the Green Dot. Large end-users are responsible for handling their own backdoor waste. Ecoembes handles packaging of hazardous substances used in the home, but not packaging of hazardous substances from business sites.



The glass manufacturers have established their own system, Ecodrio, to recover glass throughout Spain. Membership is open to producers who primarily use glass, and to distributors and importers of products packed in glass, and to glass manufacturers and recyclers. Ecodrio also uses the on-pack Green Dot symbol. Ecoembes and Ecodrio co-operate closely, and charge identical fees.



The pharmaceutical producers fund SIGRE, a special recovery system for used pharmaceutical packaging. Consumers return the packaging to retail pharmacies and it is sent on for recycling or energy recovery. Use of the SIGRE logo on participating packaging is mandatory.



Sigfito-Agroenvases is a system handling containers of plant protection products. Use of the Sigfito logo on participating packaging is mandatory.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Essential Requirements and heavy metals limit have been transposed.

SWEDEN

(EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

Manufacturers, importers or sellers of packaging or packaged goods must either participate in a compliance system or ensure that somebody with the relevant approval manages the waste from their packaging. This obligation does not apply to beverage containers subject to the mandatory deposit.

TARGETS

The PPWD's overall recovery and recycling targets apply, but Sweden's material-specific recycling targets are higher than those in the PPWD. New, higher recycling targets will apply from 2020, but the existing targets will remain in force until then.

	Current targets	2020 Targets
Metal (except beverage containers)	70%	85%
Metal beverage containers	90%	90%
Paper and board	65%	85%
Glass	70%	90%
Plastic (except beverage containers)	30%	50%
Plastic beverage containers	90%	90%
Wood	15%	15%
Other materials	15%	15%
All packaging waste	55%	65%

BEVERAGE CONTAINERS

All metal cans and plastic bottles for ready-to-drink beverages must be part of an approved deposit system, except for those for drinks composed predominantly of dairy products or vegetable, fruit or berry juice. The deposit rate is 1 krona (€0.10) for cans and for PET bottles with a capacity of 1 litre or less, and 2 kronor (€0.19) for larger PET bottles.

There is a long-standing deposit system for refillable glass bottles for beer and soft drinks, using a range of standard bottles. This is based on voluntary agreements, not statutory requirements.

The Returpack deposit system for beverage cans and PET bottles was operating before the FTI (formerly REPA) system was established and operates independently of it. Svenska Returpack AB, which operates the beverage can recovery system, is jointly owned by the Swedish Brewers Association and by two grocery distribution associations. The PET beverage container recovery system is run by Returpack PET, which has the same shareholding structure as its sister-system in the can sector and operates in the same way. There are also two small closed-circuit deposit systems.

Fillers and importers pay an annual fee to the Agriculture Agency to fund monitoring and enforcement activities. They also pay a fee to Returpack to register each bar-code. Finally, they pay a handling fee for each PET bottle and steel can they place on the market, but there is no handling fee for aluminium cans.

COMPLIANCE SYSTEMS

From 2016, compliance systems must apply for approval from SNV, the Swedish environment agency, and report to it each year on achievement. Approval will depend on the organisation setting up contracts with the municipalities and demonstrating suitable plans for management of packaging waste. They must also set up accessible collection points nationwide.



FTI organises the collection of household and non-household packaging waste of all materials except glass, and charges weight-based fees. It is licensed to use the on-pack Green Dot symbol.

Svensk Glasåtervinning, the material system for one-way glass, operates independently but has a co-operation agreement with FTI. Its fees are charged per unit.

Companies opting for individual compliance must report direct to SNV.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The legislation transposes the Essential Requirements and heavy metals limit. Compliance is organised through a self-policed Code of Practice developed by Miljöpack, a part of the Invenntia paper and packaging research system.

SWITZERLAND

(EFTA – NON-MEMBER OF THE EEA)

LEGAL OBLIGATIONS – PACKAGING WASTE

Having opted out of the European Economic Area, Switzerland has no obligation to transpose the PPWD, and up to now the only legislative measures on packaging waste management relate to beverage containers.

The Beverage Containers Ordinance applies to containers for all beverages except milk and milk products. Distributors, manufacturers and importers who supply non-refillable packaging in PET and aluminium and who do not participate in private compliance systems, must take back packaging of products in their range – not just those of the brands they sell – and ensure that it is recovered.

There is a mandatory deposit of at least 30 centimes/ rappen (€0.27) on refillable beverage containers and on non-refillable PVC bottles.

Whereas for aluminium and PET, the Ordinance allows producers flexibility in how they meet their targets, for glass it prescribes that they must pay an Advance Recycling Fee.

TARGETS

If a 75% recovery target is not achieved for any beverage container material, the authorities may impose a mandatory deposit and/or impose a take-back



obligation on suppliers. This provides an incentive for producers to join the relevant compliance systems.

COMPLIANCE SYSTEMS

Systems are in place to ensure the recycling of beverage containers (and some non-beverage packaging made from the same materials). IGORA handles aluminium packaging (cans, pouches and trays), FERRO Recycling handles all types of steel can and PET-Recycling Schweiz (PRS) handles PET. They are all funded by voluntary levies paid by fillers and importers.

ATAG is managing the Vetro-Swiss system for glass recycling until the end of 2016, when it will be put out for tender. The system manages the income from the Advance Recycling Fee paid by suppliers of empty glass bottles for beverages destined for use in Switzerland and importers of empty or filled glass beverage bottles. The funds are used to support the collection, transport, sorting and preparation of these containers for recycling, and for consumer information on this recycling programme.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

As a non-member of the EEA, Switzerland has no obligation to implement these provisions. SNV, the Swiss standards system, is however a member of the European Committee for Standardisation (CEN) and has adopted the CEN standards which give effect to the Essential Requirements and offer guidance on compliance with the heavy metals limit.

SPECIAL LABELLING RULES

Refillable beverage containers, except those for restaurants, must be marked with an indication of refillability, and the amount of the deposit must be marked on all deposit-bearing containers.

Use of the PRS and IGORA on-pack logos is optional. There are different logos for each type of aluminium packaging handled by IGORA.



PET bottles



Beverage cans



Petfood trays



Food tubes



Nespresso

TURKEY

(EU ACCESSION CANDIDATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The Packaging and Packaging Waste Control Regulation transposes the PPWD. Packaged goods producers and importers can meet the targets in one of three ways: by operating a deposit-and-return system; by contracting direct with municipalities; or by joining an approved compliance system. They must also register with the Ministry of Environment and Urban Planning as a company placing packaged goods on the market.

Packaging producers and importers must register with the Ministry and submit annual data on the packaging produced and the companies that purchased it.

Retailers must provide special collection points for consumers to return their used packaging, and inform them of this; and pass the packaging waste on, free of charge, to the licensed collectors contracted to the relevant municipalities. They must also identify and refuse to sell packaged products from producers that do not have a registration number assigned by the Ministry.

TARGETS

Material-specific recovery targets have been set for every year up to 2020:

Material recovery targets					
	2016	2017	2018	2019	2020
Glass	52%	54%	56%	58%	60%
Plastics	52%	54%	56%	58%	60%
Metal	52%	54%	56%	58%	60%
Paper & board	52%	54%	56%	58%	60%
Wood	7%	9%	11%	13%	15%

COMPLIANCE SYSTEMS

Approved compliance systems must have an overall market share of at least 10% for all types of packaging that they are authorised to handle. If a system's share falls below 10%, its approval will be cancelled unless it regains that 10% minimum share within one year.



ÇEVKO was set up in 1991 to coordinate the packaging industry's recycling activities. Member companies (packer/fillers and importers) pay fees on the tonnage of packaging waste needed to meet the targets. The fees are the same for household packaging and for commercial and industrial packaging. ÇEVKO members may use the on-pack Green Dot symbol.

The market share threshold was lowered from 25% to 10% to make it easier for new market entrants, reflecting stakeholders' wish that competition between compliance systems should be promoted. Following this, two new compliance systems, TÜKÇEV and PAGÇEV, were set up and authorised as competitors to ÇEVKO.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

The Regulation reproduces the Essential Requirements in the PPWD – though it only bans the marketing and import of packaging which technically cannot be recovered or recycled when there are “no alternatives”.

The EU heavy metals limit, and the derogation for glass packaging, have also been transposed.

SPECIAL LABELLING RULES



If packaging producers choose to use recycling markings, they must use the recoverable packaging symbol illustrated here, together with the abbreviation of the packaging type and the number indicating the type of material. The number indicating the material type should appear in the centre of this symbol, and below the symbol there should be an abbreviation in capital letters indicating the type of material. An Annex lists the numbers and abbreviations, which are those in Commission Decision 97/129/EC. Like the Commission Decision, the Regulation says that no other type of marking and numbering may appear on the packaging.

UNITED KINGDOM (EU – EEA MEMBER STATE)

LEGAL OBLIGATIONS – PACKAGING WASTE

The Producer Responsibility Obligations (Packaging Waste) Regulations require every company “handling” more than 50 tonnes of packaging per year and with an annual turnover of £2 million (*€2.6 million*) or more to meet its share of the targets laid down. This can be done either through individual action or through collective activity.

Every supplier in the packaging supply chain that is above these thresholds must obtain certificates¹³⁵ to show that an appropriate tonnage of material has been reprocessed on its behalf. Surplus certificates can be traded, and the idea is that the resale value of the

certificates will give reprocessors a further incentive to expand capacity.

The targets are divided into “activity obligations” relating to each part of the packaging chain. Raw material producers are responsible for 6% of the targets, converters for 9%, packer/fillers 37% and sellers to the final end-user (whether a private household, a business or the public sector), 48%.¹³⁶ The converter also carries a 37% obligation as the packer/fillers of the transport packaging used – and a 48% obligation as the supplier of this transport packaging to the end-user.

Importers pick up a legal obligation for any activity that has previously taken place outside the UK. Thus packer/fillers of imported converted packaging take on the material producer's and converter's obligations as well as their own obligations as a packer/filler and as a supplier if not selling to an obligated retailer. An importer takes on 100% of the obligation for the transport packaging around imported raw materials, converted packaging or packaged goods.

Exports (including packaging subsequently exported by businesses downstream in the supply chain) are excluded from the obligations.

Reusable packaging is subject to recovery obligations when first placed on the market, but does not bear an obligation when subsequently re-used.

TARGETS

The Regulations prescribe year-by-year recovery targets and material-specific recycling targets for obliged companies. Targets for 2016 and 2017 are as follows:

	2016	2017
Paper & board	69.5%	69.5%
Glass	77%	77%
Aluminium	52%	55%
Steel	75%	76%
Plastic	52%	57%
Wood	21.5%	21.5%
Total recycling	71.8%	72.7%
Recovery	78%	79%

¹³⁶ That is to say, by January 2017 a packaged goods producer should have obtained certificates from a reprocessor showing that material equivalent to 28.49% of the tonnage of glass packaging he supplied (i.e. 37% of the 77% glass recycling target for 2016) has been recovered on his behalf; material equivalent to 19.24% of the tonnage of plastics packaging he supplied (i.e. 37% of the 52% plastics recycling target for 2016) has been recycled on his behalf; and so on. Additionally, the packaged goods producer will have an 85% “secondary provider” obligation for the transport packaging supplied to the retailer (i.e. the 37% packer/filler obligation plus a 48% obligation as the supplier of this transport packaging to the end-user).

¹³⁵ Packaging Recovery Notes (PRNs) or Packaging Export Recovery Notes (PERNs).



There is also a target for “glass recycling by re-melt”, which is 67% in 2016-17. The remainder can come from the use of glass as aggregate.

CARRIER BAGS

There is a charge of at least 5p (€0.07) on single-use plastic or paper carrier bags in Scotland, Wales and Northern Ireland, but in England, the mandatory charge applies only to plastic bags and there is provision for a possible exemption for biodegradable plastic bags.

COMPLIANCE SYSTEMS

The UK compliance systems buy Packaging Recovery Notes (PRNs) and Packaging Export Recovery Notes (PERNs) on behalf of their members. Unlike their Continental and Irish counterparts, they do not directly subsidise the collection of packaging waste from households.

The obligations in the Regulations were structured so as to encourage the emergence of more than one compliance system and to make individual compliance possible. 32 approved systems are operating.

Most of them charge an annual administration fee, but the main cost of membership is the levy to cover the cost of purchasing the necessary PRNs from the reprocessors to which the waste has been delivered or PERNs in respect of packaging sent for reprocessing outside the UK. The cost of PRNs and PERNs varies according to market conditions.

Valpak is by far the largest compliance system. It is a multi-material, multi-product system set up by the packaging chain specifically to meet the requirements of the Regulations. Waste management companies operate a second group of compliance systems. One system is run by the paper producers and another by paper merchants – both have mechanisms which enable them to handle their members’ non-paper obligations, and there are also compliance systems run by a freight forwarder and an offshoot of a packaging supplier. There are a number of small regional schemes. Finally, there are systems providing electronic trading facilities for PRNs to help companies meet their obligations.

THE ESSENTIAL REQUIREMENTS AND HEAVY METALS LIMIT

Legal responsibility for compliance with the Essential Requirements and heavy metals limit rests with the brandowner or importer of packaged goods, or the reconditioner of re-used packaging.

Technical documentation demonstrating compliance must be made available to an enforcement authority within 28 days of its being requested. This information should be available for four years from the date the packaging was placed on the market.

SPECIAL LABELLING RULES

A voluntary recycling logo has been devised by the British Retail Consortium to guide consumers about which packs are collected for recycling. The scheme is administered by a not-for-profit company, OPRL Ltd.



The logos indicate whether the packaging is ‘widely recycled’ (i.e. more than 75% of local authorities can collect it for recycling); whether it is ‘not currently recycled’ (i.e. fewer than 20% of local authorities provide a separate collection service); or whether residents should ‘check local recycling’, as only 20%-75% of local authorities offer a service to recycle it.

The logos are extensively used by many British retailers but some multi-national producers prefer not to use them as the information is UK-specific.





APPENDIX I

LEGISLATION IN FORCE IN THE EU MEMBER STATES, THE EEA, SWITZERLAND AND THE ACCESSION STATES

EUROPEAN UNION

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, as amended by Directive 2004/12/EC of 11 February 2004, Directive 2005/20/EC of 9 March 2005, Directive 2013/2/EU and Directive (EU) 2015/720

European Commission Decision 97/129/EC of 28 January 1997 establishing the identification system for packaging materials pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste

European Commission Decision 2001/171/EC of 19 February 2001 establishing the conditions for a derogation for glass packaging in relation to the heavy metal concentration levels established in Directive 94/62/EC on packaging and packaging waste, as amended by Commission Decision 2006/340/EC of 8 May 2006

European Commission Communication 2005/C44/13 in the framework of implementation of Directive 94/62/EC on packaging and packaging waste

European Commission Decision 2005/270/EC of 22 March 2005 establishing the formats relating to the database system pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste

European Parliament and Council Directive 2008/98/EC of 19 November 2008 on waste and repealing certain directives, as amended by Commission Regulation (EU) No. 1357/2014 of 18 December 2014 and Commission Directive (EU) 2015/1127 of 10 July 2015

European Commission Decision 2009/292/EC of 24 March 2009 establishing the conditions for a derogation for plastic crates and plastic pallets in relation to the heavy metal concentration levels established in Directive 94/62/EC on packaging and packaging waste

ALBANIA

Decision No. 177 of 6 March 2012 on packaging and packaging waste

Law No. 9975 of 28 July 2008 on national taxation

AUSTRIA

Ordinance No. 648 of 29 November 1996 on Prevention and Recycling of Packaging Waste and the Remaining Items of Certain Goods and the Establishing of Collection and Recycling Systems (Packaging Ordinance), as amended to 30 October 2014

Ordinance No. 10 of 28 January 2015 on packaging demarcation

Ordinance No. 275 of 23 September 2015 on household packaging compensation

Decree No. 513 of 19 July 1990 on Charging Deposits and Returning Refillable Plastic Packaging for Drinks

Sustainability Agenda of the Austrian Beverage Industry (Voluntary Commitment period 2008-2017), with additional commitments added in 2011

Waste Management Law 2002, as amended to 16 September 2013

Waste Wood Ordinance of 15 May 2012

BELGIUM

Law of 16 July 1993 aimed at completing the Federal Structure of the State, as amended by the Law of 16 July 1997, the Law of 2 March 2004 and the Law-Programme of 27 April 2007

Product Standards Law of 21 December 1998

Royal Decree of 25 March 1999 setting product standards for packaging, as amended by Royal Decrees of 15 May 2003, 21 October 2005, 1 July 2006 and 23 May 2011

Royal Decree of 9 September 2008 setting product standards for the

designation of biodegradable and compostable materials

Co-operation Agreement of 4 November 2008 on the Prevention and Management of Packaging Waste, as amended by the Cooperation Agreement of 2 April 2015

BOSNIA AND HERZEGOVINA

Waste Management Law of 8 July 2003 (Federation of Bosnia-Herzegovina)

Ordinance on Packaging and Packaging Waste Management of 28 December 2011, as amended by the Ordinance of 5 April 2013 (Federation of Bosnia-Herzegovina)

Regulation of 9 January 2014 on fees for plastic bags (Federation of Bosnia-Herzegovina)

Regulation of 18 October 2012 on fees for burdening the environment with packaging waste, as amended by the Regulation of 30 April 2015 (Republika Srpska)

Waste Management Law of 28 November 2013 (Republika Srpska)

Regulation of 30 April 2015 on Packaging and Packaging Waste Management (Republika Srpska)

BULGARIA

Waste Management Act of 28 June 2012, as amended to 10 July 2013

Council of Ministers Ordinance of 30 October 2012 on Packaging and Packaging Waste, as amended to 30 August 2013

Council of Ministers Decree of 30 October 2012 on adopting an Ordinance on Packaging and Packaging Waste

Council of Ministers Decree No. 120 of 30 May 2008 on payment of the product fee and amending Council of Ministers Ordinance No. 41 of 5 February 2004 on Packaging and Packaging Waste, as amended to 19 November 2013

Council of Ministers Decree No. 76 of 31 March 2011 adopting the Ordinance on the manner of calculating the financial guarantee or equivalent insurance and to provide annual VAT returns in cross-border shipment of waste (which also amends Ordinance No. 41/2004 and Decree No. 120/2008)

CROATIA

Sustainable Waste Management Law No. 2123/2013 of 18 July 2013

Ordinance No. 1735/2015 of 4 August 2015 on Packaging and Packaging Waste

Regulation No. 1872/2015 of 10 September 2015 on Packaging Waste Management

CYPRUS

Packaging and Packaging Waste Act 32(I) of 2002, as amended to 31 January 2014

Packaging and Packaging Waste (Responsibility of Economic Operators) Regulations 2003 (KDP 747/2003) of 3 October 2003

Waste Act 185 (I) of 2011

CZECH REPUBLIC

Act No. 477/2001 on Packaging and Amendment of Certain Other Acts, as amended to 19 March 2014

Government Order No. 209/2010 of 7 June 2010 amending Government Order No. 111/2002 Coll., specifying the amount of deposit on selected types of refillable packaging

DENMARK

Voluntary Agreement of 14 September 1994 on PET

Voluntary agreement of February 2000 on transport packaging

Consolidated Act No. 101 of 13 February 2001 on taxes on certain packaging, certain paper or plastic bags, disposable tableware and PVC films, as last amended by Act No. 523 of 17 June 2008

Act No. 475 of 7 June 2001 amending the Danish Act on environmental protection (Deposit and return systems)

Act No. 789 of 28 June 2013 repealing the law on the taxation of mineral water etc., and amending the Beer and Wine Tax Act and various other acts

Order No. 1017 of 8 July 2013 on taxes on certain packaging, bags, disposable tableware and PVC films (Packaging Tax Act)

Statutory Order No. 1353 of 25 November 2015 on deposits and collection etc of packaging for certain beverages

Statutory Order No. 1455 of 7 December 2015 on certain requirements for packaging

ESTONIA

Packaging Excise Duty Act of 19 December 1996 (RT I 1997, 5/6, 31), as amended to 17 May 2014



Packaging Act of 21 April 2004, as amended to 9 December 2015

Regulation No. 346 of 26 November 2004, establishing a National Packaging Register

Regulation of 23 March 2005 on the amount of the deposit, as amended to 1 February 2015

FINLAND

Waste Act No. 646/2011 of 17 June 2011

Act No. 1037/2004 of 3 December 2004 on the taxation of packaging containing certain beverages, as amended by Act No. 1129/2010 and by Act No. 652/2011

Government Decree No. 180 of 23 March 2005, on the return system for certain beverage containers

Government Decree No. 179/2012 of 19 April 2012 on waste

Government Decree No. 526/2013 of 27 June 2013 on the return system for certain beverage containers

Government Decree No. 518/2014 of 3 July 2014 on packaging and packaging waste

Åland Regional Ordinance No. 93/1998 of 29 September 1998 on packaging and packaging waste, as amended to 5 December 2012

FRANCE

Environmental Code, Book V, Title IV, Chapter 1, Section 2, Articles L541-9 and L541-10 (Design, production and distribution of waste-generating products)

Environmental Code, Chapter 3, R 543-42 to R 543-74 – Section 5 Packaging

Decree No. 2005-1472 of 29 November 2005 amending Decree 96-1008 of 18 November 1996 on waste management plans for household and similar waste

Law No. 2009-967 of 3 August 2009 on implementation of the Grenelle (Grenelle I)

Law No. 2010-788 of 12 July 2010 on national commitment to the environment (Grenelle II)

Order of 12 November 2010 concerning the specifications for the certification of an organization or a company designed to handle used packaging as provided by Decree No. 92-377 of 1 April 1992, Annex on the approval of an organisation issued pursuant to Articles R.543-58 and R.543-59 of the Environmental Code

Law No. 2010-1579 of 17 December 2010 on various provisions transposing EU law in the field of waste

Decree No. 2011-828 of 11 July 2011 on various provisions relating to the prevention of waste

Order of 7 February 2012 on examples of the criteria defining the concept of “packaging” laid down in Article R. 543-43 of the Environmental Code, as amended by an Order of 6 August 2013

Decree No. 2014-1577 of 23 December 2014 on common signage for a sorting instruction for recyclable products (Environment Code Article R541-12-17 and R541-12-18) (“Triman”)

Law No. 2012-1442 of 24 December 2012 on the suspension of the manufacture, import, export and placing on the market of any food packaging containing bisphenol A

Law No. 2015-992 of 17 August 2015 on energy transition for green growth

GERMANY

Ordinance of 21 August 1998 on the Avoidance and Recovery of Packaging Waste, as last amended by the Fifth Amending Ordinance of 2 April 2008

Ordinance of 19 June 2002 on the Management of Municipal Wastes of Commercial Origin

Ordinance of 23 August 2002 on the Management of Waste Wood

GREECE

Law No. 2939/2001 of 6 August 2001 on Packaging and Other Waste, as amended by Joint Ministerial Decision No. 9268/469/07 of 2 March 2007, Law No. 3854/2010 of 16 June 2010 and Joint Ministerial Decision No. 54461/1779/E.103

Decision No.116570 of 13 February 2009 on the procedure for renewal of approval systems for individual or collective alternative management of packaging and other products

Law No.4042 of 13 February 2012 – Framework Law on waste

HUNGARY

Government Decree No. 94/2002 on the specific rules concerning packaging and packaging waste management, as amended by Decree 37/2006

Government Decree No. 209/2005 on the rules for applying a deposit charge

Government Decree No. 91/2006 on detailed rules of conformity certification of packaging to environmental requirements, as amended to 11 September 2013

Act LXXXV of 27 June 2011 on Environmental Product Fees, as last amended by Act LXXIV of 2014

Government Decree No. 343/2011 implementing Act LXXXV on Environmental Product Fees, as amended by Government Decree 139/2013 of 13 May 2013 and Government Decree 529/2013 of 30 December 2013

Act CLVI of 2011 on certain tax laws and amendments to other Acts

Act CLXVI on the amendment of certain laws underpinning Hungary's 2012 budget

Act CLXXXV of 2012 on waste

Government Decree No. 533/2013 on the rules of the deposit system for reusable packaging materials

ICELAND

Regulation No. 609/1996 on packaging and packaging waste, as amended by Regulations Nos. 682/1999, 562/2005 and 380/2014

Law No. 52/1989 imposing a deposit on beverage containers, as amended by Law 58/2011

Law No. 162/2002 on recycling, as amended to 1 January 2015

Law No. 55/2003 on waste management, as amended to 1 January 2015

Regulation No. 1124/2005 on recycling

Regulation No. 368/2000 on collection, recycling and the deposit on disposable containers, as amended to 22 December 2014

IRELAND

Waste Management (Environmental Levy) (Plastic Bag) Regulations 2001 (S.I. No. of 2001), as amended by the Waste Management (Environmental Levy) (Plastic Bag) (Amendment) (No. 2) Regulations 2007 (S.I. No. 167 of 2007)

European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014)

ITALY

Decree-Law No. 152 of 3 April 2006, Title II, as amended to 23 February 2012

Law No. 296 of 27 December 2006 (the 1997 Finance Act), as amended by Decree-Law No. 102 of 3 August 2009

Legislative Decree No. 205 of 3 December 2010. Provisions implementing Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

Environmental Decree of 26 April 2013 on approval of the model Statute of the consortia established for the management of packaging

Environmental Decree of 22 April 2014 implementing Directive 2013/2/EU revising the illustrative examples of the definition of packaging

KOSOVO

Administrative Instruction No. 27/2014 of 3 December 2014 on packaging waste management

Law No. 04/L-060 on waste

LATVIA

Packaging Law of 9 January 2002, as amended to 26 May 2011

Council of Ministers Regulation No. 140 of 2 April 2002 on identification and marking of packaging, as amended by a Council of Ministers Regulation of 25 October 2005 on data reporting and the definition and marking of packaging

Council of Ministers Regulation No. 414 of 22 July 2003 on application of a deposit system for reusable packaging, as amended to 30 August 2013

Natural Resources Tax Law No. 209 of 15 December 2005, as amended to 22 October 2014

Cabinet of Ministers Regulation No. 404 of 19 June 2007 on procedures for the calculation and payment of the Natural Resources Tax, as amended to 31 July 2015

Cabinet of Ministers Regulation No. 1281 of 3 November 2009 on procedures for the marking of packaging and disposable tableware and accessories made from bioplastic and oxo-degradable plastic

Cabinet of Ministers Regulation No. 1293 of 3 November 2009 on exemptions from the Natural Resources Tax for packaging, single-use containers and tableware, as amended to 23 August 2013



Council of Ministers Regulation No. 983 of 19 October 2010 on packaging waste recovery targets and the heavy metals limit, as amended to 7 November 2015

Waste Management Law of 28 October 2010, as amended to 30 April 2015

Cabinet of Ministers Regulation No. 71 of 24 January 2012 on procedures for sale or return to a dedicated packaging take-back point for collected non-deposit packaging

LIECHTENSTEIN

Ordinance No. 166 of 26 August 1997 on packaging and packaging waste, as amended to 2014

LITHUANIA

Waste Management Law No. VIII-787 of 1998, as amended to 30 April 2014

Law No. IX-720 of 22 January 2002 amending the Pollution Tax Law No. VIII-1183 of 13 May 1999, as amended to 28 April 2011

Law No. IX-517 of 25 September 2001 on the Management of Packaging and Packaging Waste, as amended to 23 December 2015

Order No. 227 of 27 June 2002 on control procedures for the approval of noxious substances in packaging

Order No. 348 of 27 June 2002 on packaging and packaging waste rules, as amended by Orders Nos. D1-706 of 29 December 2004 and D1-21 of 10 January 2007

Order No. D1-226 of 29 April 2004 on exemptions from the heavy metal limits for glass containers and plastic crates and pallets

Order No. D1-618 of 28 December 2006 on collection and reuse targets for reusable packaging

Order No. D1-370/1K-230 of 9 July 2008 on calculation and payment rules for the Pollution Tax

Order No. D1-291 of 27 May 2009 on registration of producers and importers

LUXEMBOURG

Grand-Ducal Regulation of 31 October 1998 transposing Directive 94/62/EC on Packaging and Packaging Waste, as amended by Grand-Ducal Regulations of 22 February 2006 and 11 October 2013

Waste Management Law of 21 March 2012

Environmental agreement between the Ministry of the Environment and Valorex on the prevention of packaging waste, period 2012-2017

FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Law of October 2004 on Waste Management, as amended to September 2014

Order No. 847 of 26 February 2009 banning the use of bags made of plastic

Law of 29 December 2009 on Management of Packaging and Packaging Waste, as amended to January 2015

Regulation No. 757 of 17 March 2010 on reporting requirements for compliance systems and individual compliers

Regulation No. 957 of 25 March 2010 listing illustrative examples of packaging

Regulation No. 1109 of 29 March 2010 on numbering, abbreviations and marking of packaging

Regulation of 16 January 2013 on standards for biodegradability for bags for transporting goods

MALTA

Eco-Contribution Act (Act XII of 2004), as amended to 1 September 2015

Waste Management (Packaging Waste) Regulations 2006 (LN 277 of 2006), as amended to 1 January 2015

Eco-Contribution (Exemptions) Regulations 2010 (LN 84 of 2010)

Eco-Contribution (Granting of Refunds) Regulations 2011 (LN 158 of 2011)

The Waste Regulations 2011 (LN 184 of 2011)

MONTENEGRO

Regulation of 25 December 2008 on criteria, amount and method of payment of fees for special waste management

Waste Management Law of 27 December 2011

Regulation of 28 June 2012 on the procedure for establishing the system of taking, collecting and treatment of packaging waste and the work of that system

Regulation of 28 June 2012 on criteria, amount and method of payment of fees for special waste management

NETHERLANDS

Packaging Tax Law of 22 November 2007

Framework agreement of 20 July 2012 between I&M, the packaging industry and the VNG on packaging and litter for the years 2013 to 2022, and addendum

Agreement of 4 October 2012 establishing the Packaging Waste Fund

Environmental Management Act notice of 28 December 2012 on the agreement on the waste management fee for packaging

Decree No. 409 of 27 October 2014 laying down rules on packaging and packaging waste (Packaging Management Decree 2014)

NORWAY

Regulation on Excise Duties No. 1451 of 11 December 2001, last amended by Regulation No. 1565 of 17 December 2013

Agreement of 21 March 2003 on the collection and recovery of brown paper (corrugated) packaging waste and on the optimisation of brown paper packaging

Agreement of 21 March 2003 on the collection and recovery of folding box board packaging waste and on the optimisation of folding box board packaging

Agreement of 21 March 2003 on the collection and recovery of metal packaging waste and on the optimisation of metal packaging

Agreement of 21 March 2003 on the collection and recovery of plastic packaging waste and on the optimisation of plastic packaging

Agreement of 21 March 2003 on the collection and recovery of waste beverage cartons and on the optimisation of beverage cartons

Product Regulation No. 922 of 1 June 2004 on heavy metals in packaging, as amended by Regulation No. 855 of 2 July 2013

Waste Regulation No. 930 of 1 June 2004, last amended by Regulation No. 269 of 13 March 2014 – Chapter 6, Return systems for beverage containers

POLAND

Producer Responsibility Act (Act on Entrepreneurs' Obligations with regard to Management of Certain Wastes, Product Charge and Deposit Fee) of 11 May 2001, as amended by the Act of 21 January 2005 as amended to 4 September 2014

Waste Act of 14 December 2012, as amended to 15 January 2015

Packaging and Packaging Waste Act No. 888 of 13 June 2013

Regulation No. 1274 of 31 October 2013 on a sample list of products that are considered or not considered to be packaging

Regulation No. 412 of 12 March 2014 on the annual levels of recovery and recycling of packaging waste arising from households

Regulation No. 618 of 16 April 2014 on the minimum annual levels of recovery and recycling targets for multi-material packaging and for packaging of dangerous goods

Regulation No. 1298 of 3 September 2014 on packaging label design

Regulation No. 1972 of 16 December 2014 on product fee rates for packaging

Regulation No. 137 of 21 January 2015 on packaging for which the requirements on the content of lead, cadmium, mercury and hexavalent chromium in packaging do not apply

Regulation No. 170 of 21 January 2015 on the method of determining the sum of lead, cadmium, mercury and hexavalent chromium in packaging

PORTUGAL

Decree Law 366-A/97 of 20 December 1997 concerning the management of packaging and packaging waste, as amended to 10 April 2015

Implementation Decree 29-B/98 of 15 January 1998, as amended to 29 May 2015

Decree Law 407/98 of 21 December 1998 transposing the Essential Requirements

Decree Law 73/2011 of 17 June 2011 amending certain waste legislation, as amended to 5 November 2014

Law 82-D/2014 of 31 December 2014 amending environmental tax rules and introducing a system of taxing plastic bags

Order 7110/2015 of 12 June 2015 on the methodology for approving packaging compliance operators

Decree 286-B/2014 of 31 December 2014 on lightweight plastic bags

Regional Decree Law No. 13/2015/A of 27 April 2015, amending Regional Decree Law No. 10/2014/A creating measures to reduce the consumption



of plastic bags, together with Regional Decree Law No. 10/2014/A republished as amended (Autonomous Region of Azores)

Regional Decree Law No. 8/2012/M creating and approving the legal regime of the environmental fee for the use of non-reusable packaging in the Autonomous Region of Madeira

ROMANIA

Law No. 211 of 15 November 2011 on Waste, republished on 28 March 2014

Ordinance No. 2742/3190/305 of 31 November 2011 on the procedure for approval, authorization criteria, renewal, review, annual approval, issuance and cancellation of operating license, the minimum percentage of recovery of packaging waste taken from the population, economic operators to take over the annual obligations to achieving recovery and recycling of packaging waste and its composition and duties of the Commission approving authority

Ordinance No. 794/2012 of 6 February 2012 on reporting procedures relating to packaging and packaging waste

Ordinance No. 192 of 29 February 2014 amending Ordinance No. 578/2006 on the methodology for calculating contributions and taxes owed to the Environment Fund

Law No. 249 of 28 October 2015 on Packaging and Packaging Waste Management

SERBIA

Law of May 2009 on Packaging and Packaging Waste

Regulation 110-00-93 of 21 August 2009 on criteria for determining what can be defined as packaging, with examples for application of the criteria

Regulation 110-00-94 of 21 August 2009 on the threshold level of overall concentrations of lead, cadmium, mercury, hexavalent chromium in packaging or its components, exceptions to the application and the deadline for application of limit values

Regulation 110-00-95 of 21 August 2009 on the method of numbering, abbreviations and symbols on which the system of identification and labelling the packaging materials is based

Regulation 110-00-96 of 21 August 2009 on the annual quantity of packaging waste for which it is required to provide a space for receiving, collecting, sorting and temporary storage

Regulation 110-00-97 of 21 August 2009 on the de minimis exemption from the packaging waste management obligation

Regulation 110-00-98 of 21 August 2009 on types of packaging with a long service life

Regulation 110-00-83 of 28 August 2009 on the keeping of the register of permits issued for packaging waste management

Law of 2009 on Waste Management (OG 36/2009, as amended in OG 88/2010)

Regulation 110-832 of 11 February 2010 on criteria for the calculation of charges for packaging or packaged product and exemptions from fees, payment bonds, the amount of

fees, and method of calculation and payment of fees

Regulation 110-00-229 of 17 December 2010 on the amount of the deposit on individual containers for certain chemicals

Regulation 110-00-00129 of 30 December 2011 on technical and other requirements for plastic bags with additives for degradation by oxidation and biodegradation, on conformity assessment and conditions that must be completed by the appointed body

Regulation 110-00-24 of 24 April 2013 on incentives for reuse and recycling

Regulation 110-16533 of 25 December 2014 on the Plan for reducing packaging waste for the period from 2015 to 2019

SLOVAKIA

Act No. 119/2010 of 3 March 2010 on Packaging and on amendments to Act No. 223/2001 on Waste and on amendments and supplements to certain acts as amended

Waste Act No. 79/2015 of 17 March 2015

Regulation No. 373 of 28 July 2015 on extended producer responsibility and the management of selected products with dedicated waste streams

Regulation No. 370 of 27 October 2015 on contributions to the Recycling Fund

Ordinance No. 371 of 13 November 2015 on the implementation of certain provisions of the Packaging Act

SLOVENIA

Packaging and Packaging Waste Regulation No. 84 of 27 July 2006, as amended to 15 January 2016

Regulation No. 32 of 16 March 2006 on an Environmental Tax on the generation of packaging waste, as amended to 12 March 2010

Regulation of 16 December 2011 on waste

Ordinance 2005:220 on the return system for plastic bottles and metal cans, as amended by Ordinance 2008:26

Waste Act 2011:927 of 20 September 2011, as amended to 19 November 2015

Ordinance 2014:1073 of 28 August 2014 on Producer Responsibility for Packaging

The Producer Responsibility Obligations (Packaging Waste) Regulations (Northern Ireland) 2007 (S.R. 2007 No. 198), as amended to 26 February 2016

The Packaging (Essential Requirements) Regulations 2015 (S.I. 2015 No. 1640), of 1 September 2015

The Waste (England and Wales) Regulations 2011 (S.I. 2012 No.1889), as amended in 2012 (S.I. 2011 No. 988)

The Waste Regulations (Northern Ireland) 2011 (2011 No. 127)

The Waste (Scotland) Regulations 2012

The Single Use Carrier Bags Charge (Wales) Regulations 2010 (S.I. 2010 No. 2880 (W.238))

The Single Use Carrier Bags Act (Northern Ireland) 2011

The Single Use Carrier Bags Charge Regulations (Northern Ireland) 2013

The Single Use Carrier Bags Charge (Scotland) Regulations 2014

The Single Use Carrier Bags Charges (England) Order 2015 (S.I. 2015 No. 776)

SPAIN

Royal Decree Law No. 11 of 24 April 1997 on Packaging and Packaging Waste, as amended to 29 July 2011, and Implementing Decree 782 of 30 April 1998

Order 10215 of 27 April 1998 on Deposit and Return Systems

Royal Decree No. 1416 of 14 December 2001 on packaging for plant protection products

Law 22/2011 of 28 July 2011 on waste and contaminated soil, as amended by Law 11 of 19 December 2012 on urgent environmental matters

SWITZERLAND

Ordinance of 5 July 2000 on beverage containers

Ordinance of 7 September 2001 on the amount of the Advance Recycling Fee on glass beverage containers

TURKEY

Packaging and Packaging Waste Control Regulation of 24 August 2011

Waste Management Regulation of 2 April 2015

UNITED KINGDOM

The Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (S.I. 2007 No. 871), as amended to 24 November 2014

SWEDEN

Ordinance 1985:839 on Cadmium, as amended by Ordinance 1992:1385

Ordinance 1998:944 on the prohibition etc in certain cases of the handling, import and export of chemical products

APPENDIX II



THE PRINCIPAL NATIONAL WASTE RECOVERY SCHEMES COVERING HOUSEHOLD PACKAGING

AUSTRIA

ARA - Altstoff Recycling Austria
Mariahilfstrasse 123
1062 Wien
tel: +43 1 599 97-0
www.ara.at

CZECH REPUBLIC

EKO-KOM, a.s.
Na Pankráci 17
Praha 4
tel: + 420 261 176 230
www.ekokom.cz

Beer & Beverage Cans Organisation
(Suomen Palautuspakkaus Oy)
c/o PALPA
Box 119
00241 Helsinki
tel: +358 9 868 9860
www.palpa.fi

BELGIUM

FOST-Plus
Olympiadenlaan 2
BE-1140 Brussels
tel: +32 2 775 0350
www.fostplus.be

DENMARK

Dansk Retursystem
Baldersbuen 1
DK-2640 Hedehusene
tel: +43 32 32 32
www.dansk-retursystem.dk

Ekopullo

c/o PALPA
Box 119
00241 Helsinki
tel: +358 9 868 9860
www.palpa.fi

BULGARIA

EcoPack Bulgaria Jsc
Blvd. Tsarigradsko Shousse 60, Fl 1
Business Center Avi Set
1750 Sofia
tel: +359 2 401 19 00
www.ecopack.bg

ESTONIA

**Eesti Taaskasutusorganisatsioon
MTÜ (ETO) – ERO Estonia**
Mustamäe tee 24
10621 Tallinn
tel: +372 640 32 40
www.eto.ee

FRANCE

Eco-Emballages S A
50 Boulevard Haussemann
75009 Paris
tel: +33 1 81 6906 00
www.ecoemballages.fr

CYPRUS

**Green Dot (Cyprus) Public Co.
Limited**
Tseriou ave. 229
Postal Code 2047
Strovolos,
Nicosia
P.O. Box 25463, 1310 Nicosia
tel: +357 2258 6000
www.greendot.com.cy

Eesti Pandipakend (EPP)

Visase 18
11415 Tallinn
Harjumaa
tel: +372 647 00 10
www.eestipandipakend.ee

GERMANY

**DSD AG - Duales System
Deutschland**
Frankfurterstrasse 720-726
51145 Köln-Porz-Eil
tel: +49 2203 9370
www.gruener-punkt.de

FINLAND

RINKI Oy (PYR)
Mikonkatu 15B
FI-00100 Helsinki
tel: +358 6162 3500
<http://rinkiin.fi/kotitalouksille/>

**DPG – Deutsche Pfandsystem
GmbH**
Luisenstrasse 46
10117 Berlin
tel: +49 30 800 974 0
www.dpg-pfandsystem.de

GREECE

HE.R.R.CO

Hellenic Recovery & Recycling Corporation
5 Chimaras St
Maroussi
P.C. 15125
tel.: +30 210 8 01 09 62-3
www.herrco.gr

IRELAND

Repak

Red Cow Interchange Estate
1 Ballymount Road
Clondalkin
Dublin 22
tel: +353 1 467 0190
www.repak.ie

ITALY

Consorzio Nazionale Imballaggi – CONAI

Via Litta 5
20122 Milano
tel: +39 02 540441
www.conai.org

LATVIA

Latvijas Zalais Punkts NPO Ltd

Maskavas iela 240
Riga
LV – 1063
tel: +371 670 398 10
www.zalais.lv

LITHUANIA

Zaliasis taškas

A.Goštauto g. 40B
LT-03163
Vilnius
tel: +370 5 233 11 52
www.zaliasistaskas.lt

LUXEMBOURG

Valorlux

22 Rue de l'Industrie
L-8399 Windhof
tel: +352 370 006-1
www.valorlux.lu

MALTA

GreenPak

18 St. John Street
Fgura FGR 1447
tel: +356 21 660233
www.greenpak.com.mt

NORWAY

Grønt Punkt Norge

Karenslyst Allé 9
0278 Oslo
tel: +47 22 12 1500
www.grontpunkt.no

Infinitum (Resirk)

Karenslyst Allé 9C
0278 Oslo
tel: +47 22 12 15 20
<http://infinitum.no>

POLAND

RekoPol Organizacja Odzysku S.A.

ul. Mangalia 4,
02-758 Warszawa
tel. +48 22 436 78 30- 33
www.rekopol.pl

recan Organizacja Odzysku S.A.

ul. Mariensztat 8,
PL-00-302 Warszawa,
tel. +48 22 538 91 72
www.recan.com

PORTUGAL

Sociedade Ponto Verde

Edifício Infante D. Henrique
Rua João Chagas, no 53 – 1o Dto
Cruz Quebrada
P-1495-764 Dafundo
tel: +351 21 010 24 00
www.pontoverde.pt

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ECO-ROM Ambalaje SA

B-dul 1 Mai Nr. 53
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061629 Bucharest
tel : +402 1.413.08.44
www.ecoromambalaje.ro

SLOVAKIA

ENVI-PAK

Galvaniho 7/B
SK - 821 04 Ružinov-Bratislava
tel.: +421 2 333 227 10
www.envipak.sk

SLOVENIA

SLOPAK d.d.o.

Vodovodna cesta 100
1000 Ljubljana
tel.: +386 1 5600 250
www.slopak.si

SPAIN

Ecoembalajes España S.A.

Paseo de la Castellana 83-85/11ª
Planta
28046 Madrid
tel: +34 91 567 24 03
www.ecoembes.com

Ecovidrio

C/ Miguel Ángel, 23 (5ª planta)
28010 Madrid
tel: +34 914 118 344
www.ecovidrio.es

SWEDEN

FTI (REPA)

Box 17033
104 62 Stockholm
tel: +46 8566 14400
www.ftiab.se

Returpack / Returpack PET

Box 432
601 05 Norrköping
tel: +46 11 191 960
<http://pantamera.nu/>

**Svensk GlasÅtervinning AB**

Strandvägen 2
696 74 Hammar
tel: + 46 5838 7100
www.glasatervinning.se

SWITZERLAND**FERRO Recycling**

Gotthardstrasse 18
8800 Thalwil
tel: +41 44 533 55 25
<http://ferrorecycling.ch>

IGORA Alu-Recycling

Gotthardstrasse 18
8800 Thalwil
tel: +41 44 387 50 10
www.igora.ch

PET-Recycling Schweiz

Naglerwiesenstrasse 4
8049 Zürich
tel: +41 44 344 1080
www.petrecycling.ch

Vetrorecycling

Vetropack SA
Schützenmattstrasse 48
CH-8180 Bülach
tel: +41 44 863 36 36
fax: +41 44 863 36 26
www.petrecycling.ch

Vetroswiss

ATAG Wirtschaftsorganisationen AG
Postfach 1023
3000 Bern 14
tel: +41 44 31 380 79 90
www.vetroswiss.ch

TURKEY**ÇEVKO**

Cenap Sehabettin Sok. No:94 94
Kosuyolu 34718
Kadiköy
Istanbul
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www.cevko.org.tr

UNITED KINGDOM**VALPAK Ltd**

Unit 4
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Stratford-upon-Avon Business and
Technology Park
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CV37 7GW
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www.valpak.co.uk





WHERE TO BUY THE CEN STANDARDS

The CEN standards may be obtained, in the relevant language or languages, from the following national standards bodies:

AUSTRIA

Österreichisches Normungsinstitut (ON)
Heinestraße 38
AT-1020 Wien
tel: +43 1 213 00
www.austrian-standards.at

BELGIUM

Bureau de Normalisation/Bureau voor Normalisatie (NBN)
Rue Joseph II 40
PO box 6
1000 Brussels
tel: +32 2 738 01 11
www.nbn.be

BULGARIA

Bulgarian Institute for Standardisation (BDS)
13 Lchezar Stanchev Str.
Izgrev Complex
BG-1797 Sofia
tel: 359 2 8174 504
www.bds-bg.org

CROATIA

Croatian Standards Institute (HZN)
Ulica grada Vukovara 78
10000 Zagreb
tel: + 385 1 610 60 95
www.hzn.hr

CYPRUS

Cyprus System for Standardisation (CYS)
P.O. Box 16197
CY-2086 Nicosia
tel: + 357 22 411 411
www.cys.org.cy

CZECH REPUBLIC

Czech Standards Institute (CNI)
Biskupský dvůr 1148/5
110 00 Praha 1
tel: +420 221 802 200
www.unmz.cz

DENMARK

Dansk Standard (DS)
Göteborg Plads 1
DK-2150 Nordhavn
tel: +45 39 96 61 01
www.ds.dk

ESTONIA

Estonian Centre for Standardisation (EVS)
Aru Street 10
EE-10317 Tallinn
tel: + 372 605 50 50
www.evs.ee

FINLAND

Suomen Standardisoimisliitto r.y. (SFS)
PO Box 130
FI-00101 Helsinki
tel: +358 9 149 93 31
www.sfs.fi

FRANCE

Association Française de Normalisation (AFNOR)
11, Avenue François de Pressensé
F-93571 La Plaine Saint-Denis Cedex
tel: +33 1 41 62 80 00
www.afnor.org

GERMANY

Deutsches Institut für Normung e.V. (DIN)
Am DIN-Platz
Burggrafenstraße 6
10787 Berlin
tel: +49 30 26 01 0
www.din.de

GREECE

Hellenic System for Standardization (ELOT)
Av . Kifisou 50
121 33 Peristeri
tel: + 30 210 21 20 100
www.elot.gr

HUNGARY

Hungarian Standards Institution (MSZT)
Horváth Mihály tér 1
HU-1082 Budapest
tel: +36 1 456 68 00
www.mszt.hu

ICELAND

Icelandic Standards (IST)
Skúlatún 2
IS-105 Reykjavik
tel: +354 520 71 50
www.stadlar.is

IRELAND

National Standards Authority of Ireland (NSAI)
1 Swift Square
Northwood
Santry
IE-Dublin 9
tel: +353 1 807 38 00
www.n Sai.ie

ITALY

Ente Nazionale Italiano di Unificazione (UNI)

Via Sannio, 2
IT-20137 Milano
tel: +39 02 70 02 41
www.uni.com

LATVIA

Latvian Standards Ltd (LVS)

55 Brivibas Str.
K-2, Riga
tel: +371 67 339 984
www.lvs.lv

LITHUANIA

Lithuanian Standards Board (LST)

T. Kosciuškos g. 30
LT-01100 Vilnius
tel: + 370 5 270 9360
www.lsd.lt

LUXEMBOURG

Institut Luxembourgeois de la normalisation, de l'accréditation, de la sécurité et qualité des produits et services (ILNAS)

Belval, 4367
Luxembourg
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MALTA

Malta Competition and Consumer Affairs Authority (MCCAA)

Mizzi House,
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NETHERLANDS

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2623 AX Delft
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NORWAY

Standards Norway (SN)

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www.standard.no

POLAND

Polish Committee for Standardization (PKN)

ul. Swietokrzyska 14
00-050 Warszawa
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PORTUGAL

Instituto Português de Qualidade (IPQ)

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P-2829 513 Caparica
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www.ipq.pt

ROMANIA

Romanian Standards Association (ASRO)

Str. Mendeleev 21-25
RO-010362 Bucharest 1
tel: + 40 021 316 77 23
www.asro.ro

SLOVAKIA

Slovak Standards Institute (SUTN)

Štefanovičova 3
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810 05 Bratislava 15
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www.unms.sk

SLOVENIA

Slovenian Institute for Standardization (SIST)

Šmartinska cesta 152
SI-1000 Ljubljana
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www.sist.si

SPAIN

Asociación Española de Normalización y Certificación (AENOR)

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E-28004 Madrid
tel: +34 91 432 60 00
www.aenor.es

SWEDEN

Swedish Standards Institute (SIS)

Sankt Paulsgatan 6
S-118 80 Stockholm
tel: + 46 8 555 520 00
www.sis.se

SWITZERLAND

Schweizerische Normen-Vereinigung (SNV)

Bürglistrasse 29
CH-8400 Winterthur
tel: + 41 52 224 54 54
www.snv.ch

UNITED KINGDOM

British Standards Institution (BSI)

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GB- London W4 4AL
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