

Material Flow Accounts

1995-2015

Domestic Material Consumption increased less than GDP in 2015

Domestic Material Consumption increased 0.9% in 2015. This evolution was determined by the economic activity recovery, namely of industries with more intensive use of *biomass* (related to the production of pulp and paper), *fossil energy materials*, *metallic ore* and *other products*. The higher increase in GDP (+1.6% in real terms) compared to Domestic Material Consumption, led to a slight increase in productivity associated with the use of materials in 2015 (0.7%), retaking the growing trend observed between 2008 and 2013.

Portugal kept its resource productivity bellow EU28 average in 2015 (64.7%), although observing a continuous improvement (it was 62.6% in 2000). The Portuguese *per capita* consumption of materials was the lowest 16th of EU28 (in 2000 was 21st).

Statistics Portugal publishes the provisional results of Material Flows Accounts (MFA) for the year 2015, further reviewing the retrospective series, following the data sources update, the inclusion of new data sources (namely in Domestic Processed Output and balance items) and the methodological changes proposed by Eurostat.

MFA aims to express, in terms of material flows, the interaction of the national economy with the natural environment and the rest of the world economy, in order to evaluate if economic growth is achieved through a more efficient use of materials taken from the environment (dematerialization) or a more intense use of materials.

In Statistics Portugal website, in the National Accounts dissemination area (Satellite Accounts section), additional tables with more detailed information are also available.

1. Analysis of the main indicators

Domestic Material Consumption (DMC) increased by 0.9% in 2015. As occurred in previous years, this evolution was determined by the economic activity dynamics in Portugal, expressed by an increase in the Gross Domestic Product (GDP) (+1.6% in real terms).

However, as in 2014 and unlike previous years, the developments observed in 2015 were not mainly due to the non metallic mineral consumption (driven by the dynamic of sectors with more intensive use of materials, such as construction), but instead due to the

increasing use of *biomass* (related to the production of pulp and paper), *fossil energy materials* (invigorated by the conversion project of the national refinery), *metallic ore* and *other products*.

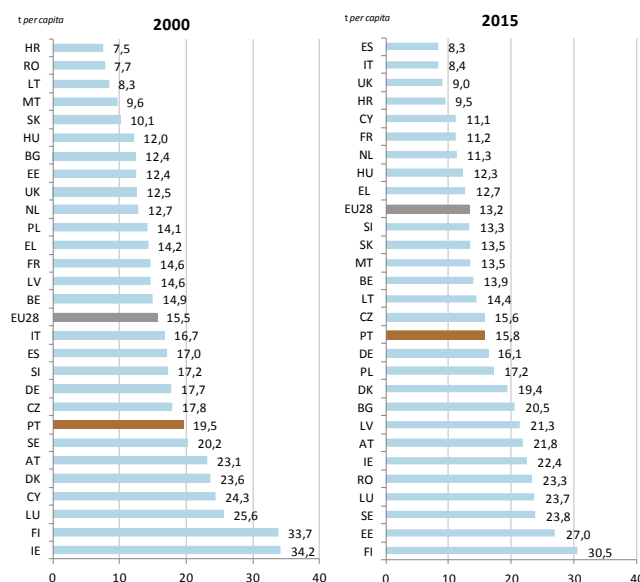
The less pronounced increase of DMC compared to GDP in volume led to a slight increase (0.7%) of the resource productivity (GDP/DMC) in 2015, retaking the upwards trend observed since 2009 and interrupted in 2014.

2. International comparisons¹

Portugal recorded a DMC of 15.8 tons *per capita* in 2015 (19.5 tons in 2000), having approached the European average, which was 13.3 tons per inhabitant (15.4 tons in 2000).

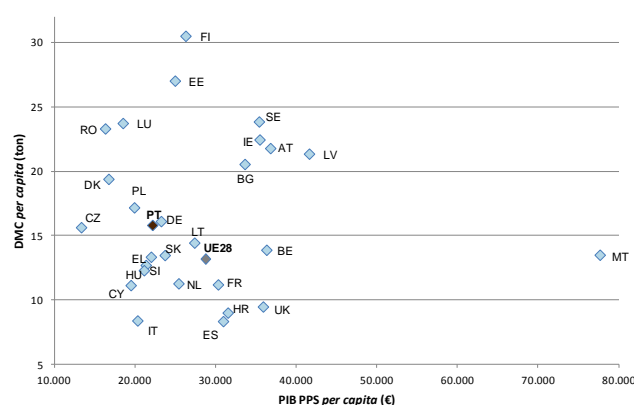
Compared to 2000, there was an improvement in the relative position of Portugal in terms of DMC *per capita* (switching from the 21st country with the lowest DMC *per capita* in 2000 to the 16th in 2015).

Chart 2.1. **Domestic Material Consumption (DMC) per capita, in EU28, in 2000 and 2015**



Confronting the positioning of Portugal in terms of DMC *per capita* and GDP *per capita* (in Purchasing power standard - PPS) it is possible to observe that in 2015 Portugal presented a higher DMC than the European average (+19.6%), as opposed to GDP *per capita*, which was lower by 22.0%.

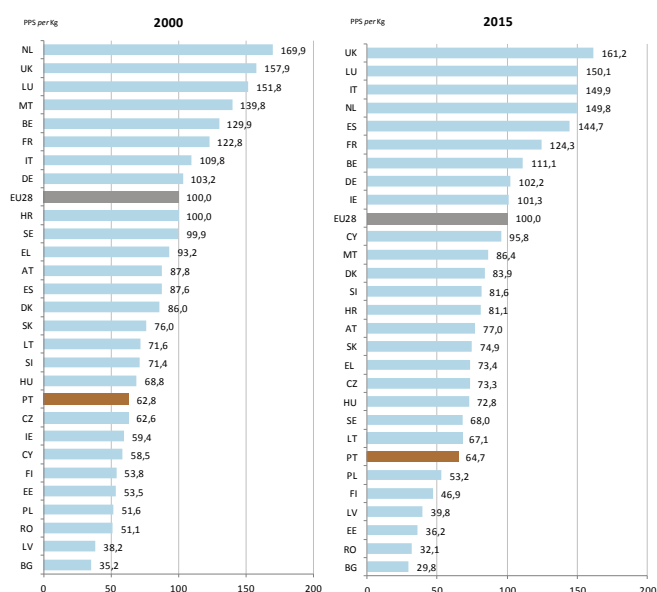
Chart 2.2. **Domestic Material Consumption (DMC) and GDP in PPS per capita, in EU28, in 2015**



¹ The information from the Member States (except Portugal) was extracted from Eurostat database on 18 November 2016. Data for Portugal have been updated with the new MFA series now available.

Although slight improvements have occurred, Portugal continued to experience productivity associated with the use of resources (GDP in PPS/DMC) below the European average (64.7% of the EU28 average in 2015 and 62.8% in 2000).

Chart 2.3. **Resource productivity (GDP in PPS/DMC), in EU28, in 2000 and 2015**



This is partly due to the structural differences between the national economy and the other European economies, since the Portuguese industry is still supported in several materials-intensive sectors such as pulp and paper, refinery and non-metallic mineral products (cement and ceramics), steel and metal products.