

# Home Appliances Material Flows Circular Society

Korrina Hegarty  
Environment Policy Director

WEEE Generation Conference  
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**APPLiA**  
Home Appliance Europe

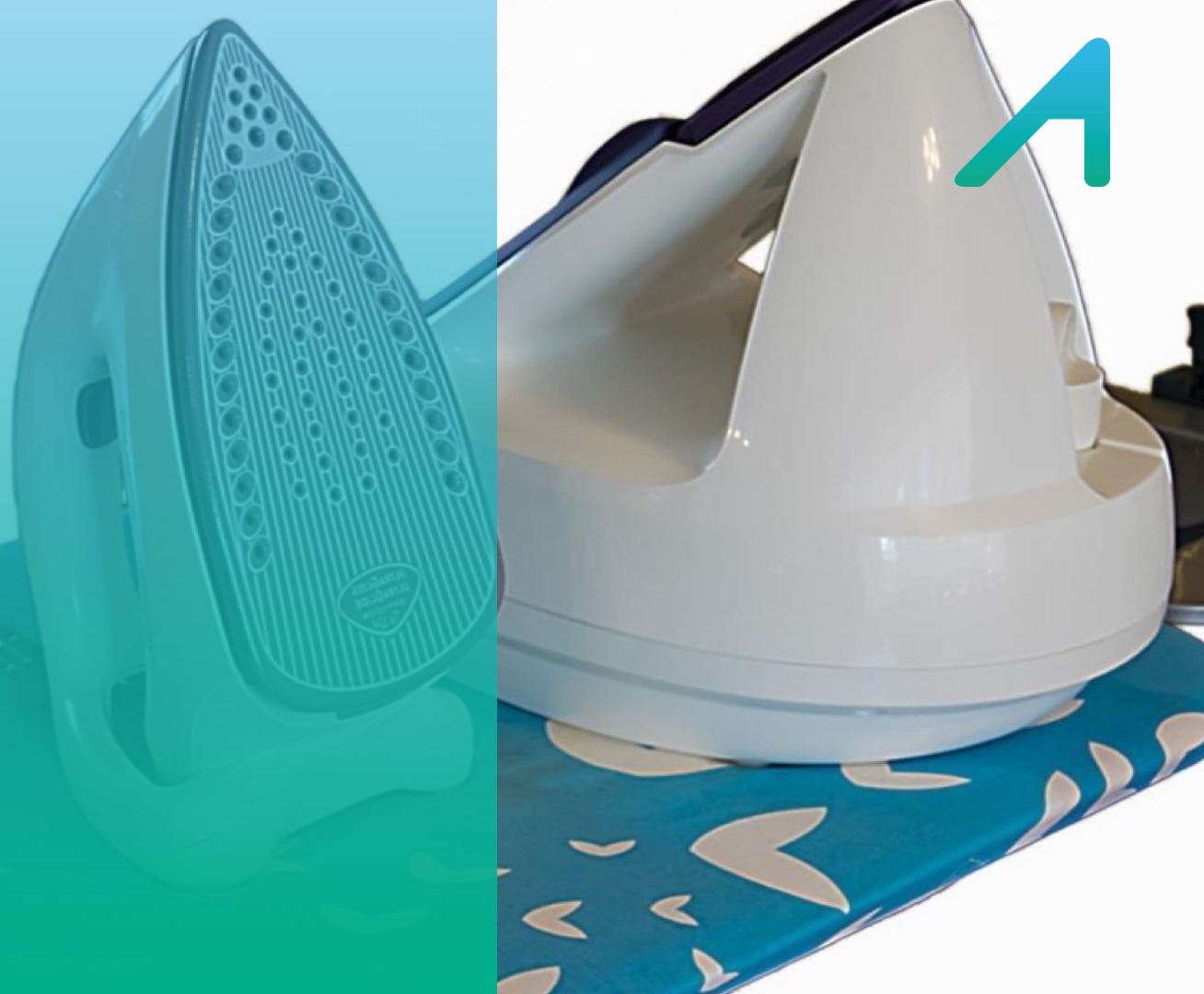




# Large home appliances



# Small Home Appliances



# Home Comfort Appliances





# APPLiA Membership

# Direct Members



Arçelik

 **ARISTON**  
THERMO GROUP

B/S/H/

**CANDY**

 **DAIKIN**

 **DeLonghi**

**dyson**

 **Electrolux**

 **GROUPE  
ATLANTIC**

**gorenje**

 **LG**

**LIEBHERR**

**Miele**

**PHILIPS**

**Panasonic**

**SAMSUNG**

  
**GROUPE  
SEB**

 **smeg**

**VESTEL**

 **VORWERK**

 **Whirlpool**  
CORPORATION

# 25

National Associations  
in 24 countries



# The Home Appliance Industry in Europe in 2016



**€ 52.998 m**  
Direct & indirect value added to GDP



**€ 47.639 m**  
Turnover in the EU



**3.429**  
Number of enterprises in the EU



**202.089\***  
Number of direct employees  
\* figure doesn't include Turkey



**889.192**  
Number of direct & indirect employees



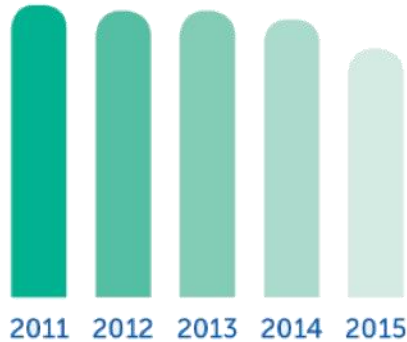
**€ 32.373\***  
Wages & salaries  
\* 2015 data, per employee





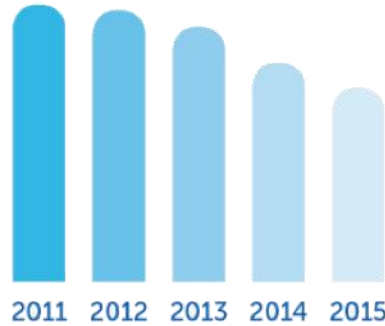
# A circular industry from the outset

# Reduction of impact in production process



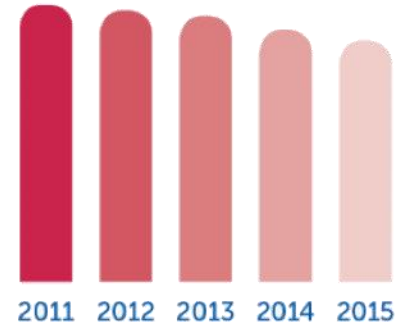
**-15%**

Reduction in waste generation during production, 2015-2011



**-30%**

Reduction in water consumption during production, 2015-2011



**-13%**

Reduction in energy consumption during production, 2015-2011

# Appliances = Savings



# Cutting-edge technologies



Water savings:

**6.142 billion  
litres/year**

**=**



**2,5 million**  
Olympic size swimming pools

# Saving resources: water & energy



117 l



2,73 Kwh



10 l



0,96 Kwh

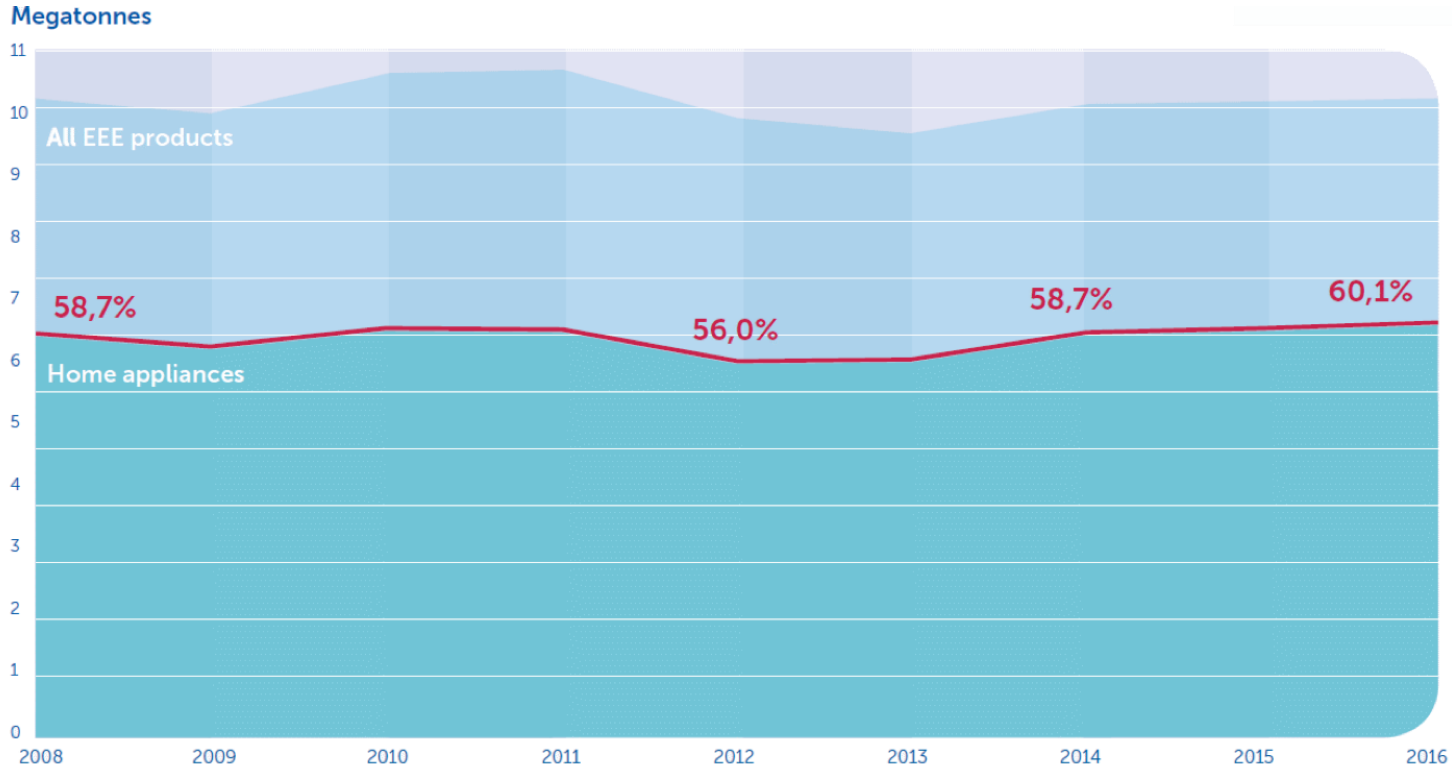


**-83,5%**  
Water consumption

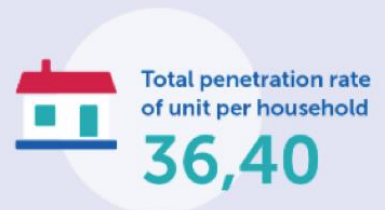


**-63,6%**  
Energy consumption

# Electrical & electronic equipment placed on the market in the EU



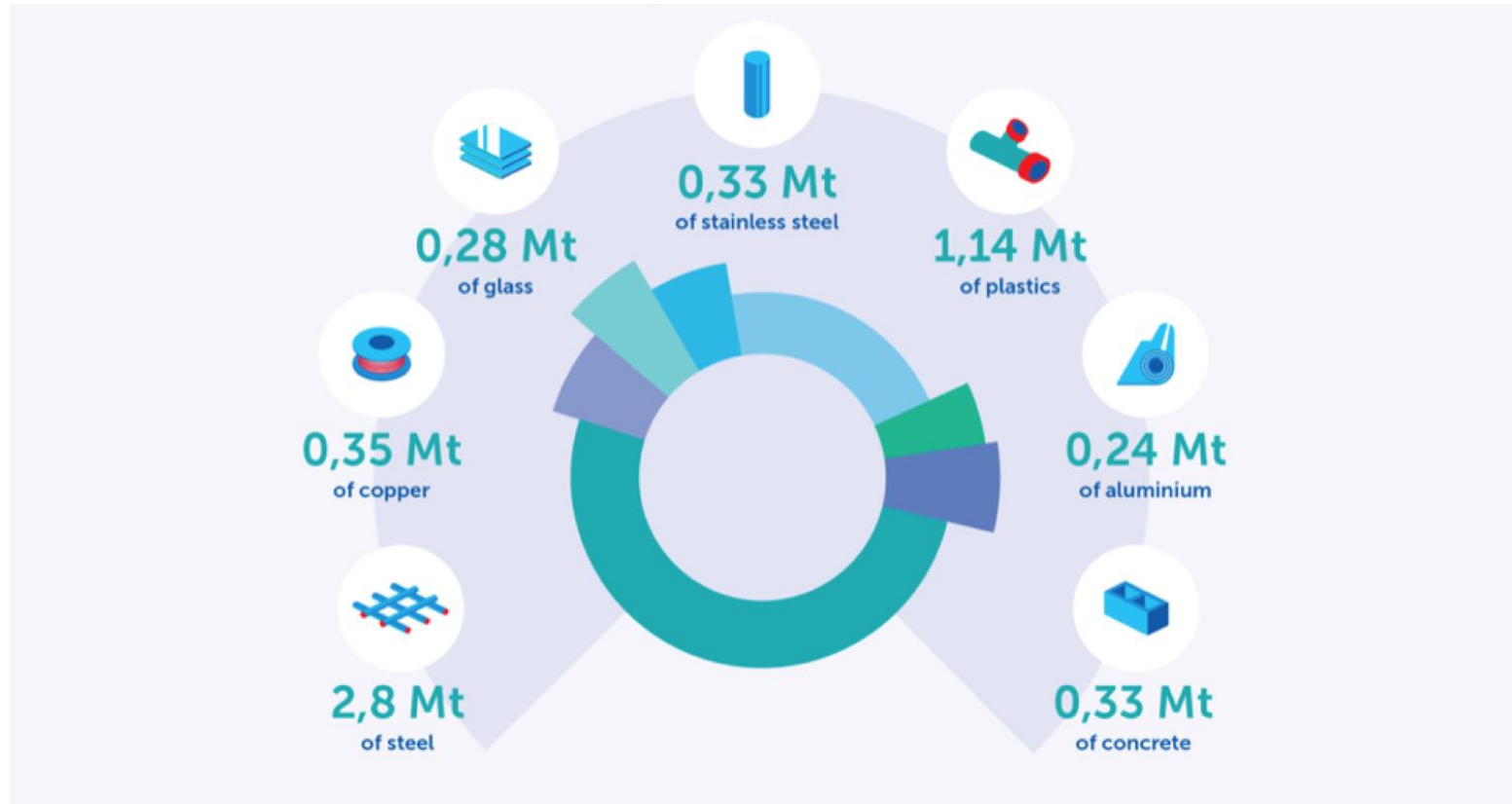
# Home appliances penetration rate



	Air conditioners	Dishwashers	Dryers	Freezers	Fridges	Kitchen appliances	Household heating & ventilation	Washing machines	Other cooling	Food processing	Hot water	Microwaves	Personal care	Vacuum cleaners	Other small household

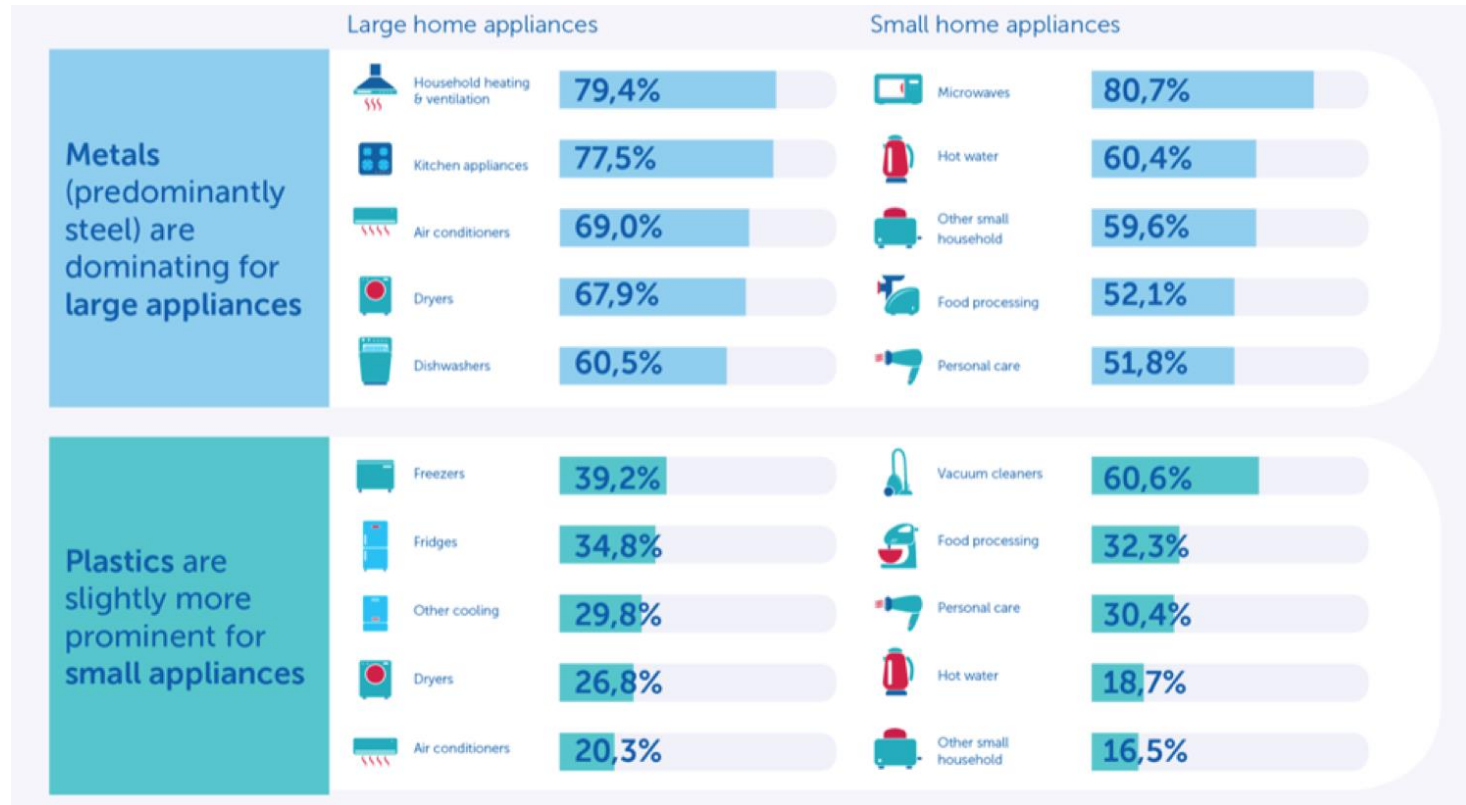
unit/person	0,18	0,20	0,18	0,16	0,68	0,94	0,36	0,38	0,03	2,91	1,73	0,55	1,25	0,83	4,87
unit/household	0,43	0,47	0,42	0,38	1,62	2,24	0,86	0,90	0,06	6,94	4,13	1,32	3,00	1,99	11,65

# Quantities of individual materials used by the home appliance sector

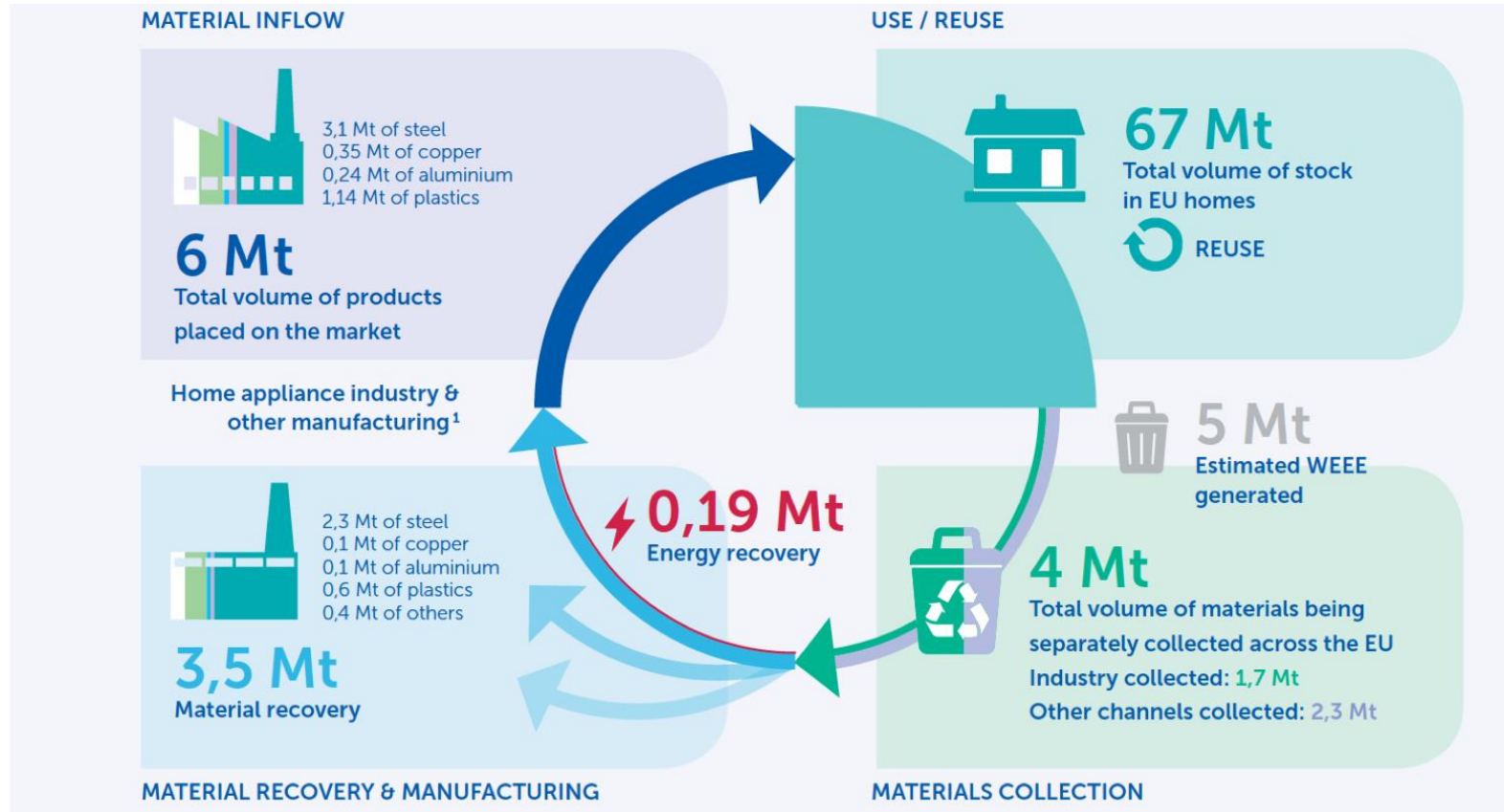




# Average material composition of home appliances



# Circularity of material flows





# Home Appliances >50% of WEEE

- WEEE Directive fundamentally changed state of affairs of recycling of appliances in short time
- Home appliances represent largest share of WEEE waste streams in Europe
- Heavy investments in recycling infrastructure in last 20 years

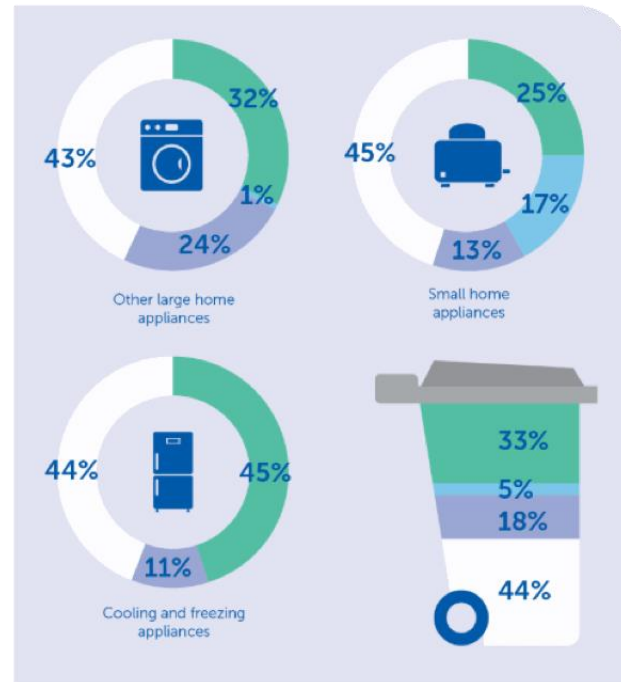




# Facing circular challenges



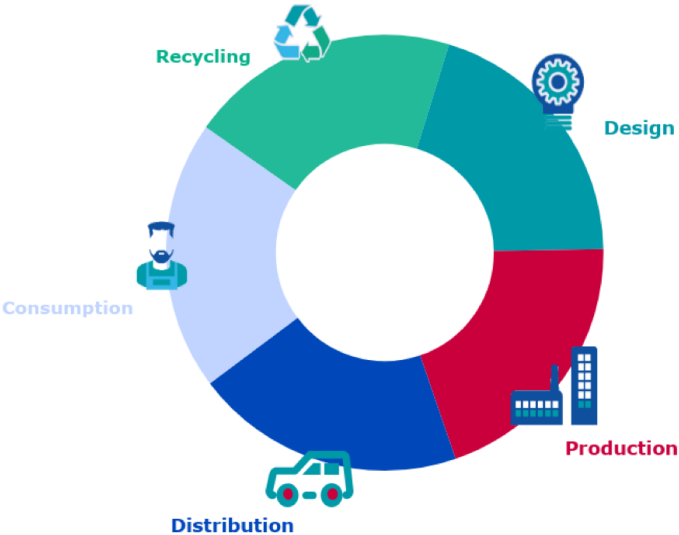
# EU Home Appliance WEEE Flows





# Recycling & recovery of home appliance WEEE

## Value Chain Cooperation



# Time lag between manufacturing & recycling



# Constant evolution of chemical legislation





# Information for recyclers



# The one-stop shop for recyclers



**WEEE Recycling information**

The I4R platform provides treatment and recycling facilities and preparation for re-use operators with access to WEEE recycling information in line with the requirements of Directive 2012/19/EU.

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# Industry Code of Conducts





# Enforcement & a level playing field

European Standards  
for Waste Electrical and  
Electronic Equipment  
(WEEE)

Collection | Transport | Re-use | Treatment

**CENELEC**

A hand is shown holding a blue plastic lid over a metal appliance part, likely a coffee maker. The background is a yellow cardboard box. The image is split into two vertical panels: the left panel is a teal gradient with white text, and the right panel is a yellow gradient with a blue arrow icon.

# Improving the collection & recycling of smaller appliances

# The role of consumers





**One goal:  
#CircularSociety**

# Circular society

MADE ALSO AT HOME. BY YOU, BY US.

**Get in touch**  
[www.circularsociety.eu](http://www.circularsociety.eu)

# Thank You

[korrina.hegarty@applia-europe.eu](mailto:korrina.hegarty@applia-europe.eu)