

## Waste

### CSI 016 Municipal waste generation

#### Indicator definition:

The indicator for municipal waste generation is expressed in kg per person and year, and the method of treatment (recycling, composting, landfill and incineration) is expressed as a percentage of total municipal waste treatment. Municipal waste refers to waste collected by or on behalf of municipalities; the main part originates from households, but waste from commerce and trade, office buildings, institutions and small businesses is also included.

#### Key policy question:

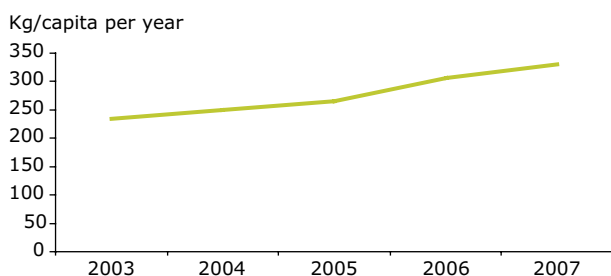
Waste prevention: are we reducing the generation of municipal waste?

### Past and present trends

#### Key message:

The generation of municipal waste per capita in the Western Balkan region has been increasing since 2003. The increase is attributed mainly to rapid economic growth following the adoption of a free market economic system and the consequent steady increase in GDP. The trend is projected to continue due to the further economic growth of the countries expected as their economies become integrated with the EU in the lead-up to accession to the EU.

#### Municipal waste generation per capita in the Western Balkans, 2003–2007



#### Municipal waste generation by country

Kg/capita per year	2003	2004	2005	2006	2007
Albania	184	200	202	229	229
Bosnia and Herzegovina	232	250	257	250	260
Croatia	288	295	326	373	388
The former Yugoslav Republic of Macedonia	197	229	245	271	291
Regional	234	250	265	289	300

**Note:** The former Yugoslav Republic of Macedonia data for 2006–2007, and Croatian data for 2003 have been estimated. Bosnia and Herzegovina provided rough estimations, therefore presented results should be taken with caution.

#### Assessment:

Generation of municipal waste per capita in the region showed an increase of almost 41 % from 234 kg/cap in 2003 to 330 kg/cap in 2007, following the increases in population and GDP. A further significant increase is expected as a result of continuing economic growth, increase in consumption, and expansion of tourism (the latter especially in Croatia). Compared with the EU average of more than 500 kg per capita per year, the figures for the Western Balkan countries are considerably lower, mainly as a result of an underdeveloped municipal waste collection and disposal systems as well as different consumption patterns.

The main option for disposal of municipal waste in all countries is still landfilling: in many cases existing facilities are inadequate, posing considerable risks to public health and the environment. Hazardous, industrial and medical wastes are very often sent to municipal waste landfills, due to the lack of adequate treatment and safe disposal facilities.

New environmental legislation including municipal waste management is already in place in most of the countries in the region; however, it is poorly enforced and implemented.

#### Source:

*Albania:* Ministry of Public Works, Transport and Telecommunication — Annual Reports on waste generation for years 2003, 2004, 2005, 2006 and 2007.

*Bosnia and Herzegovina:* Data obtained within project Setting up an Operational Unit under the ESC, 2003. Environmental Protection Strategy/Waste Management Strategy of the Federation of Bosnia and Herzegovina (pending official adoption) 2007. FBIH/BiH Recycling Association (at Chamber of Commerce FBIH/Chamber of Foreign Trade BiH). Ministry of Physical Planning and Environmental Protection of Sarajevo Canton.

*Croatia:* Waste Management Plan of the Republic of Croatia for 2007–2015 (OG No. 85/07). Environmental Emission Register (KEO/ROO) and other databases maintained by Croatian Environment Agency 2005. Statistical Yearbook of the Croatian Bureau of Statistics 2005.

*The former Yugoslav Republic of Macedonia:* The National Waste Management Plan for 2004–2005; the Ministry of Environment and Physical Planning.

**Temporal coverage:** 2003–2007.

**Spatial coverage:** Albania, Bosnia and Herzegovina, Croatia and the former Yugoslav Republic of Macedonia.

