

### Is land-based sources pollution from coastal cities going down?

The reduction of pollution of marine waters from land-based sources in the Mediterranean was the object of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources. It is therefore one of the priority objectives of the MSSD: Halve by 2015 the number of coastal urban inhabitants with no access to sanitation.

**69% of the Mediterranean coastal cities of more than 10 000 inhabitants are connected to waste water treatment plants**, 21 % do not possess one, while 6% are currently building one and 4% have one that is out of service for various reasons. 15 % of the Mediterranean waste water treatment plants use tertiary treatment, 55 % secondary treatment and 18 % primary treatment.

Only 6 countries have a considerable number of towns connected (Cyprus, Israel, France, Spain, Slovenia and Croatia). Albania and Syria have no system for waste water treatment and the other countries have only a few towns connected.

The costs of upgrading the sanitation systems for the 32 million inhabitants of the coastal towns of over 10 000 inhabitants in the southern and eastern Mediterranean countries, added to the new facilities necessary for the treatment of the 18 million coastal urban population expected by 2025, has been assessed by Plan Bleu at about 10 billion euros by 2025.

This amount represents between 2 and 3% of their GDP. Operating costs could be between 300 and 600 million euros per year.

40% of the cities with a population between 2000 and 10000 inhabitants (673 villes sur 1699) are not connected to a waste water treatment.

#### Definition

This indicator measures the number of inhabitants (the share of the population) in coastal cities connected to wastewater sanitation networks.

Several sub-indicators are proposed:

- The population connected to sanitation networks equipped with wastewater treatment plants (differentiating between the types of treatment) out of the total population.
- The population connected to sanitation networks without a waste water treatment plant out of the total population.

#### Precautions / Notes

Cost assessment method: on the basis of an average cost of 100euros/equivalent per inhabitant for the levelling and 400euros equivalent per inhabitant for the new facilities.

A large number of connected towns would not guarantee a sufficient treatment rate, this being conditioned by the type of waste water treatment plants and their efficiency.

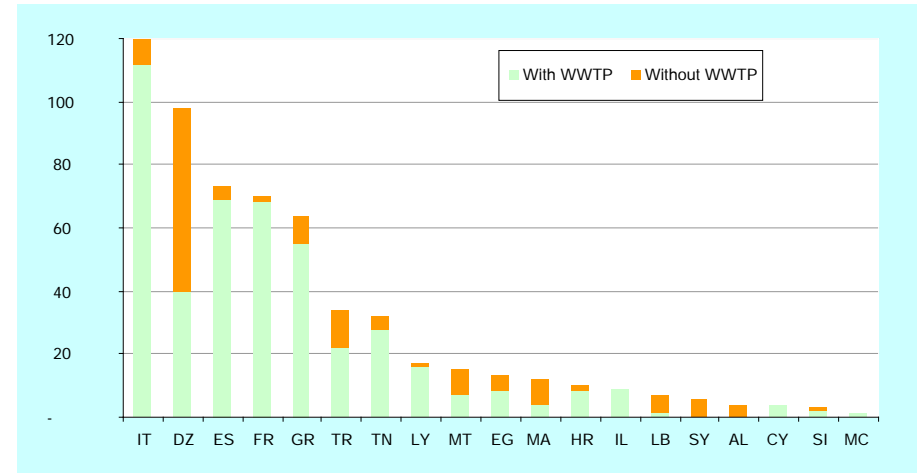
This indicator depends on the definitions of the towns (built-up areas, towns) that could be different from one country to another.

#### Sources / References

UNEP-MAP-MED POL, WHO, Plan Bleu

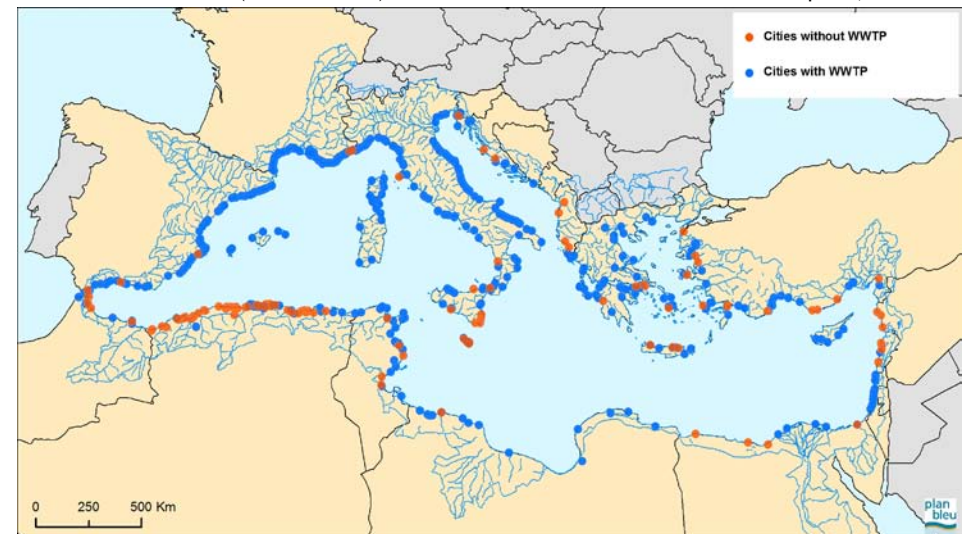
### 25. Proportion of coastal urban population connected to a sanitation network

Number of coastal cities of more than 10 000 inhabitants with and without a waste water treatment plant, 2003



Source : MEDPOL/Plan Bleu

The coastal cities (>10 000 inhab) with and without a waste water treatment plant, 2003



Source : MEDPOL/Plan Bleu