

## 2.3. UA for resource efficiency and waste management

### **2.3.2 Waste-to-resources: the potential uses of bio-waste**

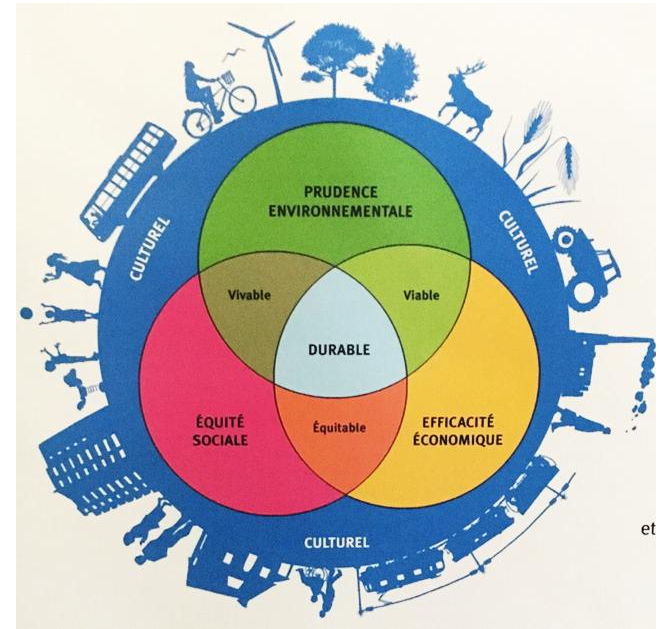
Laure Vidal-Beaudet

Agrocampus Ouest / Agreenium

## 2.3.5 Waste-to-resources: The potential uses of biowaste

### Plan

- Urban system
- Type of urban bio-wastes
- Ways of recycling
- Potential uses of bio-wastes for plant production

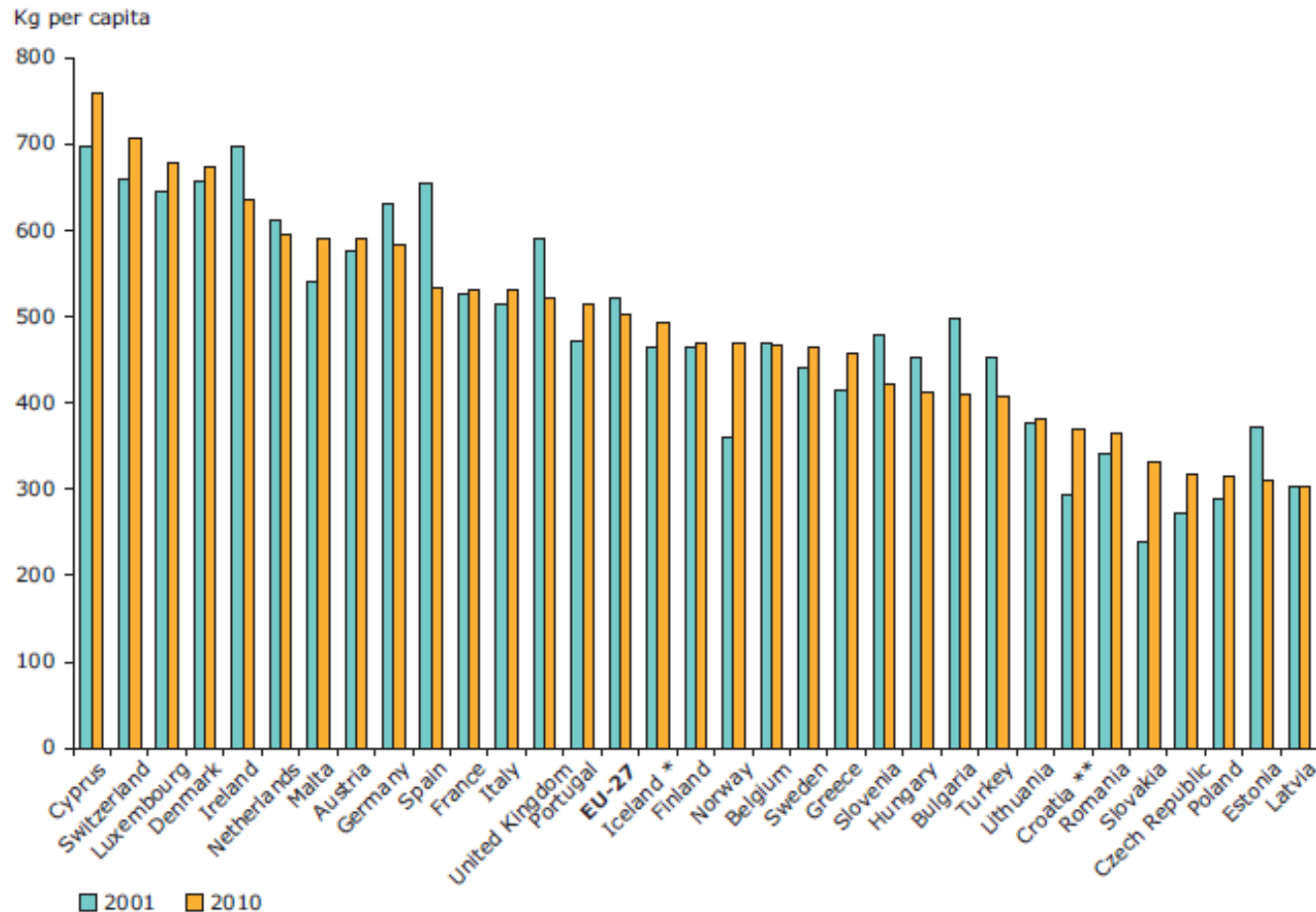


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# Urban wastes



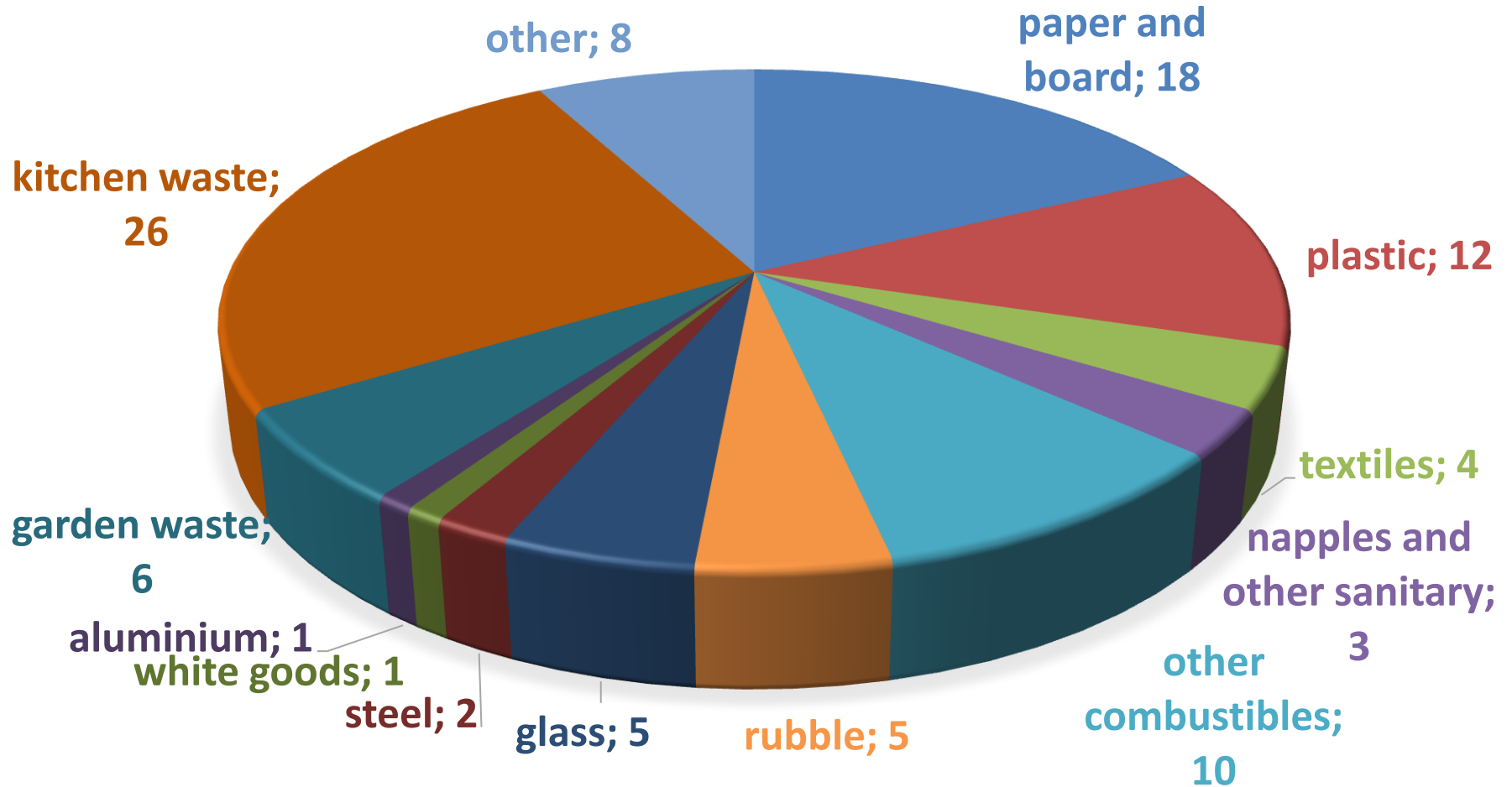
Municipal waste production for european countries in 2001 and 2010 (kg per capita)



**Note:** (\*) 2008 data used for 2010. (\*\*) 2004 data used for 2001. According to Eurostat the comparability of the data over time is high. However, some breaks in the time series are documented, which can influence the comparability between countries and within a country. Generally, the quality of the data has improved during the period 2001-2010.

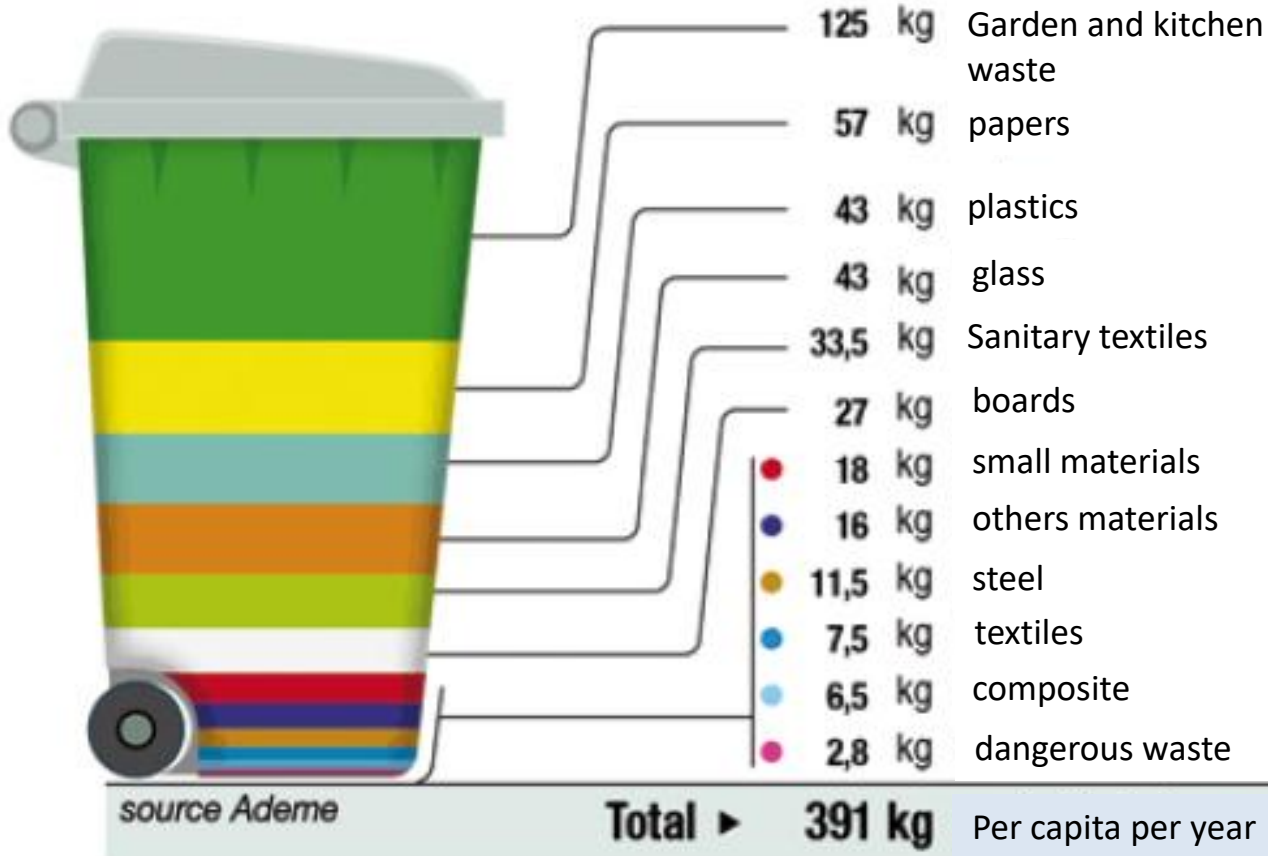
**Source:** Eurostat, 2012c; ETC/SCP, 2013b.

Municipal solid waste composition UE 27 %



# Urban wastes

→ Type of wastes collected by municipal services in France



→ **Biowastes : ?**



Municipal biowaste production (other than agriculture and woodculture) in 2013 in France

Organic waste	Millions of tons
Waste collected by municipal services	20.2
Kitchen waste	7.1
Papers and board, textiles, sanitary	7.2
Green waste	5.9
in domestic waste	1.2
in local waste disposal	3.5
by door-to-door	1.2
Organic waste with domestic management	5.1
Other organic waste	21.1
Green waste from municipality	1
Sewage sludge	9
market	0.4
Green waste from enterprises	3.2
Food retail	0.8
Restaurant	1.1
Food industries	3
Paper industries	1.8
Others industries	0.8
<b>TOTAL</b>	<b>46.4</b>