







30 January 2015 Original: English

Conference on the Review of the Mediterranean Strategy for Sustainable Development

Floriana, Malta, 17-18 February 2015

Draft Mediterranean Strategy for Sustainable Development

For environmental and economic reasons, this document is printed in a limited number. Delegates are kindly requested to bring their copies to meetings and not to request additional copies.

-Draft-

Mediterranean Strategy for Sustainable Development 2016–2025

Contents

1.	INTRODUCTION AND BACKGROUND	1
1.1.	The Mediterranean region	2
1.2.	Pressures and impacts	2
1.3.	Background	4
1.4.	Formulating the Mediterranean Strategy for Sustainable Development	9
2.	MEDITERRANEAN STRATEGY FOR SUSTAINABLE DEVELOPMENT:	
	THEMATIC AREAS, STRATEGIC DIRECTIONS AND ACTIONS	11
2.1.	Ensuring sustainable development in marine and coastal areas	16
2.2.	Promoting resource management, food production and security through sustainable fo	rms of
	rural development	20
2.3.	Addressing climate change as a priority issue for the Mediterranean	24
2.4.	Planning and managing sustainable Mediterranean cities	30
2.5.	Transition towards a green economy	36
2.6.	Governance in support of sustainable development	40
3.	IMPLEMENTATION AND FINANCING	44
3.1.	Implementation of the Mediterranean Sustainable Development Strategy – the players	44
3.2.	Financing the implementation of the Strategy	45
3.3.	Towards a regional dashboard on the implementation of the Strategy: a monitoring s	system
	and indicators for the Strategy	46

1. INTRODUCTION AND BACKGROUND

Sustainable development seeks to address the needs of current and future generations, utilizing natural resources and ecosystems in ways that preserve them and ensure equitable access to them in the present and the future. It sets the framework for securing viable and lasting development and decent livelihoods for all, which are particularly important considerations in the current challenging Mediterranean socio-economic context.

The United Nations process on the Sustainable Development Goals, one of the key outcomes of the United Nations Conference on Sustainable Development (Rio+20), aims to build upon the Millennium Development Goals and propose a set of goals that should be coherent with and integrated into the United Nations development agenda beyond 2015. Poverty eradication, food security, healthy lives and gender equality are all addressed, together with access to basic resources, such as water and energy, as well as key environmental challenges, including climate change and biodiversity loss.

Sustainable development is of key importance for the Mediterranean: it is a closed sea, in which water renewal is limited by the narrow connection to the ocean, and therefore particularly sensitive to pollution. It has a very mild climate, making it home to a large diversity of natural ecosystems and indigenous and endemic species, which at the same time are fragile and threatened by degradation and extinction, resulting from changes in the conditions around them.

The Mediterranean is also subject to considerable pressures. With its rich history and exceptional natural and cultural landscapes, its coasts accounted for 31 per cent of global tourist arrivals in 2011, while in previous years that had reached more than 35 per cent. At the same time, international tourism receipts reached €190 billion, representing approximately 26 per cent of the global total.¹ Urban agglomerations on the Mediterranean coasts, along with tourist infrastructure, have resulted in the development of large and megacities, with consequent pressures from population and economic activities being accumulated in that fragile environment. Global shipping routes through the Mediterranean make the density of maritime traffic exceptional for a semi-closed sea. Mediterranean food and diet is renowned around the world, but Mediterranean food products depend entirely on the sustainability of the rural landscapes and resources of the region. The recent surge of interest in commercially exploiting hydrocarbons and minerals under the Mediterranean seabed also poses increased risks for the Mediterranean environment.

Significant discrepancies in development levels and living standards between countries and the conflicts in the region, negatively affecting investment and development, also pose challenges for envisaging a sustainable future for the Mediterranean region. The fragility of the region is further aggravated by its sensitivity to climate change: in its Fifth Assessment Report, the Intergovernmental Panel on Climate Change has identified Mediterranean ecosystems among the most impacted by global climate change drivers.

The aim of the Mediterranean Strategy for Sustainable Development is to provide a strategic policy framework, built upon a broad consultation process, for securing a sustainable future for the Mediterranean region. Its purpose is to adapt international commitments to regional conditions, to guide national sustainable development strategies and to stimulate regional cooperation in the achievement of sustainable development objectives. The strategy is also expected to lead to synergies being forged with and between the work of important national and

regional players and stakeholders, leading to increased efficiency in the achievement of sustainable development in the Mediterranean.

1.1. The Mediterranean region

The Mediterranean occupies a basin of almost 2.6 million km². The coastline is 46,000 km long and the basin itself about 3,800 km from east to west and 900 km from north to south at its maximum. The average water depth is approximately 1,500 m, with a maximum depth of 5,121m, and the shallowest part in the northern Adriatic has an average depth not exceeding 50m.

The Mediterranean drainage basin extends over an area of more than 5 million km². The estimated residence time of Mediterranean waters is quite high, around 50–100 years, which has important implications for the cycling and eventual export of contaminants.

A vast set of coastal and marine ecosystems deliver valuable benefits to all coastal inhabitants. The basin supports some of the richest fauna and flora in the world and has an extraordinary diversity of habitats. It is recognized as one the 25 top global hotspot areas of rich biodiversity, a large number of endemic species and critical levels of habitat loss. There are an estimated 10,000–12,000 marine species in the Mediterranean, comprising approximately 8,500 macroscopic fauna, over 1,300 plant species and 2,500 species from other taxonomic groups. That represents 4–18 per cent of the world's known marine species, depending on the taxonomic group, in an area covering less than 1 per cent of the world's oceans and less than 0.3 per cent of its volume.³

The total population of the Mediterranean countries grew from 276 million in 1970 to 412 million in 2000, and to 466 million in 2010. The population is predicted to reach 529 million by 2025. Overall, more than half the population lives in countries on the southern shores of the Mediterranean and that proportion is expected to grow to three quarters of the population by 2025. The population of the Mediterranean region is concentrated near the coasts. More than one third of the population lives in coastal administrative entities totaling less than 12 per cent of the surface area of the Mediterranean countries. The population of the coastal areas of the Mediterranean grew from 95 million in 1979 to 143 million in 2000 and could reach 174 million by 2025.

1.2. Pressures and impacts

The state of the Mediterranean coastal and marine environment varies from place to place, but all parts of the Mediterranean are subject to multiple pressures, acting simultaneously and in many cases chronically. The 2012 report on the state of the Mediterranean marine and coastal environment highlights the major issues requiring coordinated policy and management responses in the coming years in order to stem the tide of degradation of the Mediterranean ecosystems:

- Coastal development and sprawl, driven by urban and touristic development, leading to fragmentation, degradation and loss of habitats and landscapes, including the destabilization and erosion of the shoreline.
- Chemical contamination of sediments and biota caused by pollution from urbanization, industry, anti-foulants and atmospheric transport. Although environmental conditions are improving with regard to certain pollutants in many Mediterranean areas, thanks to improved control of land-based pollution releases, contamination linked to hazardous substances remains a problem in many areas.
- **Eutrophication,** caused by human-mediated input of nutrients into marine waters, is a source of concern, especially in coastal areas near large rivers and/or cities. Impacts of

eutrophication include algal blooms, some of them harmful, and hypoxia. The direct socioeconomic impacts are related to toxicity or mortality of harvested fish and shellfish, loss of aesthetic value of coastal ecosystems and reduced water quality.

- The impact of **marine litter**, concentrated especially in bays and shallow areas, has recently been identified as a matter of concern across the Mediterranean.
- The impact of **marine noise** on biota, especially marine mammals and fish, requires targeted research. Intense maritime traffic, particularly in the western Mediterranean, and intense offshore exploration and military activities in specific locations suggest potentially serious impacts.
- Invasive non-indigenous species have increased in recent years, particularly in the easternmost reaches of the Mediterranean. Documented impacts on natural diversity include predation, alteration of the food chain, niche competition and modification of habitats, leading to a variety of impacts on fishing, aquaculture, human health and tourism.
- Overexploitation beyond sustainable limits affects many of the commercially exploited fish stocks of the Mediterranean. The result is changes in species diversity, with some species regarded as endangered, vulnerable or near-threatened. Other pressures brought about by the intense fishing activity in the Mediterranean include bycatch, non-selective fishing methods and destructive fishing. While touted as a means of reducing pressure on wild stocks, aquaculture has increased noticeably since the 1990s, adding new pressures. Those include nutrient and organic matter pollution, leading to eutrophication and eventual benthic anoxia, pollution through the release of antibiotics and biocides and the introduction of non-indigenous species.
- **Sea-floor integrity** is affected mainly by bottom fishing, but also by dredging and offshore installations. Bottom fishing and dredging lead to the re-suspension of sediment and organisms and to changes in the structure of benthic communities. The impact of offshore installations is not well researched.
- Changed **hydrographic conditions** caused by local disruption of circulation patterns by human-made structures, changes in freshwater fluxes to the sea, brine release from desalination plants, or climate change have an influence on both near-shore and offshore areas. Changes in freshwater flows also affect sediment delivery to the coastal zone near river mouths, with impacts on coastline stability and key systems, such as dune-beach complexes.
- Marine food webs have been affected by fisheries pressures that have led to the estimated reduction on average of one trophic level in fisheries catches during the last half-century, increased jellyfish numbers and reduced abundance of large predator species.

In addition, **Climate change impact** is becoming increasingly evident in the Mediterranean. In its recent Fifth Assessment Report (2014), the Intergovernmental Panel on Climate Change considered the Mediterranean region as "highly vulnerable to climate change" and stated that it would "suffer multiple stresses and systemic failures due to climate changes". According to the conclusions from the project on "Climate change and impact research: the Mediterranean environment" funded by the European Union:

- In the course of the twenty-first century, the Mediterranean region might experience substantial warming, which in summer might be of the order of 0.6° C/decade.
- The warming appears to be accompanied by a reduction in precipitation (projected annual mean precipitation in the period 2021–2050 will decrease by about 5 per cent compared with the mean for the period 1961–1990) over the entire region, more pronounced in the southern and western part of the basin during summer.

- Inter-annual variability of temperature and precipitation in the Mediterranean basin is projected to generally increase, especially in summer, as is the occurrence of extreme heat and drought events.
- The sea level of the Mediterranean might increase, causing adverse impacts on coastal areas. The projected mean sea-level rise in the period 2021–2050, owing to thermal expansion and salinity-density compensation of sea water, might be in the range of about +6/+11 cm.
- It is expected that there will be an increase in the number of very hot days and nights and longer heat waves. The projections also indicate an earlier onset and a longer duration of droughts.
- Overall, there will be an increase in the intensity of heavy precipitation events over most of the Mediterranean region in all seasons.

Furthermore, and a key issue for the region is water shortages, both acute and chronic. Where the deficit is greatest, people resort to so-called non-conventional water resources, such as greywater reuse, rainwater harvesting and desalinization. Demand for water has doubled in the past 50 years, with agriculture remaining the top consumer. Diversions, leaks and waste of water resources, particularly in agriculture, still represent nearly 40 per cent of total demand. To meet growing demand, countries are increasing their exploitation of non-renewable water sources (16 km³/year for the entire region), thereby aggravating the already serious problem of salinization of soil and coastal aquifers. The lack of sanitation and water-treatment infrastructure degrades the quality of water and other resources and makes it more difficult to supply clean water.

With respect to agriculture, in the north, marginal agricultural and grazing areas are abandoned and reforestation campaigns have taken effect. In the southern and eastern Mediterranean countries, by contrast, pressures on ecosystems remain very strong, particularly in the North African countries, owing to the clearing of marginal land for cultivation, overharvesting of wood and overgrazing. The risk of forest fires increases as grazing recedes and brush grows up on pastureland. That will only increase as the climate changes and dry seasons become longer and even drier.

Overall, unsustainable patterns of consumption and production are upstream drivers of pressures and impacts on marine and coastal ecosystems, in terms of pollution and waste generation (marine litter, toxic chemicals and nutrients), land degradation (intensive resource exploitation, coastal artificialisation, erosion) and biodiversity (decrease of local species, overexploitation of fisheries, habitat degradation).

1.3.Background

At the 12th Conference of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) in Monaco in November 2001, in line with the outcomes of the World Summit on Sustainable Development, the 21 Mediterranean countries and the European Community decided to prepare a Mediterranean Strategy for Sustainable Development.

The Strategy was developed as a result of a consultation process that mobilized Mediterranean stakeholders, including Governments and civil society through the participation of non-governmental organizations and key experts. The first Mediterranean Strategy for Sustainable Development was adopted by the Contracting Parties to the Barcelona Convention in 2005 at their 14th meeting in Portorož, Slovenia.⁴

The need for the Strategy remains strong today, as while the global and regional context has changed significantly, the pressures are even more pronounced. At the same time, new regional instruments have been developed, such as the ecosystem approach and the Protocol for Integrated Coastal Zone Management in the Mediterranean under the Barcelona Convention, as well as sustainable consumption and production approaches.

Above all, the process for agreeing on the Sustainable Development Goals, decided upon at Rio+20, creates a platform on which to base and discuss sustainable development. In this respect, the present Strategy has been formulated taking into account the draft Sustainable Development Goals.

At the same time, on the regional level, the landscape is characterized by the emergence of initiatives focusing on development through increased collaboration between the south and north coasts of the Mediterranean, such as the Union for the Mediterranean. Other regional initiatives focus on specific issues to be addressed at the Mediterranean level, aiming to tackle the most significant sources of environmental degradation in the Mediterranean.

In the light of the outcomes of Rio+20, the Contracting Parties to the Barcelona Convention requested, at their 18th Ordinary Meeting held in Istanbul, Turkey, in December 2013, that a review of the Strategy be launched (Decision IG.21/11), with a view to submitting a revised strategy for consideration and adoption by the Contracting Parties at their 19th meeting, to be held in December 2015 in Greece. The Decision emphasizes the importance of synergies with the global Sustainable Development Goals process, in order to ensure coherence between global and Mediterranean regional objectives and targets, while allowing for regional innovation and specificities.

In addition, the Decision IG.21/11 emphasises the need for synergies and coherence between the Strategy and other regional initiatives, both those led by MAP and those led by other actors. As well as the need to consider policy initiatives and instruments at the regional level, the review of the Strategy will need to take on board key existing MAP initiatives and/or instruments, such as the road map for the implementation of an ecosystem approach in the Mediterranean, the action plan for the Protocol on Integrated Coastal Zone Management in the Mediterranean, the upcoming regional framework on adaptation to climate change and the upcoming Sustainable Consumption and Production Action Plan. The reviewed Strategy will also need to develop linkages with other regional strategies (existing or to be finalized) and strategic frameworks.

1.3.1. Assessment of the implementation of the Mediterranean Strategy for Sustainable Development during the period 2005–2011

In 2011, an assessment of the implementation of the Strategy was carried out five years after its adoption, which offered a number of useful conclusions (UNEP(DEPI)/MED WG.358/4). The key conclusions are summarized below:

- Progress had been achieved regarding specific aspects, but much remained to be achieved for priority issues, such as climate change, energy intensity, water and sustainable tourism. Overall, while for some objectives the situation was improving, for others the situation was worsening, particularly for the environmental objectives.
- The revised Strategy should put more emphasis on orientations, actions and indicators concerning emerging priorities, such as climate change adaptation and the green economy. New indicators, such as those related to population migration caused by climate change, would allow the monitoring of adaptation processes in greater detail. Tangible targets and indicators for their measurement should be elaborated in the revised Strategy.

- An explanation of the procedures, resources and organization for the transformation of the Strategy into actions at national level were needed, as the passage from a regional strategic framework to national policies was neither automatic nor straightforward, especially taking into account the interlinkages between different sectors and levels of administration and governance in the countries.
- The implementation of the Strategy had been strongly affected by the existing governance framework. A different organization of the roles and organization framework concerning the UNEP/MAP for the Barcelona Convention, including the role and expectations of focal points, would be needed to create the channels for effective implementation of the Strategy.
- The Strategy should include, as far as possible, opportunities for synergies with other programmes, organizations and initiatives and, when feasible, indicate timing and modalities by which those synergies might arise. MAP should create and adapt existing work units to provide a monitoring service for the existing programmes and push forward activities of technical assistance, knowledge sharing, capacity-building, information exchange and monitoring.
- The business community, local authorities or their representatives, academics and NGOs should be more involved at the national level and at the level of the Mediterranean Commission on Sustainable Development. Synergies with such partners could be more clearly mapped out in the revised strategy and monitoring of those synergies should be ongoing and would also help national implementation.

1.3.2. Influence of the Mediterranean Strategy for Sustainable Development on national strategies for sustainable development in the region

The MAP secretariat carried out a review and assessment of national strategies for sustainable development in the Mediterranean Region in 2009, in order to "provide an overall assessment of the actions and initiatives carried out so far by the Mediterranean countries for sustainable development and hence allow for a better appreciation of the state of play".

Useful findings emerged from that report, specifically as regards the relation and effect of the strategy on the development and implementation of national strategies for sustainable development. In summary, the following points can be highlighted:

- It can generally be said that the strategy has played a role more at the regional level than in effectively engaging the authorities at national level to produce their national strategies for sustainable development. That can be attributed to other engagements, or to endogenous reasons. However, the MAP initiative to assist in the preparation of national strategies for sustainable development is worthwhile and has been embraced by a number of countries. In addition, although national strategies are structured around the three pillars of sustainable development, more often than not the environmental issues overshadow the other two pillars.
- A single government institution, usually a Ministry of the Environment, generally coordinates the process. It is often the case that the administrative entity responsible for coordinating the formulation and implementation of sustainable development strategies faces the challenge of providing leadership and cross-government support, especially when sustainable development strategy processes are not connected with government planning and budgeting, which is often the case. In addition, there is the risk of cross-government commitment fading through time, especially in times of economic crisis.

In addition to the findings of the review, the assessment of the Strategy concluded that it had had a less strong influence on national strategies for sustainable development, particularly in European Union countries which were influenced more strongly by European Union policies. However, the Strategy was widely appreciated as a background document to inspire national strategies and had proved to be influential at a strategic level.

1.3.3. Policy and institutional frameworks at international and Mediterranean levels

The review of the Strategy took place within a global and regional policy environment, which was formed through a set of programmes and activities that shaped the background against which the Strategy will have to be agreed and implemented. Taking into consideration these programmes and activities is fundamental in the formulation of the Strategy in order to ensure the streamlining of implementation at a regional level with relevant activities and policies. Some of them are described below:

"The future we want"/Rio+20

The primary political context laying the foundation for the review of the Strategy comes from General Assembly resolution 66/288 of 27 July 2012, by which Heads of State and Government endorsed the outcome document of the United Nations Conference on Sustainable Development, entitled "The future we want".

"The future we want" puts a particular focus on the green economy in the context of sustainable development and poverty eradication, and addresses the need to establish the appropriate institutional framework for sustainable development, including the engagement of major groups and other stakeholders, the participation of international financial institutions and the deployment of activities at regional, national, subnational and local levels.

Sustainable Development Goals⁵

One of the main outcomes of the Rio+20 Conference was the agreement by Member States to launch a process to develop a set of sustainable development goals, which would build upon the Millennium Development Goals and converge with the post-2015 development agenda.

"The future we want" set out a mandate to establish an open working group that would submit a report to the sixty-eighth session of the General Assembly containing a proposal for a set of sustainable development goals for consideration and appropriate action. The Assembly further stated that the Sustainable Development Goals should be coherent with and integrated into the United Nations development agenda beyond 2015.

Barcelona Convention and its Protocols

Being the only regional multilateral agreement for the protection of the Mediterranean marine and coastal environment, the Barcelona Convention aims "to prevent, abate, combat and to the fullest extent possible eliminate pollution of the Mediterranean Sea Area" and "to protect and enhance the marine environment in that area so as to contribute towards its sustainable development". The Barcelona Convention rests on seven associated protocols:

- The Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea (Dumping Protocol, adopted 1976, in force 1978, amended 1995),
- The Protocol concerning Co-operation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in Cases of Emergency (Emergency Protocol, adopted 1976, in force 1978), replaced by the Protocol concerning Co-operation in Preventing Pollution from Ships and, in Cases of Emergency, Combating

Pollution of the Mediterranean Sea (Prevention and Emergency Protocol, adopted 2002, in force 2004),

- The Protocol for the Protection of the Mediterranean Sea Against Pollution from Land-based Sources and Activities (LBS Protocol, adopted 1980, in force 1983; amended 1996, in force 2008),
- The Protocol Concerning Mediterranean Specially Protected Areas (SPA Protocol, adopted 1982, in force 1986) replaced by the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol, adopted 1995, in force 1999),
- The Protocol for the Protection of the Mediterranean Sea Against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Offshore Protocol, adopted 1994, in force 2011),
- The Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (Hazardous Wastes Protocol, adopted 1996, in force 2008),
- The Protocol on Integrated Coastal Zone Management (ICZM Protocol, adopted 2008, in force 2011)

The Mediterranean Action Plan II adopted in 1995 by COP 10 as well as by a Conference of the Plenipotentiaries held in Barcelona, Spain, June 1995 contains three principal components:

- i. Sustainable development in the Mediterranean
 - Integration of environment and development
 - Conservation of nature landscape and sites
 - Assessment, prevention and elimination of marine pollution
 - Information and participation
- ii. Strengthening of the legal framework
- iii. Institutional and Financial Arrangements

It also contains an annex describing priority fields of activities for the environment and development in the Mediterranean basin (1996-2005) that was further complemented and replaced in 2005 and 2009 by the multiannual programme of work of the MCSD (COP 14) and 5 year UNEP/MAP strategic programme of work (COP 16).

In addition to MAP II, the Convention and its Protocols, the following regional strategies and programmes provided foundation for medium term and biannual planning and programming of UNEP/MAP's work so far:

- The Strategic Action Programme to Address Pollution from Land-Based Activities (SAP MED), adopted by the Contracting Parties to the Barcelona Convention at their Tenth Meeting held in Tunis in 1997
- The Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (SAP BIO), adopted by the Contracting Parties to the Barcelona Convention at their Thirteenth Meeting held in Catania in 2003
- The Mediterranean Strategy for Sustainable Development (MSSD), adopted by the Contracting Parties to the Barcelona Convention at their Fourteenth Meeting held in Portoroz, Slovenia in 2005
- Regional Strategy for Prevention of and response to marine pollution from Ships
- Mediterranean Strategy on Ships' Ballast Water Management

The Union for the Mediterranean

The Union for the Mediterranean is a multilateral partnership aimed at increasing the potential for regional integration and cohesion among Euro-Mediterranean countries. The Union is inspired by the shared political will to revitalize efforts to transform the Mediterranean into an area of peace, democracy, cooperation and prosperity.

On launching the Union, the heads of State and Government identified six priority areas in which all project proposals would have to uphold the principles of sustainable development:

- Depollution of the Mediterranean
- Maritime and land highways
- Civil protection
- Alternative energies: Mediterranean solar plan
- · Higher education and research, Euro-Mediterranean university
- Mediterranean business initiative.

Horizon 2020 initiative

One specific initiative developed under the Union for the Mediterranean, relevant to the work of the Barcelona Convention on the protection of the Mediterranean Sea is the Horizon 2020 initiative. It aims to depollute the Mediterranean by the year 2020 by tackling the sources of pollution that account for around 80 per cent of the overall pollution of the Mediterranean Sea: municipal waste, urban waste water and industrial pollution.

Europe 2020 Strategy

The Europe 2020 Strategy is European Union's growth strategy for the coming decade. In a changing world, the European Union wants to become a smart, sustainable and inclusive economy. Those three mutually reinforcing priorities should help the European Union and the Member States deliver high levels of employment, productivity and social cohesion. Concretely, the Union has set five ambitious objectives on employment, innovation, education, social inclusion and climate/energy, to be reached by 2020. Each Member State has adopted its own national targets in each of those areas. Concrete actions at the European and national levels underpin the Strategy.

A resource-efficient Europe: flagship initiative of the Europe 2020 strategy

The flagship initiative for a resource-efficient Europe under the Europe 2020 strategy supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth. It provides a long-term framework for actions in many policy areas, supporting policy agendas for climate change, energy, transport, industry, raw materials, agriculture, fisheries, biodiversity and regional development. This initiative serves to increase certainty for investment and innovation and to ensure that all relevant policies factor in resource efficiency in a balanced manner.

1.4.Formulating the Mediterranean Strategy for Sustainable Development

The review of the Strategy was carried out in three phases. During the first phase, the review process was launched and a consultation document was drawn up. On the basis of that document a wide consultation process was carried out, focusing on the vision and issues to be addressed in the review. The second phase envisaged the drafting of the revised Strategy, based on the inputs received from feedback on the review consultation document and other ad hoc feedback received. During the third phase the draft revised Strategy will be submitted for endorsement by the Mediterranean Commission for Sustainable Development in June 2015 during its 16th meeting in Morocco and final approval for

the draft Strategy will be sought during the 19th Meeting of the Contracting Parties to the Barcelona Convention, to be held at the end of 2015 in Greece.

At the end of the first phase of the review, a draft vision and structure for the new strategy was agreed during the meeting of the Steering Committee of the Mediterranean Commission on Sustainable Development in Malta in June 2014. Drawing on the issues emerging from the consultation and the proposals emerging for the global Sustainable Development Goals, the Steering Committee then proposed a structure for the new strategy, based on six thematic areas. Echoing the decision taken at the 18th meeting of the Contracting Parties to the Barcelona Convention, the Steering Committee also emphasized that the revised strategy should focus on the interface between the environment and development. Socioeconomic matters would be addressed insofar as they relate to the interfacing thematic areas.

A participatory approach was also taken during the second phase of the review, when the Strategy was being drafted. Six thematic working groups made up of key stakeholders and experts were constituted to develop the relevant sections of the revised Strategy. Face-to-face meetings complemented the electronic communications of the groups during this period. During the deliberations of the working groups, the issues noted in the Strategy, along with those emerging from the consultation, were reviewed and a new list of issues for each thematic area was prepared, also taking into account the most relevant European Union instruments and tools, as well as relevant international and regional commitments. A set of strategic directions addressing those issues was then elaborated for each thematic area. The strategic directions are the building blocks of the Strategy and in the next chapter they are presented, with a set of concrete actions to be taken at national and regional levels.

2. MEDITERRANEAN STRATEGY FOR SUSTAINABLE DEVELOPMENT: THEMATIC AREAS, STRATEGIC DIRECTIONS AND ACTIONS

The aim of this Strategy is to provide a strategic policy framework to secure a sustainable future for the Mediterranean region. It seeks to adapt international commitments to regional conditions, to guide national sustainable development strategies and to stimulate regional cooperation in the achievement of sustainable development objectives.

The Strategy is built around the following vision:

A prosperous and peaceful Mediterranean region in which people enjoy a high quality of life and where sustainable development takes place within the carrying capacity of healthy ecosystems. This is achieved through common objectives, cooperation, solidarity, equity and participatory governance.

A set of guiding principles also informs the Strategy: the importance of an integrated approach to development and environment planning, a balanced approach to territorial development and openness to a plurality of future development models.

It focuses on the following thematic areas:

- 1. Seas and coasts
- 2. Natural resources, rural development and food
- 3. Climate
- 4. Sustainable cities
- 5. Transition towards a green economy
- 6. Governance

These thematic areas correspond closely to those covered by the proposed Sustainable Development Goals in the 2014 draft from the Open Working Group on sustainable development goals, submitted for consideration by the United Nations General Assembly at its 69th Session in 2015, as indicated in Table 1 below. Nevertheless, due to the interlinkages between thematic areas, almost all the proposed sustainable development goals are directly or indirectly relevant to the thematic areas.

Table 1. Linking the thematic areas of the Mediterranean Strategy for Sustainable Development to the global sustainable development goals

Proposed sustainable development goals (2014)
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss 6. Ensure availability and sustainable management of water and sanitation for all.

3. Climate	13. Take urgent action to mitigate climate change and its impacts.		
4. Sustainable cities	11. Make cities and human settlements inclusive, safe, resilient and sustainable		
	7. Ensure access to affordable, reliable, sustainable, and modern energy for all		
5. Transition towards a	8. Promote sustained, inclusive and sustainable economic growth, full and		
green economy	productive employment and decent work for all		
	9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation		
	12. Ensure sustainable consumption and production patterns		
6. Governance	16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.		
	17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.		
Cross-cutting sustainable development goals			
Social issues	1. End poverty in all its forms everywhere		
	3. Ensure healthy lives and promote well-being for all at all ages		
	4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all		
	5. Achieve gender equality and empower all women and girls		
	10. Reduce inequality within and among countries		

The thematic areas provide the backbone of the Mediterranean Strategy for Sustainable Development. Each thematic area has been developed to contain a list of strategic directions that need to be followed in order to address the relevant issues in that thematic area. The strategic directions are complemented by actions to be taken at national and regional levels. In certain areas, flagship initiatives were also identified, which demonstrate the vision of the Strategy in an exemplary way. The key issues identified for each thematic area are presented in Box 1.

Box 1. List of issues to be addressed by thematic area

Seas and coasts

Continued environmental degradation and increased risks from marine pollution, loss of biodiversity, ecosystem fragmentation and degradation, unsustainable exploitation of living resources and alien species in ecological systems; Impacts from exploitation of non-living marine resources; and, Insufficient scientific knowledge and reliable data.

Natural resources, rural development and food

Natural resources and ecosystem services

- ➤ Loss of biodiversity and local varieties of crops and indigenous breeds from:
 - Overexploitation or illegal use of water and other natural resources
 - O Habitat loss, degradation and fragmentation
 - Alien and invasive species
 - Genetically modified organisms
 - Climate change
- Pollution of sea, soil, water and air
- > Protected areas at risk from deficient spatial coverage, planning, management and funding
- Insufficient awareness of ecosystem services and their economic benefits from society, industries and policymakers

Rural development and food

- Loss of agricultural land, erosion and desertification
- Socioeconomic inequalities affecting rural populations, particularly women and youth
- Cross-border issues in the management of natural resources
- Lack of access to markets by local and small producers
- Agricultural production and market controlled by large players, leaving limited access for small-scale producers
- ➤ Loss of traditional know-how
- Insufficient collective organization and lack of participation of local communities in natural resource management
- Insufficient consideration of water, land and food security nexus

Climate

- Scientific knowledge and tools on climate change not sufficiently developed and used for decision-making
- Damage caused by climate change increase, including extreme events and long-term steady changes, in key vulnerable areas and sectors
- ➤ Growing trend of greenhouse gas emissions [also beyond energy sector]
- ➤ Slow pace in emergence of climate-friendly economies due to limited access to best available technologies and alternatives
- Climate change adaptation and mitigation costs largely unmet at national and local levels
- Over-reliance on public funding and State-led initiatives
- Non-homogenous institutional and legal frameworks

Sustainable cities

- Increased linear coastal urbanization resulting in inadequate protection and management of land, urban sprawl owing to illegal construction and gentrification of coasts
- Urban quality of life and health degraded by traffic congestion, noise, poor air quality, inadequate supply of sanitation and increased generation of urban waste
- Resilience reduced by impacts of natural risks, particularly those triggered by climate change
- Unsatisfactory urban economic and social cohesion, caused by regional territorial imbalance, results in increased urban poverty, especially in slums and informal urban settlements
- Increased demand for energy coupled with low level of efficiency of energy utilization

Transition towards a green economy

- Socioeconomic inequalities between and within countries and high unemployment in particular for youth and women
- Economic growth that does not take into account the environmental and social impact
- > Unsustainable lifestyles based on high resource consumption patterns and low recycling rates
- Environmentally harmful and inefficient production facilities
- ➤ Investment flows financing unsustainable facilities and inefficient infrastructures
- Wrong price/market signals and fiscal incentives not valuing intangible and natural capital and externalities

Governance

- Poor understanding of the relationship between population movements and environmental sustainability
- Inequalities among and within countries, such as North-South disparities and increased levels of social exclusion
- Fragmentation of responsibility in different levels of governance and between sectors
- ➤ Insufficient planning, management and implementation of existing instruments
- Inadequate awareness, education, and research and innovation regarding sustainable development

Table 2 lists the strategic directions for each thematic area. It also indicates the interlinkages between strategic directions: such interlinkages are of particular interest, as they show how the implementation of one strategic direction may also affect the implementation of the activities under another area.

Table 2. Strategic directions under each thematic area of the Mediterranean Strategy for Sustainable Development

Develop		Tri		-4:-			_
Strate	gic directions	1	nem 2	atic	are	5	6
and ts	1.1: Strengthen implementation of and compliance with the Protocols of the Barcelona Convention and other regional policy instruments and initiatives supplemented by national approaches		_				Ü
1. Seas and coasts	1.2: Establish and enforce regulatory mechanisms to prevent and control open ocean unsustainable exploitation, including Marine Spatial Planning						
1.	1.3: Develop capacity and implement schemes for sharing integrated monitoring data related to the marine and coastal environment at sub-national, national and regional levels						
ral 	2.1: Promote the sustainable use, management and conservation of natural resources and ecosystems						
es, rui i food	2.2: Promote conservation and use of indigenous or traditional plant varieties and domestic animal breeds, value traditional knowledge in rural management decisions						
Natural resources, rur development and food	2.3: Promote networks of ecologically protected areas at national and Mediterranean level and enhance stakeholder awareness on the value of ecosystem services and the implications of biodiversity loss						
2. Natural resources, rural development and food	2.4: Promote inclusive and sustainable rural development, with a specific focus on poverty eradication, women's empowerment and youth employment, including equitable and sustainable access to basic local services for rural communities						
	2.5: Ensure access of local producers to distribution channels and markets, including the tourism market						
e	3.1: Develop scientific knowledge and technical capacities to deal with climate change and ensure informed decision-making at all levels						
nat	3.2: Accelerate the uptake of climate-smart technologies						
3. Climate	3.3 : Leverage existing and emerging climate finance mechanisms, including international and domestic instruments, and enhance the engagement of the private and finance sectors						
4,	3.4: Encourage institutional, policy and legal reforms for the effective mainstreaming of climate change responses into national and local development frameworks						
	4.1: Apply holistic and integrated coastal spatial planning processes based on ICZM						
	principles, as well as improved compliance with respective rules and regulations, to increase economic, social and territorial cohesion and reduce urban pressures on coastal areas						
ties	4.2: Encourage inclusive urbanization and strengthen capacities for participatory and integrated human settlement planning and management						
4. Sustainable cities	4.3: Promote the protection and rehabilitation of Mediterranean historic urban areas						
nina	4.4: Promote sustainable waste management within the context of the circular economy						
Susta	4.5: Promote urban spatial patterns that reduce demand for transportation, stimulate sustainable mobility and accessibility in urban areas						
4	4.6. Promote green buildings to contribute towards reducing the ecological footprint of the built environment						
	4.7: Enhance urban resilience in order to reduce vulnerability to risks from natural and human-induced hazards including climate change						
n en	5.1: Promote green and decent jobs for all, in particular for youth and women, to eradicate poverty and enhance social inclusion						
itio gre nv	5.2: Review the definitions and measurement of development, progress and well-being						
5. Transition towards a green economy	5.3: Promote sustainable consumption and production patterns 5.4: Encourage environmentally-friendly innovation						
. Tr varc eco	5.5: Promote sustainability principles and criteria for public and private investment						
5. tow	5.6: Promote a greener and more inclusive market that integrates the true environmental and						
	social cost of products and services to eliminate social and environmental externalities						
	6.1: Strengthen regional dialogue and cooperation in the Mediterranean to enhance						
ınce	emergency-preparedness 6.2: Ensure ownership of a sustainable development model and promote the engagement of						
erna	civil society, scientists, local communities and other stakeholders in the governance process						
6. Governance	6.3: Promote implementation and compliance with environmental obligations and agreements, including through policy coherence						
.9	6.4: Enhance capacity of national and local governments and other stakeholders, including the private sector						
							_

In the following pages the thematic areas are presented, with a set of strategic directions and actions for each. The Strategy takes as a given the implementation of all national and international obligations, even if it does not explicitly mention them. The activities proposed are aimed at providing guidance and inspiration, as they summarize the opportunities for developing national actions and regional collaboration within and outside the MAP system for the most effective implementation of the Strategy. At the same time, it is understood that not all countries may have the necessity or the resources to undertake the proposed national level actions. They may prefer, in line with their national planning procedures, to adapt the proposed actions to their needs. National actions should therefore serve as a reference framework to help countries design national policies to implement the strategic directions. The flagship initiatives proposed under some of the strategic directions are indicative of a regional or (multi) national action that could carry significant potential for demonstration and visibility.

2.1. Ensuring sustainable development in marine and coastal areas

The theme of seas and coasts sits firmly and historically in the basin approach taken by the Mediterranean Action Plan and the Barcelona Convention. The 1975 Mediterranean Action Plan was the first ever regional seas programme under the UNEP umbrella. The Barcelona Convention was adopted in 1976 by 16 Mediterranean countries and the European Community. Since then various protocols have been adopted under the Convention to help with the protection of the Mediterranean Sea and its coastal regions. The protocols currently cover dumping from ships and aircraft, oil and harmful pollution emergencies, land-based pollution, specially protected areas, pollution from exploitation of the continental shelf, hazardous wastes and, most recently, integrated coastal zone management.⁶

The 2005 Strategy established seas and coasts as one of its seven priority fields of action, deeming this priority is essential to make real progress in the sustainable development of the Mediterranean. In the years since its adoption, there have been a number of developments relevant to this theme, which include:

- ➤ Higher profile for marine issues within sustainable development. Rio+20 increased the focus on marine issues through its chapter on oceans and seas. In addition, there is increasing recognition of the role of marine areas in economic development, as the concept of the blue economy illustrates. In addition to its higher profile at global level, at Mediterranean level the Istanbul Declaration contains a commitment from the Contracting Parties to Barcelona Convention, to make the "Mediterranean an exemplary model in implementing activities effectively protecting the marine and coastal environment as well as contributing to sustainable development".
- > Stronger regional policy instruments under the Barcelona Convention. The adoption of the Protocol on Integrated Coastal Zone Management in the Mediterranean in 2008, recognized the importance of coastal zones for sustainable development.
- > Sub-regional policy development. The European Union Marine Strategy Framework Directive (2008) and the associated criteria and indicators have become applicable to European Union Member States.⁸

Increased realization of the economic value of the open sea and the need for blue growth has promoted an increase in the exploration for, and exploitation of, non-living open sea resources (e.g. oil, gas) and emphasized the need for robust integrated marine planning to support sustainable development. In addition, the global momentum behind assessing vulnerabilities and the impacts of climate change and delivering an effective and efficient response has grown rapidly over the last decade leading to the increased inclusion and mainstreaming of climate change in many sectors associated with coastal and marine areas.

The aspects of the Strategy relating to marine and coastal areas rest on three pillars:

- Improving implementation of and compliance with existing legal commitments
- Establishing and enforcing regulatory mechanisms to prevent and control unsustainable exploitation in the open ocean
- Developing capacity and implementing schemes for sharing integrated monitoring data on marine and coastal areas at subnational, national and regional levels.

National actions (strategic direction 1.1.) include strengthening of the Barcelona Convention and its Protocols' implementation with special focus on the Protocol on Integrated Coastal Zone Management, while delivery of ratified protocols through strengthened national policies and priority

actions, including coastal conservation. These processes will be supported by regional/sub-regional roadmaps for delivery of protocols and enhanced coordination, exchange of good practices, including technology transfer, and local knowledge. Joint efforts will be initiated for the coastal and marine protected areas in the Mediterranean Sea, including the high seas, as part of the wider efforts to implement the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean

Strategic direction 1.1: Strengthen implementation of and compliance with the Protocols of the Barcelona Convention and other regional policy instruments and initiatives supplemented by national approaches

Actions	Owner	Time frame	Indicators
National	OWNER	Time irane	Indicators
1.1.1. Strengthen the implementation of the Barcelona Convention and its Protocols and other regional policy instruments through enhanced prioritization and results-based management through ministries with environmental and budget portfolios and implementing line agencies.	National and local governments, regional institutions, private sector, civil society	Ongoing	Number of ratifications and level of compliance as reported by Contracting Parties
1.1.2. Translate the Protocol on Integrated Coastal Zone Management (where ratified) and its Action Plan into national policies and further its implementation	National and local governments, regional institutions	2016-2020	Status of implementation of articles of the Protocol
1.1.3. Support national coastal conservation initiatives (such as the French Conservatoire du Littoral) and strengthen or develop specific national laws for conservation of coastal areas	National governments	Ongoing	Number of initiatives and legal instruments addressing specifically coastal conservation
1.1.4. Create or strengthen delivery nodes for ratified protocols through national prioritization and policy strengthening Regional	National governments	2016-2020	List of delivery nodes per contracting party
1.1.5. Improve regional/sub regional coordination, exchange of good practices, including technology transfer, and local knowledge	Regional institutions, national and local governments, civil society	Ongoing	Number of regional meetings on regional/sub-regional coordination on seas and coasts Number of good practice exchange programmes on seas and coasts annually
1.1.6. Develop regional sub/regional roadmaps, where lacking, for delivery of all protocols.	Regional institutions, national governments	2016-2020	Number of roadmaps in place
1.1.7. Develop and implement a joint working programme for the coastal	Regional institutions,	Ongoing	Status of joint working programme

and marine protected areas in the Mediterranean Sea, including the high	national governments		Progress on implementation of joint working programme
1.1.8. Implement the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean (SAP-BIO)	SPA/RAC in cooperation with regional institutions, national governments, civil society	Ongoing	Status of implementation of SAP-BIO
Flagship initiative			
1.1.9. Support the Regional Trust Fund for Mediterranean MPAS	France, Monaco, Tunisia and the other Countries	Ongoing	Number of states supporting the Fund

In order to address the issues resulting from unsustainable non-living marine resource exploitation (strategic direction 1.2), the Strategy calls for implementation of relevant legislation and policy measures at national level, including the requirements of the Barcelona Convention, in particular the Offshore Protocol and its Action Plan, and environmental impact assessment (EIA) and strategic environmental assessment (SEA) procedures. A regional integrated marine planning process based on the Marine Spatial Planning approach, integrating SEA, EIA and ecosystem approach principles will support implementation of the Strategy.

Strategic direction 1.2: Establish and enforce regulatory mechanisms to prevent and control open ocean unsustainable exploitation, including Marine Spatial Planning							
Actions Owners Time frame Indicators							
National	0						
1.2.1. Ensure that the necessary regulatory instruments, including SEA and EIA, national development guidelines, and exploration and extraction tender criteria are in place, and amend national regulatory framework as required.	National governments, regional institutions	2016-2019	Status of regulatory capacity for open ocean exploitation				
1.2.2. Implement relevant legislative and policy measures to control open ocean exploitation within national and regional requirements	National governments, regional institutions, private sector	Ongoing	Share of open ocean exploitation projects on which regulatory controls exercised				
1.2.3. Translate the Offshore Protocol (where ratified) and its Action Plan into national policies and further its implementation	National and local governments, regional institutions	Ongoing	Number of countries whose policies reflect the Offshore Protocol and its Action Plan 100 per cent of the goals defined under the Mediterranean Offshore Action Plan are achieved by 2024				
Regional							
1.2.4. Prepare a regional programme for assessment and control opportunities for open ocean exploration and exploitation of non-living resources, based on the Marine Spatial Planning approach, and including standards for open ocean exploitation compatible with good environmental status.	Regional institutions, private sector	2016 – 2020	Status of regional programme Number of countries utilizing Marine Spatial Planning by 2020 and by 2030				

1.2.5. Set up process to further the	UNEP/MAP and	2020-2025	Status of good practice
exchange of good practice on control	other regional		exchange process
approaches.	institutions,		
	private sector		

The strategic direction 1.3. addresses the lack of sufficient scientific knowledge and reliable data in the region. In order to allow the appropriate knowledge-based decision and policy making, the national information centres will be established, which will collect existing and new information. It is also envisaged to establish a publicly accessible Mediterranean integrated information system, through which synergy is established between national Governments, international institutions and the private sector, to collect and display transparently the state of the environment and delivery on the protocols to the Barcelona Convention.

Strategic direction 1.3: Develop capacity and implement schemes for sharing integrated monitoring data related to the marine and coastal environment at sub-national, national and regional levels					
Actions	Owners	Time frame	Indicators		
National					
1.3.1. Complement and update national marine and coastal inventory based on survey information	National governments, regional institutions, civil society, private sector	Ongoing	Coverage of marine space surveyed as per national obligations		
1.3.2. Establish national information centres for the collection of existing and new integrated information on marine and coastal areas, and ensure public access	National governments, regional institutions, civil society, private sector	2016–2025	Centres set up in 50 per cent of the countries by 2020 Centres set up in 100 per cent of the countries by 2025		
Regional	D : 1	2010 2025			
1.3.3. Develop capacity and enhance technology where necessary to create comparable and compatible data	Regional institutions, national governments, academia	2018-2025	Cooperation and networking activities carried out		
1.3.4. Coordinate national monitoring programmes at regional level, including through annual workshops	Regional institutions, national governments	Ongoing	Cooperation, networking and joint monitoring activities carried out		
Flagship initiative					
1.3.5. Establish a publicly accessible Mediterranean integrated information system through a triumvirate of national Governments, international entities and the private sector to collate and transparently display the state of the environment	UNEP/MAP and other regional institutions, national governments, civil society, academia, private sector	2018-2022	Status of integrated information system project		

2.2.Promoting resource management, food production and security through sustainable forms of rural development

Rural areas in the Mediterranean are relatively diverse in their history, culture, natural conditions, population density, settlements, economic structure, and human resources and thus require different policy interventions, but share a potential for the establishment of new bases for economic and social development.¹⁰

The Mediterranean agri-food sector consumes significant rural resources and constitutes to the one of the main drivers of environmental degradation through processes such as desertification of marginal lands and pollution run-off from farming. At the same time the sector is a key player in the conservation of the Mediterranean agricultural landscape and in providing livelihoods and employment. The sustainable management of natural resources, rural development and food production and security are interdependent aspects that ensure the well-being of rural communities and provide significant inputs to downstream industries, from food processing to tourism.

When addressing the use of natural resources, attention must be paid to the protection of terrestrial ecosystems, which provide essential goods and services for human development. Those range from food and water to medicinal plants, fuel and materials for constructing shelters. The maintenance of the good status and health of those ecosystems is therefore fundamental for both biodiversity conservation and human well-being.

The three objectives of the Convention on Biological Diversity – conservation of biological diversity, sustainable use of its components and fair and equitable sharing of benefits arising out of the utilization of genetic resources – reflect the importance of this theme. The Strategic Plan for Biodiversity 2011-2020 sets 5 strategic goals and 20 targets to be achieved by 2020. The intention is not only to guarantee the conservation of all biodiversity components, but also to address key socioeconomic aspects, such as poverty reduction, sustainable agriculture, aquaculture and forestry, the needs of women, local communities, and traditional knowledge and public participation.

The strategy aims to address the limits to sustainable rural development caused by unsustainable use of natural resources (wildlife, game, timber, fuel wood, non-wood products, etc.) and overexploitation or illegal use of resources (strategic direction 2.1.). The Strategy, calls for improved management effectiveness of protected areas, backed up by Environmental Impact Assessment, Strategic Environmental Assessment and permitting processes to regulate development and resource management strategies. It puts special emphasis on cross-border water cooperation programmes.

Strategic direction 2.1: Promote the sustainable use, management and conservation of natural resources and						
ecosystems						
Actions	Owners	Time frame	Indicators			
National						
2.1.1. Ensure that legal measures are in place to conserve biodiversity in line with international and regional commitments as applicable	National governments, civil society	Ongoing	Status of legal measures that are in place			
2.1.2. Ensure that management processes are in place for protected areas	National and local governments, regional institutions, civil society	Ongoing	Share of protected areas with management processes in place			

2.1.3 Establish or strengthen national capacity development and training programmes targeting directors and managers of protected areas	National governments, civil society, academia	Ongoing	Number of countries with targeted capacity development and training programme(s)
2.1.4. Ensure Environmental Impact Assessment, Strategic Environmental Assessment and permitting processes are in place to regulate development in rural areas.	National and local governments, regional institutions, civil society, private sector	Ongoing	Share of contracting parties with such processes in place
2.1.5. Put in place cross-sectoral resource management strategies to ensure that renewable natural resources are extracted in ways that do not threaten the future use of the resources	National and local governments, civil society, private sector	Ongoing	Water efficiency index Percentage of water used in sustainable water management practices for agriculture Number of river basins with integrated water resources management schemes in place Share of Mediterranean forests under sustainable management
2.1.6. Ensure that extraction of non-renewable resources is carried out in ways that minimize environmental impacts.	National and local governments, civil society, private sector	Ongoing	Share of contracting parties implementing permitting systems on extractive sectors
Regional 2.1.7. Develop or strengthen cross border water cooperation programmes	Regional institutions,	Ongoing	Participation of countries in cross border integrated water
corder water cooperation programmes	National and local governments, civil society, private sector		resources management processes

Rural development is limited by loss of indigenous species and varieties and the disappearance of traditional practices and knowledge. In the strategy actions at transnational/regional level existing order to conserve and use traditional plant varieties and knowledge in the region. The use of such varieties is promoted for ecological restoration and forest protection. The traditional knowledge will be valorised in rural development funding programs and will be used in capacity development programmes targeting rural and agricultural stakeholders.

Strategic direction 2.2: Promote conservation and use of indigenous or traditional plant varieties and domestic					
animal breeds, value traditional knowled	animal breeds, value traditional knowledge in rural management decisions				
Actions	Owners	Time frame	Indicators		
National					
2.2.1. Establish national seed banks and knowledge repositories of indigenous or traditional plant varieties and domestic animal breeds	National and local governments, agricultural associations and cooperatives, civil society, academia, private sector	2016-2025	Number of seed banks and knowledge repositories in place		
2.2.2. Support the integration of traditional knowledge in education and training for rural and agricultural practices at national level	National governments, civil society, academia, private sector	Ongoing	Share of agricultural training courses that include traditional knowledge		
2.2.3. Promote the valorisation of traditional knowledge and landraces in rural development funding programs	National governments, donor agencies	Ongoing	Number of rural development programs that include support for traditional agricultural practices and landraces		
Regional	Regional				
2.2.4. Establish regional collaboration between seed banks and knowledge repositories around the Mediterranean	Regional institutions, civil society	2016-2025	Number of seed banks operating in the region		

The pressures on protected areas created by deficient spatial coverage, planning and management are addressed through national actions, including training for directors and managers and enhanced networking (strategic direction 2.3.). At the regional level, the Strategy further networking, as well as promotion of the new "Green List" initiative agreed between IUCN and IUCN national committees to assess the effectiveness of parks managing bodies.

Strategic direction 2.3: Promote networks of ecologically protected areas at national and Mediterranean level			
and enhance stakeholder awareness on the value of ecosystem services and the implications of biodiversity loss			
Actions	Owners	Time frame	Indicators
National			
2.3.1. Promote national networking	National and local	2016-2019	Number of national
activities for ecologically protected	governments, civil		networking initiatives
areas with similar and different	society		
protection status'			
2.3.2. Establish programmes to	National and local	2016-2020	Number of programmes
enhance awareness among local	governments,		established
stakeholders on the economic,	rural		
environmental and social value of	communities, civil		
ecosystem services and the	society		
implications of biodiversity loss for			
their daily lives			
Regional			
2.3.3 Promote a regional network of	Regional		Status of project
managers of ecologically protected	institutions,		
areas building on the experiences of			
existing initiatives			
2.3.4. Promote the "Green list" in	IUCN-Med and	Ongoing	Number of countries
riparian states to assess the efficiency	IUCN national		participating in the Green
and effectiveness of parks managing	committees		list initiative
bodies just created at the IUCN World			
Parks Congress			

The Strategy addresses the social and environmental consequences created by inequalities affecting rural populations, particularly women and youth, by developing skills and opportunities for women and supporting a regional flagship action on the development and dignity of rural communities.

Strategic direction 2.4: Promote inclusive and sustainable rural development, with a specific focus on poverty eradication, women's empowerment and youth employment, including equitable and sustainable access to basic local services for rural communities

Actions	Owners	Time frame	Indicators
National			
2.4.1. Develop participatory rural development programmes to encourage sustainable economic development of vulnerable rural communities, particularly for the benefit of women and youth	National governments	Ongoing	Number of rural development programs that include sustainability considerations, including in relation to women and youth
Regional			
2.4.2. Develop international partnerships to build capacity in the promotion of traditional knowledge, skills and crafts as well as establishment of capacity development programmes for local communities	Regional institutions	2016 - 2020	Number of partnerships established

In order to enhance the access of small-scale and local rural producers to markets the strategic direction 2.5. of the Strategy supports promotion of traditional Mediterranean products and for the circulation of perishable products.

Strategic direction 2.5: Ensure access of local producers to distribution channels and markets, including the tourism market				
Actions	Owners	Time frame	Indicators	
National				
2.5.1. Undertake actions to improve access of small scale producers to markets, including tourism market, through the use of innovative products and processes	National, regional and local environment, civil society, local cooperatives	2016-2020	Number of countries with such national actions undertaken	
2.5.2. Undertake initiatives to raise awareness on environmental and social benefits of consuming local products	National, regional and local environment, civil society, local cooperatives	2016-2020	Number of countries with such national actions undertaken	

2.3. Addressing climate change as a priority issue for the Mediterranean

Addressing climate change as a priority issue for the Mediterranean. As highlighted in the recent Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5), the Mediterranean region, considered one of the world's major climate change hotspots, is highly vulnerable to the negative impacts of global warming.

Climate variability and change is already becoming increasingly evident in the Mediterranean. In recent decades, warm days, warm nights, heat waves, extreme precipitation and soil dryness have increased and cold days and nights have decreased. Regarding sea level rise, there are areas in the Mediterranean Sea with current average increases of more than 6 mm/year, but also with decreases of more than -4 mm/year. All model projections agree on the region's future warming and drying with potential huge risks and costs to the region's economy, population centres and biodiversity. More specifically, in the IPCC AR5 medium-low emissions scenario (RCP 4.5) the surface mean air temperature in the region is expected to increase by 2-4°C by 2081-2100 compared to 1986-2005 and mean annual precipitation to decrease by 10-20%. In the worst case scenario (RCP 8.5), by 2100 mean temperatures could increase by up to 7.5°C and mean precipitation could decrease by up to 60%. Regarding sea level, an average rise of 0.4-0.5m is projected for most of the Mediterranean.

Depending on the extent of climatic disruption, the region will face increased risk of desertification, soil degradation, an increase in duration and intensity of droughts, changes in species composition, habitat losses, agricultural and forests production losses resulting to increased risk of coastal erosion, infrastructure damage and threatened water and food security. The MENA region, which already has one of the lowest water availabilities per capita world-wide, is expected to be more severely affected.

The contribution of the region to global greenhouse gas emissions varies considerably, with the northern, European Union countries of the Mediterranean contributing to a much greater extent to global greenhouse gas emissions than the southern rim. Nevertheless, the carbon footprint is increasing steadily in southern Mediterranean countries, which highlights the need to mitigate climate change. In particular, the energy sector, accounting for 85 per cent of greenhouse gas emissions in the Middle East and North Africa region, and the transport sector play a crucial role in mitigation.

In the Mediterranean Strategy for Sustainable Development, followed by other key regional policy frameworks on climate change, including the recent Ministerial Declaration on environment and climate change under the Union for the Mediterranean, a range of actions has been recommended to tackle common adaptation and mitigation challenges with determination and success. However, progress towards a green, low-carbon and climate-resilient Mediterranean region remains limited and constrained by a number of issues and barriers that still need to be addressed. Thus, scientific knowledge, data and information from research and monitoring systems remain insufficiently developed, usable and used in decision-making processes. The awareness of the co-benefits of climate change policies for economic development is low, which hampers their implementation. Regional cooperation efforts are scattered and would benefit from coordination. Persistent market distortions and substantial financing and technology gaps across the region limit the shift towards more climate-friendly development models, especially in the area of renewable energies and energy efficiency. In addition, public participation, the involvement of the private and finance sectors and the capacity to benefit from international funding mechanisms need to be fostered.

Adapting to climate change is as important as addressing its root causes. The Mediterranean countries need to identify and develop a regional approach to climate change adaptation, with common regional priorities in order to increase the resilience of the Mediterranean to climate change. This is the main purpose of the Strategic Framework for Adaptation to Climate Change in the Mediterranean Marine and Coastal Zones which is currently being developed by UNEP/MAP and which should be followed by a detailed Regional Climate Change Adaptation Action Plan.

The Mediterranean region is at a crossroads with regard to climate change and development. If left unaddressed, climate change will pose a serious risk to economic growth and may jeopardize achievement of the Sustainable Development Goals in most Mediterranean countries. Climate change is no longer considered an environmental or scientific issue but rather a developmental challenge that requires urgent and dynamic policy and technical responses at the regional, national and local levels. Adaptation is not "only" about responding directly to the impacts of climate change but also about tackling wider sources of existing vulnerabilities. Mitigation is not "only" about avoiding dangerous climate change but also an opportunity to re-orientate the way we use natural resources to sustainable paths. .

Climate change policies and decision-making need to be based on sound scientific knowledge and data. The Strategy, at a national level, calls for the establishment of innovative services with the cooperation of academic institutions, centres of excellence and national and intergovernmental institutions, and also through education and sensitization campaigns through dedicated programmes (strategic direction 3.1.). At a regional level, the Strategy promotes a Mediterranean research agenda to be implemented through synergies, data sharing and harmonization, and regional level education through various schemes. A regional science-policy interface to provide consolidated regional scientific assessments and a web-based regional climate change clearing house on climate change information is envisaged to complement the national and regional actions.

Strategic direction 3.1: Develop scientific knowledge and technical capacities to deal with climate change and ensure informed decision-making at all levels

ensure informed decision-making at all levels				
Actions	Owners	Time frame	Indicators	
National				
3.1.1. Upgrade, sustain and expand climate, weather and water monitoring systems	National governments, government specialized agencies, regional and global institutions, academia	2016-2022	Climate, weather and water monitoring systems are in place and operational	
3.1.2. Establish national climate clearinghouses to ensure that the relevant knowledge and information reach the various types of stakeholders	National governments, academia, regional and global institutions , private sector	2016-2020	Number of countries where such clearinghouses are set up	
3.1.3. Sensitise the public through environmental education campaigns and ensure climate change is mainstreamed in the formal educational curricula, including through dedicated courses	National, regional and local governments, regional and global institutions, academia, civil society	Ongoing	Number of countries where such campaigns and courses have been set up Number of countries where climate change is mainstreamed into educational curricula	
Regional				
3.1.4. Promote a Mediterranean research agenda on climate change by encouraging collaborative programmes and networking amongst regional research centres and universities.	Regional and global institutions, academia, governmental research centres, civil society	Ongoing	Number of collaborative initiatives at the regional and sub-regional levels	
3.1.5. Enhance regional capacities for	Regional and	2016-2022	Number of multi-country	

climate change monitoring and analysis through multi-country data- sharing agreements and integration of existing climate observation and early warning systems	global institutions, academia, governmental research centres, civil society		data-sharing agreements Number of countries with climate observation and early warning systems
3.1.6. Promote harmonised indicators and tools for climate change vulnerability and mitigation assessments, including climate risk analysis and adaptation planning under uncertainty, climate change economic costings and monitoring, reporting and verification of emissions/reductions in greenhouse gases	Regional and global institutions, academia, specialized governmental agencies, civil society	2016-2020	Number of harmonised indicators and tools for climate change vulnerability and mitigation assessments Number of collaborative workshops, and capacity building activities on indicators and harmonisation
3.1.7. Establish regional courses and diplomas; promote cutting-edge elearning and massive open online course (MOOC) programmes on Mediterranean climate change issues	Regional and global institutions, academic networks, specialized governmental agencies, civil society	2016-2020	Number of e-learning and massive open online course (MOOC) programmes on climate change
Flagship initiatives			
3.1.8. Establish a regional science-policy interface mechanism endorsed by all the Contracting Parties to the Barcelona Convention, with a view to preparing consolidated regional scientific assessments and guidance on climate change trends, impacts and adaptation and mitigation options	Regional and global institutions, academic networks, specialized governmental agencies, civil society	2016-2020	Status of Mediterranean regional scientific assessment and guidance on climate change trends, impacts and adaptation and mitigation options

Strategic direction 3.2. promotes the uptake of innovative technologies that can assist in addressing climate change or increase preparedness . At the national level, development, funding and implementation of national technology investment plans deem key. , The Strategy, at Mediterranean scale, calls for initiatives to foster research and development programmes, the sharing and transfer of knowledge and regional initiatives on innovation and funding outline the action framework.

Strategic direction 3.2: Accelerate the uptake of climate-smart technologies			
Actions	Owners	Time frame	Indicators
National			
3.2.1. Design, finance and implement	National	2016-2020	Number of countries with
national technology investment plans	governments,		national technology
for climate change	Regional and		investment plans in place
	global institutions,		
	private sector		
Regional actions			
3.2.2. Develop regional climate change	Regional and	2016-2020	Number of platforms and
adaptation and mitigation knowledge-	global institutions,		support schemes set up
sharing platforms and support	academia, civil		
mechanisms aiming at fostering	society, private		
collaborative R&D and innovation	sector		
programmes between universities,			
governments and businesses, including			

start-ups and SMEs			
3.2.3. Create climate change specific funding lines on innovation open to southern and eastern Mediterranean countries under large-scale international programmes (e.g. EU Horizon 2020, Climate KIC)	Regional and global institutions, national governments, private sector, civil society	2016-2020	Number of funding lines on climate change innovation open to southern and eastern Mediterranean countries
3.2.4. Establish a regional climate knowledge and innovation centre, also hosting a web-based regional climate change clearinghouse mechanism that will contain information on climate change monitoring, research, practical tools and projects	Regional and global institutions, civil society	2016-2020	Status of project
3.2.5. Launch a Mediterranean Climate Technology Initiative in conjunction with the EU Climate KIC, and UNFCCC CTI platform	Regional and global institutions, civil society	2016-2020	Status of project
3.2.6. Mobilize resources and support for the development of trans-Mediterranean power grids for efficient utilization of renewable energy sources in the region	Regional institutions, national and local governments, private sector	2018-onwards	Status of the initiative

Financing in support of addressing climate change will be mobilized through instruments including pricing, targeted subsidies, national funds, concessional interest rates, and others as appropriate, at the national and regional levels (strategic direction 3.3). Mechanisms will be established for leveraging private sector investment at the national level while encouraging the shift of public and private spending and consumption habits towards green and climate change-friendly practices. At the regional level, support will be provided for countries to establish mechanisms that improve access to international funding schemes and develop financial instruments to support national efforts is proposed. A Mediterranean investment facility, in collaboration with regional and international political and financial institutions and instruments (e.g. Clean Development Mechanism (CDM), Green Climate Fund, Global Environment Facility (GEF), etc.), will support national and regional actions.

Strategic direction 3.3 : Leverage existing and emerging climate finance mechanisms, including international				
and domestic instruments, and enhance the engagement of the private and finance sectors				
Actions	Owners	Time frame	Indicators	
National				
3.3.1. Set up suitable domestic financial instruments to finance the costs of adaptation and mitigation efforts at the national level	National and local governments, private sector	2016-2020	Number of countries using financial instruments to finance the costs of adaptation and mitigation	
3.3.2. Establish conducive legal frameworks for leveraging private sector investments and developing partnerships between public and private actors in the delivery of climate change actions	National governments, civil society, private sector	2016-2020	Number of countries establishing conducive legal frameworks for leveraging public private partnerships on climate change	
Regional				
3.3.3. Assist countries to strengthen institutional and technical capacities to improve access to international climate funding mechanisms and ensure	Regional institutions, national governments, civil	2016-2020	Regional share within international mechanisms (CDM, Green Climate Fund, GEF, etc.)	

effective delivery of funds.	society		
Flagship initiative			
3.3.4. Create a climate change Mediterranean investment facility bringing together EU, international financial institutions (IFIs), development banks and bilateral donor agencies	International funding institutes, donors	2016-2025	Number of donors who participate in Mediterranean climate change investment facility

The strategic direction 3.4. addresses specific needs on institutional and governance issues related to climate change, through mainstreaming climate change at the legislative and policy levels with a particular focus on measures concerning energy and transport, including through reforming energy subsidies, scaling up investments in energy efficiency and renewable energy, promoting universal energy access and low-carbon transport schemes/alternatives and delivering sustainable no/low regret adaptation measures across all vulnerable sectors (coastal and urban development, water management, agriculture, health, tourism, etc.). The Strategy addresses the development national climate change strategies and action plans, including low emissions development strategies, nationally appropriate mitigation actions, national adaptation plans and disaster risk reduction initiatives. Coordination mechanisms will be reinforced and the effective involvement of local authorities in planning and implementation will be enhanced. The strategy calls at the regional level for enhancing national structures and in implementing commitments under the United Nations Framework Convention on Climate Change is also proposed. The national efforts will be supported by a regional climate change knowledge and innovation centre.

Strategic direction 3.4: Encourage institutional, policy and legal reforms for the effective mainstreaming of				
climate change responses into national and local development frameworks				
Actions	Owners	Time frame	Indicators	
National				
3.4.1. Mainstream climate change into national legislation and policies with a focus on measures concerning energy and transport and on delivering no/low regret adaptation measures across all vulnerable sectors	National and local governments, civil society, private sector	2016-2018	Status of updated policies and programmes in sensitive sectors and territories fully addressing climate change	
3.4.2. Establish designated climate change coordination mechanisms within countries involving all relevant stakeholders	National and local governments, regional and international organizations, academia, civil society, private sector	2016-2018	Number of countries with participatory national coordination mechanisms in place	
3.4.3. Enhance the leadership and capacity of local authorities addressing climate change issues, through twinning and capacity-building programmes and greater access to climate finance	National and local governments, regional and international organizations, academia, civil society, private sector	2016-2020	Number of countries with such capacity development programmes	
3.4.4. Implement commitments and obligations under the new UNFCCC climate agreement and its future implementation mechanisms	National and local governments, civil society	2016-onwards	Status of implementation	

3.4.5. Implement high-level regional initiatives, including the UNEP/MAP Regional Climate Change Adaptation Framework, and other regional initiatives as appropriate	Regional and international organizations, national and local governments, academia, civil	2016-20120	Status of implementation of relevant strategies and policies
Regional	society		
3.4.6. Provide policy tools and guidance through the climate change knowledge and innovation centre for enhancing national governance, legal and investment frameworks in terms of climate change strategies and action plans	Regional and international organisations, national governments	2016-2025	Status of project

2.4. Planning and managing sustainable Mediterranean cities

Although affected by the economic crisis, the urbanization of the Mediterranean population continues at a fast pace, in particular on its southern shores. Two in every three persons are already living in the urban areas of Mediterranean countries, which is a higher percentage than the world average. By around 2050, the United Nations Human Settlements Programme predicts that the urban population will grow to around 170 million in the countries on the northern shore (140 million in 2005) and to over 300 million to the south and east (151 million in 2005). That fact generates serious challenges (for example, by 2030 some 42 million additional dwellings will be required, mainly in cities). However, the main issue is that most Mediterranean cities, in particular those located on its coasts, are not currently being managed sustainably, in the sense that their ecological footprint is still too large, particularly in relation to the carrying capacity of those coasts.

Mediterranean coastal cities are sometimes insufficiently resilient in terms of coping with natural and human-made risks and hazards. In addition, they are highly energy-dependent, with low shares of renewable energy used. At the decision-making level, they are sometimes non-inclusive, as the participation of urban residents in decision-making on urban matters and access to the majority of urban services remains low.

Urban growth prospects in the Mediterranean cities point towards an exacerbation of the current challenges: excessive land uptake; more rapid degradation of architectural heritage; aquifer pollution; inefficient waste management; and the cumulative effect of all these factors on the environment and human health. However, cities are critical for sustainable development in the Mediterranean, both due to their impact on marine and coastal areas and rural hinterlands, but also because as cities they are engines of economic development, innovation and creativity. On that basis, if actions and initiatives aimed at correcting the negative aspects of urban territorial, environmental, economic and social imbalances are not taken, Mediterranean societies and ecosystems may suffer serious consequences in the future, particularly in combination with the expected negative impacts of climate variability and change. Those are likely to impact most strongly the shores of the Mediterranean, where the majority of the population lives in cities. For those reasons, a new, sustainable and creative approach to planning and managing Mediterranean urban agglomerations, taking into consideration all the present and future challenges and offering longer-term sustainable solutions, building on common aspirations and understanding among relevant stakeholders, is the best hope for the Mediterranean urban future.

The Strategy aims to address the increased linear coastal urbanization and urban sprawl, sometimes characterized by informal development, and the gentrification of coasts, which negatively impacts the protection and management of coastal land (Strategic direction 4.1.). At the national level, the stricter application of non-exemptions and restrictions of urban allotments that build on the Protocol on Integrated Coastal Zone Management will be utilized. The development of major agglomerations and related sub-urban sprawl in the region is having a detrimental effect on the economic and social web. Loss of open spaces and green areas in urban areas further degrade the environment, while coastal urbanization is increasing, resulting in the separation of the coast from the social and scenic web of urban agglomerations. Specific actions contain inclusion of rural populations in planning and the protection and maintenance of safe, shady and green open spaces in cities and free access to the coast for urban populations will be undertaken. Regional guidelines to accommodate growing urban populations in sustainable cities will be developed, while maintaining the main ecological and social values.

Strategic direction 4.1: Apply holistic	c and integrated coa	astal spatial planni	ng processes based on ICZM		
principles, as well as improved compliance with respective rules and regulations, to increase economic, social					
and territorial cohesion and reduce urban pressures on coastal areas					
Actions	Owners	Time frame	Indicators		

National			
4.1.1. Utilize spatial planning systems that build on the Protocol on Integrated Coastal Zone Management to ensure balanced development in coastal areas, including touristic developments	National and local governments, planning authorities,	2016-2020	Number of countries utilizing spatial planning systems for coastal urban development
4.1.2. Strengthen small and medium- sized towns as focal points for regional development that will reduce population pressures on urban agglomerations	National and local governments, planning authorities, civil society	2016-2020	Population in large, medium and small urban settlements
4.1.3. Promote the protection, upgrading and creation of additional public open space	National and local governments, planning authorities, civil society	Ongoing	Number of countries with initiatives to improve public open space
Regional			
4.1.4. Monitor coastal urbanization and encroachment at regional level and provide monitoring support to national and local authorities	Regional and international institutions, national and local governments, planning authorities	2016-2020	Status of monitoring projects Number of capacity development and technical assistance projects
4.1.5. Establish a regional process to build capacity and share good practices on improving compliance with spatial planning regulations	Regional and international institutions, national and local governments, civil society	2016-2020	Status of project
4.1.6. Identify Mediterranean urban biodiversity hotspots and share experiences on their protection	International and regional institutions, National and local governments, planning authorities, civil society	2016-2020	Number of countries with identified urban biodiversity hotspots

The Strategy promotes participation of urban populations in planning and decision—making to aid sustainable urban planning. In this respect securing the flow of information and enhancing capacities for participation are key. At the national level, national and local participation mechanisms will be established, the role of small and medium towns, as focal points for regional development, will be promoted. At the national level, planning measures will support the development of urban models integrating informal settlements within the urban web through forward-looking territorial planning, Regional networks of of cities are promoted and a sustainable urban toolbox for the Mediterranean will be developed so as to ensure that the Mediterranean cities will be planned and developed with smaller ecological footprints, with safe and affordable housing and basic services for all, taking into account the role of aquatic ecosystems for the resilience of coastal cities in the Mediterranean and protection of urban biodiversity and public open and green spaces.

Strategic direction 4.2: Encourage inclusive urbanization and strengthen capacities for participatory and				
integrated human settlement planning an	integrated human settlement planning and management			
Actions	Owners	Time frame	Indicators	
National				
4.2.1. Strengthen urban governance by establishing communication and participation mechanisms to enhance urban stakeholders' involvement and engagement in decision-making	National and local governments, planning authorities, civil society private sector,	2016-2020	Number of countries with such participatory mechanisms enshrined in planning legislation	
4.2.2. Integrate informal settlements into cities and anticipate the expected rates of urban growth through more balanced territorial planning	National and local governments, planning authorities, civil society	2016-2020	Number of countries with such integration processes in place People living in informal settlements	
4.2.3. Ensure legal provision for free public access to the coast	National and local governments, planning authorities, civil society	2016-onward	Number of countries with national legislation providing for free access to coast	
Regional				
4.2.4. Develop or strengthen regional networking and partnership programmes between cities and at the city-region level around the Mediterranean to promote knowledge-sharing and capacity building on sustainable cities	Regional and international institutions, Local governments, civil society, national governments	2016-onward	Number of partnership programmes of networks running in area of sustainable cities	
4.2.5. Create a sustainable urban toolbox for the Mediterranean, with a view to planning cities that will work for everyone, in order to make them inclusive, safe, resilient and sustainable	Regional and international institutions, national and local governments, planning authorities, civil society, private sector	2016-2020	Status of the project	

The Strategy focuses on the protection and rehabilitation of historic urban centres as a means to retain population and economic activity, against the trend of increased desolation and marginalization. At a regional level, networking between historic centres and connecting them to economic uses are promoted as a means to secure viability.

Strategic direction 4.3: Promote the protection and rehabilitation of Mediterranean historic urban areas					
Actions	Owners	Time frame	Indicators		
National					
4.3.1. Utilize forms of integrated and sustainable rehabilitation of historic urban centres, building on good practice to maintain the population in historic centres	governments, planning	2016-2020	Population migration between newer and older urban areas by sub-region		

4.3.2. Provide fiscal and planning incentives to utilize and rehabilitate historic urban centres	National and local governments, planning authorities	2016-2020	Number of countries utilizing such incentives
Regional actions			
4.3.3. Develop a network of historic cities in the Mediterranean, involving economic players, including the tourism sector and that representing traditional industries.	International and regional institutions, national and local governments, planning authorities, civil society, private sector	2016-2020	Status of project

Waste production and management remains a major concern in many urban regions in the Mediterranean. The strategy promotes national measures for implementing innovative waste management solutions, in line with the waste hierarchy: prevention; reuse; recycling; recovery, and, as the least preferred option, disposal. It is also a priority to build behavioural change schemes to lead to reduced waste volumes. At a regional level assessment of high-tech and low-tech solutions, including but not limited to awareness-raising and economic measures that can be implemented, will be carried out.

Strategic direction 4.4: Promote sustainable waste management within the context of the circular economy			
Actions	Owners	Time frame	Indicators
National			
4.4.1. Implement innovative, integrated and sustainable waste management solutions, in line with the waste hierarchy: prevention; reuse; recycling; recovery, and, disposal	National and local governments, civil society, private sector	Ongoing	Percentage of waste treated by treatment type
4.4.2. Develop schemes to encourage local communities to change their behaviour with regard to waste	Local governments, civil society, national governments, private sector	Ongoing	Municipal waste generated
Regional			
4.4.3. Undertake regional assessments of high- and low-tech solutions that have been successfully implemented to achieve waste reduction	Regional institutions, National and local governments, academia, civil society, private sector	2018-onward	Status of the assessment initiative

Mediterranean cities have increased their dependence on private vehicles, further aggravated by suburban sprawl, leading to pollution, congestion, high economic and social costs and land occupation for traffic management and parking. The Strategy, under strategic direction 4.5., calls for reduced dependence on private vehicles be by developing efficient integrated public transport systems between coastal cities and their functional regions; anticipate future growth and transport needs, based on transport to be provided mainly by collective forms of transport. At the regional level, a sustainable transport and mobility framework for the Mediterranean will be developed.

Strategic direction 4.5: Promote urban spatial patterns that reduce demand for transportation, stimulate sustainable mobility and accessibility in urban areas			
Actions	Owners	Time frame	Indicators
National			
4.5.1. Put in place spatial planning provisions that reduce the need for personal private mobility	National and local governments, urban planning authorities, civil society, private sector	Ongoing	Number of countries with such planning provisions
4.5.2. Reduce urban traffic congestion and pollution by promoting low-pollution collective transport systems at the local urban level	National and local governments, urban planning authorities, civil society, private sector	2016-2020	Number of coastal cities with integrated public transport systems Percentage of the urban population using public transport Per capita number of private vehicle ownership per urban inhabitant
Regional			
4.5.3. Develop a sustainable Mediterranean transport and mobility framework, taking into account the objectives of the EU transport policy and other relevant regional initiatives, including guidelines for compact cities, in order to minimize transport and service delivery costs	Regional institutions, national and local governments, civil society	2016-2020	Status of the project

An innovative instrument that the Strategy promotes is the green buildings, where regional standards, certification and quality frameworks will provide guidance to national level efforts to construct green buildings and retrofit existing ones.

Strategic direction 4.6: Promote green buildings to contribute towards reducing the ecological footprint of the					
built environment	built environment				
Actions	Owners	Time frame	Indicators		
National					
4.6.1. Set standards and enhance capacity to construct green buildings and retrofit existing buildings	National and local governments, civil society, private sector	2016-onward	Number of countries with green building standards		
Regional					
4.6.2. Develop regional standards, certification and quality frameworks for green buildings	Regional institutions, National and local governments, civil society, private sector	2016-2020	Status of the initiative		

Coastal resilience and the response to natural risks are reduced and coastal cities are exposed to natural disasters and large-scale changes, including climate change (strategic direction 4.7.). In the

Strategy, besides the general measures under climate change, there exists specific actions related to coastal cities. At a national level climate proofing is addressed in the implementation of programmes increasing urban coastal resilience. National guidelines for planning and infrastructure will be prepared in support of urban level climate change adaptation plans. At the regional level, the Strategy calls for an inventory of local authorities in the region which are developing natural risk response mechanisms.

Strategic direction 4.7: Enhance urban resilience in order to reduce vulnerability to risks from natural and human-induced hazards including climate change				
Actions	Owners	Time frame	Indicators	
National				
4.7.1. Ensure urban spatial plans are subject to climate proofing	National and local governments, urban planning authorities, civil society, private sector	Ongoing	Number of countries that have enacted legal provisions for climate proofing of spatial plans	
4.7.2. Develop national guidelines for planning of green and blue infrastructure, with reference to natural and human induced risks, including climate change	National and local governments, urban planning authorities, private sector, civil society	Ongoing	Number of countries that have national risk reduction guidelines for planning of green and blue infrastructure	
4.7.3. Prepare and implement action plans to improve urban resilience to natural and human induced risks, including through natural solutions and smart development	National and local governments, urban planning authorities, civil society	Ongoing	Number of countries with such action plans	
Regional	5	201 5 2020		
4.7.4. Set up an inventory of Mediterranean local authorities developing natural risk response mechanisms, including climate change adaptation actions and relevant good practices	Regional institutions, national and local governments, civil society	2016-2020	Status of project	

2.5. Transition towards a green economy

Despite being a relatively new concept launched by UNEP, the green economy has attracted much attention from the international community at a time when the financial crisis is seriously affecting socioeconomic development. A green economy – sometimes called blue economy when applied to the Mediterranean – is one that improves human well-being and social equity while significantly reducing environmental risks and ecological scarcities. In other words, a green economy promotes resilient, low-carbon, resource-efficient and socially inclusive socioeconomic growth.

A Mediterranean green and blue economy will generate sustainable growth and employment through public and private investments, while reducing carbon emissions and pollution, enhancing energy and resource efficiency and preventing the loss of biodiversity and ecosystem services. The related green investments would be catalysed by targeted public and private expenditure, innovative policy and regulatory changes, training and research initiatives and progressive tax and job reforms, including promoting sustainable consumption and production patterns. That green development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and limited source of public benefits, especially for people whose livelihoods and security depend heavily on nature.¹¹

The green economy should indeed explicitly include the objectives of job creation and social inclusion to ensure the commitment of citizens and leaders of society. In addition, the active participation of all relevant stakeholders in the transition to a green economy should be guaranteed in an efficient, consistent and transparent manner, engaging with local communities and respecting cultural contexts. In that sense, the connection with the thematic area of Governance (Section 2.6), another transversal issue, is fundamental to facilitating the transition to the green economy.

Addressing socioeconomic inequalities between and within countries, owing partly to the high unemployment rate, is a key concern for the green economy. The creation of green and fair jobs for all is therefore critical, in particular for youth and women. New jobs should be gender-inclusive and provide some form of social solidarity mechanism to workers. The Strategy calls for better understanding of the role of green jobs through skills assessment and gap analysis for green jobs, and green and social enterprises, which will help developing tailored capacity development programmes.

Strategic direction 5.1: Promote green and decent jobs for all, in particular for youth and women, to eradicate				
poverty and enhance social inclusion				
Actions	Owners	Time frame	Indicators	
National				
5.1.1. Undertake a skills assessment and gap analysis for green jobs, and green and social enterprises, with a view to obtaining a better understanding of the role of green jobs in eradicating poverty and enhancing social inclusion, in particular for youth and women	National and loca governments, civi society, private sector	l	Number of countries undertaking such assessments	
5.1.2. Develop training and capacity building programmes for green skills and green jobs, particularly for youth and women	governments,	2016-2020	Number of countries with such programmes	
Regional actions				

5.1.3. Harmonise the regional definition	Regional	2016-2020	Status of project
of green jobs and green and social	institutions,		
entrepreneurship	national,		
	governments,		
	specialised		
	agencies		

It has been widely recognized that the standard economic indicators, such as GDP, do not give a full picture of the socioeconomic development of a country and could lead to misinterpretations. New indexes including environmental and social progress will be gradually developed and integrated to support correct decision-making processes (strategic direction 5.2.). A regional open database for societal progress and well-being in the region, including integrated environmental and economic accounting and environmental goods and services sector will assist national efforts.

Strategic direction 5.2: Review the definitions and measurement of development, progress and well-being			
Actions	Owners	Time frame	Indicators
National			
5.2.1. Embed indicators that are more inclusive of environmental and social aspects of progress within the national statistics databases	National governments, academia, civil society, private sector	2016-2020	Number of countries where new such indicators are included in the national statistics databases
Regional			
5.2.2. Identify, collect and share in an open database alternative statistics and indicators on societal progress and well-being, including integrated environmental and economic accounting and environmental goods and services sector	Regional institutions, national and local governments, civil society, academia	2016-2020	Status of project

The Strategy is complemented by the Sustainable Consumption and Production Regional Action Plan for the Mediterranean. Implementation of the action plan, thus the strategic direction 5.3. will be secured through awareness raising programmes on sustainable lifestyles - with reduced social and environmental impact - targeting wider public.

Strategic direction 5.3: Promote sustainable consumption and production patterns			
Actions	Owners	Time frame	Indicators
National			
5.3.1. Implement the Sustainable Consumption and Production Regional Action Plan for the Mediterranean			Status of implementation of the Action Plan
5.3.2. Undertake awareness-raising programmes on sustainable lifestyles including on environmental labels and alternative options for sustainable behaviour	society		Number of countries with such awareness campaigns
Regional			
5.3.3. Carry out capacity building programme to support countries in implementing the Sustainable Consumption and Production Regional Action Plan for the Mediterranean		Ongoing	Status of programme

A large part of the pollution in the Mediterranean is due to inefficient industrial processes and insufficient management of waste and resources. Apart from harming the environment and health, it also jeopardizes the competitiveness and long-term sustainability of industries. The Strategy promotes resource efficiency and eco-innovation initiatives as critical tools to allow businesses and economies to be more productive, while reducing cost, waste and use of raw materials. Creation and connection green and social incubators and training programmes, including through partnerships between universities, businesses and research centres at national and regional scales will complete the picture.

Strategic direction 5.4: Encourage environmentally-friendly innovation			
Actions	Owners	Time frame	Indicators
National			
5.4.1. Increase the resource efficiency and eco-innovation capacity of the industry and service sectors, through regulatory measures and financial incentives	National governments, civil society, academia, private sector	Ongoing	Number of countries with such regulatory measures and financial incentives
5.4.2. Support networks of "eco-incubators" for green and social businesses and entrepreneurs	National and local governments, civil society, private sector	2016-2020	Number of countries with such networks
5.4.3. Promote collaborative partnerships between universities, businesses and research centres	National and local governments, civil society, academia, private sector	Ongoing	Number of countries with such initiatives in place
Regional			
5.4.4. Create a Mediterranean network of green and social incubators and training programmes	Regional institutions, national and local governments, civil society, private sector	2018-2020	Status of project

The misallocation of capital contributes to the development of inefficient, underused and environmentally harmful infrastructures. The Strategy addresses environmental and social externalities through the development and implementation of sustainability principles and criteria for public and private investment (strategic direction 5.5.).Improved dialogue with international donors will secure mainstreaming of economic and social criteria in investments

Strategic direction 5.5: Promote sustainability principles and criteria for public and private investment			
Actions	Owners	Time frame	Indicators
National			
5.5.1. Raise the awareness of financial actors of the economic risks due to lack of environmental and social impact assessments, encouraging them to mainstream such assessments through the provision of tools and guidelines	governments, private sector, civil society	2016-2020	Number of countries with such initiatives
Regional			
5.5.2. Build capacity of national agencies on sustainable investment and corporate social responsibility		2016-2020	Status of programme
5.5.3. Initiate or strengthen dialogue with international funding institutions regarding economic and social criteria for investments	institutions,	Ongoing	Status of initiative

Environmental and social externalities are not sufficiently addressed by markets and policies, creating misleading price signals and incentives to business as usual or in other words, high carbon economy. In the framework of existing global initiatives, to the Strategy promotes a greener and more inclusive market in the region. by integrating sustainability principles including the polluter pays, and promoting instruments like eco-design criteria and environmental certification of products and services.

Strategic direction 5.6: Promote a greener and more inclusive market that integrates the true environmental and				
social cost of products and services to eliminate social and environmental externalities				
Actions	Owners	Time frame	Indicators	
National				
5.6.1. Promote environmental tax reform to reduce tax on labour and integrate the polluter pays principle into finance policy	National governments	2016-2020	Number of countries undertaking such reform	
5.6.2. Integrate sustainability principles into public procurement at national and local levels	National and local governments	2016-2025	Share of sustainable public procurement	
5.6.3. Promote eco-design criteria and environmental certification of products and services	National governments, academia, private sector	Ongoing	Number of countries promoting such initiatives	
Regional				
5.6.4. Provide assistance to countries interested in integrating the polluter pays principle into national finance policies	International institutions, national governments, private sector	Ongoing	Status of advisory programme	

2.6. Governance in support of sustainable development

Governance is a cross-cutting theme, related to every aspect of sustainability. Hence, it applies to the procedures of governing each of the thematic areas identified in the review of the Strategy. Taking into account the three pillars of sustainability (environmental, economic and social), the model of sustainable development requires equity, democracy and participation, application of the precautionary principle, policy integration and finally integrated environment and development planning.

Governance is characterized by the inclusion of non-state actors in the decision-making process, such as civil society, private corporations, international organisations, etc. That also involves new forms of cooperation arrangements, either at a national or a transnational level, such as public-private partnerships. Consequently there is multi-level governance, vertically, with increased fragmentation of authority at all levels of government (supranational, international, national, regional, local), and also multi-polar governance, horizontally, with different parallel rule-making systems and interlinkages among them.

Governance issues in the Mediterranean region range from endangered peace in the region, to inequalities among and within countries and weak public engagement, involvement and participation. Also, fragmentation of responsibility and insufficient planning, management and implementation, as well as inadequate awareness and education, research and innovation, and sharing of knowledge and information, are also challenges faced in Mediterranean countries.

Fragmentation of responsibility needs to be addressed through increased policy integration and coordination. Horizontal institutional reforms including, inter alia, legal, administrative and taxation reforms (such as green national accounting, green tax reform) and efforts to fight corruption, are some of the approaches to be considered. The science-policy-governance interface should also be expanded to provide better information for decision makers and the public.

Effective governance requires that participation in decision-making and cooperation to ensure social justice considerations are taken into account be strengthened and more sustainable development opportunities to address inequalities be found. It has to be flexible and adaptive and devise new forms of institutions based on discussion and participation, taking also into account the new digital world and the opportunities it offers. Finally, wide variations in the development models of Mediterranean countries do not allow a "one policy for all" approach and emphasis needs to be placed on their specific needs and contexts.

The strategy addresses strengthened regional dialogue and cooperation in the region to improve disaster risk management mechanisms, including through preparedness and prevention and alert mechanisms, supported by environmental surveillance systems. Strategy also addresses the problems related to regional and national population movements and their root causes.

Strategic direction 6.1:	Strengthen r	egional dialogue an	d cooperation in	the Mediterranean to enhance
emergency-preparedness				
Actions		Owners	Time frame	Indicators
National				
6.1.1. preparedness/prevention cooperation plans mechanisms in case of human-made) disasters, adaptive actions	(natural and		Ongoing	Number of countries implementing such measures

Regional			
6.1.2. Strengthen cross-border cooperation and information exchanges to optimize environmental surveillance of the Mediterranean Sea	International institutions, national governments, academia, civil society	Ongoing	Status of cooperation programme
6.1.3. Strengthen regional dialogue and cooperation in order to better understand the relationship between environmentally sustainable development and challenges and opportunities related to population movements	International institutions, national governments, academia, civil society	2018-2025	Status of dialogue programme

Engagement with sustainable development requires more attention and ownership at a higher political level, impeding continuity at all levels, and effectiveness in decision-making. The strategy enhances the engagement of decision makers with sustainable development through accession to relevant mechanisms, such as encouraging the accession of countries to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), in order to secure the flow of information and transparency.

Strategic direction 6.2: Ensure ownership of a sustainable development model and promote the engagement of					
civil society, scientists, local communities and other stakeholders in the governance process					
Actions	Owners	Time frame	Indicators		
National					
6.2.1. Strengthen the capacity of local institutions and governments, and civil society in terms of human and financial resources, in order to secure inclusive processes and integrity in decision-making	International institutions, national and local governments, academia, civil society	Ongoing	Number of countries undertaking such programmes		
6.2.2. Expand the science–policy–governance interface, to support policymaking by scientific analysis and data.	International institutions, national and local governments, academia, civil society	Ongoing	Interface of science and policy ensured through regional intergovernmental scientific panels		
Regional					
6.2.3. Encourage the adoption and implementation of the Aarhus Convention on Public Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters in the region	International institutions, national governments, civil society	2016-2020	Number of countries adopting the Aarhus Convention		

Decision-making is characterized by the fragmentation of responsibility at different levels of governance and through distinct sectors, as well as parallel rule-making systems and insufficient planning, management and implementation of existing instruments. Thus, the Strategy asks for improved coordination and cross-sectoral planning, and promotes effective application of instruments, such as environmental impact assessments, strategic environmental assessments and other regulatory tools. The Strategy calls for ratification of and compliance with global and regional agreements, the

application of sustainability principles and procedures, as well as the establishment of partnerships between public and private sector.

Strategic direction 6.3: Promote implementation and compliance with environmental obligations and agreements, including through policy coherence			
Actions	Owners	Time frame	Indicators
National			
6.3.1. Ensure ratification, compliance and implementation of global and regional agreements to guide actions at national and regional levels	International institutions, national and local governments, academia, civil society	Ongoing	Regional and global agreements adopted by countries
6.3.2. Ensure the application of the precautionary principle by undertaking environmental impact assessments, strategic environmental assessments and other relevant procedures	National and local governments, academia, civil society, private sector	2016-2025	Number of countries with application of EIA/SEA in development policies
6.3.3. Enhance policy coherence through better coordination and cross-sectoral planning to ensure interministerial coordination	National and local governments, civil society	2016-2025	Number of countries with interministerial coordination mechanisms
6.3.4. Encourage and support partnerships in planning and implementation, including but not limited to private sector involvement, public-private partnerships, innovative financing etc. at regional and/or local level	International institutions, national and local governments, academia, civil society, private sector	2016-2025	Number of countries with such partnership initiatives
Regional			
6.3.5. Develop capacity building programmes on environmental impact assessments and strategic environmental assessments	International institutions, national and local governments, academia, civil society, private sector	2016-2020	Number of countries where such capacity development programmes developed

Decision--making and implementation require adequate awareness of and education for sustainable development and sharing of knowledge and information. The Strategy calls for effective information outreach and appropriately planned and supported research and development. The implementation of the Mediterranean Strategy on Education for Sustainable Development will ensure promotion of the integration of the principles, values, and practices of sustainable development into all aspects of education and learning. The Strategy also underlines the value of large-scale programmes (e.g. EU Horizon 2020) to promote sustainable development research and innovation at regional scale.

Strategic direction 6.4: Enhance capacity of national and local governments and other stakeholders, including				
the private sector				
Actions	Owners	Time frame	Indicators	
National				
6.4.1. Implement the Mediterranean	Regional	Ongoing	Status of implementation of	
Strategy on Education for Sustainable	institutions,		the Strategy	
Development, which promotes the	national and local			
integration of the principles, values	governments, civil			
and practices of sustainable	society, academia			
development into all aspects of				

education and learning			
6.4.21. Strengthen research capacity at national level, through long-term provision of training opportunities, transfer of know-how and research infrastructure development	International institutions, national and local governments, academia, civil society	2016-2025	Number of countries with such initiatives
6.4.3. Foster joint knowledge creation and knowledge-sharing initiatives between local authorities and civil society	International institutions, national and local governments, academia, civil society	2016-2020	Number of countries with such initiatives
Regional			
6.4.4. Promote research and innovation by ensuring that large-scale programmes (e.g. EU Horizon 2020) take on Mediterranean priorities for sustainable development	International institutions, academia, civil society	2016-2025	Number of such programmes embedding Mediterranean priorities for sustainable development

3. IMPLEMENTATION AND FINANCING

3.1. Implementation of the Mediterranean Sustainable Development Strategy – the players

Implementation of the Mediterranean Strategy for Sustainable Development is a collective process. Although facilitated by MAP and the Mediterranean Commission for Sustainable Development, it is the participation and active role of all stakeholders, either those involved in the development of the Strategy, or those that will become involved in its implementation through activities that will play a decisive role for successful delivery of the Strategy.

MAP itself needs to be in a position to provide leadership and guidance. At the same time, it is expected to provide support and technical guidance to the Contracting Parties to the Barcelona Convention and to ensure that the organizational procedures allow a coordinated effort of the Parties. It can also provide a relevant platform for the exchange of information, experience and synergies that can be developed at regional or sub-regional level.

The Commission is a key structure within MAP to have an overview and support the development and implementation of the Strategy. As a central point of reference and bringing together the Contracting Parties and all stakeholders involved with sustainable development, it should work closely with the secretariat and the regional activity centres and relevant organizations for the effective implementation of the Strategy.

The Contracting Parties are invited to use the Strategy as a starting point for better integration of sustainable development into their national policies. The Strategy is aimed, among other objectives, at providing the Contracting Parties with the necessary tools to integrate sustainable development into their thematic national policies and build horizontal synergies between different government sectors and vertical synergies between different levels of government, from local to central and vice-versa. That will allow for better coordination and integration of policies around the objective of sustainability.

Intergovernmental and regional and subregional institutions also have a very important role to play in the implementation of the Strategy. As mentioned in chapter 1 above, there are already a number of regional and subregional institutions with strategies and actions aimed at supporting sustainable development in the Mediterranean region, as well as addressing significant environmental challenges. Working in tandem with each other and with the MAP structure, as well as facilitating synergies with Contracting Parties using the Strategy as a common platform, they can be critical to successful implementation. They will not only create an important critical mass of significant national and regional players working in a coordinated way towards sustainable development, but will also have a positive effect on using more efficiently the limited human and financial resources needed for the implementation of joint activities.

The private sector must be addressed as a necessary partner with limited participation in the process of sustainable development in the past. Through the incorporation of private sector activities, not only through corporate social responsibility, but also thorough its core business, through sustainable consumption and production processes, the integration of innovative technologies leading to more sustainable practices and the key aspect of influencing the upstream and downstream processes of the industrial, artisanal and marketing chains, the private sector can be one of the strongest allies in the

process of implementing the Strategy in the Mediterranean, while at the same time securing its own sustainability.

Science is key to success: all action and policy development at a national or regional level must rely on strong scientific foundations. In addition, the analytical tools that will allow the forecasting, planning and assessment of results, need to be developed with the academic and scientific community, which itself needs to integrate its capacities into the planning and implementation of activities.

Civil society has always been an important group of stakeholders in the Commission. In the implementation of the revised Strategy, its role becomes more pronounced: besides being a catalyst for supporting and controlling the implementation process at a regional and national level, civil society can take up important tasks related to awareness and sensitization, as well as acting as the third pillar of democracy, along with decision makers and judicial entities, to ensure transparency and secure the participation of the people.

3.2. Financing the implementation of the Strategy

Implementation of the Strategy, based on the ambitious but necessary and realistic vision of establishing a sustainable Mediterranean on strong economic and social foundations, needs significant financial resources.

The resources for financing the strategy implementation cannot and should not be expected to come from only one or a few sources. It is, again, a collective effort, though which the sum will be much greater than the addition of the parts, thanks to the synergies developed and economies of scale achieved.

In that sense, the national budgets of the Contracting Parties to the Barcelona Convention, allocating funds for the implementation of strategic targets aligned with the Strategy and the mobilization of resources for participation in regional/subregional actions aligned with the Strategy, can significantly assist in promoting implementation, while at the same time serving national objectives and policies.

The proposed activities within the Strategy are designed in such a way as to allow the Contracting Parties to adhere to existing activities, or to develop actions that fit within one or more strategic directions and relevant actions, thus directing national funding for sustainable development in the direction proposed in the Strategy.

Similarly, the coordination between MAP and other regional and subregional intergovernmental institutions and development agencies can be streamlined around selected topics and actions in the Strategy, so that collective support can produce the necessary resources for significant action in the region. The development of flagship initiatives is aimed at concentrating the efforts of all involved partners and stakeholders on actions that will gain significant impetus, through publicity and promotion, and increased effectiveness through the synergies developed and the focusing of resources on common targets.

The private sector needs to be in a central place in the process. By mobilizing resources for its own research, development and integration of technologies into the production process, and shifting some of the resources invested annually in marketing and promotion activities, it can play a very significant role in critically strengthening the process of implementation. For that purpose, the MAP system, as well as the Contracting Parties and other stakeholders, such as civil society, need to develop close working relations with the private sector and construct a platform of trust and synergy through which "win-win" collaborations will be established for the implementation of actions in the context of the Strategy.

3.3. Towards a regional dashboard on the implementation of the Strategy: a monitoring system and indicators for the Strategy

A comprehensive monitoring system and relevant indicators are necessary for the implementation of the Strategy. The following two requirements must be adequately covered:

- 1. Monitoring the implementation of the actions recommended in the Strategy: the level of implementation and gaps in the objectives in terms of actions (for example, the number of countries complying with a protocol).
- 2. Monitoring the progress of sustainable development issues: the sustainability dashboard in relation to the objectives in terms of sustainability (for example, reduction in greenhouse gas emissions).

Both are relevant to monitoring the Strategy, but the indicators and approaches are totally different.

The first set of indicators are mainly "response indicators" related to the implementation of the actions, as per the tables in the Strategy. The second set of indicators, generally structured according to the DPSIR ("Driving forces - pressures - state - impact - responses") framework¹² related to a systemic analysis of the issues, was used for the 2009 report entitled "State of the Environment and Development in the Mediterranean".

Implementation of the data-sharing principles on the indicators and data related to the monitoring system for the Strategy is needed. That process should be promoted and facilitated by a consistent platform for the exchange of information, experience and synergies.

Data and information sharing is facilitated by the Aarhus Convention. The "UNEP Live" knowledge platform aims to fill the gaps between data providers and consumers. ¹³ The crowd-sourcing of data could complement the institutional data sources generally used in international reporting. In addition to the traditional data sources, the population of the indicators in the Strategy could also mobilize a "data revolution for sustainable development" taking into consideration more open data

The Strategy will be reviewed after ten years, taking into consideration the global developments, progress and evolution of Sustainable Development Goals, new climate regime and targets in line with UNFCCC decisions after COP21 in December 2015 (Paris, France), as well as other relevant global conventions and their protocols.

References

¹ World Tourism Organization, "Tourism towards 2030: global overview", Madrid, 2011.

² Claude Millot and Isabelle Taupier-Letage, "Circulation in the Mediterranean Sea" in *The Mediterranean Sea*, Alain Saliot, ed. (Springer-Verlag, Berlin and Heidelberg, 2005).

³ Ibid. and C.N. Bianchi and C. Morri, "Marine biodiversity of the Mediterranean Sea: situation, problems and prospects for future research", *Marine Pollution Bulletin*, vol. 40, No. 5 (May 2000)

⁴ "Mediterranean Strategy for Sustainable Development: a framework for environmental sustainability and shared prosperity", June 2005, available from http://195.97.36.231/dbases/acrobatfiles/05IG16_7_eng.pdf.

⁵ The SDGs proposed by the Open Working Group in July 2014 will be considered by the UNGA at its 69th Session in 2015.

⁶ Available from http://www.unepmap.org/index.php?module=content2&catid=001001001

⁷ Decision IG.21/9 of the Contracting Parties to the Barcelona Convention, annex I.

⁸ See http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0056.

⁹ See http://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning/index_en.htm.

Giullo Malorgio, New Medit N. 2/2004, http://www.iamb.it/share/img_new_medit_articoli/343_02malorgio.pdf

¹¹ Definition of the green economy available from http://www.unep.org/greeneconomy/AboutGEI.

¹² See http://ia2dec.ew.eea.europa.eu/knowledge_base/Frameworks/doc101182 for a description of the framework.

¹³ http://uneplive.unep.org/.

¹⁴ Report prepared at the request of the Secretary-General by the Independent Expert Advisory Group on a Data Revolution for Sustainable Development (November 2014), available from http://www.undatarevolution.org/wp-content/uploads/2014/12/A-World-That-Counts2.pdf.