

National factsheet on separate collection

Denmark

Note: This 'National factsheet' has been prepared within the EC study "**Assessment of separate collection schemes in the 28 capitals of the EU**". The document represents the status-quo of the EU Member State (MS) in September 2015. The information included in this document has been elaborated for all 28 EU-MS based on publically available documents, i.e. national legislation, Waste Management Plans, Waste Prevention Programmes, strategies, implementation reports, and statistics. All information is cited in the factsheet, a complete list of information sources can be found at the end of this document.

For quality assurance purposes the 'National factsheet' has been sent to the EU Technical Advisory Committee (TAC) Members on waste for verification and commenting, the comments received are included in this final version.

1 General requirements on separate collection based on national legislation

The Danish Environmental Protection Act (Miljøbeskyttelsesloven), announced in 2010, and its Statutory Orders, transpose the requirements of the WFD on separate collection into domestic law. The main acts are the Statutory Order on Waste (Bekendtgørelse om affald) and the Statutory Order on drink packaging deposit (Pantbekendtgørelsen).

Although the WFD is not transposed directly, the Danish legislation implements most of the same goals. In more general terms it should be noted, that the initiatives taken within the area of waste management and separate collection is **only partly regulated by national law**, since Danish municipalities have a very extensive legal ground for regulating requirements on source separation and separate collection of household and household-similar waste. In many cases the national legislation therefore does not prescribe specific regulations on separate collection of waste. On national level it is to a greater extent national strategies and objectives, which guide the municipalities in shaping their practices around separate collection and handling of waste.

Collection of paper waste, cardboard waste, glass packaging waste, recyclable metal packaging waste and recyclable plastic packaging waste as well as packaging containing beverages, is, in most cases, required. There is no requirement that these fractions are collected separately, but it is required that the majority of these fractions are recycled or in some cases prepared for reuse, which makes separate collection the preferred choice for municipalities implementing waste collection. It should be mentioned that there is a general requirement for companies to source separate their waste in Statutory Order on Waste.

In regards of requirements 4, 5, and 6 the implementation of separate collection if technically, environmentally and economically practicable it has to be stated that the Statutory Order on waste [DK BEK 2012] has been based on assessments of technical, economic and environmental evaluations. Further, new evaluations are continuously taken into consideration by the Danish EPA, in order to make certain that the order meet prevalent technical, economic and environmental standards.

There are no specific requirements for the quality of the recycling included in the Statutory Order on Waste, but in other orders, for instance the Order on Use of Waste for Agricultural Purposes and the Order on Residual Products.

With respect to bio-waste there is no legal requirement that foster encouragement of composting and digestion as well as its separate collection. An exemption may be Article 41 of the Order on Waste and article 2, (2) in the Order on Use of Waste for Agricultural Purposes. The current regulation does however result in many municipalities having separate collection of garden waste. Organic waste is however a focus area in the latest Waste Management Plan from 2014.

Table 1: Overview of national law(s) that implement separate collection

Year and Abbreviation	Title of the law (translation)
[DK LBK 2010]	Miljøbeskyttelsesloven LBK nr 879 af 26/06/2010 (Law of environmental protection)
[DK BEK 2012]	Bekendtgørelse om affald BEK nr 1309 af 20/12/2012 (Statutory order on waste)
[DK BEK 2014]	Pantbekendtgørelsen BEK nr 104 af 27/01/2014 (Statutory order on deposit)

Table 2: Overview on evaluation categories

Evaluation	Explanation
Additional	The requirements of the WFD have been transposed and additional information or requirements are set out in the national legal requirement, i.e. additional definition, precision of requirement that goes beyond the text of the WFD
one:one	The requirement of the WFD has been transposed exactly / literally or transposed analogously. No additional requirements or explanations are set out.
deviating	The requirements of the WFD have been implemented into national legal requirements but have been adjusted, left out or deviated
not included	The requirement of the WFD is not transposed into national law

Table 3: Assessment on national transpositions

Law & Article	Evaluation	English text	Original text
1. Article 3 (11) WFD: Definition separate collection: "separate collection' means the collection where a waste stream is kept separately by type and nature so as to facilitate a specific treatment"			
[DK BEK 2012] Chapter 2 §3 (34)	deviating	Chapter 2 §3 (34) Collection system: A regulation specific scheme in which the municipality takes over responsibility for the further handling of the waste at the collection site, and which is organized as a collection- or bring scheme.	Indsamlingsordning: En regulativbestemt ordning, hvor kommunen overtager ansvaret for affaldets videre håndtering ved opsamlingsstedet, og som er organiseret som en hente- eller en bringeordning.
2. Article 10 (2) WFD: "waste shall not be mixed with other waste/material with other properties"			
	not included		
3. Article 11 (1) WFD: "measures to promote high quality recycling"			
	not included	- Comment [DK TAC 2015]: <i>There are measures in the waste strategy Denmark without Waste which promote high quality recycling and there are in specific regulations rules which promote high quality recycling as well such as the order on Order on Use of Waste for Agricultural Purposes and the Order on Residual Products.</i>	
4. Requirement WFD: 11 (1) "separate collection if technically practicable"			
	not included	See summary in box	
5. Requirement WFD: 11 (1) separate collection if economically practicable			
	not included	See summary in box	
6. Requirement WFD: 11 (1) "separate collection if environmentally practicable"			
	not included	See summary in box	
7. Article 11 (1) WFD: "separate collections (...) appropriate to meet the necessary quality standards for the relevant recycling sectors"			
	not included		

8. Article 11 (1) WFD “by 2015 separate collection shall be set up for at least the following: paper, metal, plastic and glass”			
[DK BEK 2012] § 28	deviating	§28 If the collected amount of paper and cardboard waste, see. §§ 26 and 27, in the municipality represents less than 55% of the total paper and cardboard potential for households throughout the municipality in two consecutive calendar years from the 2006 calendar year, the local council must organise the collection system, see § 26, in such a way that fixed collection equipment which makes it at least as easy for households to dispose of paper waste, such as passing the municipal waste, is used.	§28 Hvis den indsamlede mængde af papir- og papaffald, jf. §§ 26 og 27, i kommunen udgør mindre end 55 % af det samlede papir- og pappotentiale for husholdninger i hele kommunen i to på hinanden følgende kalenderår regnet fra og med kalenderåret 2006, skal kommunalbestyrelsen tilrettelægge indsamlingsordningen, jf. § 26, på en sådan måde, at der anvendes fast opsamlingsmateriel, som gør det mindst lige så nemt for husholdningerne at aflevere papiraffaldet som at aflevere dagrenovation.
[DK BEK 2012] § 26	deviating	§26 The municipal council shall establish a collection scheme for paper waste from households in buildings where there constantly is more than 1 000 inhabitants. The scheme should be organised in such a way, that substantial amounts of the waste is collected.	§26 Kommunalbestyrelsen skal etablere en indsamlingsordning for papiraffald fra husholdninger i bebyggelser, hvor der til stadighed er mere end 1 000 indbyggere. Ordningen skal tilrettelægges på en sådan måde, at væsentlige dele af affaldet bliver indsamlet...
[DK BEK 2012] § 27	deviating	§27 The municipal council shall establish a collection scheme for cardboard waste , including cardboard packaging, from households in buildings where there constantly is more than 1 000 inhabitants. The scheme should be organised in such a way, that substantial amounts of the waste is collected.	§27 Kommunalbestyrelsen skal etablere en indsamlingsordning for papaffald, herunder papemballager, fra husholdninger i bebyggelser, hvor der til stadighed er mere end 1 000 indbyggere. Ordningen skal tilrettelægges på en sådan måde, at væsentlige dele af affaldet bliver indsamlet.
[DK BEK 2012] § 29	deviating	§29 The municipal council shall establish a collection scheme for glass packaging waste from households in buildings where there constantly is more than 2 000 inhabitants. The scheme should be organised in such a way, that substantial amounts of the waste which is suitable for preparation for reuse or recycling is collected.	§29 Kommunalbestyrelsen skal etablere en indsamlingsordning for glasemballageaffald fra husholdninger i bebyggelser, hvor der til stadighed er mere end 2 000 husstande. Ordningen skal tilrettelægges på en sådan måde, at væsentlige dele af glasemballageaffaldet, som kan forberedes til genbrug eller genanvendes, bliver indsamlet.
[DK BEK 2012] § 30	deviating	§30 The municipal council shall establish a collection scheme for recyclable metal packaging waste . The scheme should be organised in such a way, that substantial amounts of the waste which is suitable for recycling is collected.	§30 Kommunalbestyrelsen skal etablere en indsamlingsordning for genanvendeligt metalemballageaffald. Ordningen skal tilrettelægges på en sådan måde, at væsentlige dele af det genanvendelige metalemballageaffald bliver indsamlet.

Law & Article	Evaluation	English text	Original text
[DK BEK 2012] § 31	deviating	§31 The municipal council shall establish a collection scheme for recyclable plastic packaging waste , including plastic bottles and cans. The scheme should be organised in such a way, that substantial amounts of the plastic packaging waste which is suitable for recycling is collected.	§ 31. Kommunalbestyrelsen skal etablere en indsamlingsordning for genanvendeligt plastemballageaffald, herunder for affald i form af plastflasker og -dunke. Ordningen skal tilrettelægges på en sådan måde, at væsentlige dele af det genanvendelige plastemballageaffald bliver indsamlet.
9. Article 22 WFD: Bio-waste - Member states shall take measures, as appropriate (...) to encourage: "a) the separate collection of bio-waste with a view to the composting and digestion of bio-waste"			
- Comment [DK TAC 2015]: [DK BEK 2012] § 41 and §64	not included	- Comment [DK TAC 2015]: §41 As of 1 January 2016, local authorities shall offer to the companies operating in their territory to be covered by separate collection of organic waste from their waste streams similar to waste from households This applies only at areas where organic waste is source separated from households as well. §64 Waste produced by enterprises shall be source separated.	- Comment [DK TAC 2015]: § 41. Kommunalbestyrelsen kan indtil den 1. januar 2016 tilbyde virksomheder i kommunen, at de omfattes af en ordning for organisk affald fra deres dagrenovationslignende affald. Stk. 2. Stk. 1 finder kun anvendelse, hvor kommunalbestyrelsen i sit regulativ for husholdningsaffald har fastsat bestemmelser om, at organisk affald skal udsorteres fra dagrenovationen, og har etableret en selvstændig ordning for dette affald. § 64. Affaldsproducerende virksomheder skal kildesortere deres affald, jf. dog § 65, stk. 5 og 6, og § 66.

2 General requirements on separate collection based on main strategies

Denmark	668 kg MSW/capita 45.21% recycling
<p>Definition of Municipal solid waste (MSW): There is no direct definition of the term “Municipal solid waste” in the Danish legislation. However, in Annex 2 (the Catalogue of Waste) in the waste legislation, waste collected by the municipality covers household- and household like waste from businesses, industry and institutions, including separately collected fractions [DK BEK 2012].</p>	
<p>Main strategies implementing separate collection</p>	
<p>The National Waste Management Plan [DK NWMP 2014] is the most important strategy implementing waste collection in Denmark. The NWMP introduces a number of initiatives that shall secure the meeting of the recycling target for certain fractions of household waste [DK NWMP 2014, p.6-7]. More specifically, the strategy shall ensure support of the development of new separate collection schemes in municipalities, in order to enable better citizens’ access to sorting and secure more recycling of waste including organic, plastic and metal fractions. Further, partnerships between different actors such as municipalities, companies, designers, anthropologists etc. should be established in order to develop simple and easily accessible waste systems. The strategy also emphasises that information campaigns to promote recycling of different waste fractions, such as organic waste, plastic and metal waste will be developed. Good practice examples of sorting certain fractions of waste (organic waste, metal, plastic) and their substitution for fertilisers or utilisation for producing new high-quality products, will be published for inspiration [DK NWMP 2014, p. 6-7].</p> <p>The Danish target is that 50% of organic, paper, cardboard, glass, plastic, metal and wood waste from households is collected for recycling or material recovery in 2022. Municipalities are responsible for introducing collection schemes to secure meeting the target on the national level, through whichever collection scheme they choose [DK NWMP 2014, p.36].</p> <p>The NWMP thus focus on including the ‘wet’ waste fraction (organic waste) into the separate collection additionally to the ‘dry’ waste fractions like glass, paper and cardboard that are already collected in Denmark Danes had traditionally collected [DK REG 2013, p.23].</p> <p>Municipalities have the responsibility for household waste management, as specified by the Environmental Protection Law and several related Acts, in particular the Act on Waste [DK BEK 2012]. Municipalities have to prepare a 12-years waste management plan, based on the NWMP, together with regulations specifying collection systems to be established for different waste fractions. In Denmark two different waste management schemes can be introduced. The first one is the allocation schemes (‘anvisningsordning’), under which the waste producer is responsible for making sure that waste gets delivered at an appointed place for handling. The second one is a collection schemes (‘indsamlingsordning’) in which the municipality is responsible for the waste treatment, the door-to-door collection and bring points. The Environmental Protection law also stipulates that when municipalities establish a waste collection scheme, no other competing scheme can be set up [DK NWMP 2014, p.92-94].</p> <p>Every municipality has the right to decide on the collection scheme as well as the obligation to secure the necessary processing capacities for collected waste. Recycling capacity is in many cases secured by agreements with private recycling companies or through intermunicipal companies. [DK REG 2013, 22].</p>	

3 Implementation of separate collection

Overview on separate collection systems in place

The amount of waste recycled through material recycling increased more or less steadily since 2000 with a jump from 130 kg/cap in 2007 to 201 kg/cap in 2008, followed by a fluctuation until it reached 215 kg/cap in 2012, the year with the latest available data at Eurostat. In the same period, the quantity of composted and digested waste increased from 84 kg/cap in 2001 to 136 kg/cap in 2007 and fell again to 87 kg/cap in 2011 and 2012. The recycling rate of municipal waste, which includes both material recycling and biological processing, has increased from 30.8% in 2001 to 43.7% in 2009, decreased by a few percentage points in the following years and reached 45.2% in 2012 [DK Eurostat 2014 1,2].

In 2011, before the obligatory establishment of waste management plans, roughly 22% of paper, cardboard, plastic, glass, metal, wood and organic waste were sorted, which means that a double that amount was necessary to meet WFD's goal in 2022 [DK NWMP 2014, p.17].

There are several options for collecting many of the waste streams and their availability may differ between municipalities. **Collection schemes for paper and cardboard** have to be established in settlements with more than 1 000 inhabitants, and for **recyclable glass** packaging waste in settlements over 2 000 inhabitants. Collection schemes for **recyclable metal and plastic** packaging waste also have to be established [DK NWMP 2014, p.32].

Glass, paper, cardboard, plastic and metal waste can either be collected at **bring points or at civic amenity sites** [DK AFF 2012]. In some municipalities, the collection of bulky waste is established, where glass, cardboard and metal waste can be disposed of. **Glass** can also sometimes be **collected by door-to-door system**, which increases the collection rate [DK AFF 2013].

Civic amenity sites are managed by municipalities that decide on the types of waste that citizens can deliver. With the **exception of food waste and mixed household waste**, most of the other waste streams can be **deposited at these sites** [DK AFF 2013].

Most organic waste is not sorted out of household waste and therefore ends in an incinerator. A number of municipalities have however established **separate collection systems where source-separated organic waste** is used for the production of biogas and fertiliser in biological treatment facilities [DK NWMP 2014, p.33]. Some municipalities collect green/garden waste from houses for controlled bulk composting. Bio-waste can also be home-composted by citizens. Some municipalities offer support in terms of e.g. guidance or containers for composting [DK AFF 2013].

The collection of composite material (beverage packaging) is administered by the company Dansk Retursystem A/S, obliged by law to secure collection free of charge [DK RET 2013, p.7]. Certain types of glass bottles have been included in the deposit-refund system since 1942 and other types of beverage containers – plastic bottles and cans – were added later [DK AFF 2013].

Table 4: Overview of main separate collection systems in Denmark

Collection type	Paper	Glass	Plastic	Metal	Bio-waste
Door-to-door collection 	Primary	Secondary*	Primary	Primary	Rare for organic waste but common for garden waste
Co-mingled (door-to-door) 	Tertiary for one-family households (however, more municipalities are considering introducing this). Not applicable for apartment buildings.				
Bring points 	Secondary	Primary* (bottles and jars)	Secondary	Secondary	
Civic amenities 	Additional collection for all streams and other waste types, i.e. hazardous waste				Not seen for organic waste but common for garden waste
Producer/retail take-back 	Deposit system for selected beverage packaging (composite material)				

* For apartment buildings the primary collection method is door-to-door collection while bring points is secondary. For houses it is opposite.

4 Information sources

- [DK AFF 2012]** Sorterditaffald.dk (Sort your waste), a website by Dansk Affaldsforening (Danish Waste Association), <http://sorterditaffald.dk/>, accessed April 2015.
- [DK AFF 2013]** Affald.dk (Waste.dk), a website developed by a number of waste companies and municipalities, <http://affald.dk/da/>, accessed April 2015.
- [DK BEK 2012]** Bekendtgørelse nr. 1309 af 18. december 2012 om affald (Decree on Waste), Legal act: Bekendtgørelse, number: 1309; Official Journal: Lovtidende A, Publication date: 20121220, Entry into force: 20130101; Reference: (MNE(2013)50894), <https://www.retsinformation.dk/Forms/R0710.aspx?id=144826>, accessed April 2015.
- [DK BEK 2014]** Pantbekendtgørelsen BEK nr 104 af 27/01/2014 (Act on deposit), <https://www.retsinformation.dk/Forms/R0710.aspx?id=161334>, accessed April 2015.
- [DK Eurostat 2014, 1]** Eurostat – Municipal waste generation and treatment, by type of treatment method, <http://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&pcode=sdpc240&language=en>, accessed April 2015.
- [DK Eurostat 2014, 2]** Eurostat – Recycling rate of municipal waste, http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=t2020_rt120&plugin=1, accessed April 2015.
- [DK LBK 2010]** Lov om miljøbeskyttelse, jf. lovbekendtgørelse nr. 879 af 26. juni 2010.(Act on Environmental protection) Legal act: Lov, number: 879; Official Journal: Lovtidende A, number: 879; Reference: (MNE(2010)57399), <https://www.retsinformation.dk/Forms/r0710.aspx?id=132218>, accessed April 2015.
- [DK MILJ 2014]** Miljøstyrelsen - Kortlægning af kommunale affaldsordninger for husholdningsaffald. Internt projekt (Mapping of municipal waste collection schemes for household waste for the Danish EPA), <http://mst.dk/virksomhed-myndighed/affald/affaldshaandtering-strategi-aktiviteter/projektoversigt/husholdnings-affald/kortlaegning-af-kommunale-affaldsordninger-for-husholdningsaffald/>, accessed April 2015.
- [DK NWMP 2014]** Miljøstyrelsen: Danmark uden affald. Ressourceplan for affaldshåndtering 2013-2018 (Denmark without waste. Resource Plan for Waste Management 2013-2018), <http://mst.dk/service/publikationer/publikationsarkiv/2014/maj/danmark-uden-affald/>, accessed March 2015.
- [DK REG 2013]** Regeringen – Danmark uden affald. Genanvend mere – forbrænd mindre. 2013 (Denmark without waste. Recycle more – incinerate less. 2013), http://mst.dk/media/mst/Attachments/Ressourcestrategi_DK_web.pdf, accessed April 2015.
- [DK RET 2013]** Dansk Retursystem – Årsrapport 2013.(Dansk Retursystem – Annual Report) Dansk Retursystem, Hedehusene, 2013 [http://www.dansk-retursystem.dk/media\(1932,1030\)/Aarsrapport_2013.pdf](http://www.dansk-retursystem.dk/media(1932,1030)/Aarsrapport_2013.pdf), accessed April 2015.
- [DK TAC 2015]** Information provided by the TAC member of Denmark, September 2015