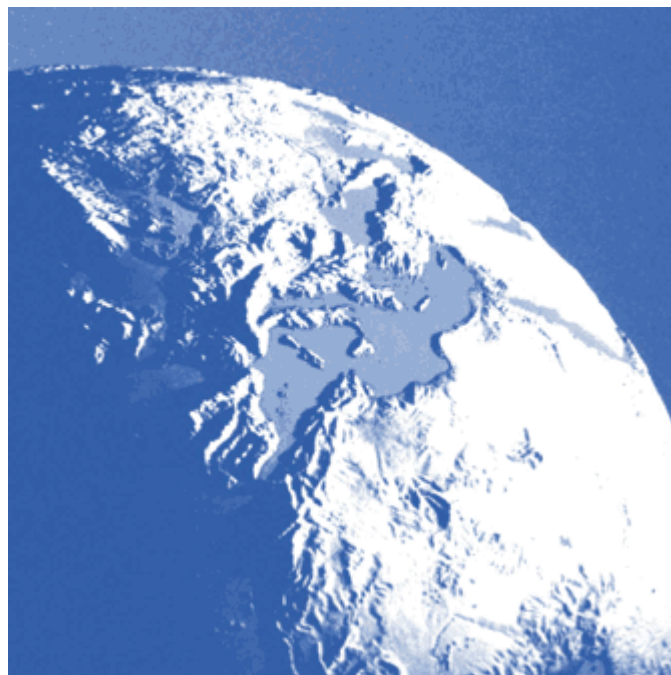




## **Methodological sheets of the 34 priority indicators for the “Mediterranean Strategy for Sustainable Development” Follow-up**

Working document



Plan Bleu  
Regional Activity  
Centre

Sophia Antipolis,  
May 2006



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Working document

(May 2006)

This report contains the methodological sheets of the 34 priority indicators (adopted by the Contracting Parties at fourteenth meeting in Slovenia (Portoroz) in October 2005) according to the following framework:

| STRATEGY FIELD<br>PRIORITY FIELD | TYPE<br>PRIORITY (OR<br>COMPLEMENTARY)<br>INDICATORS | MCS<br>CHAPTER<br>THEME<br>(*) |
|----------------------------------|--|--------------------------------|
| <b>Indicator label</b>           | <b>MSSD N°<br/>CODE</b>                              |                                |

- Strategic Objective
- Rationale
- Definition
- Unit
- Objective and/or targeted values
- Methodological Indications
- Geographical scope
- References
- International Data Sources
- Precautions for use
- Methodological Annex

(\*) Number of the indicator in the “130 indicators for sustainable development in the Mediterranean region”

## The 34 priority indicators for the MSSD follow-up

| ISSUES AND OBJECTIVES  | N° | INDICATORS   | CODE    |
|--|----|--|---------|
| <b>IMPROVING INTEGRATED WATER RESOURCE AND DEMAND MANAGEMENT</b>   |    |  |         |
| Stabilize water demand (decrease in the North and controlled increases in the South and East). Reduce losses and misuses by setting up efficiency objectives for each sector of use. Decouple water demand and GDP growth and significantly increase the economic agriculture added value per cubic metre of water used. | 1  | Water Efficiency Index (total and by sector)   | WAT_P01 |
|  | 2  | Water demand and compared to GDP (total and by sector)   | WAT_P02 |
| Preserve water resources.  | 3  | Exploitation Index of renewable resources  | WAT_P03 |
| Achieve the Millennium Development Goals (MDGs) for access to safe drinking water and sanitation.  | 4  | Share of population with access to an improved water sources (total, urban, rural)   | WAT_P04 |
|  | 5  | Share of population with access to an improved sanitation system (total, urban, rural)   | WAT_P05 |
| <b>MANAGING ENERGY DEMAND AND MITIGATING THE EFFECTS OF CLIMATE CHANGE</b>   |    |  |         |
| Use energy rationally by setting up global objectives and for each sector.   | 6  | Energy intensity (total and by sector)   | ENE_P01 |
| Develop renewable energies to meet 7% (excluding biomass) of the energy demand by 2015.  | 7  | Share of renewable energies in energy balance  | ENE_P02 |
| Control, stabilize or reduce emission of gas   | 8  | Greenhouse gas emissions   | ENE_P03 |
| Use the Kyoto Protocol flexibility mechanisms for the sustainable development of the developing Mediterranean countries.   | 9  | Amount financed in the framework of the Kyoto Protocol flexibility mechanisms by the annex 1 countries to the benefit of other Mediterranean countries | ENE_P04 |
| <b>ENSURING SUSTAINABLE MOBILITY THROUGH APPROPRIATE TRANSPORT MANAGEMENT</b>  |    |  |         |
| Decouple the motorized transport increase from GDP growth.   | 10 | Motor transport intensity compared to GDP  | TRA_P01 |
| Stabilize or reduce whenever possible the proportion of road transport in the overall volume of traffic by a shift to sea and rail.  | 11 | The proportion of road transport in terms of land freight transport  | TRA_P02 |
| Reduce urban vehicle congestion and pollution noise by promoting low-pollutant public transport.   | 12 | Share of public surface transport (urban and inter-urban)  | TRA_P03 |
| <b>PROMOTE SUSTAINABLE TOURISM</b>   |    |  |         |
| Diversify tourism by developing offers that enhance Mediterranean diversity (eco-tourism, cultural, urban and rural tourism).  | 13 | Share of "non-seaside resort beds" vs total number of beds   | TOU_P01 |
| Increase added value of tourism for local communities and actors in developing countries.  | 14 | International tourism receipts   | TOU_P02 |
| <b>PROMOTING SUSTAINABLE AGRICULTURAL AND RURAL DEVELOPMENT</b>  |    |  |         |
| Diversify the rural economy by developing non-agricultural activities.   | 15 | Ratio of agricultural population vs rural population   | AGR_P01 |
| Combat desertification and the loss of productive land by 2015; reduce by at least one-third the present rates of quality agricultural land losses due to erosion, salinization, desertification, urban and other development and abandonment.   | 16 | Loss of arable land  | AGR_P02 |
| Promote sustainable agricultural rural development programmes, especially in marginal rural areas.   | 17 | Share of public budget allocated to sustainable rural development programmes   | AGR_P03 |
| Increase the agriculture added value, recognition and marketing of quality Mediterranean products.   | 18 | Proportion of agriculture quality products and Share of the agricultural land area used by organic farming   | AGR_P04 |

| ISSUES AND OBJECTIVES  | N° | INDICATORS   | CODE    |
|--|----|--|---------|
| <b>PROMOTING SUSTAINABLE URBAN DEVELOPMENT</b>   |    |  |         |
| Promote a sustainable urban economy. Anticipate and plan for expected urban growth.  | 19 | Number of cities with over 10 000 inhabitants engaged in a process Agenda 21 type or in urban renewal programmes   | URB_P01 |
| Reduce social disparities.   | 20 | Proportion of urban population with access to a decent dwelling  | URB_P02 |
| Improve the urban environment:<br>Reduce waste generation. Decouple the increase in waste generation and GDP growth.   | 21 | Household waste produced per capita and number of uncontrolled landfills   | URB_P03 |
| Reduce air pollutants.   | 22 | Air quality in the main Mediterranean urban areas  | URB_P04 |
| <b>PROMOTING SUSTAINABLE MANAGEMENT OF THE SEA AND THE COSTAL AREAS AND TAKE URGENT ACTION TO PUT AN END TO THE DEGRADATION OF COASTAL ZONES</b>   |    |  |         |
| Promote balanced development and integrated management of the coastline. Push back urbanization to prevent artificialization of coasts. Avoid linear and continuous urbanization.  | 23 | Share of artificialised coastline  | COA_P01 |
| Eliminate operational pollution from ships by 2025.  | 24 | Operational pollution from ships   | COA_P02 |
| Reduce pollution from land-based sources.  | 25 | Proportion of coastal urban population connected to a sanitation network   | COA_P03 |
| Halt or reduce substantially marine and coastal biodiversity loss by 2010. Bring at least 10% of the marine and coastal surface under some form of protection.   | 26 | Surface of protected coastal and marine areas  | COA_P04 |
| <b>STRENGTHEN SOLIDARITY, COMMITMENT AND FINANCING FOR A SUSTAINABLE DEVELOPMENT AT REGIONAL, NATIONAL AND LOCAL LEVELS</b>  |    |  |         |
| Before 2015, raise the level of official development aid (ODA) from the European OECD countries to 0.7% of their GNP (MDG), and reinforce this support contribution to implementation of the Strategy.   | 27 | ODA allocated as % of OECD DAC countries donors' GNP; proportion of the ODA allocated to Mediterranean countries and proportion contributing to the strategy objectives                          | COO_P01 |
| Strengthen reciprocal commitments, solidarity and Mediterranean and Euro-Mediterranean cooperation for sustainable development.  | 28 | EU net public financial flows to EU Mediterranean members, candidates, CARDS and MEDA countries (in absolute value and per capita) and proportion contributing to the objectives of the strategy | COO_P02 |
| Promote implementation of systems to enable funding of SMEs for productive and innovative activities (micro-credit, venture capital, incentives, etc).   | 29 | Proportion of bank credit allocated to the private sector – Existence of alternative financing systems to bank credit  | COO_P03 |
| Strengthen local authorities' prerogatives and capacities.   | 30 | Proportion of local government tax receipts as percentage of total tax revenues (government receipts). Proportion of government budget allocated to local authorities.                           | COO_P04 |
| Reinforce territorial and social cohesion. Develop public financial mechanisms to support the least favoured regions.  | 31 | Public financial mechanisms to support the least favoured regions  | COO_P05 |
| <b>STRENGTHEN HUMAN CAPITAL AND ACTORS' INVOLVEMENT: RESEARCH, TRAINING, EDUCATION, AWARENESS-RAISING AND PARTICIPATION</b>  |    |  |         |
| Ensure primary education for all   | 32 | Youth literacy rate  | HUM_P01 |
| Eliminate the disparities between girls and boys in education  | 33 | Girl/Boy primary and secondary school registration ratio   | HUM_P02 |
| In synergy with the private sector, increase expenses on research and development between now and 2015 so as to get closer to at least the average level in countries with equivalent incomes, stressing the rational use of natural resources, developing environment-friendly technologies and enhancing the Mediterranean economic and social know-how and diversity. | 34 | Public and private expenses for research and development in percentage of GDP  | HUM_P03 |



## INDICATORS LIST

|     |  |    |
|-----|--|----|
| 1.  | Water Efficiency Index (total and by sector) .....   | 9  |
| 2.  | Water demand and compared to GDP (total and by sector).....  | 12 |
| 3.  | Exploitation Index of renewable resources .....  | 14 |
| 4.  | Share of population with access to an improved water sources (total, urban, rural).....  | 16 |
| 5.  | Share of population with access to an improved sanitation system (total, urban, rural) ..  | 18 |
| 6.  | Energy intensity (total and by sector).....  | 20 |
| 7.  | Share of renewable energies in energy balance.....   | 24 |
| 8.  | Greenhouse gas emissions .....   | 26 |
| 9.  | Amount financed in the framework of the Kyoto Protocol flexibility mechanisms by the annex 1 countries to the benefit of other Mediterranean countries .....   | 28 |
| 10. | Motor transport intensity compared to GDP .....  | 30 |
| 11. | The proportion of road transport in terms of land freight transport .....  | 32 |
| 12. | Share of public surface transport (urban and inter-urban) .....  | 33 |
| 13. | Share of “non-seaside resort beds” vs total number of beds.....  | 35 |
| 14. | International tourism receipts.....  | 37 |
| 15. | Ratio of agricultural population vs rural population .....   | 41 |
| 16. | Loss of arable land .....  | 43 |
| 17. | Share of public budget allocated to sustainable rural development programmes.....  | 45 |
| 18. | Proportion of agriculture quality products and Share of the agricultural land area used by organic farming .....   | 46 |
| 19. | Number of cities with over 10 000 inhabitants engaged in a process Agenda 21 type or in urban renewal programmes .....   | 48 |
| 20. | Proportion of urban population with access to a decent dwelling .....  | 50 |
| 21. | Household waste produced per capita and number of uncontrolled landfills .....   | 51 |
| 22. | Air quality in the main Mediterranean urban areas .....  | 53 |
| 23. | Share of artificialised coastline .....  | 55 |
| 24. | Operational pollution from ships .....   | 57 |
| 25. | Proportion of coastal urban population connected to a sanitation network.....  | 59 |
| 26. | Surface of protected coastal and marine areas .....  | 61 |
| 27. | ODA allocated as % of OECD DAC countries donors’ GNP; proportion of the ODA allocated to Mediterranean countries and proportion contributing to the strategy objectives.....                           | 64 |
| 28. | EU net public financial flows to EU Mediterranean members, candidates, CARDS and MEDA countries (in absolute value and per capita) and proportion contributing to the objectives of the strategy ..... | 67 |
| 29. | Proportion of bank credit allocated to the private sector – Existence of alternative financing systems to bank credit .....  | 69 |
| 30. | Proportion of local government tax receipts as percentage of total tax revenues (government receipts). Proportion of government budget allocated to local authorities..                                | 71 |
| 31. | Public financing mechanisms to support the least favoured regions .....  | 73 |
| 32. | Youth literacy rate.....   | 75 |
| 33. | Girl/Boy primary and secondary school registration ratio .....   | 77 |
| 34. | Public and private expenses for research and development in percentage of GDP .....  | 79 |





|   |  |   |
|---|--|---|
| <p style="text-align: center;"><b>STRATEGY FIELD</b></p> <p style="text-align: center;"><b>IMPROVING INTEGRATED RESOURCES AND WATER DEMAND MANAGEMENT</b></p> | <p style="text-align: center;"><b>TYPE</b></p> <p style="text-align: center;"><b>PRIORITY INDICATORS</b></p> | <p style="text-align: center;"><b>MCS D</b></p> <p style="text-align: center;"><b>ENVIRONMENT</b></p> <p style="text-align: center;">Freshwater and waste water</p> |
| <p><b>Water Efficiency Index (total and by sector)</b></p>  | <p style="text-align: center;"><b>MSSD 1</b></p> <p style="text-align: center;"><b>WAT_P01</b></p>           |   |

**Strategic Objective:**

To stabilize water demand: reduction in the North and controlled increase in the South and East. To reduce losses and misuse by defining efficiency targets in all sectors. To create more added value through more efficient use of water for irrigation, cities and industry, and to satisfy economic and social requirements at lower costs.

**Rationale:**

Water volumes lost and “misused” in all sectors are such that they artificially increase water demand in Mediterranean countries. Thus, at the scale of Mediterranean catchment’s areas, the “feasible savings potential” has been appraised to be at 24% of current demand.

**Definition:**

This indicator measures progress in water savings through demand management, by reducing losses and waste during transport. It covers total and sectoral Efficiency (drinking water, agriculture and industry):

- 1) Sectoral Efficiencies
  - a) Drinking Water Efficiency

This is the share of drinking water produced, distributed<sup>1</sup>, and paid by consumers.

$$E_{pot} = V1 / V2 \text{ where}$$

- V1 = drinking water volume invoiced and paid by consumer
- V2 = total drinking water volume produced and distributed

The indicator measures both the physical efficiency of drinking water distribution networks (loss rates or yield) and economic efficiency, e.g., the capacity of network managers to cover costs through consumer payments.

- b) Irrigation Water Efficiency

The physical efficiency of irrigation water is the product of “network for irrigation water transport and distribution” efficiency by plot efficiency:

$$E_{irr} = E1 \times E2$$

- E1: efficiency of irrigation water transport and distribution networks, upstream from agricultural plots, measured as the ratio between water volumes actually distributed to plots and the total volume of water for irrigation, upstream of networks, including losses in networks;
- E2: plot irrigation efficiency is defined as the sum of efficiencies (per plot) of all irrigation methods (surface irrigation, sprinkler irrigation, micro-irrigation, others), weighted by the respective proportions of all local methods and estimated as the ratio between water volumes actually consumed by plants and volumes delivered to plots.

<sup>1</sup> In the sense of networks upstream from losses.

$$E2 = \frac{\sum_1^n Sm \times Em}{S}$$

- n: number of irrigation methods used:
- Sm: surfaces irrigated using method m
- Em: method efficiency m
- S: total local irrigated surface according different methods

#### c) Industrial Water Efficiency

The volume of recycled industrial water (recycling index)

$$E_{ind} = V1 / V2$$

- V1 = Recycled water volumes
- V2 = Gross volume consumed for industrial processes which is equal to the volume incoming for the first-time to the industrial plant + recycled volume.

#### 2) Total Efficiency

Total physical efficiency of water consumption is defined as the sum of used water quantity ratios per sector (demand-losses) over sector demand, weighted by the share of sectoral requirements (drinking water, irrigation and industry)

$$E = \frac{(E_{pot} \times D_{pot} + E_{irr} \times D_{irr} + E_{ind} \times D_{ind})}{D}$$

Water demand is defined as the sum of water volumes dedicated to satisfying needs (excluding « green » water and « virtual » water), including volumes lost in production, transport and consumption. This corresponds to the sum of water volumes abstracted, non-traditional water production (desalination and imports), and water reuse, minus export volumes.

#### **Unit**

Percentage

#### **Objective and/or targeted values:**

To achieve the 2025 physical efficiency levels recommended by the alternative scenario of the Blue Plan:

- Drinking water in communities : restore levels of distribution losses to 15%;
- Industry recycling generalized at 50%;
- Irrigation: restore levels of transport losses to 10% and maintain high physical efficiency at 80%.

Or to achieve national total physical efficiency objectives.

#### **Methodological Indications:**

When network measurement tools are available (meters, satellite imaging), the efficiency of the irrigation network (E1) can be estimated by management structures. Efficiency is network-specific. However, national average efficiency could be assessed by computing individual network averages, weighted by volumes distributed yearly.

In situ measurements of actual average plot irrigation efficiency (E2) are more complex, in view of the difficulty in precisely assessing volumes consumed by plants, and in view of the high number of plots. The value of E2 will be estimated. Each country has national estimates of the average efficiency of all

systems, based on pilot experiments. The value of E2 in fact highlights the distribution of irrigation per major modes of irrigation at national level.

As an initial approximation, and in the absence of precise data on the actual efficiency of the modes of irrigation, the indicator may be computed on the basis of theoretical average efficiency estimated at 40% for surface irrigation, 70% for sprinkler irrigation and 90% for localised irrigation.

$$E2 = (S1 \times 0.40 + S2 \times 0.70 + S3 \times 0.90) / S$$

- S1: surface irrigation and similar;
- S2: land irrigated by sprinkler
- S3: land irrigated with the localised irrigation method
- S: total country surface irrigated for all modes of irrigation

### **Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            | YES             |                                      |               |                     |              |

### **References:**

- L'eau des méditerranéens : situation et perspectives, Jean Margat, PNUE, PAM, Plan Bleu, 2004
- « A Sustainable Future for the MEDITERRANEAN : The Blue Plan's Environment & Development Outlook », Plan Bleu, 2005
- <http://www.veoliawater.com/services/industrial-customers/applications/re-use/>

### **International Data Sources:**

FAO-Aquastat <http://www.fao.org/ag/agl/aglw/aquastat/dbase/index.stm>

### **Precaution for use:**

In some cases, and due to the diversity in data sources for one country, or due to heterogeneous definitions, total water demand can be different from the sum of demand in various sectors.

The economic efficiency of drinking water is dependent on invoicing modes (subscription, meters) and meter malfunction can yield biased results.

|   |  |   |
|---|--|---|
| <p style="text-align: center;"><b>STRATEGY FIELD</b></p> <p style="text-align: center;"><b>IMPROVING INTEGRATED RESOURCES AND WATER DEMAND MANAGEMENT</b></p> | <p style="text-align: center;"><b>TYPE</b></p> <p style="text-align: center;"><b>PRIORITY INDICATORS</b></p> | <p style="text-align: center;"><b>MCS D</b></p> <p style="text-align: center;"><b>ENVIRONMENT</b></p> <p style="text-align: center;">Freshwater and waste water</p> |
| <p><b>Water demand and compared to GDP (total and by sector)</b></p>  | <p style="text-align: center;"><b>MSSD 2</b></p> <p style="text-align: center;"><b>WAT_P02</b></p>           |   |

***Strategic Objective:***

To stabilize water demand: reduction in the North and controlled increase in the South and East. To reduce losses and misuse by setting consumption efficiency objectives for all sectors. To create additional added value through more efficient use of water for irrigation and industrial and urban needs. To decouple water demand and gross domestic product (GDP) growth and significantly increase added value from agriculture per cubic meter consumed.

***Rationale:***

The evolution of water demand is a major concern in the Mediterranean, in view of the scarcity of the resource.

Demographic growth and the associated drinking water demand are naturally the main factors responsible for the changes in water consumption, particularly in high-growth urban areas, and as regards the higher irrigation requirements to cover food production. Industrial development is also a major factor.

***Definition:***

This indicator is defined by:

- Total water demand defined as the sum of consumed water volumes (excluding « green <sup>1</sup> » water and « virtual <sup>2</sup> » water) to satisfy different uses, including volumes lost during production, transport and consumption. It corresponds to the sum of water samples, unconventional water production, reuse and imports, minus exports. Total (km<sup>3</sup>) and relative share (%) per sector will be specified – agriculture, industry, household water consumption (including tourism) ;
- Water demand and demand compared to GDP, total and for agriculture and industry, by computing the ratio of agricultural and industrial water respectively over agricultural and industrial GDP. As regards agriculture, the ratio of irrigation water demand can be computed over the added value from irrigated production.

***Unit:***

- km<sup>3</sup>/year for total demand and % per sector
- km<sup>3</sup> / US\$ for demands compared to GDP

***Objective and/or targeted values:***

For agriculture: reduce demand forecasts by 10% in 2015 and increase added value from production.

***Methodological Indications:***

GDP figures are aggregates of National Accounting, corresponding to the sum of added value created by resident producers (plus taxes minus subsidies). For this indicator, GDP is expressed at constant prices. Data in national currency can be converted in US\$ at constant PPP.

<sup>1</sup> rainwater, returning to the atmosphere, through evaporation or consumption by useful vegetation (crops, grazing lands, forests)

<sup>2</sup> corresponds to water quantities consumed by exporting countries for food production

Purchasing Power Parity (PPP) are rates which allow conversion to a common currency while eliminating purchasing power differences between currencies. In other words, their application for conversion purposes eliminates inter-country disparities.

This indicator can also be used to compute water demand per capita, as it measures different demands within one regional group or worldwide.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

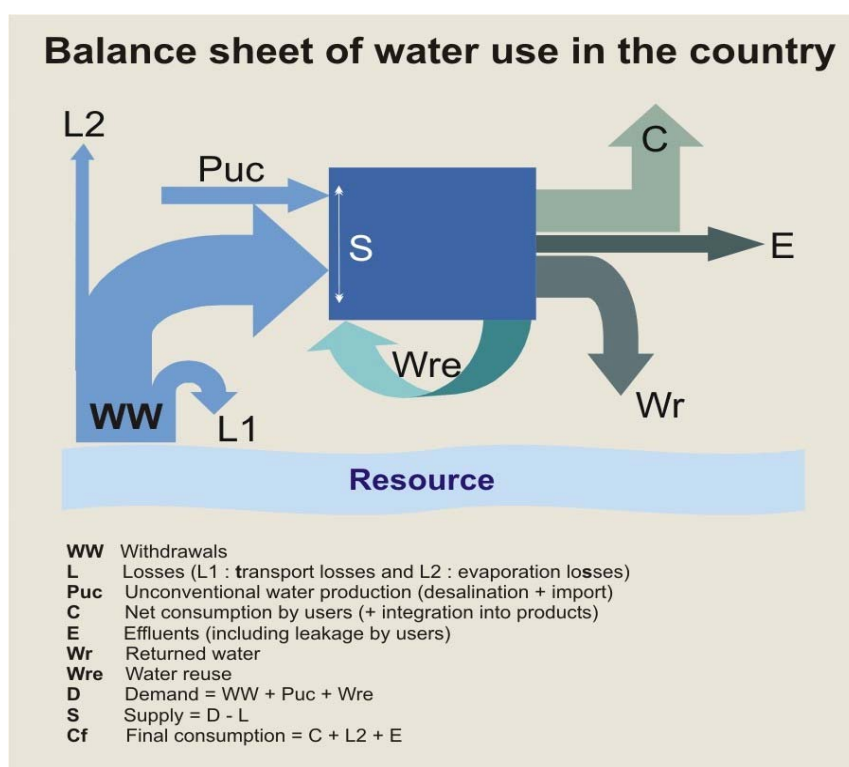
- L'eau des méditerranéens : situation et perspectives, Jean Margat, PNUE, PAM, Plan Bleu, 2004
- « A Sustainable Future for the MEDITERRANEAN: The Blue Plan's Environment and Development Outlook », Plan Bleu, 2005

**International Data Sources:**

FAO-Aquastat <http://www.fao.org/ag/aql/aglw/aquastat/dbase/index.stm>

**Precautions for use:**

**Methodological Annex:**



Source : Plan Bleu, J. Margat

|  |   |  |
|--|---|--|
| <b>STRATEGY FIELD</b><br><b>IMPROVING INTEGRATED RESOURCES AND WATER DEMAND MANAGEMENT</b> | <b>TYPE</b><br><b>PRIORITY INDICATORS</b> | <b>MCS D</b><br><b>ENVIRONMENT</b><br>Freshwater and waste water |
| <b>Exploitation Index of renewable resources</b>   | <b>MSSD 3</b><br><b>WAT_P03</b>           |  |

**Strategic Objective:**

To promote integrated catchment area management, including surface water and groundwater, as well as ecosystems and to foster depollution objectives (to preserve water resources).

**Rationale:**

The pressure on renewable water resources is increasing in most countries of the South and East Mediterranean. The renewable resources exploitation index can sometimes exceed 100%.

**Definition:**

This indicator measures the relative pressure of annual abstraction (A) over traditional renewable natural drinking water resources (R).

$$(A / R) \times 100$$

A: Amount of annual traditional renewable natural water volumes consumed for all other purposes, including volume losses during transport ;

R: Annual traditional renewable natural water flow volume. Country resources are individually defined by surface run-off and underground flows, either formed or entering the territory. Volumes are measured on the basis of hydrological data, in reference to average values over sufficiently long periods to ensure stability, and to avoid double accounting of surface and underground water.

**Unit:**

Percentage

**Objective and/or targeted values:**

Countries are said to be facing water shortage when the volumes consumed represent over 50% of available water resources. When figures exceed 70%, the situation is qualified as « critical ».

**Methodological Indications:**

The «renewable natural freshwater resources» indicator is the sum of surface run-off or underground flows which form the «internal contribution » in rainfall and external resources. Underground water tables produce renewable underground freshwater resources.

The significance of this indicator applies to basins and regions as well as countries, and assesses risks of over-abstraction of underground water resources.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            | YES             |                                      |               |                     |              |

### **References:**

- Water resources and uses in the Mediterranean Countries : Figures and facts, Plan Bleu : MARGAT J. & VALLEE D., 1999.
- « L'eau des méditerranéens : situation et perspectives », Jean Margat, PNUE, PAM, Plan Bleu, 2004
- « A Sustainable Future for the MEDITERRANEAN: The Blue Plan's Environment and Development Outlook », Plan Bleu, 2005

### **International Data Sources:**

WRI (<http://earthtrends.wri.org/> )

### **Precautions for use:**

Estimates of available water resources are yearly rather than pluriannual averages. Long-term averages (20 years) are to be applied. Calculations must take into account both the zones of exploitation and the zones where resources are assessed, which are most often catchment areas.

Variations in gross withdrawals may stem from fluctuations in demand, in non-traditional production, as well as from losses.

Above 50%, the exploitation index is an indicator which applies to more collective and deterministic water management, particularly as regards more efficient management of water consumption and demand.

A exploitation index exceeding 100% is not necessarily an indicator of shortage or global «overuse» of resources. In large countries, where catchment areas are extensive and where hydrographical networks are active, water consuming activities may be spread sequentially in space and can involve reuse of used water volumes (reuse, recycling).

Adversely, exploitation indices under 100% do not exclude potential local over-consumption, particularly as regards depletion of groundwater reserves.

### **Methodological Annex:**

|   |                                    |  |
|---|------------------------------------|--|
| STRATEGY FIELD<br><b>IMPROVING INTEGRATED RESOURCES AND WATER DEMAND MANAGEMENT</b>       | TYPE<br><b>PRIORITY INDICATORS</b> | MCSD<br><b>ENVIRONMENT</b><br>Freshwater and waste water |
| <b>Share of population with access to an improved water sources (total, urban, rural)</b> | <b>MSSD 4</b><br><b>WAT_P04</b>    |  |

**Strategic Objective:**

To achieve Millennium Goals for development regarding access to drinking water.

**Rationale:**

According to currently available UN estimates, rates of water supply to rural populations in Mediterranean countries remain low. Approximately 30 million inhabitants of the region do not have access to an improved water sources.

**Definition:**

This indicator covers the share of populations supplied with or having reasonable access to sufficient volumes of drinking water. The volume required to satisfy metabolic, hygienic and domestic requirements is estimated at a minimum of 20 litres per day and per capita.

$$(E / P) \times 100$$

E: Population supplied with or having reasonable access to sufficient water volumes within reasonable distance.

P: Total Population.

This indicator may be calculated for urban and rural populations on specific dates.

**Unit:**

Percentage

**Objectif and/or targeted values:**

To reduce by half the proportion of populations deprived of regular access to drinking water by 2015.

**Methodological Indications:**

Drinking water is water free of pathogens or chemical agents at levels detrimental to health; this includes drilling water, wells and treated and non-treated surface waters which are not contaminated. Waterways and lakes must be considered as drinking water if water quality is regularly monitored and acceptable to Public Health authorities.

Reasonable access signifies the existence of household water supply, or that of a source within less than 1,000 meters in distance.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

Millennium indicators:

- <http://millenniumindicators.un.org>
- <http://www.childinfo.org>



### ***International Data Sources:***

Millennium indicators:

- <http://millenniumindicators.un.org>;
- <http://www.childinfo.org>

### ***Precautions for use:***

The distinction between « urban » and « rural » populations can not be satisfied with a single global definition, due to the differences between urban and rural area characteristics in the different countries. National definitions usually refer to the size of the locality. Rural populations represent the rest of the population not considered as urban.

This indicator does not take into consideration the issues facing populations in many Mediterranean cities, submitted to frequent interruptions in water supply.

National definitions of urban populations are not similar, and may lead to biased international comparisons.

### ***Methodological Annex:***

According to the World Health Organization, “improved” water sources involve public water conveyance networks, public drilling operations, and collected rainwater.

«Non-improved» sources are: unprotected wells and sources, purchase from water distributors, bottled water (issue of water supply quantity rather than quality), water delivered in tankers. «Access » refers to a source producing at least 20 litres per capita and per day, and located at less than 1,000 meters in distance. This assumption has been tested by WHO, in its National Health Study, conducted in 70 countries. (March 25,2003 Communication, Health and Sanitary Program).

|   |                             |   |
|---|-----------------------------|---|
| STRATEGY FIELD<br><b>IMPROVING INTEGRATED RESOURCES AND WATER DEMAND MANAGEMENT</b>           | TYPE<br>PRIORITY INDICATORS | MCSD<br>ENVIRONMENT<br>Freshwater and waste water |
| <b>Share of population with access to an improved sanitation system (total, urban, rural)</b> | MSSD 5<br>WAT_P05           |   |

**Strategic Objective:**

To achieve Millennium Goals for development regarding access to sanitation.

**Rationale:**

While at global level, over half the population is still deprived of access to basic sanitation systems; nearly 27 million people in the Mediterranean have no access to adequate sanitation systems.

**Definition:**

This indicator represents the share of population having access to basic sanitation systems, installed in homes or in the immediate vicinity, for the evacuation of human faeces (public sanitation network, septic tank...)

$$(A / P) \times 100$$

A: Population having access to adequate sanitation installations

P: Total Population.

This indicator is also calculated for urban and rural populations.

**Unit:**

Percentage

**Objectif and/or targeted values:**

To reduce by half the proportion of populations deprived of regular access to basic sanitation systems by 2015.

**Methodological Indications:**

WHO definitions for « sanitation systems » apply to: Connections to public sewage systems, septic tanks, pour-flush latrines, simple pit latrines, ventilated improved pit latrines. Faeces treatment systems are considered to be adequate when they are private (or shared, but not public) and if they prevent all contact between man and faeces.

« Non-improved » technologies apply to: latrines where faeces are removed manually, public latrines, open pit latrines, bucket latrines.

The characteristics of Mediterranean urban and rural areas are different. Therefore, no single definition can be applied regionally as regards the distinction between “urban” and “rural” populations. National definitions most often refer to the size of locations. Rural populations represent the rest of the population considered as non-urban.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  | YES           | -                   | -            |

## **References:**

Millennium indicators:

- <http://millenniumindicators.un.org>
- <http://www.childinfo.org>

## **International Data Sources:**

Millennium indicators:

- <http://millenniumindicators.un.org>
- <http://www.childinfo.org>

## **Precautions for use:**

The simple fact that installations exist does not signify that they are actually used. Sanitation systems in urban areas must allow the collection and evacuation of used waters of all types (Toilet (WC) water, domestic waste water except toilet (WC) water, industrial waste water) and ensure transport to the treatment site (water treatment plant) as quickly as possible.

National definitions of urban populations are not similar, and may lead to biased international comparisons.

| STRATEGY FIELD<br>MANAGING ENERGY DEMAND AND MITIGATING THE EFFECTS OF CLIMATE CHANGE | TYPE<br>PRIORITY INDICATORS | CMDD<br>ECONOMY ENERGY<br>(69) |
|---|-----------------------------|--------------------------------|
| Energy intensity (total and by sector)  | MSSD 6<br>ENE_P01           |                                |

**Strategic Objective:**

Promote rational use of energy.

**Rationale:**

This indicator reflects the trends in overall energy use relative to GDP, indicating the general relationship of energy use to economic development.

Energy is essential for economic and social development. However, energy use affects resource availability and the environment. In particular, fossil fuel use is a major cause of air pollution and climate change. (Source: Energy Indicators for Sustainable Development: Guidelines and Methodologies – IEA, UNDESA, IEA, Eurostat 2005)

In the Mediterranean, energy consumption is highly dependent on fossil energy sources and has more than doubled over 30 years. In many Mediterranean countries, pricing and tax structures are not conducive to energy savings. The objective for Mediterranean countries is to maintain identical energy supply and to reduce consumption. Considerable energy savings are identifiable in the areas of services and residential construction (energy-efficient buildings, household appliances, lighting, air conditioning...), in transport (hybrid engines, biofuels...) and in industry.

**Definition:**

This indicator is defined as the ratio of final commercial energy consumption per GDP unit per year<sup>1</sup>. It can be disaggregated per sector: agriculture, industry, services, transport, households/residential.

It can also be defined as the ratio of energy consumption by one sector or sub-sector vs production (or activity) in said sector.

**Unit:**

- Tons of oil equivalent per US dollar PPP (total and per sector).
- Tons of oil equivalent per passenger or fret km (transport).
- Tons of oil equivalent per square meter used (services or households).
- Tons of oil equivalent per person (households).

**Objective and/or targeted values:**

There are no international conventions or agreements regulating or limiting energy consumption per GDP unit. Energy intensity improves when the ratio is lower.

The Mediterranean Strategy for Sustainable Development recommends: «To reduce energy consumption by 1 to 2% per year per GDP unit by 2015 ».

**Methodological Indications:**

- Energy consumption:

Energy consumption values are reported in kg of oil equivalent, as per the conversion factors of the International Energy Agency (IEA).

The computed consumption is « apparent » consumption: production + imports - exports – Bunkers (+/-) stocks.

<sup>1</sup> This indicator can also be defined as the ratio of primary energy offer or electricity consumption per GDP unit.

National energy consumption figures combine four major energy sources:

- Solid fuels (coal, wood, charcoal, etc.)
- Liquid fuels (oil, LNG, ethanol, etc.)
- Gaseous fuels (natural gas, methane, etc.)
- Primary electricity (hydroelectricity, windmills, geothermal, etc..)

- Production and activities :

GDP is a National Accounting aggregate which corresponds to the sum of added value created by resident producers (plus taxes, minus subsidies). For this indicator, GDP is expressed at constant prices. National currency data may be converted to US dollars at constant PPP.

Purchasing Power Parity (PPP) rates are used to convert prices to a common currency which eliminates the effect of purchasing power differences between national currencies, i.e., their application to conversion eliminates the impact of inter-country price differentials.

To calculate this indicator per sector, it is necessary to use added value figures per sector (agriculture, industry) as well as activity figures such as km per passenger (transport) or used surfaces (households and services).

- Required data:

The computation of this indicator requires statistics from national accounts, census, transport and energy. The table below lists the required data and suggests statistical classifications and units. It is based on internationally applied and recommended calculation methodologies (cf Energy Indicators for Sustainable Development: Guidelines and Methodologies – IEA, UNDESA, IEA, Eurostat 2005):

| Indicators  | Energy Consumption                              | Production/activities   | Unit  | Observations   |
|---|---|---|---|--|
| <b>Total energy intensity</b>                     | Total final energy consumption                  | GDP at constant prices in USD PPP (converted from GDP in national currency)               | Tons of oil equivalent / USD  |  |
| <b>Energy intensity in Agriculture</b>            | Final energy consumption in agriculture         | Added value from agriculture in USD PPP (Division A of ISIC classification)               | Tons of oil equivalent / USD  |  |
| <b>Energy intensity in Industry</b>               | Final energy consumption in industrial sectors  | Added value from industry in USD PPP (Divisions C, D, E & F of ISIC classification)       | Tons of oil equivalent / USD  | ISIC divisions may lead to confusion (division D being the manufacturing industry). It is strongly advised to check which sectors are included by countries. |
| <b>Energy intensity in the Services Industry</b>  | Final energy consumption in the services sector | Added value from services in USD PPP (Divisions other than A to E of ISIC classification) | Tons of oil equivalent / USD  | Check that energy consumption figures differentiate services and residential/households sector   |
| <b>Energy intensity in residential/households</b> | Commercial energy consumed by households        | Number of inhabitants:<br><br>Population figures  | Tons of oil equivalent / USD per person<br><br>or<br><br>Tons of oil equivalent /m2 | The number of inhabitants may be replaced by the number of households or by the surface per person. These statistics are however more difficult to obtain.   |

| Indicators                                | Energy Consumption                      | Production/activities  | Unit   | Observations  |
|---|---|--|--|---|
| <b>Energy intensity in land transport</b> | Commercial energy consumed by transport | passenger Km<br>fret Km<br>Figures from transport statistics | Tons of oil equivalent /km (passenger or fret) | This indicator could be detailed per type of vehicle or mode of transportation. |

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- United Nations (2003) – Indicators for Monitoring the Millenium Development Goals
- International Energy Agency
- OECD
- Energy Indicators for Sustainable Development : Guidelines and Methodologies – IEA, UNDESA, IEA, Eurostat 2005

**International Data Sources:**

- United Nations: [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)
- International Energy Agency: <http://www.iea.org/>
- Eurostat : <http://www.europa.eu.int/comm/eurostat/>

**Precautions for use:**

It is not sufficient to only consider the energy consumption indicator vs. GDP (total energy intensity for national economy) as the indicator of energy intensity. In fact, fluctuations in total domestic energy intensity can also be impacted by changes in the structure of the national economy, by climate (cold and hot temperatures) or geographical conditions, as well as by effective efforts to save energy.

For example, national economies based on the use of raw materials (such as for heavy industry) consume more energy than importer countries. Country comparisons as regards energy consumed per GDP unit can be further complicated by geographical considerations: transport costs tend to be higher in large countries where distances are longer. Climate can also have an impact: populations in cold climates consume more energy per capita for heating.

This indicator is also complex to interpret as regards environmental impact, since energy options at identical levels of intensity tend to affect the environment in different ways.

Thus, in view of the many factors which have an influence on energy consumption vs GDP, the global indicator must be supported by disaggregated energy intensity indicators per sector.

The same drawbacks apply to all sectors, and it would be necessary to compute energy intensity per product but the data required for such computation are almost impossible to obtain.

Results and international comparisons can also be impacted by the base year selected for PPP conversion.

## **Methodological Annex:**

Energy consumption per sector and production statistics (added value):

| Energy statistics per sector |  | Production Statistics                       |
|------------------------------|--|---|
| Sectors                      | Ex:  | ISIC Correspondance                         |
| Industry                     | <ul style="list-style-type: none"> <li>▪ Iron and steel</li> <li>▪ Chemical Industry</li> <li>▪ Non ferrous metal</li> <li>▪ Non-metallic minerals</li> <li>▪ Transport Équipment</li> <li>▪ Machines</li> <li>▪ Extraction and quarry extraction</li> <li>▪ Food, beverages, tobacco</li> <li>▪ Pulp, paper and copy</li> <li>▪ Wood products and wood</li> <li>▪ Textiles and leather</li> <li>▪ Construction</li> <li>▪ Not classified elsewhere</li> </ul> | Division C, D, E, F for industry as a whole |
| Transport                    | <ul style="list-style-type: none"> <li>▪ Road</li> <li>▪ Rail</li> <li>▪ Air</li> <li>▪ Pipelines</li> <li>▪ National navigation</li> </ul>  |   |
| Other sectors                | <ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Trade and utilities</li> <li>▪ Residential</li> <li>▪ Others</li> </ul>  | Division A<br>Divisions other than A to F   |

Source : OECD, IEA, Eurostat (2004) - Energy Statistics Manual

|  |                            |                            |
|--|----------------------------|----------------------------|
| <b>STRATEGY FIELD</b>  | <b>TYPE</b>                | <b>CMDD</b>                |
| <b>MANAGING ENERGY DEMAND AND MITIGATING THE EFFECTS OF CLIMATE CHANGE</b> | <b>PRIORITY INDICATORS</b> | <b>ECONOMY ENERGY (71)</b> |
| <b>Share of renewable energies in energy balance</b>                       | <b>MSSD 7 ENE_P02</b>      |                            |

**Strategic Objective:**

To enhance the potential of renewable energies

**Rationale:**

As demonstrated in 2002 by the Johannesburg Summit on Sustainable Development, renewable energies and consumption efficiency are considered as the most promising routes to improving access to energy for the largest number, contributing to the development of less advanced countries and facing up to the major stakes of environmental impacts. Renewable energies alone guarantee the sustainability of their production resources. Furthermore, they bring an alternative solution to diversify and secure energy supply sources (wind, solar).

In the Mediterranean, renewable energies hold strong potential which still largely under-tapped, both for electricity production and domestic consumption. The share of renewable energies (hydraulic, solar, geothermal, windmills) in the energy balance is only 3% in 2000 (2% for hydraulic and 1% for solar, geothermal and wind).

**Definition:**

This indicator measures the share of total domestic energy consumption in renewable energy resources (hydraulic, solar, geothermal, wind).

**Unit:**

Percentage

**Objective and/or targeted values:**

To cover 7% of total energy demand through renewable energies by 2015 (excluding renewable fuels).

**Methodological Indications:**

Renewable energy includes both combustible and non-combustible renewables:

- Non-combustible renewables include geothermal, solar, wind, hydro, tide and wave energy.
- Combustible renewables consist of biomass (fuelwood, vegetal waste, ethanol) and animal products (animal materials/wastes and sulphite lyes), municipal waste and industrial waste.

(Source: Energy Indicators for Sustainable Development: Guidelines and Methodologies – IEA, UNDESA, IEA, Eurostat 2005)

Note: the indicator described herein only covers the first point of this definition.

The computed consumption is « apparent » consumption: primary production + imports + exports - bunkers (+/-) stocks.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |



### **References:**

- Source : Energy Indicators for Sustainable Development : Guidelines and Methodologies – IEA, UNDESA, IEA, Eurostat 2005
- OECD FACTBOOK 2005 – ISBN 92-64-01869-7 – © OECD 2005 (<http://oberon.sourceoecd.org/factbookpdfs/07-02-03.pdf>)

### **International Data Sources:**

- United Nations, Energy Statistics Yearbook.
- IEA (2004), Renewable Information, IEA, Paris
- World Resources Institute

### **Precautions for use:**

This indicator only applies to the following renewable energies: hydraulic, solar, geothermal, wind. Combustible renewables (solid biomass and animal products, biomass gases and fluids, municipal and industrial waste) are not included. It must however be remembered that these combustible renewables may represent a large share of the Mediterranean energy supply sources: in 2000 renewable energies excluding combustible renewables account for 3% of energy supply, and the figure reaches 6.6% if combustible renewables are included.

### **Methodological Annex:**

The following conversion rates are recommended for unit conversion per energy source, (United Nations, Energy Statistics Yearbook):

tce = ton charcoal equivalent; 1 tce = 0,7 toe (ton of oil equivalent)

- Hydraulic and wind energy: yield estimated at 100%, 0.123 tce /1000 kW
- Geothermal energy: yield estimated at 10%, 1.228 tce/1000 kW

|  |                     |                           |
|--|---------------------|---------------------------|
| STRATEGY FIELD   | TYPE                | CMDD                      |
| <b>MANAGING ENERGY DEMAND AND MITIGATING THE EFFECTS OF CLIMATE CHANGE</b> | PRIORITY INDICATORS | ENVIRONMENT<br>AIR<br>110 |
| <b>Greenhouse gas emissions</b>  | MSSD 8<br>ENE_P03   |                           |

**Strategic Objective:**

To control, stabilize or reduce greenhouse gas emissions.

**Rationale:**

During the 20th century, the Earth's average surface temperature rose by around 0.6°C, and evidence is growing that most of this warming is attributable to increasing concentrations of GHGs in the atmosphere.

The resulting effect is predicted to lead to more extreme weather events than in the past, with some areas experiencing increased storms and rainfall, and others suffering drought. How fast and where this change will happen is still uncertain, but the consequences may be serious, especially in developing countries, which are the least able to prepare for and deal with the effects of extreme weather conditions such as floods, landslides, droughts, etc.

*(Source: Energy Indicators for Sustainable Development: Guidelines and Methodologies – IEA, UNDESA, IEA, Eurostat 2005.)*

The objective of the UN framework convention on climate change, adopted in Rio de Janeiro in June 1992, is the stabilization of greenhouse gas emissions at a level preventing hazardous anthropic climate disruptions.

Specific targets to reduce greenhouse gas emissions (CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, HFC, PFC, SF<sub>6</sub>) in developed countries have been set by the Kyoto Protocol, signed in December 1997: 38 industrialized countries must globally reduce their CO<sub>2</sub> equivalent emissions by 5.2% over the period 2008-2012, vs 1990 levels (in the EU, reduction targets have been set at -8%).

**Definition:**

This indicator corresponds to aggregated annual national emissions of the main greenhouse gases (GHG) carbon dioxide (CO<sub>2</sub>), nitrogen protoxide (NO<sub>2</sub>), methane (CH<sub>4</sub>) and halocarbons (HFC, PFC) and Sulphur hexafluoride (SF<sub>6</sub>)

**Unit:**

Gigagrams (Gg) of CO<sub>2</sub> equivalent per year

**Objective and/or targeted values:**

To achieve Kyoto Protocol targets on greenhouse gas emission reduction. All countries will reduce emissions as per percentage levels set by the Protocol, over the period 2008-2012.

**Methodological Indications:**

Greenhouse gas emissions are estimated using the IPCC methodology (International Panel on Climatic Change).

N<sub>2</sub>O, CH<sub>4</sub>, HFC, PFC, SF<sub>6</sub> emissions are expressed in CO<sub>2</sub> equivalent, weighted by their Potential for Global Warming (GWP) coefficient at 20 years.

### Geographical scope:

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

### References:

- <http://ghg.unfccc.int/index.html>
- Energy Indicators for Sustainable Development : Guidelines and Methodologies – IEA, UNDESA, IEA, Eurostat 2005
- UNEP-Division of Technology, Industry, and Economics  
[http://www.uneptie.org/energy/tools/ghgin/docs/GHG\\_Indicator.pdf](http://www.uneptie.org/energy/tools/ghgin/docs/GHG_Indicator.pdf)

### International Data Sources:

- <http://ghg.unfccc.int/index.html>

### Precautions for use:

### Methodological Annex:

#### Global Warming Potentials

|                      | Chemical formula | Lifetime (years) | Global Warming Potential (Time Horizon) |           |           |
|----------------------|------------------|------------------|---|-----------|-----------|
|                      |                  |                  | 20 years                                | 100 years | 500 years |
| CO2                  | CO2              | variable         | 1                                       | 1         | 1         |
| Methane              | CH4              | 12±3             | 56                                      | 21        | 6,5       |
| Nitrous oxide        | N2O              | 120              | 280                                     | 310       | 170       |
| HFC-23               | CHF3             | 264              | 9100                                    | 11700     | 9800      |
| HFC-32               | CH2F2            | 5,6              | 2100                                    | 650       | 200       |
| HFC-41               | CH3F             | 3,7              | 490                                     | 150       | 45        |
| HFC-43-10mee         | C5H2F10          | 17,1             | 3000                                    | 1300      | 400       |
| HFC-125              | C2HF5            | 32,6             | 4600                                    | 2800      | 920       |
| HFC-134              | C2H2F4           | 10,6             | 2900                                    | 1000      | 310       |
| HFC-134a             | CH2FCF3          | 14,6             | 3400                                    | 1300      | 420       |
| HFC-152a             | C2H4F2           | 1,5              | 460                                     | 140       | 42        |
| HFC-143              | C2H3F3           | 3,8              | 1000                                    | 300       | 94        |
| HFC-143a             | C2H3F3           | 48,3             | 5000                                    | 3800      | 1400      |
| HFC-227ea            | C3HF7            | 36,5             | 4300                                    | 2900      | 950       |
| HFC-236fa            | C3H2F6           | 209              | 5100                                    | 6300      | 4700      |
| HFC-245ca            | C3H3F5           | 6,6              | 1800                                    | 560       | 170       |
| Sulphur hexafluoride | SF6              | 3200             | 16300                                   | 23900     | 34900     |
| Perfluoromethane     | CF4              | 50000            | 4400                                    | 6500      | 10000     |
| Perfluoroethane      | C2F6             | 10000            | 6200                                    | 9200      | 14000     |
| Perfluoropropane     | C3F8             | 2600             | 4800                                    | 7000      | 10100     |
| Perfluorobutane      | C4F10            | 2600             | 4800                                    | 7000      | 10100     |
| Perfluorocyclobutane | c-C4F8           | 3200             | 6000                                    | 8700      | 12700     |
| Perfluoropentane     | C5F12            | 4100             | 5100                                    | 7500      | 11000     |
| Perfluorohexane      | C6F14            | 3200             | 5000                                    | 7400      | 10700     |

Source: Climate Change 1995, The Science of Climate Change: Summary for Policymakers and Technical Summary of the Working Group I Report, pg. 26.

| STRATEGY FIELD<br><b>MANAGING ENERGY DEMAND AND MITIGATING THE EFFECTS OF CLIMATE CHANGE</b>  | TYPE<br><b>PRIORITY INDICATORS</b> | MCS D<br><b>EXCHANGE AND COOPERATION<br/>COOPERATION</b> |
|---|------------------------------------|--|
| <b>Amount financed in the framework of the Kyoto Protocol flexibility mechanisms by the annex 1 countries to the benefit of other Mediterranean countries</b> | <b>MSSD 9<br/>ENE_P04</b>          |  |

***Strategic Objective:***

Apply the Kyoto Protocol flexibility mechanisms to sustainable development in developing Mediterranean countries.

***Rationale:***

The MSSD recommends stronger regional cooperation and support to the implementation of the Framework convention on climate change and of the Kyoto Protocol:

- Invites Mediterranean countries to cooperate in the implementation of the UN framework convention on climate change and of the flexibility mechanisms of the Kyoto Protocol; to prepare for the period following 2012; and to undertake greenhouse gas emission reduction investments in the Mediterranean region.
- Recommends the development of synergies with the Mediterranean Renewable Energy Program (MEDREP), the Rome component on Mediterranean Energy (REMPE) and the Euro-Mediterranean Energy Policy.

***Definition:***

Amounts financed under the Flexibility Mechanisms of the Kyoto Protocol

- By Annex 1 countries;
- In developing countries (South and East Rim) and in transition countries (East Adriatic).

***Unit:***

US \$

***Objective and/or targeted values:***

***Methodological Indications:***

Country commitments are ambitious. Their implementation is facilitated by the Kyoto Protocol, giving countries access to "flexibility" mechanisms, in addition to policies and measures to be implemented at national level.

There are three such mechanisms:

- " **Emission trading**", allowing the sale or purchase of rights between industrialized countries;
- " **Joint implementation** " (JI) allowing developed countries to invest in greenhouse gas emission reduction outside of their national borders, and to benefit from the emission credits thus generated;
- " **Clean development mechanism** " (CDM), similar to the above, but where investments are undertaken by developed countries in developing countries.

**At international level**, in December 2001, the Conference of the Parties to the Marrakech Protocol defined the eligibility criteria to apply to initiatives, and to the joint implementation and clean development mechanisms:

- The impact of initiatives must be “additional”, i.e. generate effective emission reductions in the related field of activity vs what the situation could have been in the absence of such an approach;
- Host countries must first ratify the Kyoto Protocol and formally approve initiatives if they come under the national strategy for sustainable development.

There are technical difficulties involved in the implementation of these mechanisms, as regards the evaluation and measurement of effective greenhouse gas emission reductions, and therefore the quantification of the expected additional impact of such projects. However, solutions are gradually being developed for these difficulties and well-defined legal frameworks are now available for investors.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- <http://cdm.unfccc.int/>

**International Data Sources:**

**Precautions for use:**

Amounts financed under the Flexibility Mechanisms of the Kyoto Protocol are not necessarily limited to environmental objectives and can also apply to upgrading operations.

**Methodological Annex:**

|  |                                 |                               |
|--|---------------------------------|-------------------------------|
| STRATEGY FIELD<br><br><b>ENSURING SUSTAINABLE MOBILITY THROUGH THE APPROPRIATE MANAGEMENT OF TRANSPORT</b> | TYPE<br><br>PRIORITY INDICATORS | MCSD<br><br>ECONOMY TRANSPORT |
| <b>Motor transport intensity compared to GDP</b>   | MSSD 10<br>TRA_P01              |                               |

**Strategic Objective:**

To improve the inclusion of transport policies in economic planning to establish continuous improvement as regards the decoupling of motor transport increase and GDP growth.

**Rationale:**

Passenger and freight transport demand is growing faster than the economy and population. Transport represents one third of the total energy consumption in Northern countries, and therefore significantly contributes to greenhouse gas emissions and to pollution. The costs of congestion from motor transport are steadily increasing. Transport trends in Southern countries are also a major concern: they are often aggravated by public investments, subsidies and fiscal structures more favorable to individual motor travel and road transport than to public transportation.

**Definition:**

This indicator measures the growth of motor transport (air, rail, road) vs economic growth, and is subdivided into 2 indicators:

1. Freight: transport of goods vs GDP;
2. Passengers: passenger transport vs GDP

Waterways, sea transport and pipelines are not included.

**Unit:**

1. ton-kilometers / US dollars
2. passenger-kilometers / US dollars

**Objective and/or targeted values:**

Indicator decrease

**Methodological Indications:**

Goods transport services: sum of km per year, in ton-kilometres (t-km): 1 ton-kilometre corresponds to transport of one ton over one kilometer.

GDP figures are aggregates of National Accounting, corresponding to the sum of added value created by resident producers (plus taxes minus subsidies). For this indicator, GDP is expressed at constant prices. Data in national currency can be converted in US\$ at constant PPP.

Purchasing Power Parity (PPP) rates are used to convert prices to a common currency which eliminates the effect of purchasing power differences between national currencies, i.e., their application to conversion eliminates the impact of inter-country price differentials.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- International Civil Aviation Organization (OAI)
- International Road Federation (IRF)

**International Data Sources:**

- International Civil Aviation Organization (OAI)
- International Road Federation (IRF)

**Precautions for use:**

**Methodological Annex:**

|  |                                 |                               |
|--|---------------------------------|-------------------------------|
| STRATEGY FIELD<br><br><b>ENSURING SUSTAINABLE MOBILITY THROUGH THE APPROPRIATE MANAGEMENT OF TRANSPORT</b> | TYPE<br><br>PRIORITY INDICATORS | MCSD<br><br>ECONOMY TRANSPORT |
| <b>The proportion of road transport in terms of land freight transport</b>                                 | MSSD 11<br>TRA_P02              |                               |

**Strategic Objective:**

To stabilize and if possible to reduce the relative proportion of road transport within the global volume of traffic through transfer to sea and rail transport.

To promote the integration of transport networks to enhance complementarity between road, rail and sea transport; to promote the significant transfer from road to sea and rail.

**Rationale:**

The dominant position of road transport for goods has become a major issue, not only due to the resulting increase in traffic (and congestion, leading to considerable socio-economic consequences), but also to the impact on the environment and on public health.

In the Mediterranean, road transport of goods represents 82% of total traffic. Consequently, actions must be undertaken to reduce the use of this mode of transport, to improve transport efficiency (loading rate) and to promote transfer from road to rail, internal and sea navigation, as well as transfers to combined modes of transport (multimodal transport).

**Definition:**

This indicator measures the share of road transport for goods vs land transport for goods (road + rail + waterways + pipelines).

**Unit:**

Percentage

**Objective and/or targeted values:**

A suitable target could be the reduction of the share of road fret to 75% of land transport for goods by 2015.

**Methodological Indications:**

Freight traffic is measured in tons multiplied by number of traveled kilometres

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

**International Data Sources:**

**Precautions for use:**

**Methodological Annex:**



|  |                             |                              |
|--|-----------------------------|------------------------------|
| STRATEGY FIELD<br><b>ENSURING SUSTAINABLE MOBILITY THROUGH THE APPROPRIATE MANAGEMENT OF TRANSPORT</b> | TYPE<br>PRIORITY INDICATORS | MCSO<br>ECONOMY<br>TRANSPORT |
| <b>Share of public surface transport (urban and inter-urban)</b>                                       | MSSD 12<br>TRA_P03          |                              |

**Strategic Objective:**

Limit congestion and hazards from urban transport through the development and promotion of cleaner modes of public transportation.

To reduce congestion from urban traffic and to stem pollution through the promotion of less polluting public transport at local level.

**Rationale:**

In most developed countries, governments consider public transport essential to improve the quality of daily life in urban areas, and to the development of their economy, and have developed financial aid programs to support and develop public transport.

**Definition:**

The share of public surface transport is the ratio of passenger movements in all modes of land public transport vs movements in all modes of land transport.

**Unit:**

Percentage

**Objective and/or targeted values:**

To increase the share of public transport (less polluting)

**Methodological Indications:**

Movements are measured in passenger x km.

The modes of public transport taken into account include road transport by bus, and travel by rail. Sea or river transport may also be included.

All modes of transport include the above-mentioned public transport plus individual road transport (private automobiles, two-wheelers ...).

Public transport is a mode of mobility accessible to passengers, in vehicles specifically designed to transport a large number at the same time.

They are easily accessible, generally in exchange for payment of a one-way trip ticket, or of a subscription (week, month, year).

Public transport is often managed by public authorities, either by public companies or by Public Industrial or Commercial Establishments. They can also be managed by private companies, under the authority of local transport organizing bodies. These bodies define service requirements and prices; they ensure total or partial financing through public funds and manage receipts and expenses.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  |               | YES                 |              |

**References:**

## ***International Data Sources:***

### ***Precautions for use:***

### ***Methodological Annex:***

Public transport modes can be classified as follows:

1 – From a technical standpoint:

- Guided mode:

- train,
- subway;
- monorail, air train ;
- tramway, streetcars ;
- tram-train and train-tram ;
- funicular, cable car on rails, cable-car;

- Non-guided mode:

- autobus (urban services), coach (inter-urban services) ;
- trolleybus;
- taxi (public, non public transport) ;
- pleasure boat, liner, ferry;
- plane.

- Manual, on clean sites: traditional autobus in reserved lanes, or above-ground subway.

2 – From a functional standpoint:

- urban transport;
- inter-urban transport;
- tourist transport.

3 – From a regulatory standpoint:

- Public Transport Utilities:

- subways, tramways ;
- autobus, some local and regional coach lines;
- regional trains

- Competitive and commercial transport

- Main lines, high-speed train
- Inter-urban coach lines;
- Airlines;
- Cruise liners.

|   |                                    |                                |
|---|------------------------------------|--------------------------------|
| STRATEGY FIELD<br><b>PROMOTE SUSTAINABLE TOURISM</b>              | TYPE<br><b>PRIORITY INDICATORS</b> | MCSD<br><b>ECONOMY TOURISM</b> |
| <b>Share of “non-seaside resort beds” vs total number of beds</b> | <b>MSSD 13<br/>TOU_P01</b>         |                                |

**Strategic Objective:**

Reduce the negative impacts of tourism in the territories and on the environment, particularly in current coastal destinations.

Diversify tourism through the development of offers promoting Mediterranean diversity (ecotourism, cultural tourism, urban and rural).

**Rationale:**

In 2025, approximately 637 million tourists (foreign and domestic) are expected to visit the region, representing an increase of 270 million vs 2000, of which 50% in coastal zones.

**Definition:**

This indicator measures the share of “non-seaside resort beds” vs the total number of beds in coastal zones, for all types of tourist accommodations in the trade sector (with services).

**Unit:**

Percentage

**Objective and/or targeted values:**

Increase the “non-seaside” offer based on national situations (deviate 1/3 of flows).

**Methodological Indications:**

Coastal tourism is defined as tourism in coastal communes or districts.

Tourist accommodations mean “any establishment accommodating tourists on a regular or occasional basis». The distinction must be made between commercial establishments satisfying the largest share of the demand for accommodation and the provision of occasional accommodation services. There are two major types of tourist accommodations:

1. Group accommodation establishments: “group accommodation establishment” defines all accommodation establishments providing travellers with a room or other unit. However, the number of availabilities must be higher than the minimum determined for groups larger than families. Furthermore, the establishment must have the same commercial administration capabilities as other establishments, even in the case of non-profit establishments.
2. Private tourist accommodations: they provide a limited number of rooms to be rented or made available free-of-charge. These accommodations are not covered by the definition on group accommodation establishments and are not included in the calculation of the indicator.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  |               |                     |              |

**References:**

- WTO (World Tourism Organisation)

- IFEN (Institut Français de l'Environnement)
- AFIT (Agence Française de l'Ingénierie Touristique)

***International Data Sources:***

No international sources: the potential national sources are the National Tourism Institutes and/or Observatories and Tourism Ministries.

***Precautions for use:***

The scope of the offer may not be on a par with the number of tourists, and must include overnight stays and attendance rates (based on a homogeneous definition).

***Methodological Annex:***

|  |                             |                                 |
|--|-----------------------------|---------------------------------|
| STRATEGY FIELD<br><b>PROMOTE SUSTAINABLE TOURISM</b> | TYPE<br>PRIORITY INDICATORS | MCSO<br>ECONOMY TOURISM<br>(81) |
| <b>International tourism receipts</b>                | MSSD 14<br>TOU_P02          |                                 |

**Strategic Objective:**

Increase the added value produced for local communities and stakeholders by tourism (in developing countries).

**Rationale:**

The Mediterranean is the first tourist destination worldwide. Tourism is essentially focused on a seasonal and seaside model and is a major challenge for all countries, in terms of employment and revenue. The global share of Mediterranean revenue from international tourism has however been decreasing since 1970 and is far lower than its share of arrivals. Tourism contributes significantly to local economies in many countries, but takings are unevenly spread. The negative impacts on the environment (transport, noise, waste, use of space, deterioration of landscapes, coastal areas and ecosystems) are not taken into account by national tourism statistics.

**Definition:**

This indicator measures international tourism receipts (foreign visitors expenditures in the host country).

**Unit:**

Constant US\$

**Objective and/or targeted values:**

Increase the added value of tourism

**Methodological Indications:**

International tourism receipts corresponds to the « Credit » line in the Balance of Payments for such items as «Travel» and « Transport ».

Only the « Travel » item is covered herein, including expenditure by non-resident visitors for accommodation, food, transport and acquisition of goods and services, within the limits of the reference country, and/or relative to goods and services provided by residents.

This concept includes receipts produced by overnight stays and daily excursions, which may be substantial, as in the case of countries where visitors from neighboring countries purchase significant quantities of goods and services.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  |               |                     |              |

**References:**

- WTO “Tourism Satellite Account (TSA)”
- Eurostat “Community methodology on tourism statistics”
- Dossier on tourism and sustainable development in Mediterranean – UNEP/MAP – Plan Bleu, 2005, TRS 159

### ***International Data Sources:***

- WTO – World Tourism Organisation

### ***Precautions for use:***

The increase of the international tourism receipts is not indicative of the amount of effective economic gain for host countries and local populations.

This gain must be analyzed within the framework of tourism impact studies on local situations, such as employment, revenue increases.

It is interesting to compare the percentages of tourism receipts with GDP, and with exports of goods and services.

### ***Methodological Annex:***

International tourism receipts in fact corresponds to expenditure (or consumption) by tourists and non-resident visitors as defined under the Satellite Tourism Accounts in compliance with the Statistics Commission of the United Nations.

Extract from the WTO website:

[http://www.world-tourism.org/francais/statistics/tsa\\_project/basic\\_references/index-en.htm](http://www.world-tourism.org/francais/statistics/tsa_project/basic_references/index-en.htm)

Visitor consumption is the basic concept measuring tourism activity and refers to total consumption of or on behalf of visitors and could, consequently, also be termed as "visitor demand".

In visitor consumption concepts, visitor final consumption expenditure in cash (its main component), corresponds to the term "visitor expenditure", traditionally used in the analysis of tourism.

Visitor consumption exceeds visitor purchases on a trip. It encompasses these purchases as well as all expenditure on goods and services by all other institutional units on behalf of visitors. If cash or financial assets are transferred to the visitor to finance his/her trip, the purchases funded by these are included in visitor consumption. Along with this are all forms of transfers in kind and other transactions benefiting visitors where it is not cash or financial assets which is provided to the visitors but the goods and services themselves - thus the consumption of individual non-market services is included. Essentially all transactions where there is a direct link between the visitor and the producer/provider of the good or service are within scope.

**Inbound tourism consumption, by products and categories of visitors  
(visitor final consumption expenditure in cash) (Net valuation)**

| Products  | Same-day visitors<br>(1.1) | Tourists<br>(1.2) | Total visitors<br>(1.3) = (1.1) + (1.2) |
|---|----------------------------|-------------------|---|
| A. Specific products  |                            |                   |   |
| A.1 Characteristic products (a)                             |                            |                   |   |
| 1 – Accommodation services                                  | X                          |                   |   |
| 1.1 – Hotels and other lodging services (3)                 | X                          |                   |   |
| 1.2 – Second homes services on own account of for free      | X                          | X                 | X                                       |
| 2 – Food and beverage serving services (3)                  |                            |                   |   |
| 3 – Passenger transport services (3)                        |                            |                   |   |
| 3.1 Interurban railway (3)                                  |                            |                   |   |
| 3.2 Road (3)  |                            |                   |   |
| 3.3 Water (3)   |                            |                   |   |
| 3.4 Air (3)   |                            |                   |   |
| 3.5 Supporting services                                     |                            |                   |   |
| 3.6 Transport equipment rental                              |                            |                   |   |
| 3.7 Maintenance and repair services                         |                            |                   |   |
| 4 – Travel agency, tour operator and tourist guide services |                            |                   |   |
| 4.1 Travel agency (1)                                       |                            |                   |   |
| 4.2 Tour operator (2)                                       |                            |                   |   |
| 4.3 Tourist information and tourist guide                   |                            |                   |   |
| 5 – Cultural services (3)                                   |                            |                   |   |
| 5.1 Performing arts   |                            |                   |   |
| 5.2 Museum and other cultural services                      |                            |                   |   |
| 6 – Recreation and other entertainment services (3)         |                            |                   |   |
| 6.1 Sports and recreational sport services                  |                            |                   |   |
| 6.2 Other amusement and recreational services               |                            |                   |   |
| 7 – Miscellaneous tourism services                          |                            |                   |   |
| 7.1 Financial and insurance services                        |                            |                   |   |
| 7.2 Other good rental services                              |                            |                   |   |
| 7.3 Other tourism services                                  |                            |                   |   |
| A.2 Connected products                                      |                            |                   |   |
| distribution margins  |                            |                   |   |

|                          |  |  |  |
|--------------------------|--|--|--|
| goods (4)                |  |  |  |
| services                 |  |  |  |
| B. Non specific products |  |  |  |
| distribution margins     |  |  |  |
| goods (4)                |  |  |  |
| services                 |  |  |  |
| TOTAL                    |  |  |  |
| number of trips          |  |  |  |
| number of nights         |  |  |  |

|  |   |
|--|---|
| <p>X does not apply</p> <p>(1) Corresponds to the margins of the travel agencies</p> <p>(2) Corresponds to the margins of the tour operators</p> <p>(3) The value is net of the amounts paid to travel agencies and tour operators</p> <p>(4) The value is net of distribution margins</p> | <p>(a) Even if they are called “products”, no goods are included for the time being.</p> <p>Two main reasons led to that decision:</p> <ul style="list-style-type: none"> <li>- the importance of the existing differences (both in level and structure) between the types of goods acquired by visitors according to the country and place visited;</li> <li>- the existing limitations of the available sources of statistical information. Nevertheless, goods are not totally banned from the analysis, as retail trade services (specialized and non specialized) associated with the sale of goods to visitors are included within the list.</li> </ul> <p>This is due to the fact that the associated productive activity is an activity which is in contact with the visitor and thus, given certain circumstances, can be viewed as a tourism activity. Moreover, the list of products included in each of the 7 groups under consideration is shown in Annex II; the explanatory notes for each of them are also included in Annex I, in order that they may be clearly identified.</p> |
|--|---|



|  |   |  |
|--|---|--|
| <b>STRATEGY FIELD</b><br><b>PROMOTING SUSTAINABLE AGRICULTURAL AND RURAL DEVELOPMENT</b> | <b>TYPE</b><br><b>PRIORITY INDICATORS</b> | <b>MCS D</b><br><b>ECONOMY AGRICULTURE</b> |
| <b>Ratio of agricultural population vs rural population</b>                              | <b>MSSD 15</b><br><b>AGR_P01</b>          |  |

**Strategic Objective:**

Diversify the rural economy through the development of non-agricultural activities.

**Rationale:**

The baseline scenario highlights the on-going diminution in the number of active agricultural populations from 3.60 million in 2000 to 2.25 million by 2010 and to 1.43 million in 2025 in EU-Med 4 countries, dropping the rate of active agricultural populations to only 1.5% in France and 2% in Italy in 2025. Extension of farmlands and abandonment of agricultural space will have significant negative consequences in terms of sustainability. The increasing geographical concentration of agriculture will be detrimental to the maintenance of the quality of Mediterranean space and landscapes. Smaller active populations will reduce collective professional solidarity and the agricultural world's ability to withstand urban sprawl, in particular in coastal plains. In the mountain areas, the even smaller population of breeders will need to turn to invasive techniques, such as burning on a large scale (burn beating). Society will increase the use of public funds for space management (maintenance of waterways, pathways, forests, fire fighting, large fauna regulation).

**Definition:**

This indicator measures the share of agricultural population vs rural population.

**Unit:**

Percentage (%)

**Objective and/or targeted values:**

The creation of non-agricultural employment applied to diversify the rural economy will lead to a drop in the indicator.

**Methodological Indications:**

**The agricultural population** definition refers to all people dependent on agriculture, hunting, fishing and forestry for their livelihood (all populations active in agriculture, forestry and fishing, and their dependents).

**Rural area residents:** In most cases, urban areas, and therefore their inhabitants, are clearly defined, while other areas are considered as rural. In practical terms, the criteria applied to the distinction between urban and rural areas vary from country to country. There are nonetheless three major groups: localities of a given size are classified as urban; administrative centers of smaller civilian divisions are classified as urban. Smaller civilian divisions are classified on the basis of specific criteria, which can include the type of local administration, the number of inhabitants or the share of the active population working in agriculture.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  |               |                     |              |

**References:**

- FAO

**International Data Sources:**

- FAO : <http://faostat.fao.org/>

**Precautions for use:**

A share of the agricultural population can be urban.

**Methodological Annex:**

International comparisons are further complicated by the fact that there are major differences between the criteria (populations not included in urban areas, listed as « cities » or « communes », the number of commune inhabitants, size of urban area population, population density, equipment rate, share of agricultural population among active populations) and thresholds (from 400 inhabitants in Albania to 10 000 in Italy) retained by Mediterranean countries to differentiate between rural and urban.

This indicator can be completed with socio-economic indicators on rural areas (employment, businesses).

| STRATEGY FIELD<br><b>PROMOTING SUSTAINABLE AGRICULTURAL AND RURAL DEVELOPMENT</b> | TYPE<br><b>PRIORITY INDICATORS</b> | MCSD<br><b>ENVIRONMENT LAND</b> |
|---|------------------------------------|---------------------------------|
| <b>Loss of arable land</b>  | <b>MSSD 16<br/>AGR_P02</b>         |                                 |

***Strategic Objective:***

To combat desertification and the loss of productive land by 2015, to reduce by at least one third the current rates of quality farmland lost to erosion, salinization, desertification, urban sprawl and other forms of land abandonment.

***Rationale:***

Estimates regarding the extent of desertification and degree of irreversibility are often contradictory and very controversial. However, the seriousness of the phenomenon is today widely recognized in the Mediterranean region.

According to evaluations undertaken at the beginning of the 1990s, 80% of arid or dry areas are impacted by desertification in the South and East Mediterranean. In these areas, the impact is most severe on rangelands (84%) and on rainfed crops (74%), and irrigated land is impacted by salinization. Desertification also impacts 63% of arid or dry lands in European Mediterranean countries, in Spain, Greece, and Italy.

This demonstrates that, out of the estimated 245 million hectares of arid land forecast to be impacted by desertification in the Mediterranean, over 188 million (i.e., 77%) were already considered as more or less deteriorated in 1990.

***Definition:***

This indicator measures the evolution of pressure and use on arable land surfaces: desertification, erosion, salinization, artificialisation, deforestation, and abandonment of agriculture ...

***Unit:***

Hectares

***Objective and/or targeted values:***

Reduce by at least 1/3 all losses of farmland to erosion, salinization, desertification, urban sprawl or other forms of abandonment by 2015.

***Methodological Indications:***

« Arable land » is land dedicated to temporary crops (surfaces harvested twice are accounted for once only), temporary prairies to be cut or reserved for grazing, marketing and vegetable gardens (including greenhouse products) and temporary fallow land (under 5 years). Land abandoned after shifting cultivation is not taken into account (FAO definition).

« Desertification » is to be understood as « the deterioration of land in arid, semi-arid and dry sub-wetland areas, due to various factors, which include climate variations and human activity ». Desertification is therefore not the advance of desert as such, but rather a process of gradual loss of soil productivity and depletion of land cover mainly attributable to human activity in dry areas.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  |               |                     |              |

**References:**

- FAO
- « A Sustainable Future for the MEDITERRANEAN : The Blue Plan's Environment & Development Outlook», Plan Bleu, 2005

**International Data Sources:****Precautions for use:****Methodological Annex:**

|   |                             |                                       |
|---|-----------------------------|---------------------------------------|
| STRATEGY FIELD<br><b>PROMOTING SUSTAINABLE AGRICULTURAL AND RURAL DEVELOPMENT</b>   | TYPE<br>PRIORITY INDICATORS | MCSD<br>LAND AND AREAS<br>RURAL AREAS |
| <b>Share of public budget allocated to sustainable rural development programmes</b> | MSSD 17<br>AGR_P03          |                                       |

***Strategic Objective:***

To promote sustainable agricultural and rural development programs, particularly in marginal rural areas.

***Rationale:***

Sustainable agricultural and rural development programs are components of alternative national and regional strategies, to further the reduction of rural poverty, hinterland rehabilitation, the development of domestic and international markets, and the conservation of environmental public goods.

***Definition:***

The existence of other sustainable rural development programs in favor of underprivileged rural areas is measured by its relative share of the departmental budgets allocated for agriculture and environment.

***Unit:***

Percentage

***Objective and/or targeted values:***

***Methodological Indications:***

Sustainable rural development programs for underprivileged rural areas, reconciling human development requirements and environmental protection, including biosphere reserves and natural parks (relative proportion of the budget of the departments concerned)

***Geographical scope:***

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            | YES             | YES                                  |               |                     |              |

***References:***

- [http://www.fao.org/sd/index\\_en.htm](http://www.fao.org/sd/index_en.htm)

***International Data Sources:***

***Precautions for use:***

***Methodological Annex:***

|   |                                 |                                  |
|---|---------------------------------|----------------------------------|
| STRATEGY FIELD<br><br><b>PROMOTING SUSTAINABLE AGRICULTURAL AND RURAL DEVELOPMENT</b>                             | TYPE<br><br>PRIORITY INDICATORS | MCS D<br><br>ECONOMY AGRICULTURE |
| <b>Proportion of agriculture quality products and Share of the agricultural land area used by organic farming</b> | MSSD 18<br>AGR_P04              |                                  |

**Strategic Objective:**

Increase added value from agriculture through the development, recognition and commercialization of quality Mediterranean products.

**Rationale:**

The growth of international and domestic demand for typical and quality Mediterranean products constitutes a unique opportunity to increase the global competitiveness of Mediterranean agriculture.

**Definition:**

This indicator measures:

1. The share of quality agricultural products (identification, labels of origin, regional products, organic agriculture) in all Mediterranean countries.
2. The share of farmland dedicated to organic agriculture.

**Unit:**

Percentage

**Objective and/or targeted values:**

**Methodological Indications:**

Products labelled as organic are products that are stored, processed, managed and commercialized in compliance with specific technical standards and certified as « organic » by supervisory organizations. Labels are awarded by these organizations after assessing compliance with standards. Labelling depends on the supervisory organization, but guarantees that all essential ingredients are « organic », from agricultural production to sale; organic labelling applies to the full production process, i.e., modes of production and of processing specific to organic agriculture. The “organic” label is therefore not limited to quality certification.

"Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasises the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system." (FAO/WHO Codex Alimentarius Commission, 1999).

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- [http://europa.eu.int/comm/agriculture/foodqual/quali1\\_en.htm](http://europa.eu.int/comm/agriculture/foodqual/quali1_en.htm)
- FAO, Agriculture biologique : <http://www.fao.org/organicag/default.htm>
- The World of Organic Agriculture – Statistics and Emerging Trends – 2004  
[http://www.soel.de/inhalte/publikationen/s/s\\_74.pdf](http://www.soel.de/inhalte/publikationen/s/s_74.pdf)

**International Data Sources:**

- The World of Organic Agriculture – Statistics and Emerging Trends – 2004  
[http://www.soel.de/inhalte/publikationen/s/s\\_74.pdf](http://www.soel.de/inhalte/publikationen/s/s_74.pdf)

**Precautions for use:**

Organic production systems and products are not always guaranteed. This is specified on labels reading: 'agriculture and products not certified as organic'; this definition excludes agricultural systems which use no synthetic ingredients by default (i.e., systems which do not apply land quality maintenance systems, and which are therefore responsible for land deterioration).

**Methodological Annex:**

|   |                                 |  |
|---|---------------------------------|--|
| STRATEGY FIELD<br><br><b>PROMOTING SUSTAINABLE URBAN DEVELOPMENT</b>  | TYPE<br><br>PRIORITY INDICATORS | MCS D<br><br>SD ACTORS AND POLICIES<br><br>POLICIES AND STRATEGIES |
| <b>Number of cities with over 10 000 inhabitants engaged in a process Agenda 21 type or in urban renewal programmes</b> | MSSD 19<br>URB_P01              |  |

***Strategic Objective:***

To promote sustainable urban economy and approaches to development which take into account the growth of urban populations over the next decades.

***Rationale:***

Examples of successful urban renovation on both rims demonstrate the impact of appropriate urban management on sustainable development. However, such initiatives are still far from sufficient: less than 600 urban areas have implemented Agenda 21 type projects.

Agenda 21 complies with sustainable development objectives: integration of economy, society and environment, short- and long-term perspectives, local and global approaches, and proper governance.

***Definition:***

This indicator measures the number of cities of over 10 000 inhabitants, engaged in Agenda 21 processes or in urban renewal programs

***Unit:***

Number

***Objective and/or targeted values:***

To invite all Mediterranean urban areas, and particularly large cities, to undertake local Agenda 21 initiatives by 2015, to develop strategies, calendars and programs involving urban inhabitants, associations and businesses in joint urban renewal projects and in public/private partnerships.

***Methodological Indications:***

In Rio in 1992, the United Nations Conference on Environment and Development (UNCED) adopted the principles and objectives of Agenda 21.

States have taken the commitment to cooperate and create, as per their specific context, the conditions required to guarantee sustainable development in the future.

In some cases, countries have formalized their commitments within national programs which define the priorities and actions, in the form of official Agenda 21 publications.

In parallel, local collectivities (regions, departments, cities, communes) may also undertake such local Agenda 21 initiatives, involving local stakeholders in territorial projects.

Local Agenda 21 initiatives: local participation process in cities and rural communities to concretely implement sustainable development concepts.

***Geographical scope:***

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  |               | YES                 |              |



## **References:**

- <http://www.iclei.org/>
- « A Sustainable Future for the MEDITERRANEAN : The Blue Plan's Environment & Development Outlook», Plan Bleu, 2005

## **International Data Sources:**

- <http://www.iclei.org/>

## **Precautions for use:**

The engagement of the cities in "Local Agenda type 21" programs do not prejudge results of these programs.

## **Methodological Annex:**

Agendas 21 have been born after the 1992 Rio Earth Summit, which defined an Agenda (in Latin, 'what has to be done') for the 21st century on the world scale. Its chapter 28 encouraged the launching of local Agendas 21. International organisations such as the International Union of Local Authorities (IULA), the Fédération Mondiale des Cités Unies (FMCU) and the International Council of Local Environmental Initiatives (ICLEI) have been supporting the movement by signing the Aalborg Chart for sustainability.

In the Mediterranean, there is no specific survey on local agendas 21 processes. At the global level, the ICLEI survey to local authorities and associations in 2002 shows that of 6 416 local agenda 21 processes in 113 countries, the majority of actions takes place in Europe (the total number of local agendas 21 in 36 European countries represent near 80% of the global results). In the Mediterranean, local agendas 21 registered by ICLEI in 2002 were breakdown as follows: 900 processes in the 4 EU-Med countries (of which 360 in Spain and 430 and Italy), 30 in the Eastern Adriatic countries, 50 in Turkey, 15 in Mashrek and 20 in Maghreb.

It is however difficult to use these data as if they were statistics, without taking into account the size and the number of municipalities in each country, the diversity of processes and the nature of projects. In certain countries, projects follow a national-level campaign; in other countries, the initiative is taken by local authorities and the State only provides support to some selected projects. Some processes relate to a global and integrated strategy which is elaborated with local actors' participation; others are of a sectoral nature and relate to a specific town policy (housing, natural hazards, transport, energy, greenhouse effect, tourism, etc).

Source: « A Sustainable Future for the MEDITERRANEAN : The Blue Plan's Environment & Development Outlook», Plan Bleu, 2005 from ICLEI. *Second Local Agenda 21 Survey 2002*

|  |                                 |  |
|--|---------------------------------|--|
| STRATEGY FIELD<br><br><b>PROMOTING SUSTAINABLE URBAN DEVELOPMENT</b>   | TYPE<br><br>PRIORITY INDICATORS | MCSD<br><br>ENVIRONMENT<br><br>URBAN DEVELOPMENT |
| <b>Proportion of urban population with access to a decent dwelling</b> | MSSD 20<br>URB_P02              |  |

**Strategic Objective:**

Reduce social discrepancies by reducing the proportion of squalid housing.

**Rationale:**

One of the consequences of rapid urban sprawl is the difficulty to access decent dwelling, since public housing policies have not achieved their objectives in the Mediterranean. Not only is construction below objectives and insufficient to cover requirements, but housing is also too expensive for the populations for which it was originally designed, and so-called public housing is purchased by well-to-do middle classes.

**Definition:**

This indicator measures the share of inhabitants having access to decent dwelling.

**Unit:**

Percentage

**Objective and/or targeted values:**

To significantly reduce the proportion of squalid housing.

**Methodological Indications:**

Decent dwelling does not present obvious risks for physical security or health and equipped to comply with residential requirements.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  | YES           | YES                 | -            |

**References:**

[www.unhabitat.org](http://www.unhabitat.org)

**International Data Sources:**

**Precautions for use:**

**Methodological Annex:**

| STRATEGY FIELD<br>PROMOTING SUSTAINABLE URBAN DEVELOPMENT                       | TYPE<br>PRIORITY INDICATORS | MCSD<br>ENVIRONMENT<br>WASTE<br>(100) |
|---|-----------------------------|---------------------------------------|
| <b>Household waste produced per capita and number of uncontrolled landfills</b> | <b>MSSD 21<br/>URB_P03</b>  |                                       |

***Strategic Objective:***

To improve the quality of urban life through the development of green areas and the reduction of environmental hazards. To reduce waste production. To decouple increased waste production and GDP growth.

***Rationale:***

Since the mid-70s, urban waste has become a priority concern for urban area management in the Mediterranean. The waste is essentially produced in the form of household waste, collected and treated by municipalities or specialized companies on their behalf.

***Definition:***

This indicator measures:

- The production of waste per capita;
- The number of uncontrolled dumping sites;

***Unit:***

- Tons par capita and per year;
- Number

***Objective and/or targeted values:***

A suitable objective by 2015 could be the decoupling of increasing waste production and GDP growth, so as to reduce by approximately 50% the current growth rate of waste production, to double the share of recycling and to transform at least half of the uncontrolled landfills into controlled landfills.

In summary, from today to 2015:

- Control household waste production per capita, to reduce waste production increase by approximately 50%.
- Eliminate 50% of uncontrolled landfills (long-term objective = 0).

***Methodological Indications:***

Waste refer here to materials that are not prime products (i.e. products produced for the market) for which the generator has no further use for own purpose of production, transformation or consumption, and which he discards, or intends or is required to discard. Wastes may be generated during the extraction of raw materials during the processing of raw materials to intermediate and final products, during the consumption of final products, and during any other human activity.

Are excluded:

- Residuals directly recycled or reused at the place of generation (i.e. establishment);
- Waste materials that are directly discharged into ambient water or air.

Municipal waste includes household waste and similar waste. The definition also includes:

- Bulky waste (e.g. white goods, old furniture, mattresses); and

- Yard waste, leaves, grass clippings, street sweepings, the content of litter containers, and market cleansing waste,

If managed as waste.

It includes waste originating from:

- Households;
- Commerce and trade, small businesses, office buildings and institutions (schools, hospitals, government buildings).

It also includes: waste from selected municipal services, i.e. waste from park and garden maintenance, waste from street cleaning services (street sweepings, the content of litter containers, market cleansing waste). if managed as waste.

« Household waste » generally includes normal and special household waste and bulky waste

Controlled landfill: Landfill whose operation is submitted to a permit system and to technical control procedures in compliance with the national legislation in force. Includes specially engineered landfill.

### **Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

### **References:**

- Joint questionnaire OECD/Eurostat
- « A Sustainable Future for the MEDITERRANEAN : The Blue Plan's Environment & Development Outlook », Plan Bleu, 2005

### **International Data Sources:**

### **Precautions for use:**

Definitions of household waste and controlled landfill may vary in the countries.

### **Methodological Annex:**

|  |                                 |                                     |
|--|---------------------------------|-------------------------------------|
| STRATEGY FIELD<br><br><b>PROMOTING SUSTAINABLE URBAN DEVELOPMENT</b> | TYPE<br><br>PRIORITY INDICATORS | MCS D<br><br>ENVIRONMENT<br><br>AIR |
| <b>Air quality in the main Mediterranean urban areas</b>             | MSSD 22<br>URB_P04              |                                     |

**Strategic Objective:**

To reduce pollutants impacting urban air quality, such as CO, NOx, COV, suspended particles, lead, etc...This requires the development of appropriate policies for vehicle standards, traffic management, reinforcement of public transportation networks, deviation of heavy goods vehicles circulation and use of clean fuels.

**Rationale:**

Urban air pollutants may be produced by different sources, although they mainly stem from combustion processes. Exposure to these pollutants may cause respiratory and heart disease.

**Definition:**

This indicator measures air quality in urban areas over a one-year period, though the ATMO index categories.

**Unit:**

Percentage of Index classes from 1 to 10

**Objective and/or targeted values:**

70% of the index values in green categories (1 to 4) during the year

**Methodological Indications:**

The ATMO index and mode of computation are defined by national regulations for all urban areas of more than 100 000 inhabitants. This is a synthetic indicator describing urban air quality in Paris, on the basis of a score from 1 (very high) to 10 (very poor). The index is determined on the basis of pollution levels measured throughout the day by urban control stations. The index covers four air pollutants, tracers for transport, urban and industrial activities: sulphur dioxide (SO<sub>2</sub>), fine particles (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>) and ozone (O<sub>3</sub>). Sub-indices are calculated for all pollutants and the lowest score is retained to assess daily general air quality.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
|                |                 |                                      |               | YES                 |              |

**References:**

- AIRPARIF : <http://www.airparif.asso.fr/>

**International Data Sources:**

**Precautions for use:**

Dépend des sous indices utilisés pour le calcul de l'indice,

**Methodological Annex:**

Grid for the index computation:

Averages of Maximum hourly concentration

|    | INDEX     | SO2 (µg/m3) | PM10 (µg/m3) | O3 (µg/m3) | NO2 (µg/m3) |
|----|-----------|-------------|--------------|------------|-------------|
| 1  | Very good | 0 – 39      | 0 - 9        | 0 - 29     | 0 - 29      |
| 2  | Very good | 40 –79      | 10 - 19      | 30 - 54    | 30 - 54     |
| 3  | Good      | 80 – 119    | 20 - 29      | 55 - 79    | 55 - 84     |
| 4  | Good      | 120 – 159   | 30 - 39      | 80 - 104   | 85 - 109    |
| 5  | Average   | 160 – 199   | 40 - 49      | 105 - 129  | 110 - 134   |
| 6  | Bad       | 200 – 249   | 50 - 64      | 130 - 149  | 135 - 164   |
| 7  | Bad       | 250 – 299   | 65 - 79      | 150 - 179  | 165 - 199   |
| 8  | Very bad  | 300 – 399   | 80 - 99      | 180 - 209  | 200 - 274   |
| 9  | Very bad  | 400 – 499   | 100 - 124    | 210 - 239  | 275 - 399   |
| 10 | Very bad  | >=500       | >=125        | <=240      | >=400       |

Source : Air parif

|  |  |   |
|--|--|---|
| <p style="text-align: center;"><b>STRATEGY FIELD</b></p> <p style="text-align: center;"><b>PROMOTING SUSTAINABLE MANAGEMENT OF THE SEA AND THE COSTAL AREAS AND TAKE URGENT ACTION TO PUT AN END TO THE DEGRADATION OF COASTAL ZONES</b></p> | <p style="text-align: center;"><b>TYPE</b></p> <p style="text-align: center;"><b>PRIORITY INDICATORS</b></p> | <p style="text-align: center;"><b>MCS D</b></p> <p style="text-align: center;"><b>LANDS AND AREAS</b></p> <p style="text-align: center;"><b>SEA AND COASTAL ZONES</b></p> <p style="text-align: center;">27</p> |
| <p><b>Share of artificialised coastline</b></p>  | <p style="text-align: center;"><b>MSSD 23</b></p> <p style="text-align: center;"><b>COA_P01</b></p>          |   |

**Strategic Objective:**

Promote balanced development and integrated coastal management, and to ensure free access to coastal areas for all populations. To preserve, enhance or restore coastal heritage quality; to control linear and on-going coastal urban sprawl, and prevent coastal artificialisation. Reduce vulnerability of sensitive areas.

**Rationale:**

Based on the assumption (trend scenario) that 200 additional km are artificialised on average per year, 50% of Mediterranean coastal areas could be irreversibly artificialised by 2025. In some countries, large coastal conurbations or widespread urban sprawl could spread over tens, if not hundreds of kilometers.

There are many consequences to linear coastal area artificialisation: pollution, traffic congestion, deterioration of coastal landscapes and ecosystems, increased coastal erosion, etc.

**Definition:**

This indicator is defined by the artificialised surface of coastal strips vs total coastal strip surface. (It is advised to compute the indicator for a coastal strip of 1km and 10 km deep)

**Unit:**

Percentage

**Objective and/or targeted values:**

To preserve "Le tiers sauvage" = no more than 2/3 of the coastal area artificialised

**Methodological Indications:**

Linear coastal segments are said to be "artificialised" when all or part of the 100 meter area on both sides are or have recently been subjected to transformation by Man, modifying their original physical state (housing, embankments equipment). The term « coastal segment » is used as it is highly dependent on the chosen calculation methodology and size may vary with techniques.

The definition requires a resolution lesser than 100 meters, and artificialisation observation methods are based on aerial photography or highly precise mappings.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  | YES           |                     |              |

**References:**

- « A Sustainable Future for the MEDITERRANEAN: The Blue Plan's Environment & Development Outlook», Plan Bleu, 2005
- <http://www.languedoc-roussillon.ecologie.gouv.fr/publication/litto/artifici.htm>

***International Data Sources:***

- <http://dataservice.eea.eu.int>

***Precautions for use:***

***Methodological Annex:***



|   |                     |  |
|---|---------------------|--|
| STRATEGY FIELD  | TYPE                | MCSO                                     |
| <b>PROMOTING SUSTAINABLE MANAGEMENT OF THE SEA AND THE COASTAL AREAS AND TAKE URGENT ACTION TO PUT AN END TO THE DEGRADATION OF COASTAL ZONES</b> | PRIORITY INDICATORS | LANDS AND AREAS<br>SEA AND COASTAL ZONES |
| <b>Operational pollution from ships</b>   | MSSD 24<br>COA_P02  |  |

**Strategic Objective:**

To prevent and combat sea pollution by ships, by achieving the objectives determined by the Regional Strategy on prevention and combat against sea pollution by ships. To eradicate operational pollution from ships by 2025.

**Rationale:**

Operational pollution by oil tankers constitutes a perhaps even more hazardous threat to the health of the sea than accidental pollution from this type of vessel. 30% of international sea traffic transits through the Mediterranean Sea, which only represents 0.7% of the world's seas. Despite prevention policies, the risk of accidents remains high.

Operational hydrocarbons pollution usually impact navigation lanes and may cause damage to both the sea and the coastal environment. The accumulation of low but chronic pollution in enclosed seas such as the Mediterranean is responsible for the slow deterioration of marine ecosystems.

**Definition:**

This indicator measures operational hydrocarbon pollution from waste produced on board ships.

**Unit:**

Millions of tons

**Objective and/or targeted values:**

To eradicate 100% of operational pollution from ships by 2025.

**Methodological Indications:**

Operational pollution results from the commercial use of ships, used to transport goods or passengers.

Operational pollution results from the discharge of ship board generated wastes such as garbage, sewage, dirty bilge water and tank washings as well as from engine exhaust and tank venting emissions.

For pleasure craft, operational pollution results from normal usage: management of household waste, disposal of waste water, and ruptured fuel tank hoses.

Pollution from oil tankers is essentially "operational" and is formed by hydrocarbons and ballast.

Accidental pollution is not taken into account in the computation of this indicator.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
|                |                 |                                      |               |                     | YES          |

**References:**

- Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC). [www.rempec.org](http://www.rempec.org)
- « A Sustainable Future for the MEDITERRANEAN: The Blue Plan's Environment & Development Outlook», Plan Bleu, 2005

**International Data Sources:**

- Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC). [www.rempec.org](http://www.rempec.org)

**Precautions for use:****Methodological Annex:**

|   |   |   |
|---|---|---|
| <b>STRATEGY FIELD</b><br><b>PROMOTING SUSTAINABLE MANAGEMENT OF THE SEA AND THE COSTAL AREAS AND TAKE URGENT ACTION TO PUT AN END TO THE DEGRADATION OF COASTAL ZONES</b> | <b>TYPE</b><br><b>PRIORITY INDICATORS</b> | <b>MCSD</b><br><b>LANDS AND AREAS</b><br><b>SEA AND COASTAL ZONES</b> |
| <b>Proportion of coastal urban population connected to a sanitation network</b>   | <b>MSSD 25</b><br><b>COA_P03</b>          |   |

**Strategic Objective:**

To prevent and reduce land-based pollution, by achieving the objectives defined by the “Strategic Action Program” adopted in 1997 to combat pollution from land-based human activities.

**Rationale:**

It is estimated that 48% of large Mediterranean coastal urban areas (over 100 000 inhabitants) have no treatment plant, 10% have primary treatment facilities, 38% secondary and only 4% tertiary, before disposal into the sea. Main concerns are the repercussions of land-based pollution on human health, on the treatment costs of industrial and domestic pollutants and solid waste, and impacts on marine ecosystems.

**Definition:**

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

Several sub-indicators can be calculated:

- Population connected to sanitation networks equipped with used water treatment plants (differentiating between treatment types) vs total population.
- Population connected to sanitation networks without used water treatment plants vs total population.

**Unit:**

Percentage

**Objective and/or targeted values:**

To reduce by half the number of coastal cities inhabitants not connected to sanitation networks by 2015. To reach a level of 100% connection (access) to sanitation networks

**Methodological Indications:**

« Coastal cities » designates cities of over 10 000 inhabitants established along the coast line.

Differentiation is made between sanitation networks that are or not connected to treatment plants, and according to treatment types.

Data on population connected to sanitation networks are usually available at the local Town Hall or in companies in charge of network maintenance.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  | YES           |                     |              |

## References:

- UNEP/MAP MEDPOL
- « A Sustainable Future for the MEDITERRANEAN: The Blue Plan's Environment & Development Outlook », Plan Bleu, 2005

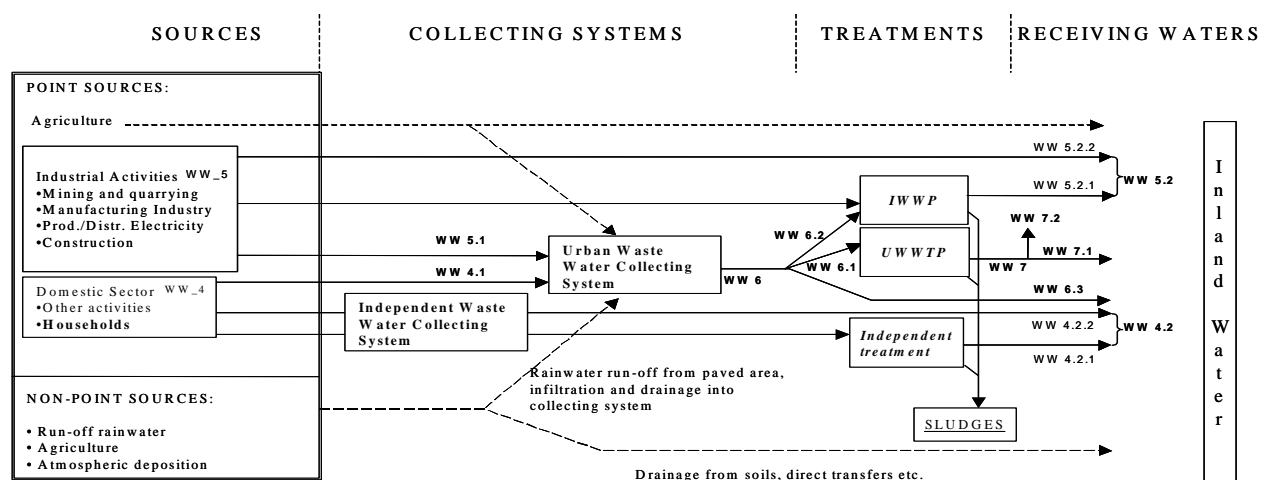
## International Data Sources:

- UNEP/MAP MEDPOL

## Precautions for use:

Some cities of less than 10 000 inhabitants may host a much larger population during the high summer season and are not included in this calculation.

## Methodological Annex:



IWWTP = Industrial waste water treatment plant  
UWWTP = Urban waste water treatment plant

|          |  |          |  |
|----------|--|----------|--|
| WW_4     | Waste water generated by domestic sector                   | WW_5.2.2 | of which: discharged without treatment                             |
| WW_4.1   | of which: connected to urban waste water collecting system | WW_6     | Total waste water connected to urban waste water collecting system |
| WW_4.2   | of which: not connected and discharged, total              | WW_6.1   | of which: connected to UWWTP                                       |
| WW_4.2.1 | of which: discharged after independent treatment           | WW_6.2   | of which: connected to IWWTP                                       |
| WW_4.2.2 | of which: discharged without treatment                     | WW_6.3   | of which: discharged without treatment                             |
| WW_5     | Total waste water generated by industry                    | WW_7     | Effluents of UWWTP   |
| WW_5.1   | of which: connected to urban waste water collecting system | WW_7.1   | of which: discharged   |
| WW_5.2   | of which: not connected and discharged, Total              | WW_7.2   | of which: re used  |
| WW_5.2.1 | of which: discharged after treatment in IWWTP              | WW_8     | Total discharges to Inland waters                                  |

Source : Joint Questionnaire OECD/Eurostat

| STRATEGY FIELD<br><b>PROMOTING SUSTAINABLE MANAGEMENT OF THE SEA AND THE COSTAL AREAS AND TAKE URGENT ACTION TO PUT AN END TO THE DEGRADATION OF COASTAL ZONES</b> | TYPE<br><b>PRIORITY INDICATORS</b> | MCSD<br><b>LAND AND AREAS<br/>SEA AND COASTAL ZONES</b> |
|--|------------------------------------|---|
| <b>Surface of protected coastal and marine areas</b>   | <b>MSSD 26<br/>COA_P04</b>         |   |

***Strategic Objective:***

To curtail or substantially reduce the loss of marine and coastal biodiversity by 2010 in EU Member States, and to substantially reduce losses in all other countries, according to international and European commitments.

Significantly increase the creation of protected areas throughout the Mediterranean Region; to apply IUCN protection criteria to at least 10% of coastal and marine habitats.

***Rationale:***

The deterioration observed in coastal biodiversity has increasingly motivated civil society, countries and the international community to pool their efforts.

Regulations, in the form of international treaties, regional protocols and agreements, national legislation, which are, in some cases, specific to the Mediterranean, have been adopted over the last 30 years. However, the relative share of protected coastal areas is still too limited to ensure the conservation of biodiversity, and the pace of implementation of the protocols and action plans adopted within the framework of Barcelona Convention remains much too slow.

***Definition:***

The indicator is defined for a specific year by the sum of protected coastal and marine areas.

***Unit:***

Km<sup>2</sup>

***Objective and/or targeted values:***

Extend the surface of protected coastal and marine areas.

To protect at least 10% of coastal and marine habitats.

***Methodological Indications:***

Marine and coastal zones are areas which include coastal ecosystems (continental and/or marine) and marine areas (pelagic and deep-sea habitats). The total surface of the protected area is taken into consideration, despite the fact that the coastal area itself may only represent a small portion.

National legislation exists in all countries regarding the protection of natural heritage. For the sake of comparison, protected areas are listed under the categories defined by the International Union for the Conservation of Nature (IUCN).

IUCN defines six categories of protected areas in two groups:

- Fully protected areas maintained in their original state and closed to extractive uses: Natural Reserves/Natural Zones (I), National Parks (II), and Natural Monuments (III).
- Partially protected areas are equipped for such specific uses as leisure activities, to guarantee optimal living conditions for species and ecological communities: habitats/species management zones (IV), protected land and marine landscapes (V), and protected resource management zones (VI).

In the case of protected areas, it will be necessary, at a later stage, to determine those which are located, even if only partially, along a coast. The total protected area surface will be included in the indicator, aggregating total protected area surfaces at national level.

### **Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 | YES                                  | YES           |                     | YES          |

### **References:**

- [www.iucn.org](http://www.iucn.org);
- World Conservation Monitoring Center (WCMC).
- MAP-Regional Activity Center/ Specially Protected Areas (RAC/SPA). <http://www.rac-spa.org>
- « A Sustainable Future for the MEDITERRANEAN : The Blue Plan's Environment & Development Outlook », Plan Bleu, 2005

### **International Data Sources:**

- [www.iucn.org](http://www.iucn.org);
- <http://iucn.org/places/medoffice/en/index.html>
- <http://www.unep-wcmc.org/>

### **Precautions for use:**

Protection of ecosystems does not necessarily involve the application of national and/or international classifications: as an example, military zones, territories managed by specific institutions (forests), and properties of the Conservatoire du Littoral or equivalent.

### **Methodological Annex:**

**Category Ia** Strict Nature Reserve: protected area managed mainly for science - Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

**Category Ib** Wilderness Area: protected area managed mainly for wilderness protection - Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

**Category II** National Park: protected area managed mainly for ecosystem protection and recreation - Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

**Category III** Natural Monument: protected area managed mainly for conservation of specific natural features - Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

**Category IV** Habitat/Species Management Area: protected area managed mainly for conservation through management intervention - Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

**Category V** Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation - Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic,

ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

**Category VI** Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems - Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

| STRATEGY FIELD<br>STRENGTHEN SOLIDARITY, COMMITMENT AND FINANCING FOR A SUSTAINABLE DEVELOPMENT AT REGIONAL, NATIONAL AND LOCAL LEVELS   | TYPE<br>PRIORITY INDICATORS | MCS D<br>EXCHANGES AND COOPERATION<br>MEDITERRANEAN COOPERATION IN THE FIELD OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT |
|--|-----------------------------|---|
| <b>ODA allocated as % of OECD DAC countries donors' GNP; proportion of the ODA allocated to Mediterranean countries and proportion contributing to the strategy objectives</b> | <b>MSSD 27<br/>COO_P01</b>  |   |

***Strategic Objective:***

Invite European donor countries, members of the OECD Development Aid Committee (DAC), to comply with Millennium goals for development by increasing the share of public aid to 0.7% of GNP, by 2015.

Encourage donors to integrate sustainable development in strategies and methods. Substantially increase the relative share of aid contributing to Strategy.

***Rationale:***

This indicator measures the increase in aid offered or received in the region and assesses whether aid is allocated to initiatives contributing to the achievement of MSSD objectives.

There are significant requirements for public financing attached to the implementation of the Strategy, in such areas as: the reduction of environmental issues, improved access to basic services, promotion of research and development, establishment of sustainable transport systems, incentives for new consumption and production patterns, strengthening of capacities, and promotion of sustainable agricultural and rural development. However, funds are very limited in most Southern and Eastern Mediterranean countries.

The use of Official Development Aid to fund projects that are compatible with MSSD targets can considerably boost regional development and support the achievement of MSSD targets.

Observation: ODA in % of GDP is also a monitoring indicator for Millennium goal N° 8 regarding the establishment of a global development partnership.

***Definition:***

This is a multiple indicator:

- Official Development Aid (ODA) provided (% of GNP in Mediterranean donor countries, members of the OECD DAC);
- Share of ODA earmarked for Mediterranean countries;
- Share of aid provided as contribution to MSSD targets;

***Unit:***

Percentage

***Objective and/or targeted values:***

Increase Official Development Aid (ODA) from European donor countries, members of OECD DAC, to 0.7% of GNP (MDG) before 2015.

***Methodological Indications:***



Official development assistance is defined as those flows to countries on Part I of the DAC List (available at [www.oecd.org/dac/htm/daclist.htm](http://www.oecd.org/dac/htm/daclist.htm)) and to multilateral institutions for flows to Part I aid recipients which are:

- i. provided by official agencies, including state and local governments, or by their executive agencies; and
- ii. Each transaction of which:
  - a) is administered with the promotion of the economic development and welfare of developing countries as its main objective; and
  - b) is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent).

Extract of the OECD report DCD/DAC/STAT(2001)8 available on the OCDE web site : [www.oecd.org/dataoecd/21/21/34086975.pdf](http://www.oecd.org/dataoecd/21/21/34086975.pdf)

Official Development Aid to countries includes:

- Aids/ donations/subsidies
- Subsidised loans (for example, loans from the World Bank or IMF)

Aid can also be obtained through multilateral or bilateral cooperation.

Aid can be provided through direct financial aid transfers in kind (food, equipment) or through compensation for local experts (technical cooperation). Private aid (decentralized cooperation, NGO) is not accounted for herein as it is difficult to assess, but can nonetheless be highly significant.

### **Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

### **References:**

- OCDE/DAC : [www.oecd.org/dac](http://www.oecd.org/dac)

### **International Data Sources:**

- OCDE/DAC : [www.oecd.org/dac](http://www.oecd.org/dac)
- United Nations: [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)

### **Precautions for use:**

Figures only cover the spread of ODA and DA provided by DAC member countries only. They do not include aid provided by Mediterranean countries not members of DAC (such as Tunisia and Israel).

### **Methodological Annex:**

#### **Distinction between « Official Development Aid » and « Official Aid »**

All aid contributions are included in the DAC list of beneficiary countries, which has recently been updated to include political and economic changes and is designed for statistics purposes. However, only traditional contributions to developing countries (in Part I of the list) are considered as « Official Development Aid », and should represent 0.7% of donor country GNP, as per the long-standing UN objective. The following beneficiary countries are included in Part I of the OECD/DAC list: Albania, Algeria, Bosnia Herzegovina, Egypt, Morocco, Serbia Montenegro, Syria, Tunisia and Turkey.

Aid to developing countries and to «more advanced» Eastern European countries (listed in Part II of the List) is accounted for separately as « Official Development Aid ». In 2003, this second list included: Cyprus, Israel, Libya, Malta and Slovenia.

In 2003, the share of ODA directly favorable to sustainable development was estimated by Plan Bleu, using OECD/DAC data, the Creditor Country Notification System (aid activities database). On the basis of this information, Plan Bleu defined 7 categories and gave estimations on the corresponding

aid levels: three areas (environment, human capital and democracy) are considered as directly favorable to sustainable development, with a share estimated at 19% for the period 1973-2002. The share is certainly under-estimated as, in addition to categories with specific links to sustainable development, sustainability components can also be found in other categories. The spread of aid will require updating, according to MSSD orientations.

| STRATEGY FIELD  | TYPE                       | MCS D  |
|---|----------------------------|--|
| <b>STRENGTHEN SOLIDARITY, COMMITMENT AND FINANCING FOR A SUSTAINABLE DEVELOPMENT AT REGIONAL, NATIONAL AND LOCAL LEVELS</b>   | <b>PRIORITY INDICATORS</b> | <b>EXCHANGES AND COOPERATION</b><br><br><b>MEDITERRANEAN COOPERATION IN THE FIELD OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT</b> |
| <b>EU net public financial flows to EU Mediterranean members, candidates, CARDS and MEDA countries (in absolute value and per capita) and proportion contributing to the objectives of the strategy</b> | <b>MSSD 28<br/>COO_P02</b> |  |

***Strategic Objective:***

Reinforce mutual commitments, solidarity and Mediterranean and Euro-Mediterranean cooperation for sustainable development.

Substantially increase the relative share of aids contributing to Strategy goals. Promote financing of decentralized development programs, particularly in the case of MEDA funds.

***Rationale:***

According to MSSD:

“As a result of the EU’s enlargement process and its Community Assistance for Reconstruction, Development and Stabilization (CARDS) programme, commitment and solidarity are already being strengthened in countries on the northern shore of the Mediterranean. In terms of sustainable development, it is necessary to improve the integration of the principles and goals of the European and Mediterranean sustainable development strategies in the process of enlargement.

The Euro-Mediterranean Partnership, initiated in 1995, constitutes a major political framework for the implementation of the Mediterranean Strategy. It is expected that the next steps in the EU’s Mediterranean neighbourhood policy toward Southern and Eastern Mediterranean countries will integrate social and ecological issues more fully into the decision-making process so as to build a genuine policy of sustainable co-development.

A strengthened Euro-Mediterranean Partnership will provide Mediterranean countries with greater opportunities to achieve their aspirations. Sustainable development should be a guiding principle in the Euro-Mediterranean project and the neighbourhood policy. This renewal will have to be combined with strengthened synergies with other regional cooperation frameworks, and particularly with the Mediterranean Action Plan (MAP). The Euro-Mediterranean Partnership will gain much from this positive reorientation, which is of vital importance for the region’s future. Policy renewal needs to guarantee the progressive enlargement of solidarity to southern and eastern Mediterranean countries, taking their specificities into account.”

Rational and targeted increases of European loans in favor of South and East Mediterranean countries and the consolidation of efforts for South-Eastern European countries could greatly contribute to boosting development in the region as a whole and allow it to achieve MSSD goals.

***Definition:***

Multiple Indicator:

- Net EU financing for member, candidate, CARDS and MEDA Mediterranean countries (in absolute value and per capita);
- Relative share contributing to Strategy goals.

**Unit:**

- US \$ and US \$ per capita
- Percentage

**Objective and/or targeted values:****Methodological Indications:****Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- Eurostat,
- European Commission
- OECD/DAC

**International Data Sources:**

- Eurostat,
- OECD/DAC

**Precautions for use:****Methodological Annex:**

| STRATEGY FIELD<br>STRENGTHEN SOLIDARITY, COMMITMENT AND FINANCING FOR A SUSTAINABLE DEVELOPMENT AT REGIONAL, NATIONAL AND LOCAL LEVELS | TYPE<br>PRIORITY INDICATORS | MCS D<br>ECONOMY<br>GLOBAL ECONOMY |
|--|-----------------------------|------------------------------------|
| <b>Proportion of bank credit allocated to the private sector – Existence of alternative financing systems to bank credit</b>           | MSSD 29<br>COO_P03          |                                    |

***Strategic Objective:***

Promote the implementation of mechanisms to finance productive and innovative small and medium enterprises (SMEs) activities (micro-credit, venture capital, incentives...).

***Rationale:***

This indicator yields information on fluctuations in the spread of bank loans between the private and public sector (the banking sector remains the main source of financing in the Mediterranean), as well as indirect information on the availability of bank loans for the private sector.

In several South and East Mediterranean countries, the public sector monopolizes a large share of total savings, and only a relatively limited share of loans is allocated to the private sector vs total bank loans. Equally, access to production financing by SMEs is strongly limited by the stringent guarantees required by merchant banks and by the high cost of loans. And lastly, due to weak financial markets and lack of alternative financing solutions, banks hold a quasi-monopolistic position. Micro-financing is common practice in Asia, but is not generally known or applied in Mediterranean countries.

SMEs in particular could benefit from easier and less costly access to loans if the share of bank loans to the private sector was increased and micro-credit developed.

***Definition:***

Multiple Indicators:

- Share of bank loans allocated to the private sector
- Existence of alternative funding mechanisms

***Unit:***

- Percentage (of total loans granted the economic sector)
- Percentage of GDP
- Number of micro-credit creditors; number of micro-financing institutions.

***Objective and/or targeted values:***

Continue and accelerate reforms in taxation, and in financial and bank mechanisms, taking into account sustainable development requirements (comparison between countries with equivalent revenue).

***Methodological Indications:***

Domestic credit to private sector refers to financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable that establish a claim for repayment. For some countries these claims include credit to public enterprises.

Alternative funding mechanisms:

- Venture capital investments in % of GDP: Venture capital investments are defined as private equity made available to businesses. Management purchases and buy-backs of listed shares are not included. Data are classified under 2 investment stages: preliminary (seeding + start-up) and expansion and replacement (expansion capital and replacement capital).
- Micro-credit: This financing mechanism applies market conditions to the grant of short-term loans for limited amounts, to populations excluded from the banking system. The loan is invested in the creation of business activities, often for people services.

***Geographical scope:***

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

***References:***

- IMF
- International Finance Statistics
- Eurostat

***International Data Sources:***

- IMF
- International Finance Statistics
- Eurostat

***Precautions for use:***

***Methodological Annex:***

|   |                     |                           |
|---|---------------------|---------------------------|
| STRATEGY FIELD  | TYPE                | MCS D                     |
| <b>STRENGTHEN SOLIDARITY, COMMITMENT AND FINANCING FOR A SUSTAINABLE DEVELOPMENT AT REGIONAL, NATIONAL AND LOCAL LEVELS</b>   | PRIORITY INDICATORS | ECONOMY<br>GLOBAL ECONOMY |
| <b>Proportion of local government tax receipts as percentage of total tax revenues (government receipts). Proportion of government budget allocated to local authorities.</b> | MSSD 30<br>COO_P04  |                           |

**Strategic Objective:**

Strengthen the prerogatives and authority of local authorities

**Rationale:**

Local policies and territorial approaches are one of the keys to the implementation of the sustainable development strategy and involve decentralized activities and/or management. Decentralization requires that sufficient financial means, compatible with the responsibilities of local collectivities, are available, either through the State budget or local public revenue.

**Definition:**

- Share of local public revenue vs total public revenue (government receipts).
- Share of the State Budget allocated to local authorities.

**Unit:**

Percentage

**Objective and/or targeted values:**

**Methodological Indications:**

This indicator strives to collect information on the financial resources of local administrations, through tax revenue, as well as on the development of local tax potential in the countries.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- IMF
- OECD
- Eurostat

**International Data Sources:**

- IMF
- OECD
- Eurostat

**Precautions for use:**

The indicator does not document the degree of autonomy of local administrations in terms of taxation. For example, in some countries, the infra-national administration does not have the authority to change the tax rate or base. The indicator does not document the quality and objectives of public local expenditure.

***Methodological Annex:***



|   |                     |  |
|---|---------------------|--|
| STRATEGY FIELD  | TYPE                | MCS D  |
| <b>STRENGTHEN SOLIDARITY, COMMITMENT AND FINANCING FOR A SUSTAINABLE DEVELOPMENT AT REGIONAL, NATIONAL AND LOCAL LEVELS</b> | PRIORITY INDICATORS | EXCHANGES AND COOPERATION<br><br>MEDITERRANEAN COOPERATION IN THE FIELD OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT |
| <b>Public financing mechanisms to support the least favoured regions</b>  |                     | MSSD 31<br>COO_P05   |

**Strategic Objective:**

Reinforce social and territorial cohesion. Support within the Euro-Mediterranean Partnership, the transition to sustainable agricultural and rural development, and the emergence of integrated mechanisms and programs.

**Rationale:**

The development of the least favoured regions is crucial to improve territorial balance and requires the implementation of financing mechanisms.

Objective 1 of the Structural Funds is the main priority of the European Union's cohesion policy. In accordance with the treaty, the Union works to "promote harmonious development" and aims particularly to "narrow the gap between the development levels of the various regions".

In Southern and Eastern Mediterranean countries, there are very significant differences in social and economic development, particularly between urban and rural areas. Financing mechanisms to support under-privileged regions may play an important role in reducing these differences.

**Definition:**

Public financing mechanisms to support the most under-privileged regions are funds invested by national and international donors in the reduction of regional development discrepancies.

**Unit:**

(Yes/No)

US\$

**Objective and/or targeted values:**

**Methodological Indications:**

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- [http://ec.europa.eu/comm/regional\\_policy/objective1/index\\_fr.htm](http://ec.europa.eu/comm/regional_policy/objective1/index_fr.htm)
- Eurostat

**International Data Sources:**

- Eurostat

***Precautions for use:***  
***Methodological Annex:***

|  |  |  |
|--|--|--|
| <p style="text-align: center;">STRATEGY FIELD</p> <p style="text-align: center;"><b>STRENGTHEN HUMAN CAPITAL AND ACTORS' INVOLVEMENT:<br/>RESEARCH, TRAINING, EDUCATION, AWARENESS-RAISING<br/>AND PARTICIPATION</b></p> | <p style="text-align: center;">TYPE</p> <p style="text-align: center;">PRIORITY<br/>INDICATORS</p> | <p style="text-align: center;">MCSD</p> <p style="text-align: center;">POPULATION<br/>AND SOCIETY</p> <p style="text-align: center;">CULTURE<br/>EDUCATION,<br/>TRAINING</p> |
| <p><b>Youth literacy rate</b></p>  | <p style="text-align: center;">MSSD 32<br/>HUM_P01</p>   |  |

**Strategic Objective:**

Generalize primary education, according to Millennium Goals.

**Rationale:**

Illiteracy rates, particularly in rural areas and among women, remain high in developing Mediterranean countries.

The misalignment between qualifications acquired through schools and universities and market needs causes high unemployment, particularly among young graduates.

**Definition:**

The number of literate/illiterate persons aged fifteen to twenty-four, expressed as a percentage of the total population in that age group. A person is considered literate/illiterate if he/she can/cannot read and write with understanding a simple statement related to his/her life.

**Unit:**

Percentage

**Objective and/or targeted values:**

Implement global primary education.

Ensure that, by 2015, all children, boys and girls, in all countries, are able to complete a full primary education.

**Methodological Indications:**

The indicator is usually calculated by dividing the number of literate 15 to 25 year-olds by the total population in the same age group, and multiplying by 100.

Considering that data on literacy are not always available for all countries or all censuses, the Institute of Statistics of UNESCO applies modeling techniques to produce yearly literacy estimates based on data from national censuses and overviews.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- UNESCO institute of statistics <http://www.uis.unesco.org>
- [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)

**International Data Sources:**

- UNESCO institute of statistics <http://www.uis.unesco.org>

- [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)

***Precautions for use:***

Literacy may be assessed by different means: either with a simple question: «Can you read and write? Yes/No», or with a panel of literacy evaluation tests. In some cases, literacy is roughly assessed in population censuses, based on self-affidavits or on estimates of the un-schooled or uneducated population.

This situation complicates international comparisons. Time data comparisons, even in the same survey, may also be problematic, in that the definitions of literacy applied in surveys are not standardized.

***Methodological Annex:***

|   |                                |  |
|---|--------------------------------|--|
| STRATEGY FIELD<br><b>STRENGTHEN HUMAN CAPITAL AND ACTORS' INVOLVEMENT:<br/>RESEARCH, TRAINING, EDUCATION, AWARENESS-RAISING<br/>AND PARTICIPATION</b> | TYPE<br>PRIORITY<br>INDICATORS | MCS D<br>POPULATION<br>AND SOCIETY<br><br>CULTURE<br>EDUCATION,<br>TRAINING<br><br>(7) |
| <b>Girl/Boy primary and secondary school<br/>registration ratio</b>   | MSSD 33<br>HUM_P02             |  |

**Strategic Objective:**

Eradicate differences in education between genders, in compliance with Millennium Goals.

**Rationale:**

Education is essential to human development and eradicating differences between genders could contribute to enhancing the status and potential of women. Education of women is also a determining factor for economic development.

**Definition:**

The indicator compares the ratio of girls and boys registered in private and public primary and secondary schools.

**Unit:**

Percentage

**Objective and/or targeted values:**

Promote equal opportunity and more power for women.

Eradicate gender differences in primary and secondary education, preferably by 2005, and for all levels of education by 2015, at the latest.

**Methodological Indications:**

The indicator is the ratio of the number of girls in school vs the number of boys, regardless of age.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- UNESCO <http://portal.unesco.org>
- [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)

**International Data Sources:**

- UNESCO institute of statistics <http://www.uis.unesco.org>
- [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)

**Precautions for use:**

The indicator is an imperfect measure of girls' access to schools, since fluctuations in the ratio can reflect an increase in the schooling of girls (positive) or a drop in the number of boys (negative), and

because there is no specification as to the number of children registered in school who complete the full appropriate cycle.

The indicator is further limited by the fact that the ratio reflects the gender-based structure of the school-age population. In case of a significant difference of 1 between the genders in the school-age population, the indicator does not accurately reflect the actual differences between registration of girls and boys. This is the case in countries where boys outnumber girls in the youngest populations.

***Methodological Annex:***

|   |  |  |
|---|--|--|
| STRATEGY FIELD<br><b>STRENGTHEN HUMAN CAPITAL AND ACTORS' INVOLVEMENT:<br/>RESEARCH, TRAINING, EDUCATION, AWARENESS-RAISING<br/>AND PARTICIPATION</b> | TYPE<br><b>PRIORITY<br/>INDICATORS</b> | MCS<br><b>POPULATION<br/>AND SOCIETY<br/><br/>CULTURE<br/>EDUCATION,<br/>TRAINING<br/><br/>(9)</b> |
| <b>Public and private expenses for research and development in percentage of GDP</b>  | <b>MSSD 34<br/>HUM_P03</b>             |  |

**Strategic Objective:**

Increase expenditures for research and development, in synergy with the private sector, by 2015, to attain the average level of countries with equivalent revenues. Emphasize rational use of natural resources, development of environmentally-friendly techniques, and enhance the economic and social know-how and diversity of the Mediterranean.

**Rationale:**

Average expenditures for R&D, including in developed North Rim countries, are much lower than expenditure in countries with equivalent revenues in other regions of the world.

**Definition:**

The indicator is composed of two sub-indicators, defined as follows:

1. the share of the operational budget of the public sector earmarked for R&D;
2. the share of R&D expenditures vs GDP for the private sector.

**Unit:**

Percentage

**Objective and/or targeted values:**

**Methodological Indications:**

Experimental research and development include innovations and systematic increase of knowledge, including knowledge of Mankind, culture and society, and the use of this knowledge in new applications. R&D is defined as three activities: fundamental research, applied research and experimental development. R&D expenditures include amounts and expenses paid to trainers, and amounts to fund the appropriate facilities, if they are solely dedicated to training and limited to company use.

**Geographical scope:**

| NATIONAL LEVEL | CATCHMENT AREAS | MEDITERRANEAN COASTAL ZONES (NUTS 3) | COASTAL ZONES | MEDITERRANEAN SITES | MARINE ZONES |
|----------------|-----------------|--------------------------------------|---------------|---------------------|--------------|
| YES            |                 |                                      |               |                     |              |

**References:**

- UNESCO institute of statistics <http://www.uis.unesco.org>

**International Data Sources:**

- UNESCO institute of statistics <http://www.uis.unesco.org>

**Precautions for use:**

**Methodological Annex:**

Gross domestic expenditure on R&D (GERD) is total intramural expenditure on R&D performed on the national territory during a given period. The sources of funds for GERD are classified according to the following five categories:

- Business enterprise funds include funds allocated to R&D by all firms, organizations and institutions whose primary activity is the market production of goods and services (other than the higher education sector) for sale to the general public at an economically significant price, and those private non-profit institutes mainly serving these firms, organizations and institutions.
- Government funds refer to funds allocated to R&D by the central (federal), state or local government authorities. These includes all departments, offices and other bodies which furnish but normally do not sell to the community those common services, other than higher education, which cannot be conveniently and economically provided and administer the state and the economic and social policy of the community. Public enterprises funds are included in the business enterprise funds sector. These authorities also include private non-profit institutes controlled and mainly financed by government.
- Higher education funds include funds allocated to R&D by institutions of higher education comprising all universities, colleges of technology, other institutes of post-secondary education, and all research institutes, experimental stations and clinics operating under the direct control of or administered by or associated with higher educational establishments.
- Private non-profit funds are funds allocated to R&D by non-market, private non-profit institutions serving the general public, as well as by private individuals and households.
- Funds from abroad refer to funds allocated to R&D by institutions and individuals located outside the political frontiers of a country except for vehicles, ships, aircraft and space satellites operated by domestic organisations and testing grounds acquired by such organisations, and by all international organizations (except business enterprises) including their facilities and operations within the frontiers of a country.