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REACHING THE 2020 HORIZON: 14 YEARS of Mediterranean cooperation on Environment

The H2020 Initiative for a cleaner Mediterranean



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List of abbreviations

2030GreenerMed	Towards 2030: Agenda for a Greener Med – Contributing to Achieving the Environmental SDGs in the Mediterranean
AFD	Agence Française de Développement (French Development Bank)
CAMENA	Climate Action in the Middle East and North Africa
CB	Capacity Building
DG NEAR	EC Directorate-General for Neighbourhood and Enlargement Negotiations
DPSIR	Drivers, Pressures, State, Impact, Response (framework)
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EcAp	Ecosystem Approach
ECRAN	Environment and Climate Regional Accession Network
EEA	European Environment Agency
EIB	European Investment Bank
ENI	European Neighbourhood Instrument
ENI-CBC MED	Mediterranean Sea Basin Programme of the Cross-Border Cooperation (CBC) initiative implemented under the ENI
ENP	European Neighbourhood Policy
ENPI	European Neighbourhood and Partnership Instrument
EU	European Union
ESD	Education for Sustainable Development
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Technical Cooperation)
FEMIP	Facility for Euro-Mediterranean Investment and Partnership
GEF	Global Environment Facility
H2020	Horizon 2020 Initiative
H2020 CB/MEP	H2020 Capacity Building/Mediterranean Environment Programme
ICZM	Integrated Coastal Zone Management
IFIs	International Finance Institutions
IMAP	Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast
IPA	Instrument for Pre-Accession Assistance
KfW	KfW Development Bank (German Financial Cooperation)
MCESD	Mediterranean Committee on Education for Sustainable Development

MED 5P	Public-Private Partnership Project Preparation in the Southern and Eastern Mediterranean
MedECC	Network of Mediterranean Experts on Climate and Environmental Change
MEDPOL	Mediterranean Pollution Monitoring and Research Programme
MeHSIP	Mediterranean Hot Spots Investment Programme
MENA	Middle East and North Africa
MoU	Memorandum of Understanding
MSESD	Mediterranean Strategy on Education for Sustainable Development
MSSD	Mediterranean Strategy for Sustainable Development
NAP	National Action Plan
NBB	National Baseline Budget
NGO	Non-Governmental Organization
PCB	Polychlorinated Biphenyls
PRIMA	Partnership for Research and Innovation in the Mediterranean Area
PRPI	Pollution Reduction and Prevention Investments
PRTR	Pollutant Release and Transfer Register
R&M	Review and Monitoring
UfM	Union for the Mediterranean
UNEP	United Nations Environment Programme
UNEP/MAP	United Nations Environment Programme/Mediterranean Action Plan
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
SDGs	Sustainable Development Goals
SCP	Sustainable Consumption and Production
SCP/RAC	Regional Activity Centre for Sustainable Consumption and Production
SEIS	Shared Environmental Information System
SMEs	Small and medium-sized enterprises
SSF	Single Support Framework
SWIM-Horizon2020 SM	Sustainable Water Integrated Management and Horizon 2020 Support Mechanism
TA	Technical Assistance
TAIEX	Technical Assistance and Information Exchange instrument of the EC
WES	Water and Environment Support (WES) in the ENI Southern Neighbourhood region

An aerial photograph of a coastal city, likely in the Mediterranean region. The foreground shows a stone wall and a paved area with a small building. A large marina is filled with numerous white sailboats docked at wooden piers. The middle ground features modern buildings and a parking lot. The background is a dense urban area with many small buildings and a few taller structures, including a church spire, under a clear blue sky.

Executive Summary

The 'Horizon 2020 Initiative' (2007 - 2020) has been a joint effort to substantially reduce pollution in the Mediterranean by tackling the sources that are said to account for around 80% of the overall pollution of the Mediterranean Sea: municipal solid waste, urban waste water and industrial pollution. The initial frame of action and scope progressively expanded since its mid-way point in 2014, to integrate approaches and actions in support of pollution prevention and the region's transition towards a green economy. This report focuses on this second phase of the H2020 Initiative.

As a regional UfM flagship initiative, H2020 was a collective endeavour with contributions from a broad set of actors, including UfM partner countries, Intergovernmental bodies, International Financial Institutions, cities and regions, Non-Governmental Organisations, academia and the private sector. The Initiative operated within the framework of existing and developing policy instruments, and supported the implementation of the commitments undertaken in the framework of the Barcelona Convention, the UfM Ministerial Declaration on Environment and Climate Change (2014) and the Mediterranean Strategy for Sustainable Development.

To meet its objectives, H2020 was organised in four interrelated components dedicated to investments for pollution reduction and prevention, capacity building, review and monitoring, and research. The H2020 Steering Group was responsible for the implementation of the H2020 Work Programme,

and three sub-groups coordinated the respective work, each led by different H2020 partners. Major regional projects specifically supported the implementation of the H2020 Work Programme under its components.

The first phase of H2020 (2007-2014) laid the foundations for pollution reduction in the Mediterranean. Following the 1st UfM Ministerial Meeting on Environment and Climate Change (Athens, 2014), the second phase of H2020 was designed to consolidate the achievements of the first phase and go beyond pollution reduction. The H2020 Work Programme was therefore expanded to more strongly focus on pollution prevention and to include sustainable consumption and production models as the main approach towards a green economy. The new work plan aimed as well to address emerging and urgent issues such as marine litter and hazardous waste.

The key achievements of the second phase of H2020 include:

- **More investments** in pollution reduction and prevention, through an H2020 investment pipeline of 24 projects. The prepared and approved projects in 6 Mediterranean countries: Egypt, Jordan, Lebanon, Palestine, Morocco and Tunisia, were of a total investment cost exceeding EUR 1.4 billion for co-financing by financial institutions.
- **Strengthened capacities** to reduce and prevent pollution: more than 2,000 trainees benefitted from more than 100 training workshops and other capacity building actions designed in complementarity by various H2020 actors and projects.
- **Policy and legal frameworks strengthened** across the region, supported through capacity building and technical assistance to various stakeholders.
- **Improved information and knowledge** on pollution in the Mediterranean, particularly through a second indicator-based assessment and the improvement of regional data infrastructure and tools with the view to supporting national data management processes and regular regional data flows.
- **Enhanced education and awareness** on sustainable development through the Mediterranean Strategy on Education for Sustainable Development (MSESD) and its Action Plan.
- **Higher priority of pollution reduction and prevention** on national, regional and global political agendas.
- **Contribution to setting the path towards green economy** in the region.

H2020 is considered to be a success by the H2020 Steering Group. Its mandate and work programme have been met for the most part and to a very satisfactory degree. It has been most impactful in building on existing institutions, initiatives and results, filling gaps where it could bring added value and in reinforcing regional cooperation, networking and partnership. Over time it maintained a clear and common agenda of shared objectives. The H2020 initiative has engaged all Mediterranean countries and a wide spectrum of regional stakeholders. As a joint initiative, H2020 has been instrumental in enhancing synergies in the region. In its second phase, the broadened scope of H2020 to include emerging issues, kept the Initiative very relevant.

There is a wide consensus among the Mediterranean stakeholder community that the achievements of H2020 have promoted a strong sense of ownership, collegiality and solidarity, that should be carried over to the follow-up post-2020 process.

There are policies, legislation, directives and guidelines in place to adequately support a sustainable development in the Mediterranean, including on monitoring and reporting on performance. However, implementation still remains a serious challenge. Any post-2020 initiative must focus on this challenge along with the needs for further developing or updating policies, legislation and supporting institutions. A wider donor basis for the implementation of a future work programme as well as a better assessment of the impacts of the work done should also be built into any future endeavours.



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Taking note of the lessons learned from H2020, a follow-up agenda entitled “Towards 2030: Agenda for a Greener Med – Contributing to Achieving the Environmental SDGs in the Mediterranean” (2030GreenerMed) has been under formulation by the UfM since 2018. This new agenda will be dedicated to support the urgently needed transition to a more sustainable, green and circular economy in the Mediterranean. It is conceived as an initiative by and for all stakeholders in the Mediterranean region and is meant as a tool for enhanced regional integration and collaboration. The core objective of “2030GreenerMed” is to set the framework to coordinate, streamline and promote the efforts in the Mediterranean region. It will involve UfM member countries and other relevant stakeholders, through a participatory approach, to:

1. support the transition towards a green, circular and socially inclusive economy,
2. prevent and reduce pollution on land, air and sea, and
3. protect, preserve, manage and restore natural resources in the Mediterranean region with- in an integrated, ecosystem-based approach, including terrestrial, marine and coastal dimensions.

The “2030GreenerMed Agenda” is advancing for political endorsement by the upcoming 2nd UfM Ministerial Meeting on Environment and Climate Action, expected to take place in December 2020 in Egypt.





1

About the Horizon 2020 Initiative

The Mediterranean Sea is the largest of the semi-enclosed European seas, surrounded by 21 countries that share a coastline of 46,000 km. The region is home to around 525 million people¹ and the environmental challenges it faces are significant.

¹ The Mediterranean region is currently home to over 525 million people, 70 % of whom live in urban areas, a figure which is expected to increase by an additional 130 million by 2050, in particular in the eastern and southern countries (UNEP/MAP-Plan Bleu, 2020).

In 2006, the 'Horizon 2020 Initiative for the Depollution of the Mediterranean Sea' (H2020) was launched by the European Commission, inviting all committed stakeholders to join efforts in substantially reducing pollution in the Mediterranean by the year 2020, by tackling the sources of pollution that are said to account for around 80% of the overall pollution of the Mediterranean Sea: municipal solid waste, urban waste water and industrial pollution.

Horizon 2020 was endorsed during the Euro-Mediterranean Environment Ministerial Conference held in Cairo in November 2006, taken up as a key flagship initiative by the Union for the Mediterranean (UfM) from its launch in 2008, and reaffirmed by the UfM Ministers at the Ministerial Meeting on Environment and Climate Change in Athens in 2014. At that point it was renamed 'Horizon 2020 Initiative for a cleaner Mediterranean' to emphasize the intention of the region to shift towards a more integrated approach within an enlarged geographical scope.

The H2020 Initiative has built on existing institutions, initiatives and results, filling gaps where it could bring added value. It operated within the framework of existing and developing policy instruments, and has supported in a tangible way the implementation of the commitments undertaken in the framework of the UfM Ministerial Declaration on Environment and Climate Change²; the United Nations Environment Programme/Mediterranean Action Plan (UNEP/MAP)³; the Barcelona Convention and its Protocols, Regional Plans and updated National Action Plans (NAPs) developed in the framework of its Land Based Sources (LBS) Protocol; the Mediterranean Strategy for Sustainable Development (MSSD 2016-2025), as well as EU policy instruments such as the EU Neighbourhood Policy (ENP)⁴ and the EU Communication from the Commission to the Council and the European Parliament: Establishing an Environment Strategy for the Mediterranean.

H2020 was implemented in two phases, with Phase 1 spanning from 2007 to 2014, and Phase 2 from 2014 to 2020. As a regional flagship initiative, H2020 was a collective endeavour with contributions from a broad set of actors and H2020 stakeholders including countries, Intergovernmental bodies (IGOs), International Financial Institutions (IFIs), cities and regions, Non-Governmental Organisations (NGOs), academia and the private sector. It should be emphasized that albeit not all actions by H2020 stake-

holders were undertaken with an explicit "H2020 label", they nevertheless contributed significantly to the common objectives of the initiative.

The Horizon 2020 Steering Group has been responsible for the implementation of the H2020 Work Programme. It was chaired by the UfM Co-Presidency (Jordan and the EU represented by the European Commission) and was set up to guide, review, monitor and effectively coordinate activities based on the agreed H2020 Work Programme. Its members participated on an equal footing and included: EU Institutions, Focal Points of EU Member States, Focal Points of ENP Mediterranean partner countries, other stakeholders such as IGOs, IFIs, NGOs, local authorities, private sector, etc. Over the years, ten Steering Group meetings took place (Marrakesh, 2007; Tunis, 2008; Dubrovnik, 2009; Amman, 2011; Barcelona, 2012; Brussels, 2013; Barcelona, 2014; Brussels, 2016; Dead Sea, 2018 and Athens, 2019).

To address the major sources of pollution of the Mediterranean Sea (municipal solid waste, urban waste water and industrial pollution) the Horizon 2020 Initiative was organised in four interrelated components dedicated to pollution reduction efforts, capacity building, review and monitoring, and research. Three H2020 sub-groups were formed to coordinate the respective work: (1) Investments for Pollution Reduction (later renamed Pollution Prevention and Reduction Investments), (2) Capacity Building for achieving H2020 objectives; and (3) Review, Monitoring and Research. Mid-way, the research component became a cross-cutting component. All H2020 Stakeholders were invited to contribute to the implementation of the objectives of the Initiative, while the EU programmed specific funding of major regional projects to support the implementation of the H2020 Work Programme under its components.

This report compiles the main results achieved under the second phase of the 'Horizon 2020 Initiative for a cleaner Mediterranean' based on the H2020 Work Programme for 2015-2020. It is the product of joint work of all partners and builds on their inputs to the overall H2020 monitoring framework and on project reports and deliverables by a variety of H2020 stakeholders.

² https://ufmsecretariat.org/wp-content/uploads/2014/05/20140515_UfM_declaration_FINAL_compromiseeditorial-changes.pdf

³ <https://www.unenvironment.org/unepmap/>

⁴ https://ec.europa.eu/neighbourhood-enlargement/neighbourhood/southern-neighbourhood_en



2

Context and history

During the 10th Anniversary Summit of the Barcelona Process in 2005, the Euro-Mediterranean Partners committed themselves to increasing efforts to substantially reduce the pollution of the Mediterranean by 2020, in what became known as the 'Horizon 2020 Initiative for the Depollution of the Mediterranean Sea' (H2020).

Horizon 2020 was endorsed during the Euro-Mediterranean Environment Ministerial Conference held in Cairo in November 2006. Since the launch of the Union for the Mediterranean (UfM) in 2008, H2020 is one of the UfM's key flagship initiatives, making it a joint endeavour and commitment of all 43 UfM

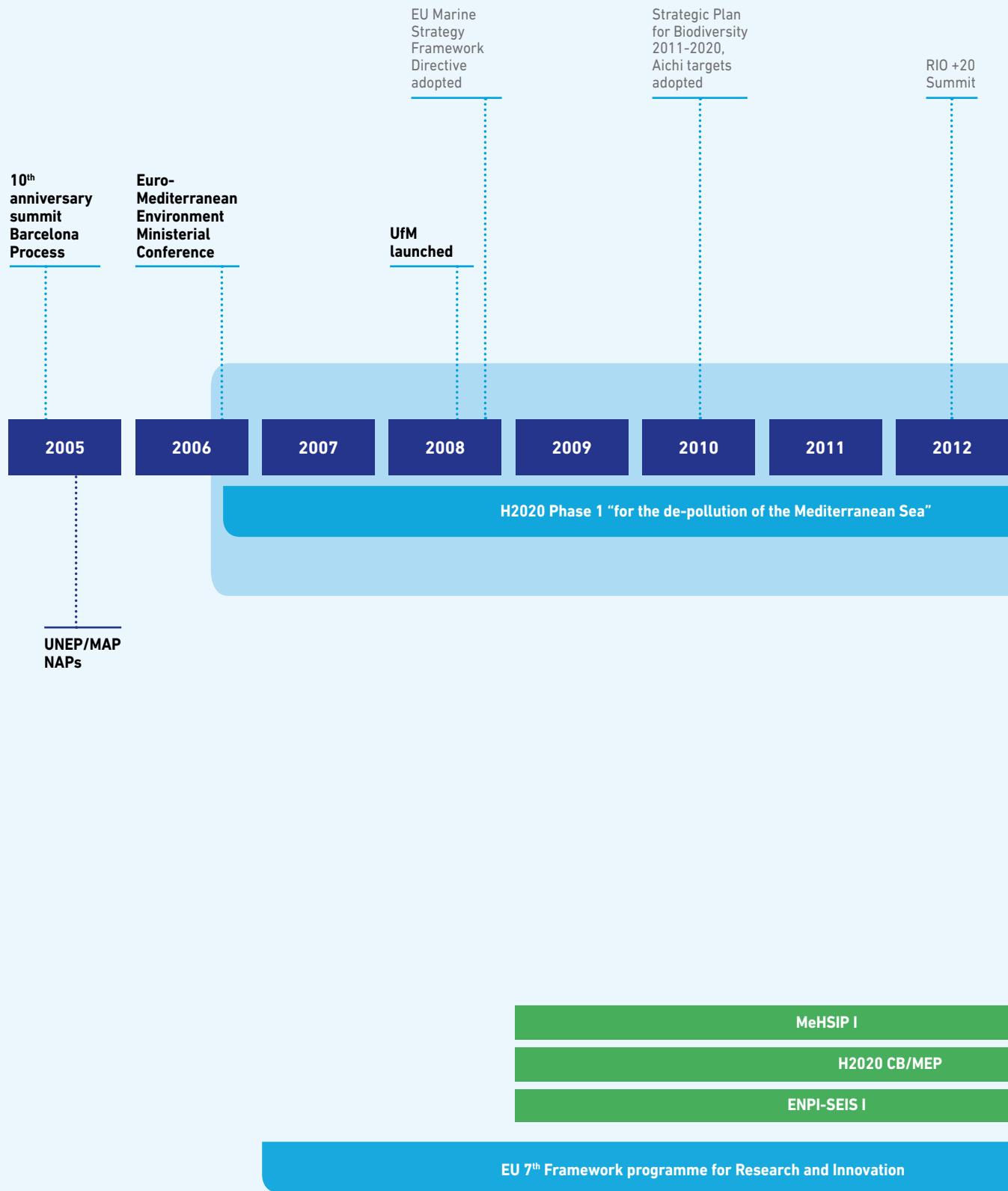
countries⁵. The geographic scope of Horizon 2020 was therefore expanded to include Focal Points from Albania, Bosnia & Herzegovina, Croatia (not an EU Member State at the time) and Montenegro.

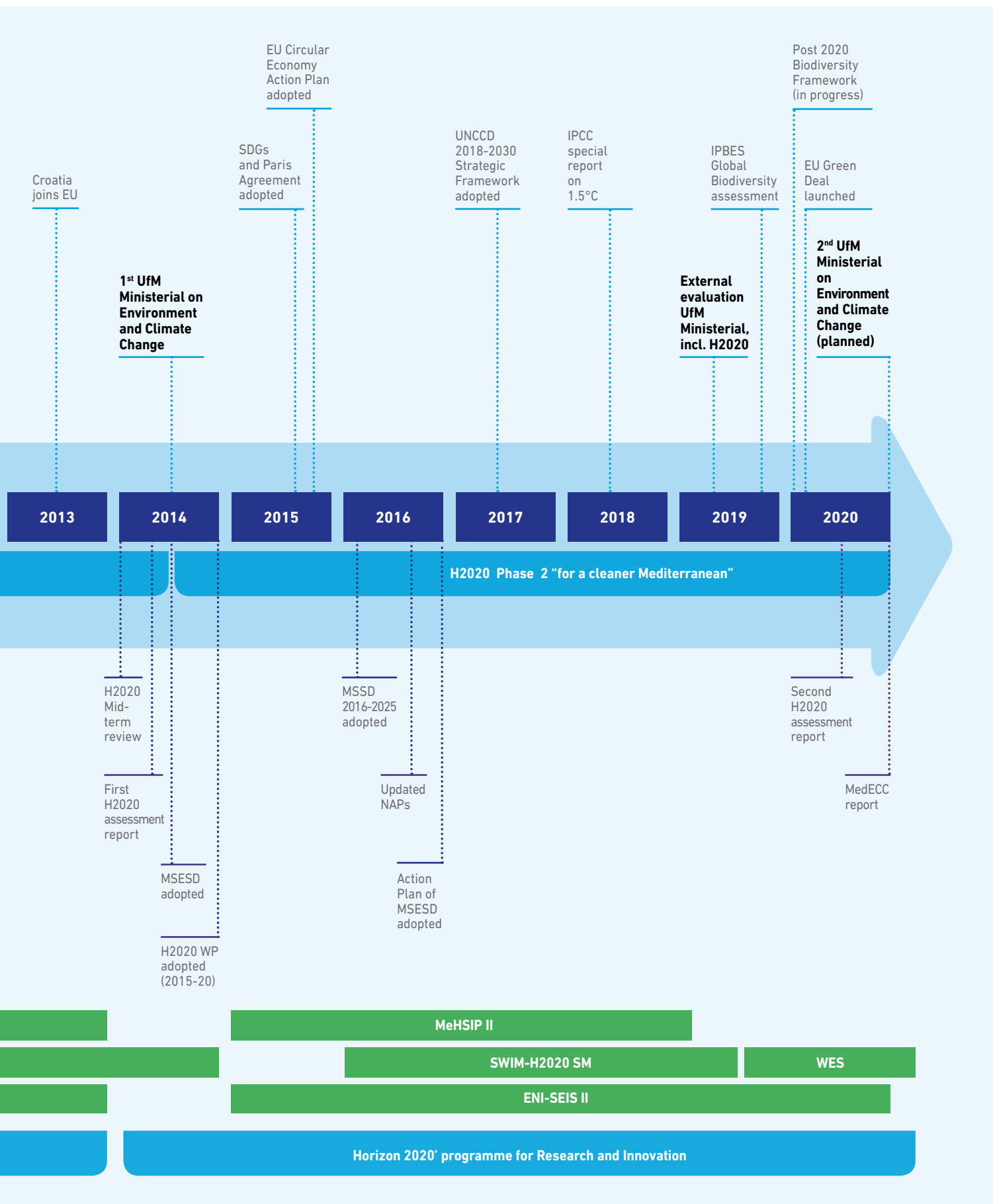
5 <https://ufmsecretariat.org/who-we-are/>



© H2020 CB/MEP project

FIGURE 1: Timeline of H2020 and other regional and international processes





2.1 Phase 1 of H2020: 2007-2014

“Laying the foundations for pollution reduction”

For the first phase of H2020 between 2007 and 2014, a road map was adopted by the Ministers in Cairo, which focused on the:

- Identification of projects to reduce the most significant sources of pollution.
- Identification of capacity building measures to help partner countries further develop national environmental administrations that are able to elaborate, implement and enforce environmental laws.
- Use of the EU research budget to develop and share knowledge of environmental issues relevant to the Mediterranean.
- Development of indicators to monitor the progress of Horizon 2020.

Many actions in support of H2020 were implemented during the first phase of the Initiative, both at national and regional levels. Several had direct H2020 links, while others did not. Some were implemented with donor support, while many were materialised through own resources.

H2020 implementation was based on countries' efforts at the national level, stakeholders' engagement and the support of a variety of regional programmes and projects in the region. Three EU-financed projects were specifically dedicated to support the road map during the period between 2009-2014:

- The Mediterranean Hot Spots Investment Programme - Project Preparation and Implementation Facility (MeHSIP-PPIF) under the H2020 Investments for Pollution Reduction component.
- The H2020 Capacity Building/Mediterranean Environment Programme (ENPI H2020 CB/MEP) under the H2020 Capacity Building component.
- The European Neighbourhood Policy Instrument- Shared Environmental Information System (ENPI-SEIS) under the H2020 Review and Monitoring components.

The projects worked in a complementary manner under the guidance of the H2020 Steering Group. For example, in the framework of the H2020 CB/MEP project, and in addition to activities aimed at enhancing the capacities to address pollution problems at institutional and society level, a Hot Spot Investment study for the West Balkans and Turkey was elaborated, complementary to the MeHSIP. Further, several EU-funded research projects relevant to H2020 were implemented, such as MIRA⁶, SEA-ERA⁷ and Perseus⁸. Funded under the EU 7th Framework Programme for Research and Innovation. They provided valuable results and experiences for H2020 at regional and national levels.

2013 marked the halfway point of the Horizon 2020 Initiative. A number of assessments, studies and reports were conducted to feed into an overall mid-term review that was carried out during 2013-2014 to present the achievements and challenges ahead and propose recommendations for the next phase, for policy makers and other H2020 stakeholders⁹.

6 The Mediterranean Innovation and Research coordination Action (<http://www.miraproject.eu/>)

7 Towards Integrated Marine Research Strategy and Programmes (<http://www.seas-era.eu/np4/2/>)

8 Protecting European Seas and Borders through the Intelligent use of surveillance (<http://www.perseus-fp7.eu/>)

9 Synthesis report and recommendations regarding the mid-term assessment of the Horizon 2020 initiative to de-pollute the Mediterranean (<https://www.h2020.net/resources/h2020-mid-term-review-documents/send/232-h2020-mid-term-review-documents/3202-synthesis-report-and-recommendations-of-the-mid-term-assessment-of-h2020>)

The mid-term review considered the H2020 Initiative successful, since it led to concrete developments within each of its different components. The main achievements of Phase 1 were:

- Capacities were strengthened to support policy and legislative development in 13 partner countries as well as in Med EU countries. H2020 carried out continuous institutional strengthening through 130 capacity building activities, trained 2,730 people engaging 360 trainers, experts and lecturers in regional, sub-regional and national trainings.
- The H2020 Initiative considerably assisted countries in complying with their regional commitments under the Barcelona Convention to reduce pollution from land-based sources.
- The UNEP/MAP Hot Spots provided a strategic focus for investments and mobilisation of stakeholders; According to the UfM report “Update of Priority Investment Projects for Protecting the Mediterranean Sea from Pollution”¹⁰, significant achievements were made since 2006, with nearly half of the 127 pollution Hot Spots defined in 2003 considered ‘cleaned’ thanks to those investment projects (operational or under construction).
- The first assessment “Horizon 2020 Mediterranean Report”¹¹ published jointly by the EEA and UNEP/MAP laid the ground for measuring progress in the future.
- The foundation for education and awareness-raising was laid through the development - and endorsement by the 2014 UfM Ministerial Meeting - of the Mediterranean Strategy on Education for Sustainable Development (MSESD) via a highly participatory process involving many stakeholders of the region.

The mid-term review also found that the first phase of H2020 “was about laying the bases; about visibility, assessing needs and state of play on the ground” and that by the end of Phase 1 there was “a shared common awareness of the challenges ahead, political support at Ministerial level (UfM), and a well-qualified and connected community of stakeholders. This result is not to be underestimated in a very diverse geographical and cultural region and in a period characterised by changes.”

10 UfM (2013). Update of Priority Investments Projects for Protecting the Mediterranean Sea from Pollution. Retrieved from: http://ec.europa.eu/environment/enlarg/med/pdf/horizon2020/ufm-priority-investment-portfolio-status_en.pdf

11 <https://www.eea.europa.eu/publications/horizon-2020-mediterranean-report>

The situation before 2014/2015 - main findings of the first H2020 Monitoring and Reporting Assessment Report: the “Horizon 2020 Mediterranean report - Toward shared environmental information systems” (EEA and UNEP/MAP, 2014)

- Sanitation has improved steadily in the region over the last decade. Between 2003 and 2011 the proportion of the population with access to sanitation increased from 87.5 to 92 %. There are still 17.6 million people in the region without sanitation, a third of them living in urban areas.
- There is great potential to reuse wastewater in the region. Currently only around 1% of wastewater is reused, so it is possible to make better use of this resource instead of discharging it into the sea.
- Progress in urban wastewater management is difficult to assess as the data available do not provide sound evidence on trends at the regional level.
- While solid waste generated in the region is still approximately half the per capita level in the EU, waste generation in the southern Mediterranean region has grown approximately 15% over the last decade, mostly due to a growing population and increased consumption.
- Waste management needs significant improvement. Around three quarters of waste is collected, but most of this is still disposed of in open dumps, which can have health impacts and find its way into the sea leading to environmental problems. Less than 10% of the waste collected in the region is recycled.
- Industrial emissions have a heavy impact on the Mediterranean. While pollution from heavy metals in seawater has decreased in recent years, local marine pollution from cities, industry and tourist resorts is still leading to pollution of seas and beaches.

At the same time, however, and despite the actions taken by countries and H2020 stakeholders, the Mediterranean continued to face significant environmental pressures caused by human activities. The degradation of the marine and coastal environment, natural resources and ecosystems had been increasing, as had pollution levels, notably from hazardous substances. Therefore, the report concluded that “considerable efforts are still required to mitigate the impacts of climate change, to better manage rare natural resources, support regional dynamics, and genuinely promote cleaner modes of consumption and production.” These were supposed to be addressed through a second phase of H2020.

2.2. Phase 2 of H2020: 2014-2020

“Going beyond pollution reduction”

The mid-term review process culminated in the UfM Ministerial Meeting on Environment and Climate Change held in Athens on 13 May 2014 during which Ministers reaffirmed their commitment towards the ‘Horizon 2020 Initiative for a cleaner Mediterranean’ and gave the H2020 Steering Group the mandate to develop and adopt a work programme for the second phase. Hence, the H2020 Work Programme 2015-2020 was prepared with a focus on:

- Broadening the scope of H2020: more focus on pollution prevention through promotion of sustainable consumption and production as well as emphasis on emerging issues including hazardous waste and marine litter;
- Increased synergies and collaboration with the Barcelona Convention decisions through a specific MoU;
- Commitment regarding implementation and enforcement of legislation;
- Commitment to apply SEIS principles in line with the Ecosystem Approach (EcAp);
Commitment to initiate reforms at national level to create an attractive investment environment;
- Commitment to continue the pipeline of projects, including a new methodology to identify hotspots under the Barcelona Convention/National Action Plans (NAPs) revision and project prioritisation;
- Endorsement of the Mediterranean Strategy on Education for Sustainable Development and commitment for its implementation.

Following the recommendations of the 2014 UfM Ministerial Meeting on Environment and Climate Change, the second phase of the H2020 Work Programme progressively extended its frame of action and scope, integrating actions in support of the transition towards green economy. The 2014 Ministerial Declaration focused on the adoption of sustainable consumption and production as an essential approach to reduce pollution and waste, to increase resource and energy efficiency and hence the prevention of climate change impacts, as well as to provide real opportunities for preserving natural resources, job creation, improvement of the quality of life for all and ensure a sustainable future. Therefore, the Ministerial Declaration called for policy reforms required to provide the appropriate incentives and signals to accelerate the shift

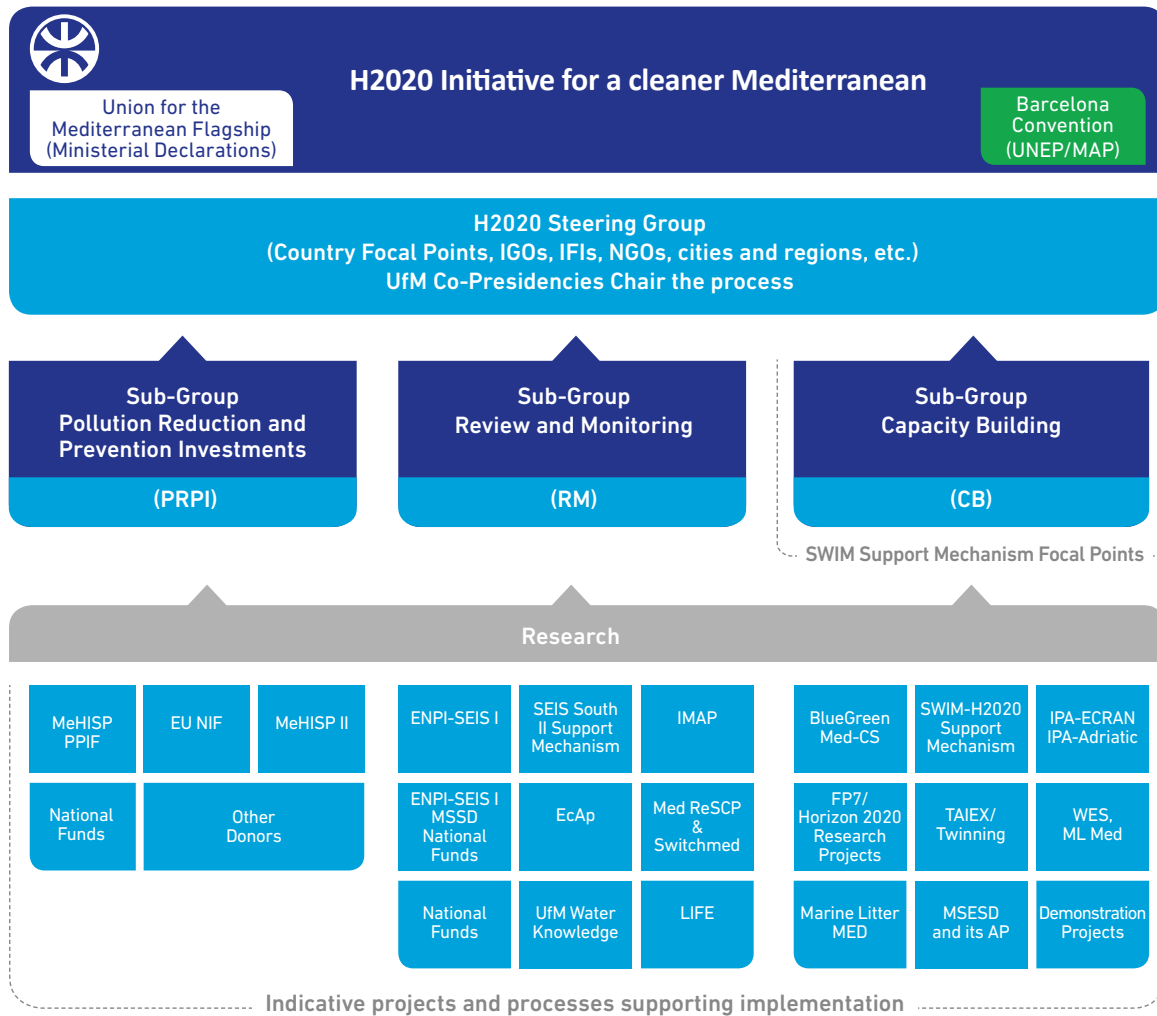
towards sustainable consumption and production patterns, while paying attention to the unequal economic development and social disparities among Mediterranean countries. The Declaration expressed support for a green and low-emission economy and the required innovations and technology transfer in the area of sustainable products and services and new sustainable business models, as well as tools such as eco-design.

By calling for strengthening its pollution prevention dimension, Ministers acknowledged the crucial role of sustainable consumption and production patterns in opening the way to green economy, to prevent the further deterioration of the Mediterranean Sea, as well as to ensure the sustainability of results (including pollution abatement investments). Ministers called for increased synergies in this area which implies adopting a broader vision and range of activities in each component. Hence, the H2020 Work Programme 2015-2020 focused on each partner country strengthening its policy and regulatory framework, by improving its comprehensiveness, and the implementation and degree of enforcement, including ratification of Barcelona Convention Protocols. In line with this, under the joint H2020 Work Programme, the UfM, UNEP/MAP, GEF and other stakeholders in the region aligned and enriched their programming and activities to contribute to its implementation.

To further support the implementation of the H2020 Work Programme 2015-2020, the EU funded the following second phase projects:

- a second Mediterranean Hot Spots Investment Programme (MeHSIP II) under the H2020 Pollution Reduction and Prevention Investments component;
- the Sustainable Water Integrated Management-Horizon 2020 Support Mechanism Project (SWIM-Horizon2020 SM); and immediately after, in 2019, the Water and Environment Support (WES), under the H2020 Capacity Building component; and the
- the European Neighbourhood Instrument - Shared Environmental Information System (ENI SEIS II) Support Mechanism under the H2020 Review and Monitoring component

FIGURE 2: Components and structure of H2020 (Phase 2)



Besides the on-going efforts of the countries, other H2020 stakeholders' programmes and the dedicated EU funded projects, contributions to the H2020 Work Programme 2015-2020 were also provided through a variety of other sources, programmes and initiatives, such as the Global Environment Facility (GEF) programme Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership)¹², the IPA-Adriatic projects¹³, etc.

Also, a variety of EU Research and Innovation projects contributed to the implementation of the H2020 Work Programme, funded under the 7th Framework Programme¹⁴ and the namesake EU Horizon 2020 Framework Programme for Re-

search and Innovation¹⁵. Under the H2020 Capacity Building component, more than 400 projects of the EU Eco-Innovation programme, LIFE+¹⁶, ENI-CBC MED¹⁷, INTERREG MED¹⁸ and IPA Adriatic programmes were mapped for insights on research results which could feed policies and practices important for marine pollution prevention and reduction in the Mediterranean. Recommendations for a strengthened research to policy/practice interface were formulated while 32 of these 'science-policy' projects were identified as particularly relevant to the policy themes of the H2020 Work Programme.¹⁹

12 <http://www.themedpartnership.org>

13 https://ec.europa.eu/regional_policy/en/funding/ipa/cross-border/

14 https://ec.europa.eu/research/fp7/index_en.cfm

15 <https://ec.europa.eu/programmes/horizon2020/en>

16 <https://ec.europa.eu/easme/en/life>

17 <http://www.enicbcmed.eu>

18 <https://www.interreg-med.eu>

19 <https://www.swim-h2020.eu/strengthening-the-research-to-policy-practice-interface/>



3

Achievements of the H2020 Initiative's second phase

3.1 Overall achievements of the Horizon 2020 Work Programme 2015-2020

The overall objectives of the H2020 Work Programme 2015-2020 were to:

1. identify, finance and implement **priority H2020 investment projects**.
2. strengthen the comprehensiveness, implementation and enforcement of **environmental policy and legislation**, to enhance environmental mainstreaming at national level into other policies and to support **better environmental governance**, with a view to reducing and preventing marine pollution in order to achieve good environmental status of the Mediterranean Sea.
3. ensure the availability, quality, accessibility and sustainability of **monitoring data and information** needed for the knowledge base supporting **regular H2020 assessment**.
4. increase the **knowledge-base** and develop dissemination and transfer of **innovative technologies** for the prevention and reduction of pollution in the Mediterranean Sea.



The key achievements of the second phase of H2020 include:

- **More investments** in pollution reduction and prevention, through an H2020 investment pipeline of 24 projects. The prepared and approved projects in 6 Mediterranean countries: Egypt, Jordan, Lebanon, Palestine, Morocco and Tunisia, were of a total investment cost exceeding EUR 1.4 billion for co-financing by the EIB.
- **Strengthened capacities** to reduce and prevent pollution: approximately 2,000 participants in more than 100 training workshops and other capacity building actions designed in complementarity by various H2020 actors and projects.
- **Policy and legal frameworks strengthened** across the region, supported through capacity building and technical assistance to various stakeholders of ENI South countries at national level and involving even more countries at regional level. Revised NAPs - as a policy tool for addressing land-based pollution in accordance with the provisions of the LBS Protocol - in place in all countries, and National Action Plans or similar policy documents on Sustainable Consumption and Production (SCP) in place in most countries of the region.
- **Improved information and knowledge** on pollution in the Mediterranean, particularly through a second indicator-based assessment undertaken based on an H2020 assessment framework including 11 macro-indicators, and improved regional data infrastructure and tools with the view to supporting national data management processes and regular regional data flows.
- **Enhanced education and awareness** on sustainable development through the Mediterranean Strategy on Education for Sustainable Development (MSESD) and its Action Plan.
- **Higher priority of pollution reduction and prevention** on national, regional and global political agendas.

Strong links, synergies and coordination between the H2020 components, as well as with other processes and projects was pursued throughout the implementation of the Work Programme. Specific actions were included to ensure complementarity and coherence, such as the setting-up of a coordination mechanism ('H2020 Core Group'), better streamlining of the networks of Focal Points and related meetings, and the organisation of a final H2020 meeting in Athens (September 2019) that brought together many different country Focal Points (environment, review and monitoring, water, etc.), stakeholders and projects.

The situation at 2020 - main findings of the second H2020 Monitoring and Reporting Assessment Report (Synthesis Report): “Towards a cleaner Mediterranean: a decade of progress. Monitoring the Horizon 2020 regional initiative” (EEA and UNEP/MAP, 2020) (adaptation)

- Major efforts have been put in place over the past 15 years towards a cleaner Mediterranean. Undeniably, clear progress achieved in terms of strengthening of regional coordination, institutional capacities, legal instruments, direct actions (e.g. investments), regional data infrastructure and tools, and international commitments.
- Main progress mostly in terms of pollution prevention at source. Yet, the data and knowledge at hand are not sufficient to provide an affirmative evidence-based response to the policy question – How much progress towards a cleaner Mediterranean?
- In most cases, the interventions put in place provide effective actions to keep up with increasing pressures, but not to curb the situation overall. Further reduction of key pressures, such as waste and marine litter, wastewater and industrial emissions is required in order to achieve a cleaner Mediterranean and “Good Environmental Status” of the Mediterranean Sea.
- In South countries in particular, a steadily increasing trend in waste generation per capita has been recorded, which is expected to continue in the future (+29 % by 2030); waste disposal remains high, while recycling of waste is increasing slowly because of relatively higher costs when compared to open dumping.
- Despite the need to increase our systemic knowledge for more informed policy-making and investments, duly systemic actions to tackle pollution should not be further delayed. In this regard, though access to safely managed sanitation has increased in the South subregion by 6 % since 2003, in recent years, more than 5.7 million people living in urban areas and no fewer than 10.6 million rural dwellers have no access to improved sanitation systems.
- There is room for improving the integrated management of pollution, going from “source-to-sea”, across thematic areas and sectors, and integrating policy priorities. For instance, driven by a higher demand for water and lower water availability, few countries are making significant advances towards effective water reuse policies.
- The nature of the drivers of change did not change markedly in the last 30-40 years; it is their persistence over time, intensity, acceleration and cumulative effects which currently drive the change in the Mediterranean region.
- The Mediterranean is subject to a complex and heterogeneous policy landscape. Given the current nature of sectorial policies, the region is not equipped to address complex environmental challenges with an integrated nature, and legal instruments are not sufficient to tackle ongoing pressures in a holistic way.
- Mediterranean economies remain largely linear, from a resource perspective, but clear efforts have been put in place to ensure transition to more preventive and circular approaches with direct link to the thematic areas (e.g. reuse of wastewater; 3Rs policies on waste that have direct impact on prevention of marine litter).
- The enforcement of policies and laws remains a key bottleneck and ensuring enforcement and compliance have never been more urgent. Political commitment needs to be translated to the operational level, through updating national environmental legislation in line with regional decisions, policies and establishing a mechanism to ensure enforcement and compliance.
- Though the establishment of regional data infrastructure has improved significantly, data availability and quality has not improved much. Massive investments in improving data and information coverage and quality is urgently needed. The process requires further efforts to develop and maintain dedicated data policies and governance structures, make it fully fit-for-purpose and cope with new challenges (big data, digital economy) and new topics (e.g. Sulphur Emissions Control Areas - SECA).
- Despite shifts on the policy front, achieving goals and targets set in national strategies will not only require reinforcing the knowledge-base, but also increased financing and capacity building, engagement of businesses and citizens’ awareness, and a better coordination among all actors at national level.

More details on the specific objectives and achievements per H2020 component are described in the following sections.

3.2 Pollution Reduction and Prevention Investments (PRPI)

3.2.1 The PRPI 2015-2020 Work Programme

The Pollution Reduction and Prevention component was implemented between 2015-2020 with the general objective “to identify, finance and implement priority H2020 investment projects”.

The related specific objectives of the Work Programme were to:

1. update key information on projects and prioritise and plan investments needed to meet the overall objective.
2. prepare needed priority investment projects and, in the process, strengthen the project preparation capacity of public sector institutions and the private sector.
3. secure funding and implement these projects.

The H2020 PRPI sub-group was led by the UfM Secretariat and the European Investment Bank. The work was closely coordinated and complemented with actions by the other H2020 components and other programmes and sources. Particularly, close coordination and collaboration was maintained with other International Financing Institutions such as AFD, KfW and EBRD, the World Bank and the African Development Bank. This is evidenced by the number of co-financed projects, participation in IFI coordination groups and sharing of information and reports regarding project preparation.

The sub-group steered the identification, preparation and financing of investment projects, mobilising facilities such as the Mediterranean Hot Spots Investment Programme (MeHSIP II) in the southern Mediterranean countries, the Instrument for Pre-Accession Assistance (IPA) funds in Balkan countries and Cohesion/Regional funds in Mediterranean EU countries.



The H2020 Initiative, through MeHSIP II, provided direct technical advice and support for the preparation of investment projects in the water and environmental sectors of the Southern Mediterranean countries and the objectives of the H2020 Work Programme related to Pollution Reduction and Prevention were thus met with the following achieved results²⁰:

- An H2020 pipeline of 24 investment projects in 6 southern Mediterranean countries was developed, and a number of these brought to the EIB Board for approval.
- Projects with a total investment cost exceeding EUR 1.4 billion have been prepared and have been approved for co-financing by the EIB²¹. Overall, projects supported under H2020 have a total potential investment volume of EUR 2.8 billion.
- A total of EUR 4.5m of Technical Assistance (TA) funds were mobilized, and technical support provided directly to a number of projects: EUR 3.7m were mobilized from the Climate Action in the Middle East and North Africa (CAMENA) envelope, EUR 0.7m from the Public-Private Partnership Project Preparation in the Southern and Eastern Mediterranean (MED 5P) facility and EUR 0.1m from the Global Environment Facility.
- The updated investment pipeline was developed selecting projects among the investment priorities identified in the region, including some of those emerging through the National Action Plans (NAPs), using prioritization criteria developed over time.
- Regular meetings of the Pollution Reduction and Prevention Investments Group including IFIs took place for streamlining support to regional investment needs.

20 Data from the EIB sources “MeHSIP-II Final Report Period covered: 1 June 2015 – 30 September 2018)” and “Second Phase of the Mediterranean Hot Spots Investment Programme (MeHSIP II) - Projects Status Update (May 2020)”

21 Note: EIB funding is only for a part

The Mediterranean Hot Spots Investment Programme (MeHSIP) II – EU Neighbourhood Advisory Programme on the Water, Wastewater & Solid Waste Management Sectors

Implementation period: 06/2015-09/2018

Budget: 6,000,000 EUR

Funding source: European Commission grants to the Facility for Euro-Mediterranean Investment and Partnership (FEMIP) Fund

Implementing Agency: European Investment Bank (EIB)

The overall objective of the MeHSIP-II programme was to promote adequate water resource management, sound water supply and wastewater services and solid waste management, and to reduce the pollution of the Mediterranean. The project covered the countries eligible under FEMIP Trust Fund, namely Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia.

The specific objectives were to:

1. increase the number of viable projects in priority sectors capable of being readily financed by donors and implemented by promoters, ensuring that their operation is efficient and sustainable in the long- term; and
2. strengthen the project preparation capacity of public sector institutions and private sector.

MeHSIP-II achieved these outcomes by providing technical assistance for the preparation of investment projects in the above-mentioned relevant sectors. The technical assistance provided by the project was based on two phases with the first phase consisting of building a project pipeline in each of the target areas, while the second phase covered the project preparation starting from project screening up to the early stages of implementation.

Promoter capacity building was done in a high-level or “meta-capacity” sense, rather than a technical sense. In other words, the value added was in technical training for promoter staff to carry out feasibility studies and more in fostering an understanding of the IFI project cycle and necessary steps to formulating bankable projects. Another key element of capacity building provided are the standardised terms of reference for feasibility studies. These ToRs can be adapted to new projects and show promoters the type of technical elements that are expected by investors to be included in a feasibility study.

The H2020 depollution pipeline is anchored in the National Action Plans for depollution of the Mediterranean under the Land-based Sources and Activities Protocol of the Barcelona Convention. The second pipeline referred to the MeHSIP-II extended thematic and geographical scope and included projects developing value-added activities aimed at optimising water and natural resource efficiency, climate adaptation and mitigation and sustainable growth and job creation. These projects could be located in all areas within the MeHSIP-II countries; thus, they did not have to drain directly into the Mediterranean.

FIGURE 3: Extended scope of MeHSIP II (source: EIB)

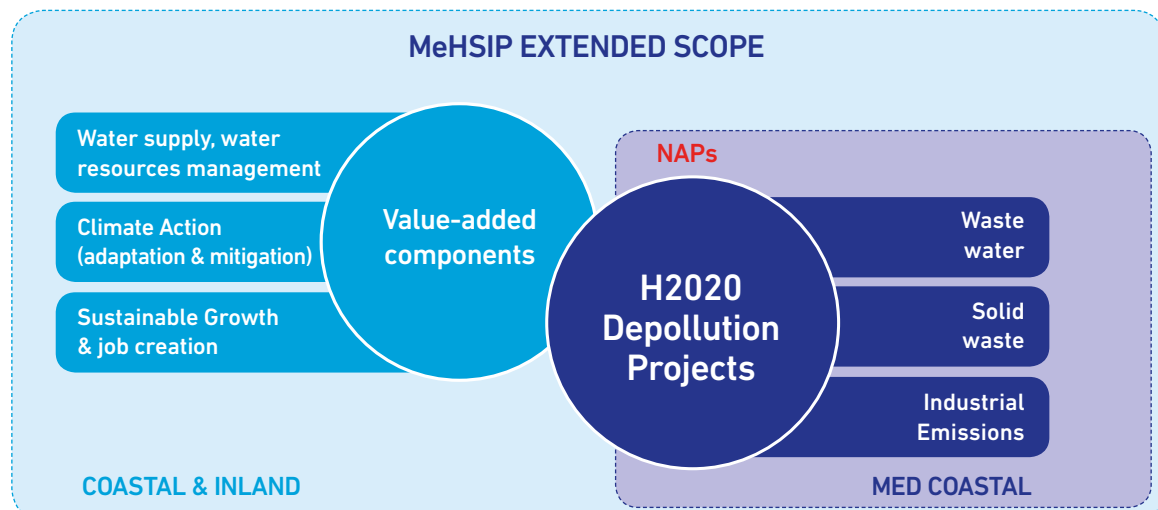


TABLE 1: Status of MeHSIP investment pipeline (source: EIB)

WW: wastewater | IE: Industrial Emissions | SW: Solid Waste | MS: Multi-sector

	Country	Project	Sector	TA Budget (EUR million)	TA Funding Source	Estimated Investment (EUR million)	Status (May 2019)
1	Egypt	Alexandria West WWTP Upgrade and Extension	WW	0.4	CAMENA	185	Approved by EIB Board
2	Egypt	Depollution of Bahr al Baqar agricultural drain	MS	0.2	SSF Cairo	550	TA completed No further interest in the project by the Egyptian Authorities
3	Egypt	Rehabilitation and extension for several water and wastewater treatment plants in different Governorates	MS	0.2	SSF Cairo	250	TA completed Interest in the project withdrawn by the Egyptian Authorities
4	Egypt	Kitchener Drain Investment Project	MS	0.2	SSF Cairo	441	Approved by EIB Board
5	Egypt	Fayoum Wastewater Expansion Project	WW	0.8	EBRD IPPF	395	Approved by EIB Board
6	Jordan	Deir Alla and Al-Karameh Water Supply and Sanitation project	MS	0.5	CAMENA	97	Approved by EIB Board
7	Jordan	Bani Kenaneh Water Supply and Sanitation project	MS	0.5	CAMENA	40	TA completed Water supply component only to be taken forward
8	Jordan	Zarqa Industrial Wastewater Treatment Plant	IE	0.7	MED5P	30	TA completed
9	Lebanon	Saida WW treatment and reuse	WW	0.3	CAMENA	60	TA completed
10	Lebanon	Rehabilitation and expansion of Tripoli WW networks	WW	-	MeHSIP	107	Approved by EIB Board
11	Lebanon	Al Ghadir Wastewater	WW	-	MeHSIP	145	Approved by EIB Board
12	Morocco	Dépollution de l'Oued Martil / COELMA	IE	-	MeHSIP	15	TA completed
13	Morocco	BMCE Ligne Bleue	MS	1.0	CAMENA	20	Approved by EIB Board
14	Morocco	BMCE Ligne Verte	SW	-	MeHSIP	40	Approved by EIB Board
15	Morocco	Integrated SW Management	SW	-	MeHSIP	tbd	TA completed
16	Morocco	Fond d' Equipement Communal (FEC)	MS	-	MeHSIP	tbd	TA suspended
17	Palestine	North East Ramallah Villages Wastewater Collection and Treatment System	WW	0.5	CAMENA	tbd	TA on-going
18	Tunisia	Sustainable management of the phosphate mining basin in Gafsa	IE	0.5	CAMENA	25	TA completed
19	Tunisia	Valorisation des déchets solides - PPP Djerba	SW	-	MeHSIP	60	TA completed
20	Tunisia	Aménagement et Valorisation de Sebkhah Sijoumi	MS	-	MeHSIP	100	TA completed
21	Tunisia	Depollution of the mercury contaminated site in the region of Kasserine (SNCPA)	IE	-	MeHSIP/GEF	40	TA suspended
22	Tunisia	Programme Gestion Intégrée déchets solides - 10 Governorates	SW	-	MeHSIP	100	TA completed
23	Tunisia	Hazardous Waste Treatment Facility (Bizerte)	SW	-	MeHSIP	25	TA completed
24	Tunisia	Programme de mise à niveau de 10 STEP de l'intérieur	WW	-	MeHSIP/GEF	80	TA completed
Total TA grants mobilised by MeHSIP ¹				4.5			
Total TA grants with MeHSIP support				5.9			
Volume of investments already financed by EIB						1,430	
Total potential investment volume						2,805	

¹ The figure includes EUR 0.1M by GEF used for the support of various projects. Support and inputs of MeHSIP experts have not been assigned monetary values.

3.2.2 Challenges and Opportunities

Water and environment projects in the Southern Mediterranean countries tend to be conducted in the public sector and as such, have long lead times. Part of this is due to the nature of public decision-making in the countries concerned, and partly this is due to the sequential nature of the EIB's and other IFIs' internal processes. Where possible, activities are pursued in parallel, but some procedural rules require various stages to have been met to initiate next steps. Mobilisation of available TA funding (e.g. CAMENA) typically took 6 months, and the TA procurement process for the larger projects took 6-8 months. The only overlap in this process is the Expression of Interest (Eoi) stage (1-2 months), which can be done prior to the confirmation of funding.

The MeHSIP-II programme did not have an accompanying technical assistance (TA) grants package for the large-scale feasibility studies that the program was expected to prepare. This required considerable effort to obtain funding and, more importantly, resulted in considerable delays to secure the funding through a relatively complex application process for TA funds (on average 6 months to secure the funds). This, combined with the 6-9 months for the TA procurement, led to significant delays and some frustrations. On the other hand, the immediate and constant availability of the resident experts and short-term call-off TA within the MeHSIP-II programme was invaluable in being able to engage promoters immediately.

Obtaining technical data from promoters is problematic and a lengthy process, which slows appraisal or can even prevent it. Sometimes, the relevant data does not exist, pointing to a need for technical assistance and perhaps a feasibility study, something which promoters may be keen to avoid due to the delays mentioned above. Other times, the studies do exist but the promoter does not possess them, cannot easily release them, or the final reports have not been officially validated at the highest level and so remain "draft" or provisional.

Phase 2 of H2020 followed a large wave of EIB investment in the water/wastewater and solid waste sectors in the MENA region, in the 1990s and early 2000s. The period 2007 – 2011, coinciding with the global financial crisis and Arab spring, shows a hiatus in water/environment lending (with the exception of three large projects in 2009). Since 2012, there has been a renewed wave of water/environment lending, to which H2020 PRPI and MeHSIP have contributed and form an integral part. It is expected that the MeHSIP pipeline will contribute to sustaining this momentum in water and environment lending for a number of years, beyond the end of the programme, given the long project cycles involved in the sectors and countries.

Integrated Programme for the Protection of Lake Bizerte against Pollution

The Lake Bizerte Depollution project is co-financed by the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the European Union and the Tunisian State. It is a Union for the Mediterranean labelled project and focuses on four main areas: the reduction of industrial pollution, the rehabilitation and strengthening of the sewerage and wastewater network, the treatment of industrial solid waste and the improvement of quality of life (through the development of the lake banks and the extension of nearby fishing ports) and a horizontal component of support to the institutions and the administration to enhance its efficiency in environmental management and sustainability.

The label delivered by the UfM in October 2013 to the Lake Bizerte Project was the recognition of a flagship project that could be an example for others, both in terms of overall impact on pollution reduction and exemplary dialogue set in place with local actors.

H2020 through the Pollution Reduction and Prevention Investments component and MeHSIP supported the preparation of the project and assisted the management unit (UGPO - Unité de gestion par objectifs) during its early stage of implementation. Through the H2020 Capacity Building component (CB/MEP) and the commitment of the Tunisian Focal Point and her team, stakeholder engagement for the integrated management of Lake Bizerte was achieved through several vivid and interactive consultations with major national, regional and local authorities and of all categories of stakeholders, leading to the "Lake Bizerte Charter" for the sustainable future of the Lake in 2012. Several other consultations have followed since then, during Phase 2 of H2020 (SWIM-H2020 SM), on the management plan for the sustainable development of the area and on consolidating the governance structure.

The participatory approach and overall experience in the development of the Lake Bizerte Charter has been reproduced in the region of the Gulf of Tunis through the 'Charter for the sustainable development of Oued Meliane'. In addition, a study was launched to identify a set of measures aimed at the integrated decontamination of the watershed of the Medjerda River, which is the largest river in Tunisia.

3.3 Capacity Building (CB)

3.3.1 The 2015-2020 CB Work Programme

The H2020 Capacity Building component was implemented between 2015-2020 with the general objective “to strengthen the comprehensiveness, implementation and enforcement of environmental policy and legislation, to enhance environmental mainstreaming at national level into other policies and to support better environmental governance, with a view to reducing and preventing marine pollution in order to achieve good environmental status of the Mediterranean Sea”.

The four associated specific objectives of the work programme were to:

1. improve the ability of national policies and legislation to support pollution reduction and prevention by reviewing, updating and completing national environmental policy and legislative frameworks (including by promoting the use, where relevant, of economic instruments) and by making the necessary legislative reforms to create a favourable and sustainable investment environment.
2. improve the capacity of partner countries to formulate, implement and enforce national environmental legislation and the private sector’s compliance capacity, including by facilitating knowledge and technology transfer and by promoting regional cooperation as well as North-to-South and South-to-South exchanges.
3. enhance environmental mainstreaming in key sectors’ policy frameworks and public and private sectors’ practice, including by strengthening the institutional framework and increasing the public and private sectors’ capacity.
4. enable national and regional stakeholders to actively participate in decision-making processes and to contribute to the implementation of environmental objectives.

These objectives have been fully met through the following achieved results:

- Policy and legislative frameworks on pollution reduction and prevention have been strengthened across the region through national efforts at country level; the implementation of the Barcelona Convention and its Protocols through the UNEP/MAP system; as well as with the support of dedicated regional and national projects.
- The national capacities for pollution reduction and prevention have been strengthened through trainings, national and regional workshops, study tours and peer-to-peer exchanges on a variety of issues, involving at least 2,000 participants²² from 12 partner countries²³ as well as from Med EU countries. Several practices related to pollution reduction and prevention have been modified, adopted and/or replicated as a consequence of the training activities, study visits and exchanges of best practices.
- National Action Plans (NAPs) on pollution reduction were revised by all H2020 partner countries (except Libya and Syria) for the period 2016-2025 and the NAP implementation process has been on going. Even Jordan and Palestine who are not Parties to the Barcelona Convention have done so under the H2020 framework.
- Several guidance documents have been produced on key themes.
- Seven countries ratified Protocols of the Barcelona Convention: Algeria (Prevention and Emergency Protocol, 2016), Italy (Prevention and Emergency Protocol, 2016), Israel (ICZM Protocol, 2016), Lebanon (Prevention and Emergency and ICZM Protocols, 2017), Croatia 2018 (Offshore Protocol, 2018) and Malta (ICZM Protocol, 2019).
- All Southern Mediterranean countries have developed National Action Plans on Sustainable Consumption and Production, and Turkey is also in that process.



© SWIM-H2020 SM project

²² SWIM-H2020 SM, UNEP/MAP, ECRAN (Environment and Climate Regional Accession Network)

²³ Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia for national level activities, and additionally, Albania, Bosnia & Herzegovina, Montenegro and Turkey in regional activities.

The Capacity Building sub-group was led by the UfM co-presidency (Jordan and the EU) and UNEP/MAP. The activities were closely coordinated and complemented with activities of the other components, such as capacity building measures on investment preparation and on data management and reporting under the components on Pollution Reduction and Prevention Investments, and on Review and Monitoring respectively.

Major support for implementing the H2020 Capacity Building component was through the EU-funded project “Sustainable Water Integrated Management and Horizon 2020 Support Mechanism” (SWIM-H2020 SM). However, a range of other projects and initiatives contributed to capacity building in the H2020 priority themes, including the UfM labelled projects “BlueGreen Med-CS”, supporting the coordinated engagement of civil society in regional capacity building programmes, “Plastic-Busters for a Mediterranean free from litter” addressing marine litter and “Med ReSCP” addressing sustainable consumption and production and green entrepreneurship; regional programmes such as “SwitchMed”, “Marine Litter Med” (specific policy support to 5 countries to strengthen their national policy framework related to single-use plastic bags and plastic packaging), “IMAP” (capacity building and training activities for IMAP implementation, measures to control and prevent marine pollution, marine litter management measures and compliance and enforcement targeting environmental inspectors); “DeFishGear” in the Adriatic MacroRegion (support to policy makers and stakeholders for dealing with marine litter), “ECRAN” (trainings on Strategic Environmental Assessment/ Environmental Impact Assessment in the Western Balkans and Turkey), many GIZ activities (sustainable integrated wastewater treatment and reuse and many more), Twinning and TAIEX tools, etc.

Sustainable Water Integrated Management and Horizon 2020 Support Mechanism (SWIM -H2020 SM) (www.swim-h2020.eu)

Implementation period: 02/2016-04/2019

Budget: 6,705,250 EUR

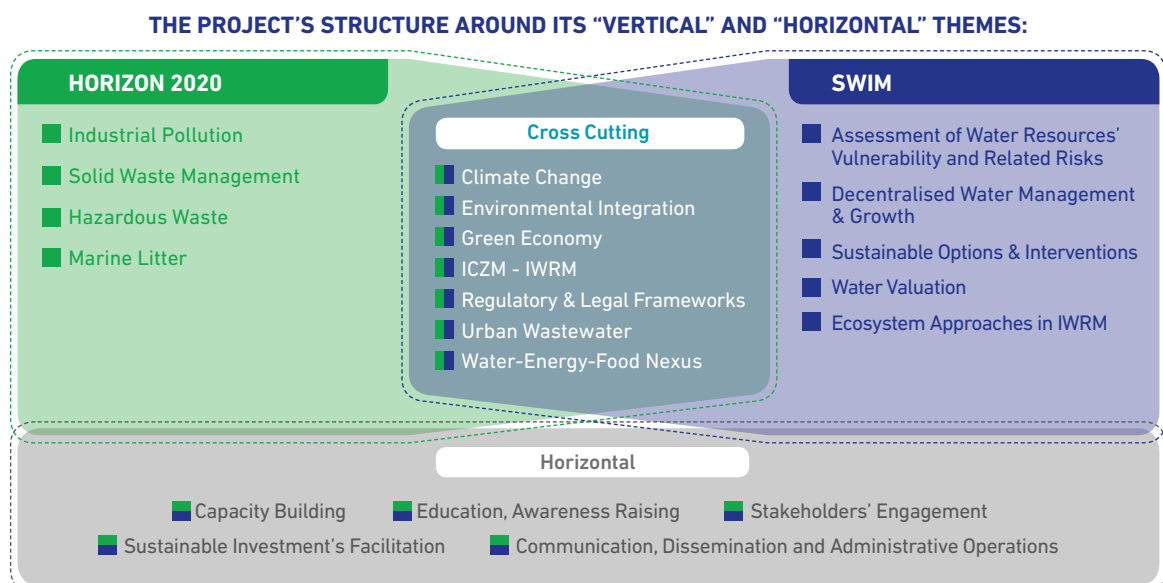
Contracting Authority: EU Commission, Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR)

The overall objective of the project was to contribute, through a tailored and needs-based capacity building programme, to reduced marine pollution and a sustainable use of scarce water resources in the Mediterranean Region, with emphasis on the Neighbourhood South Countries Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine²⁴ and Tunisia. The Western Balkans, Turkey and Mauritania also benefited from regional activities.

In total, almost 100 activities were implemented in 3 years. Interviews with many beneficiaries confirmed that practically all have gained a lot from the project. More than half of them were able to make meaningful recommendations to their hierarchy and directly contribute to the formulation or reform of policies in their country. Many of them undertook concrete initiatives to improve the situation.

24 This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of Member States on this issue.

FIGURE 4: Components of the SWIM-H2020 Support Mechanism



Through the H2020 Capacity Building component and the other H2020 components (and to be fair with support from other processes and projects as well), bodies and mechanisms for inter-ministerial, inter-sectoral and/or multi-stakeholder consultation are operating in several countries. Ministries of Environment, Water, Industry, Finance, etc. are collaborating under revised institutional settings (e.g. for sustainable management of hazardous waste or for addressing single use plastics). Ministries of Environment and Education met for the first time under H2020 activities and established permanent cooperation schemes.

Under the H2020 Initiative, best practices, measures and technologies for the olive oil, iron & steel and cement sectors were developed for guidance, inclusive of circular economy measures. For the iron and steel mill sector, a first full assessment of a key industrial sector was carried out in collaboration with a research institute (University of Athens). It included (i) a mapping of all steel and iron producing plants of the Mediterranean region located in the coastal zone within a distance of approximately 50 km from the coastline; (ii) an assessment of the present and past pollution loads and footprint of the iron and steel industry in the Mediterranean, taking into account the different processes employed in each plant; (iii) original field work through which an impressive reduction of pollution in the sediments of a site affected by a major iron and steel mill was demonstrated over a 35-year period (this reduction was the result of the combined application of Best Available Techniques (BATs) under European and national (Greek) policy and regulation); (iv) a study assessing the possibilities for improvements of the production processes and the consequent pollution loads reduction if BATs are employed²⁵. A regional capacity building activity was designed and implemented around the assessment and its findings.

25 <https://www.h2020.net/component/jdownloads/send/291-lectures-presentations/2855-pollution-loads-from-iron-steel-industries-prof-michael-scoullos>
<https://www.h2020.net/component/jdownloads/send/291-lectures-presentations/2853-pollution-loads-and-pollution-reduction-prospects-v-paraskevopoulou>

Other guidelines that were prepared by SWIM-H2020 SM were on leachate management; dredged materials' management (specific to Tunisia and based on the regional MAP guidelines); recommendations for a better interaction of research and policy. UNEP/MAP also developed guidelines on: PCB management, sustainable management of tanneries, environmental management of lube oil, Fishing for Litter, Adopt-a-Beach, phasing-out of single use plastic bags, operational guidelines on the provisions of reception facilities in ports and the delivery of ship-generated waste in the Mediterranean; Guidance document to determine the application of charges at reasonable costs for the use of port reception facilities or, when applicable, Application of No-Special-Fee System in the Mediterranean; common offshore standards and guidelines; PRTR Regulation (template for national implementation) and proposed a methodology for developing and applying national emission factors where real monitoring data is not available; Updated Guidelines on Management of Dredged Materials and Desalination Activities, etc.

Civil society in the region has contributed significantly to awareness raising on H2020 priority themes and objectives and in influencing citizens' behaviour. All of the H2020 stakeholder NGOs and associations have mainstreamed the H2020 objectives into their annual or rolling strategies and work programmes and have mobilised considerable resources to implement wide-ranging activities. At regional level, major Mediterranean NGOs²⁶ have combined their efforts under the UfM labelled BlueGreen Med CS mechanism which has been instrumental in national CSOs participating in regional capacity building projects and processes. Not least, the implementation of the Action Plan of the Mediterranean Strategy on Education for Sustainable Development by countries, international organisations, educators and NGOs is mobilising changes in practices and in perceptions of what sustainability should be (see page 40).

26 RAED, MIO-ECSDE, WWF MEDPO, IUCN Med



The SwitchMed and Mediterranean ReSCP Post Rio+20 programmes and H2020

Activities of the SwitchMed and Med ReSCP programmes provided contributions to the Capacity Building component of the H2020 Work Programme particularly related to fostering Sustainable Consumption and Production (SCP) and green entrepreneurship in the Southern and Eastern Mediterranean countries, as a key element of pollution prevention through green business models.

The main objective of SwitchMed is to promote SCP in the Mediterranean countries as means to prevent pollution and progress to green and circular economies

Implementing partners:

UNEP/MAP-SCP/RAC, UNIDO, UNEP/Economy Division

Countries:

MENA region countries

Specific objectives:

Adoption of a Mediterranean Action Plan on SCP by the Contracting Parties of the Barcelona Convention; Addressing 4 key sectors: Food, Tourism, Housing, Goods Manufacturing; Training and support to SM industries (TEST-Med), entrepreneurs and CSOs; Preparation of SCP NAPs; Development of pilot activities; Collaboration with financial agents to facilitate access to funding by green entrepreneurs.

The main objective of Mediterranean ReSCP Post Rio+20 is to promote financial mechanisms for investment in SCP by industries from MENA countries and promoting SCP in Western Balkans and Turkey (complementing SwitchMed objectives)

Implementing partners:

UNEP/MAP-SCP/RAC, UNIDO, EBRD

Specific objectives:

- provide financial mechanisms supporting middle size industries from Morocco, Tunisia, Egypt and Jordan to access to funding to implement resource efficiency measures
- stimulate the development of green industries and entrepreneurship in the Western Balkans and Turkey through training and technical assistance.

3.3.2 Challenges and Opportunities

The regional scope of the H2020 Capacity Building component promoted the engagement of countries by proposing national solutions to implement regional decisions. Particularly through H2020-SWIM SM, a flexible, demand-driven mechanism existed that provided a much appreciated by the partner countries set of targeted and tailored technical assistance activities at national level, addressing their needs.

The long-term vision and commitment shared by the partner countries and institutional partners under the Horizon 2020 Initiative, provided a sense of ownership and continuity beyond the time limits of specific projects. The tangible, needs-based activities that addressed key and emerging issues encouraged the targeted stakeholders to undertake follow up actions and replicate interventions that are important for the region. The regional regulatory and policy framework of UNEP/MAP was a key point of reference for the H2020 Capacity Building activities. Many capacity building activities were designed and implemented together.

The H2020 Capacity Building approach focused on dedicated activities for the capitalisation of lessons learnt, good practices and success stories, as well as for disseminating innovative approaches tested in EU and non-EU funded demonstration projects. The interventions facilitated complementarity with bilateral cooperation activities in the South Mediterranean countries and fostered regional dialogue, cooperation and synergies with institutional partners, other projects and initiatives.

The systematic and meaningful dialogues with the H2020 Focal Points, authorities and stakeholders, the regular on-the-ground presence of the H2020 implementing project teams, the strong and visible synergies with other relevant projects, the use of bottom-up approaches and gender considerations, all greatly contributed to the overall success of the H2020 Capacity Building component and were vital for retaining a sense of ownership, responsiveness and engagement of the different stakeholders, including, importantly, civil society and the private sector.

The difficulty in obtaining data necessary for the implementation of specific activities from Ministries and other stakeholders in some of the partner countries is still a considerable challenge. Also, law enforcement remains a weak point in most partner countries and this has a negative impact on efforts to promote and apply some of the H2020 technical assistance interventions.

Despite the significant achievements made in strengthening capacities over the last years under H2020, the need still remains to further enhance the capacities of public authorities and other stakeholders. New pressures keep emerging, governance gaps continue to persist, while new knowledge and valuable experiences need to be shared.

Capacity Building component: actions that took place after H2020 capacity building activities were completed

- ALGERIA:** New regulations for product packaging and identification of best available techniques in the packaging industries were developed. Extensive marine litter monitoring surveys produced enough data for defining measures and introducing prevention legislation.
- EGYPT:** Advanced its National Strategy on Education for Sustainable Development and mobilised funds for pilot programmes in primary and secondary schools in numerous governorates. Egypt also developed the new waste-management stream of Construction and Demolition Waste.
- JORDAN:** The Association of Banks in Jordan replicated the Lebanese experience on private-sector participation in water infrastructures with emphasis on the role of banks. In December 2018, the National Strategy on Education for Environment and Sustainable Development was launched with all relevant stakeholders (National Commission for UNESCO, competent NGOs).
- MOROCCO:** The “Vision and Call for Action for the ICZM of the Rabat-Sale-Kenitra region” guided the next steps in the process. A relevant project fiche was accepted by the World Bank and met with donor financing.
- ISRAEL:** Technical assistance based on the EU Plastics Strategy led to the National Plastic Waste Strategy. The Israel Manufacturers Association teamed up with the Ministry for Environmental Protection (MoEP) to host the first joint workshop on plastic waste and recycling. In the glass sector, the MoEP established a glass-sorting facility.
- LEBANON:** The cooperation concerning the management of the industrial sector and industrial permitting between the Ministry of Environment and the Ministry of Industry has progressed considerably. Lebanon also drafted a strategy for Construction and Demolition Waste.
- PALESTINE:** National curricula are revised to include environmental aspects. An MoU was signed in 2017 between the Environment Quality Authority (EQA) and Ministry of Education. Another MoU was signed between the EQA and the Journalists Association. Trained stakeholders will sustain the implementation of the Action Plan of the Mediterranean Strategy on Education for Sustainable Development. Palestine also drafted a Construction and Demolition Waste bylaw.
- TUNISIA:** Under Construction and Demolition Waste a joint decision was taken between the Ministry of Local Affairs and Environment and the Ministry of Equipment which states that tenders for public works will oblige bidders to use at least 20% of the materials from recycled demolition waste.

Giving continuity to SWIM-H2020 SM since 2019: the Water and Environment Support (WES) in the ENI Southern Neighbourhood region (www.wes-med.eu)

Implementation period: 05/2019-05/2023

Budget: 7,900,000 EUR

Contracting Authority: EU Commission, Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR)

The Water and Environment Support (WES) in the ENI Southern Neighbourhood region is a 4-year regional project designed to contribute to the implementation of an integrated approach to pollution reduction and prevention, in line with the Union for the Mediterranean agendas and the Barcelona Convention. WES is also meant to contribute to a more efficient management of scarce water resources. It aims to do so by increasing the capacity of stakeholders that are involved in pollution reduction and water management and support them in formulating and implementing environmental and water policies. WES capitalizes on the H2020 Initiative and on regional projects (including H2020 CB/MEP, SWIM I and II, SWIM-H2020 SM) and is implemented in synergy with many other regional projects and processes.

3.4 Review and Monitoring (R&M)

3.4.1 The R&M 2015-2020 Work Programme

The Review and Monitoring component was implemented between 2015-2020 with the general objective “to ensure the availability, quality, accessibility and sustainability of monitoring data and information needed for the knowledge base supporting regular H2020 assessment.”

The four associated specific objectives of the work programme were to:

- enhance optimal national information systems allowing for systemic production of indicator-based reporting and sharing of data;
- expand the existing H2020 priorities with a particular focus on water, solid waste and industrial emissions, identify and address additional priority areas;
- ensure the sustainability of the governance setup of the H2020 review processes;
- encourage the integration of outcome of the H2020 review in the policy making process at regional and national level.



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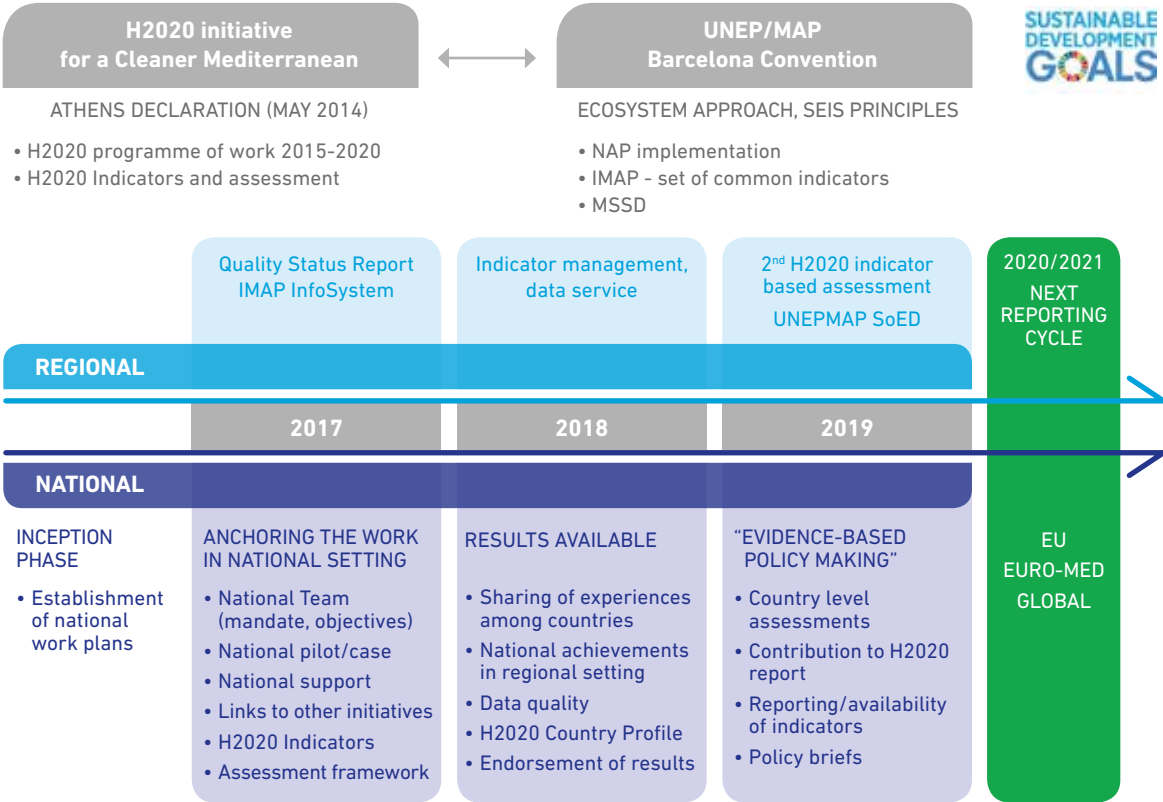
These objectives have been met through the following achieved results:

- A regional indicator-based assessment with a synthesis (summary for decision makers) has been carried out on the basis of 11 macro-indicators and a consultation and peer-review process. Building on the knowledge-base, infrastructure, data, information drawn in the first H2020 Assessment, the second H2020 Mediterranean Assessment considers the broadened scope of the H2020 work programme (2015-2020) by including the identified main land-based sources of pollution, as well as the emerging issues of marine litter, hazardous waste and bathing water quality.
- An indicator-based mid-term evaluation of Regional Plans under the Barcelona Convention LBS protocol (Article 15) has been undertaken (in the fields of wastewater, storm water, sludge, agriculture, and aquaculture, marine litter and industrial pollution management) and the findings have been taken into account for H2020 implementation as appropriate.
- Monitoring capacities have been strengthened at national level in 9 partner countries²⁷ through trainings and financial and technical support. Practically all Mediterranean countries have benefited from relevant regional capacity activities under the UNEP/MAP framework.
- New dataflows have been initiated for waste, industrial emissions and wastewater.
- Tools and procedures for data management and reporting flows (NBB/PRTR, H2020, IMAP) have been standardised and the UNEP/MAP - InfoMAP platform is ready, as a common repository for data exchange - synchronised with EEA Reportnet processes to serve interoperability between InfoMap and the EU Information System on Marine environment (WISE-Marine).

²⁷ Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia

The sub-group was led by the European Environment Agency and UNEP/MAP. The activities were closely coordinated and complemented with activities from other components, the other sub-groups through back-to-back meetings, provision and exchange of expertise, co-organisation of trainings, to name a few.

FIGURE 5: H2020 Review & Monitoring component and ENI SEIS II timeline



Achievements of the H2020 Initiative's second phase

European Neighbourhood Instrument (ENI) Shared Environmental Information System (SEIS) - ENI SEIS II South Support Mechanism

Implementation period: 2016-2020

Funding source: European Commission's Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR) under the European Neighbourhood Instrument

Implementing Agencies: European Environment Agency (EEA) and United Nations Environment Programme/Mediterranean Action Plan (UNEP/MAP)

The SEIS Support Mechanism aims to contribute to the reduction of the marine pollution in the Mediterranean by developing a Shared Environmental Information System (SEIS) supporting the regular production and sharing of quality assessed environmental data, indicators and information. The overarching objective is to ensure coherence and harmonisation of environmental reporting at the regional level in support of more efficient policymaking (i.e. in terms of contributing to reducing marine pollution). The specific objective is to improve the availability of and access to relevant environmental information for the benefit of effective and knowledge-based policymaking in the European South Neighbourhood, including Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia.

The H2020 Review and Monitoring report²⁸ ('second H2020 assessment') prepared by EEA and UNEP/MAP is the major output of the H2020 Review and Monitoring component. The set of H2020 indicators was revised and extended in the second phase of H2020 and includes a total of 11 macro-indicators and 8 sub indicators, of which 2 are complementary, covering the three H2020 thematic areas: water, waste (including marine litter) and industrial emissions. The revised H2020 indicator set results from an extensive participatory process, including the setting up of national teams to translate the H2020 review mechanism into the national context and appointing national representatives in the H2020 Review and Monitoring subgroup. These renewed Horizon 2020 indicators are descriptive.

The H2020 indicator set provides the core tool for measuring the trends and tracking the progress of implementation of regional and national regulatory frameworks. For the assessment of the pressures on the Mediterranean Sea, a holistic viewpoint was taken by using the "source-to-sea" framework to structure the thematic assessment. This shift to a more integrated approach links all relevant flows from the upstream source to the downstream area of impact on the Mediterranean marine ecosystem within the DPSIR framework. The second H2020 assessment complements other Mediterranean assessment studies, notably the Plan Bleu's "State of the Environment and Development in the Mediterranean" report and the 2017 "Mediterranean Quality Status Reports" (2017 MED QSR). The H2020 Indicators are part of the indicators selected to monitor the implementation of the National Action Plans, and are therefore actually referred to as H2020/NAP indicators.

At national level, important efforts are in place to further develop information systems e.g. in the area of waste management, Jordan and Israel have started developing national waste information systems that contribute to monitoring the enforcement of relevant provisions of legislation. Tunisia designed a dedicated information system for hazardous waste and a process to monitor health and environment indicators. At regional level, a key milestone was achieved during the last two years with the development of the InfoMAP platform by the Information and Communication Regional Activity Centre of UNEP/MAP, Info/RAC²⁹. Furthermore, the 21st Meeting of the Contracting Parties to the Barcelona Convention (December 2019), approved the main elements and roadmap for the preparation of a UNEP/MAP Data Management Policy (the policy itself is to be developed in 2020-2021).

In the second phase of H2020, national cooperation, coordination and governance set-up were strengthened by engaging and liaising with numerous stakeholders and entities, such as SDGs national committees, MED POL Focal Points, Ministries of Interior, Industry, Water and Irrigation, Health, and local authorities.

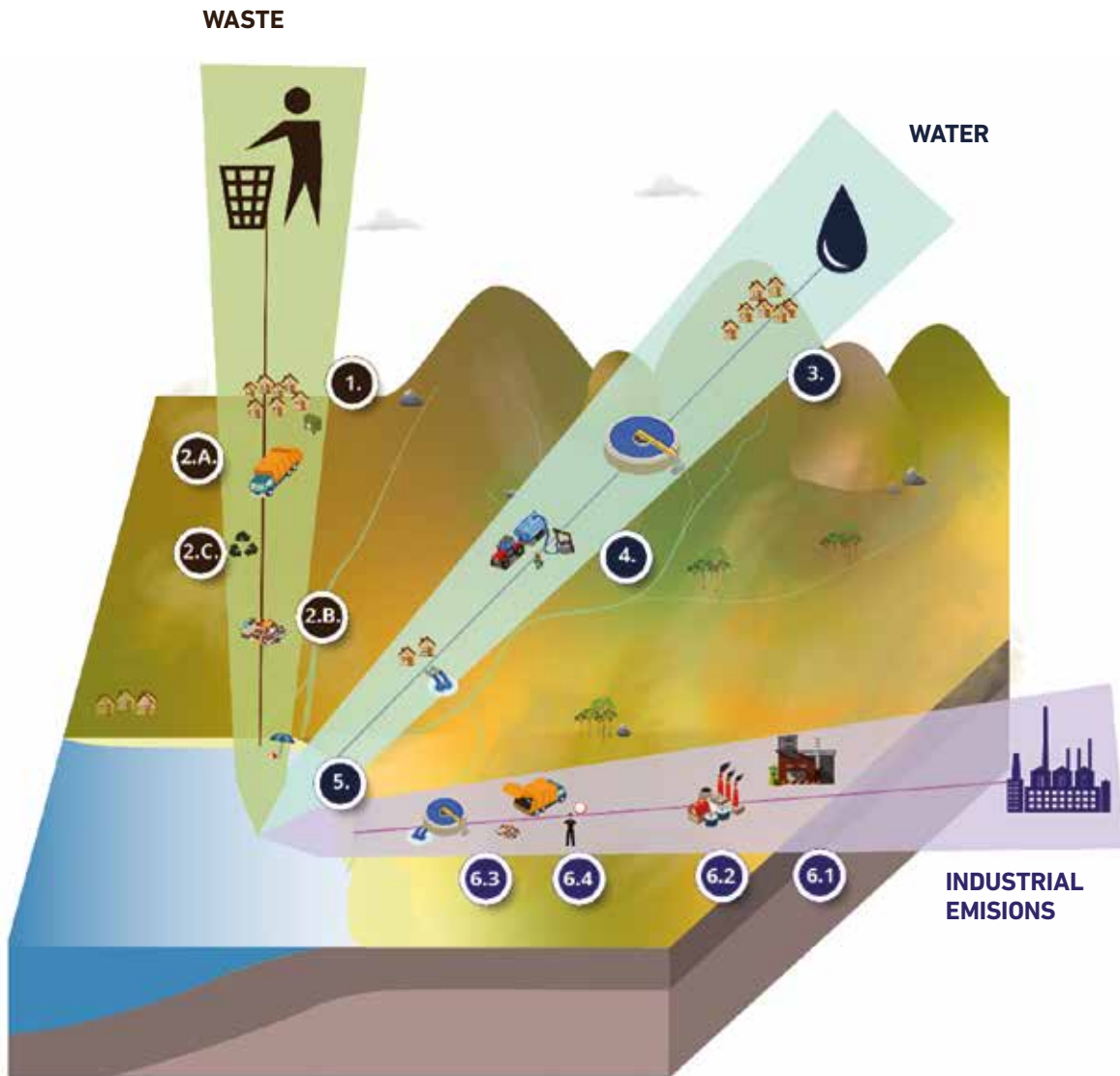
In a process driven mainly by the designated authorities representing the environmental and statistical organizations, efforts were made to increase the ownership of the process and of the outcomes. Some countries, such as Palestine, Tunisia, Jordan, took advantage of the momentum created by regional cooperation projects under H2020 to establish national inter-institutional committees and national working groups that also bring together representatives of several relevant authorities. Furthermore, over the last years, more concrete examples of involvement and cooperation with civil society emerged.

28 Synthesis report: Towards a cleaner Mediterranean: a decade of progress. *Monitoring Horizon 2020 regional initiative* Technical report: Technical assessment of progress towards a cleaner Mediterranean. *Monitoring and reporting results for Horizon 2020 regional initiative*

29 <http://www.info-rac.org/en/infomap-system/infomapnode>



FIGURE 6: Source-to-sea schematic overview with consolidated list of H2020 indicators for each thematic area (source: ETC-ICM- Deltares)



WASTE

- 1. Municipal waste generation & composition
- 2.A. Waste collection
- 2.B. Dump sites
- 2.C. Fraction of plastic waste generated that is recycled

WATER

- 3. Access to sanitation systems
- 4. Municipal wastewater chain
- 5. Quality of marine and coastal waters

INDUSTRIAL EMISSIONS

- 6.1. Release of nutrients from industrial sectors
- 6.2. Release of toxic substances
- 6.3. Industrial hazardous waste
- 6.4. Compliance measures

3.4.2 Challenges and opportunities

Despite significant efforts to consolidate the data - and information base for substantiating statements on progress with factual data, full concrete environmental evidence is still lacking. The mechanism for data collection and data sharing has been set into motion with concrete achievements in terms of established data flows, reporting tools and platforms. Yet significant gaps in data still prevail, in part due to hindrances in the data collection resulting from lack of monitoring capacities, equipment and resources, in part due to the lack of national organisation, cooperation agreements (data governance) and proper infrastructure enabling the accessibility of data. Subsequently, in the absence of a coherent body of evidence, the review of progress relies on the limited existing reliable data, knowledge accumulated within institutions to fill in gaps and document progress, as complemented by expert judgement based on field studies, research projects and comparative environmental performance analysis.

Substantial efforts have been put in place to set up the H2020 reporting process at the national and regional level, but important data gaps remain. Most of the H2020-related data from nearly all Southern Mediterranean countries is not publicly accessible via web services, platforms or interfaces. Despite increased inter-institutional dialogue, the cooperation among governmental institutions remains in some cases very limited resulting in a lack of cohesiveness, hampering the efforts for more effective data policy integration.

To help in many situations, the revision and aligning of the H2020 indicators with other national (e.g. NAP), regional (e.g. IMAP, MSSD) and global (e.g. SDG) initiatives and their respective indicators, contributed to foster synergies and encourage streamlining. This alignment process was a central task, which guided the countries in identifying areas for integration, linking to different institutions at the national and regional level. Such an alignment ensured the optimisation and use of existing data and information to serve different purposes, and the organization of information in a systematic and harmonised manner. It also promoted a more holistic and integrated assessment of the progress related to the priority themes, in line with the principles of SEIS. Ensuring the alignment of H2020 indicators with other ongoing processes was paramount also to reduce the reporting burden for countries and optimise the use of data for different purposes.

The seven principles underpinning a Shared Environmental Information System (SEIS)

1. Information should be managed as close as possible to its source
2. Information should be collected once, and shared with others for many purposes
3. Information should be readily available to public authorities and enable them to easily fulfil their legal reporting obligations
4. Information should be readily accessible to end-users, primarily public authorities at all levels, to enable them to assess in a timely fashion the state of the environment and the effectiveness of their policies, and to design new policy
5. Information should also be accessible to enable end-users, both public authorities and citizens, to make comparisons at the appropriate geographical scale (e.g. countries, cities, catchments areas) and to participate meaningfully in the development and implementation of environmental policy
6. Information should be fully available to the general public, after due consideration of the appropriate level of aggregation and subject to appropriate confidentiality constraints, and at national level in the relevant national language(s)
7. Information sharing and processing should be supported through common, free open source software tools

Research as a cross-cutting component of the second phase of H2020

The H2020 Work Programme for 2015-2020 included a general objective related to research “to increase the knowledge-base and develop innovative technologies, including their dissemination and transfer for the prevention and reduction of pollution in the Mediterranean Sea.”

The specific objectives were to:

1. address research gaps needed to achieve the H2020 objectives
2. develop mechanisms to improve the science – policy/practice interface

Specifically, the H2020 Capacity Building component, with the support of SWIM-H2020 SM, undertook an analysis of research results³⁰ to feed into policies and practices important for water management and marine pollution prevention and reduction in the Mediterranean, and provided a set of key recommendations for a better interaction of research and policy to directly support the Research Component of H2020 but also the work of the European Environment Agency (EEA), the UN Environment Programme/Mediterranean Action Plan (UNEP/MAP) and the Union for the Mediterranean (UfM). The analysis mapped projects funded under the EU 7th Framework Programme and the namesake EU Horizon 2020 Framework Programme for Research and Innovation, as well as other projects such as the EU Eco-Innovation programme, the LIFE+, ENI-CBC MED, INTERREG MED and IPA Adriatic projects, in order to identify results of H2020 relevance (municipal waste, urban waste water, industrial pollution, marine litter, etc.) to strengthen the science-policy interface. Of more than 400 screened projects, 32 were mapped as particularly relevant to the policy themes of the H2020 Work Programme.

This demonstrates that a significant number of policy-oriented research projects in the region are carried out in the Mediterranean. At the same time, there are still needs for (a) more meaningful recommendations and conclusions of the research projects - which requires better design and cooperation from the onset of research institutions with policy stakeholders; and (b) policy making processes to more strongly capitalise on the knowledge, information and data that is generated in the region, and beyond, by universities, research institutes and local communities.

Clear examples of advanced research commitments are the PRIMA (<http://prima-med.org>) and BlueMED (<http://www.blumed-initiative.eu>) Initiatives which, in close collaboration with the UfM, are promoting and tackling key Mediterranean issues and playing a central role in the research and innovation agendas of the region.

While not directly stemming from the H2020 Work Programme, a first-ever scientific report “Risks associated to climate and environmental changes in the Mediterranean region, was carried out by the MedECC network - Mediterranean Experts on Climate and Environmental Change during Phase 2 of H2020. A Summary for Policy Makers (SPM) aims to bridge the gap between scientists and decision-makers, facilitate decision-making on strong scientific findings and therefore contribute to the improvement of policies at all levels.

30 <https://www.swim-h2020.eu/strengthening-the-research-to-policy-practice-interface>

4

Conclusions and Outlook

4.1 Main conclusions

The H2020 Steering Group, at its final meeting in September 2019³¹, affirmed that the Horizon 2020 Initiative for a cleaner Mediterranean (H2020) is considered an overall success, with its mandate and Work Programme under the three Components - Pollution Reduction and Prevention Investment, Capacity Building, Review and Monitoring - being met for the most part and to a very satisfactory degree. It has been most impactful in building on existing institutions, initiatives and results, filling gaps where it could bring added value and in reinforcing regional cooperation, networking and partnership, maintaining over time a clear and common agenda of shared objectives.

Measuring the impacts of the H2020 Initiative on the state of the Mediterranean environment is a complex task, as trends can only be observed in the long term. However, there is evidence of the progress made in achieving the goals of the H2020 Work Programme, with more investments in pollution reduction and prevention, strengthened capacities and strengthened policy and legal frameworks to reduce and prevent pollution, improved information and knowledge on pollution in the Mediterranean, enhanced education and awareness on sustainable development and a formally declared higher priority of pollution reduction and prevention on regional and national political agendas throughout the region.

Many existing policies and legislative texts have been renewed or new ones introduced with the support of H2020 and especially by the Capacity Building component; but much needs to be done in terms of effectively implementing and enforcing them. Interdepartmental coordination within the Ministries of Environment, inter-ministerial dialogue (Education, Industry, Water, Agriculture, Economy, etc.) and stakeholder engagement have been enhanced and the Initiative has helped the countries to mainstream the importance of the environment and to consider it as a cross-cutting issue. The focus of the 2nd phase of H2020 on specific country interests and peer-to-peer exchanges among countries are considered particularly effective aspects of the H2020 Work Programme. This work must be continued and further strengthened in the next steps.

31 10th Meeting of the Horizon 2020 Steering Group 25 September 2019. Summary outcomes of the meeting.



Mobilising changes in practices and behaviour through the Mediterranean Strategy on Education for Sustainable Development and its Action Plan

The UfM Ministerial Meeting of May 2014 formally and unanimously endorsed the Mediterranean Strategy on Education for Sustainable Development (MSESD). The Strategy was finalised with the support of the Horizon 2020 Initiative which facilitated the final stakeholder consultations on the text.

The aim of the Strategy is to encourage countries of the Mediterranean to develop and incorporate Education for Sustainable Development (ESD) into their formal education systems, in all relevant subjects, as well as in non-formal and informal education. This equips people with knowledge and skills in sustainable development, making them more competent and confident and increasing their opportunities for acting for a healthy and productive life in harmony with nature and with concern for social values, gender equality and cultural diversity in the Mediterranean and beyond. It is the first regional Strategy on Education addressing an eco-region which touches upon 3 continents and many countries with different socioeconomic & cultural backgrounds.

Soon after the Strategy's adoption (2014) its implementation seemed to be uneven among the countries of the region, while in 2015 the adoption of the 17 SDGs with SDG4.7 exclusively addressing ESD, amplified the role of ESD. This led to the participatory development of the Action Plan (AP) of the MSESD by experts of ministries, academia and civil society and its adoption by a Conference of Mediterranean Ministers of Education (Nicosia 2016). The AP sets the Strategy in motion providing strategic directions in priority areas of institutional and operational interventions (recommended activities and indicative roadmap), common thematic areas, region-wide programmes, as well as indicators for monitoring the progress (in line with those for SDG4.7).

At the Nicosia Ministerial Conference, the Mediterranean Committee on Education for Sustainable Development (MCESD)³² was set up to guide and monitor the implementation of the AP at regional level and support the countries. Chaired by the Ministry of Education of Cyprus it has as members, Ministries of Education from Croatia, Greece, Malta, Portugal, and the Ministry of Environment of Jordan, as well as international organizations: the UNESCO Office in Venice, the Union of the Mediterranean, UNEP/MAP, the UNECE and the League of Arab States. The Committee has met twice since then, reporting on progress and planning next steps. In cooperation with the countries, the MCESD organizes tailor-made activities to develop competences on the implementation of ESD and to provide technical support for the proper implementation of the AP of the MSESD in alignment with the national Agenda 2030 frameworks, through trainings and consultations.

Between 2017 and 2019, seven national (Egypt, Jordan, Palestine, Tunisia, Algeria) and two regional (in Cyprus and Greece) capacity building events have been held, with the support of the EU SWIM-H2020 Support Mechanism Project, the UfMS, UNEP/MAP and significant country contributions especially from Cyprus and Greece. More than 600 experts, administrators and educators were engaged in interactive workshops, meaningful discussions and dialogue.

MSESD is also an integral part of the Mediterranean Strategy for Sustainable Development 2016-2025 (MSSD 2016-2025) and the status of MSESD implementation (namely number of countries that have launched national strategies on education for sustainable development) has been included in the 'dashboard' indicators for monitoring the MSSD implementation progress.

³² The Secretariat of the MCESD is provided by MEDIES/MIO-ECSDE (<https://medies.net/project/240415/>) and the UNESCO Chair on ESD in the Mediterranean of the University of Athens.

Cooperation on investment projects was accomplished, particularly in terms of creating enabling conditions (economic, institutional, fiscal, etc.) for investments to take place in countries.

Much has been achieved on country capacities to monitor and report, and the list of H2020 indicators that has been developed is fully aligned with the reporting processes under the UNEP/MAP - Barcelona Convention and the SGDs, in relevant correspondence with indicator frameworks developed consistently by regional institutional partners such as the EU/EEA and the Arab League. Yet, there is need for completion of the data and indicators coverage by some countries, and requirements for securing regular coordination of the working procedures in line with the Shared Environment Information System (SEIS) principles.

The relevance of the Horizon 2020 Initiative has been and remains very high for the Mediterranean region. According to all consulted sources in the context of the External Evaluation of the UfM 2014 Ministerial Declaration on Environment and Climate Change³³, particularly relevant has been the broadening of the thematic scope of the H2020 Initiative in Phase 2 to more strongly focus on pollution prevention, to include green economy principles and SCP for pollution control and prevention, and to address emerging issues such as marine litter and hazardous waste. This also implied that

the scope of the H2020 Initiative encompasses environmental pollution in a wider sense, beyond the major initially identified sources of marine pollution (municipal solid waste, urban waste water and industrial pollution).

The political endorsement through the UfM 2014 Ministerial Declaration on Environment and Climate Change was key in promoting this broadened scope, and for ensuring the enhanced and continued relevance of the H2020 Initiative, building on the mid-term review results and the Horizon 2020 Mediterranean report by the European Environment Agency and UNEP/MAP of 2014. All components of the H2020 Initiative – Capacity Building, Review and Monitoring, Pollution Reduction and Prevention Investment and even Research – have been considered highly relevant by stakeholders.

Beyond the concrete activities and results, H2020, as a joint initiative engaging all Mediterranean countries and a wide spectrum of stakeholders, has been instrumental in enhancing synergies and the much-needed spirit of cooperation in the region. The H2020 Initiative has contributed significantly to clarifying the delineation and the identification of complementarities of roles of the different organizations, implementing partners and stakeholders of the Mediterranean. It has become a platform of exchange on concrete issues, fostering a better understanding among all involved stakeholders and in this way has assisted in regional stability.

³³ GlobalCAD, 2019. External Evaluation of the UfM Ministerial Declaration on Environment and Climate Change. Final Report.



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4.2 Building on the H2020 Legacy: towards a “GreenerMed” by 2030

Echoing the above, there is a broad consensus among the wider Mediterranean stakeholder community that the achievements of H2020 have promoted a strong sense of ownership, collegiality and solidarity, that should be carried over to the follow-up 2030 agenda dedicated to support, cohesively so, the urgently needed transition to a more sustainable, green and circular economy in the Mediterranean.

The 2014 UfM Ministerial Meeting on Environment and Climate Change introduced and pioneered in the Mediterranean some of the concepts and approaches that are currently being referred to under the European “Green Deal”. Expanding the thematic focus and ensuring a strategic, inter-linked approach to addressing depollution, pollution prevention (through sustainable consumption and production and resource efficiency) and climate change, the Mediterranean region geared its course towards a green and circular economy before other regions. It can share a wealth of relevant knowledge and practices.

The Naples Ministerial Declaration of the Contracting Parties to the Barcelona Convention (December 2019) underlines the need for a “systemic change supported by forward-looking and innovative strategies, policies, and behaviours”. It focused in particular on four priority areas for action and commitments: effectively tackling marine litter, strengthening and expanding the Marine Protected Areas (MPAs) network, responding to the challenges arising from climate change, and supporting sustainable blue economy and an ecological transition for the region.

There are policies, legislation, directives and guidelines in place to adequately support a sustainable development in the Mediterranean, including on monitoring and reporting on performance. However, implementation still remains a serious challenge. As a main lesson from H2020, any new initiative must focus on this challenge along with the needs for further developing/updating policies, legislation and supporting institutions.

A follow-up agenda entitled “Towards 2030: Agenda for a Greener Med – Contributing to Achieving the Environmental SDGs in the Mediterranean” (2030GreenerMed) has been under formulation through the UfM (Senior Officials Meetings, Working Group on Environment and Climate Change, Environment Task Force) since 2018. The Concept Note of 2030GreenerMed is expected to receive political endorsement at the upcoming 2nd UfM Ministerial Meeting on Environment and Climate Action (December 2020).

The “2030GreenerMed” Agenda is conceived as an initiative by and for all stakeholders in the region. It is open to all and will function in complementarity with ongoing efforts. It is meant as a tool for enhancing regional integration and collaboration. As such, it acts as a framework for existing and emerging initiatives to work towards a common goal. It shall provide a platform to advance the Mediterranean environment and climate change/sustainable development agenda and bring different actors together without affecting the ownership and responsibilities that the different actors have on their projects, mandates and programmatic frameworks.

The core objective of “2030GreenerMed” is to set the framework to coordinate, streamline and promote the efforts in the Mediterranean region (in accordance with regional and global commitments and obligations) by involving UfM member countries and other relevant stakeholders through a participatory approach, to:

1. support the transition towards a Green, Circular and Socially Inclusive Economy;
2. prevent and reduce pollution on land, air and sea;
3. protect, preserve, manage and restore natural resources in the Mediterranean region within an integrated, ecosystem-based approach, including terrestrial, marine and coastal dimensions.

The three thematic areas are closely interlinked and need to be addressed simultaneously. A fourth cross-cutting thematic area of high regional priority is the link with climate action for mitigation and adaptation. The core objective will be translated into a series of key actions by the UfM Member States, stakeholders and donors for easy communication and follow up, based on the themes identified.

Based on the lessons learnt from H2020, the following priorities are being taken up by “2030GreenerMed”:

- The funding sources for the implementation of the new initiative have to be diverse and not mainly EU-based, as was the case under H2020. Access to adequate funding for civil society actions is very important to be included.
- Projects that will be implementing the “2030GreenerMed” need to be operationally connected with each other. This coordination is linked to the role of the Focal Points at country level, whose Terms of Reference will have to be more clearly defined under the new Agenda.
- Modalities need to be sought that would allow some activities and projects to cover all the UfM countries, harmonising and complementing as much as possible. The same applies for incentives that would encourage the more active participation of all EU countries, including those without a Mediterranean shore.
- Future capacity building activities should focus on exchanges of peers. The EU funded Water and Environment Support (WES) in the ENI Southern Neighbourhood region (2019-2023) has integrated this peer-learning approach in its work programme.
- Education and awareness raising at all levels under the guiding regional frameworks linked to “2030GreenerMed” (i.e. the Mediterranean Strategy on Education for Sustainable Development, the Mediterranean Commission for Sustainable Development, Education for Sustainable Consumption, etc.) need to be further strengthened.
- Effective communication of the political dimension of what “2030GreenerMed” aims to achieve and how, will help to ensure engagement of high-level decision makers.

The means of implementation of “2030GreenerMed” are expected to include:

- Providing Capacity Building and Technical Assistance, sharing of good practices and know-how.
- Enhancing knowledge and evidence, monitoring and assessment capacities (including having an effective monitoring and reporting mechanism that involves various actors, civil society organizations, youth groups, etc.).
- Promoting education for sustainable development at all levels and forms of education.
- Facilitating linkages between Research, Innovation, Technology Transfer and business opportunities.
- Mobilizing finance and investments, including innovative financing mechanisms, access to finance and access to markets for SMEs and entrepreneurs.

Reinforcing the work done under Horizon 2020, monitoring and reporting processes for “2030GreenerMed” should focus on impacts. It should also further enhance synergies between the regional stakeholders, and their collaboration thereof, building on the efforts of the past 14 years of cooperation. Monitoring and evaluation of the core objectives, as well as of the targets and objectives for each of the thematic priorities, will be aligned with the SDGs framework, which provide the basis for “2030GreenerMed”. The “2030GreenerMed” Agenda can support the joint tracking of how related SDGs are progressing in the Mediterranean. It could facilitate and strengthen regional and countries’ capacities to meet the Goals.




In terms of environmental governance, the “2030GreenerMed” Agenda is expected to build on and pursue better cross-sectoral coordination, environmental mainstreaming and involvement/tighter links with economic/planning agencies; multi-stakeholder participation and engagement, including more direct involvement of regional and local authorities, and partnerships and coordination among different actors (public, private, civil society, academia, etc.); links to the SDGs, international, regional and national agendas, and links and synergies with the other UfM ministerial agendas (Blue Economy, Water, etc.); governance reforms at national level to support the transition towards a circular economy within a framework of equity of access to resources (i.e. social justice).



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