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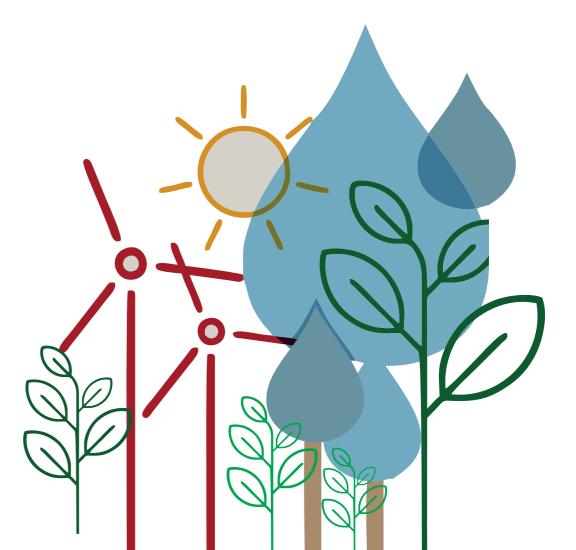






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Partnership plan for Nationally Determined Contribution (NDC) implementation in Tunisia



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1.General context

Under the Paris Agreement, Tunisia is reducing is carbon intensity by 41 percent by 2030 compared to 2010 and is strengthening its resilience to climate change impacts by implementing adaptation projects in the agriculture and ecosystems, coastline, water resources, health, and tourism sectors.

In addition to mobilizing significant financial resources estimated at around USD20 billion, implementation of the Nationally Determined Contribution (NDC)'s various priority programs/projects would require comprehensive action in which all state and non-state actors intervene simultaneously, coherently, and in complementarily.

To further mobilize the technical and financial support needed to implement the NDC's actions, Tunisia joined the NDC Partnership in 2017. This global coalition, launched at COP22 in 2016, helps countries respect their commitments and achieve ambitious climate and sustainable development objectives...

In this context, the Ministry of Local Affairs and the Environment, with UNDP support, carried out a broad consultation process with key actors resulting, in June 2019,in a roadmap that would make it possible to accelerate NDC implementation.

As a continuation of this process, the Ministry of the Local Affairs and the Environment launched a mission to develop a Partnership Plan based on the NDC Partnership Template to support NDC implementation in Tunisia.

This document reflects the country's priorities in terms of support needed to facilitate the implementation of the actions to combat climate change. It also integrates mature initiatives, which are being implemented and/or planned in Tunisia.

The measures to be undertaken, which will appear therein, are organized within a framework which will make it possible to monitor progress against the objectives and expected results.

The Partnership Plan serves as a tool to mobilize, optimize, and coordinate development partners' technical and financial assistance. It will facilitate the NDC Partnership's support services at the national level by providing a clear framework, enabling national partners to work together to achieve common goals.

Thus, the Partnership Plan is intended to be a dynamic document. It must evolve over time to reflect, in a fairly faithful way, the country's priorities in terms of investment projects and technical and financial support needed for fast NDC implementation and the achievement of set objectives.

2. Presentation of the NDC Partnership coalition

The NDC Partnership is a global coalition of nearly 200 members including more than 110 countries, more than 40 institutions, and more than 35 associate members working together to drive transformational climate action through sustainable development.

It is based on the principle that effective cooperation can accelerate achievement of results and enhance the collective impact of resources invested.

Through this partnership, members leverage their resources and expertise to provide countries with the necessary tools to implement NDCs in line with the Paris Agreement, ,thus, fighting climate change more effectively.

The Partnership is open to countries and international institutions engaged in ambitiously implementing NDCs, at the national level under the Paris Agreement and the 2030 Sustainable Development Goals.

It offers members easy access to a global network of knowledge and resources to support activities in climate action.

Benefits include access to an extensive network of partners who can provide a flexible range of NDC implementation-oriented services through:

- · Targeted technical assistance and capacity building
- Knowledge products to fill information gaps
- Increased financial support

Until December 2020, 114 member countries, 43 international institutions and 36 associate members have joined this coalition.

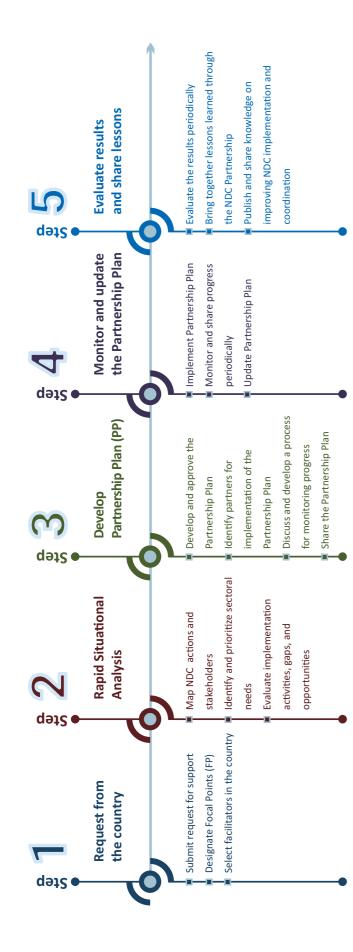
Among these partner countries, 67 have an active participation, including Tunisia.

a. The NDC Partnership's Intervention approach

The NDC Partnership country engagement process is a "step-by-step" approach to establishing, operationalizing, and monitoring partnership activities at the national level. The process itself can be broken down into five main steps, as shown in the diagram below.

Tunisia has carried out the first two steps and has finalized the third one, which consists of developing and validating the Partnership Plan.

Country Engagement Process



3. Partnership Plan

a. Preparation process

The Partnership Plan (PP) preparation was carried out in three successive, iterative, and complementary steps:

- Consulting the available documentation, reports, and other official partner departments and administration publications
- Organizing and holding bilateral meetings with resource persons from sectors involved in mitigation and adaptation
- Verifying, correcting, and validating partners based on the PP.

The PP presents the actions and activities deemed to be priorities. It integrates technical support, capacity building and investment projects.

Activities are organized by category: mitigation and adaptation. Each category provides evaluation indicators intended to be SMART; the steps to follow for implementation; the necessary budget expressed in USD; the actor responsible for the implementation and its privileged partners; the current state of progress; the budgets available as well as those to be mobilized; and an implementation schedule over a two year period.

The document functions as a dashboard for the Ministry in charge of the Environment as climate change focal point as well as it national and international partners, in particular the technical and financial ones. It provides visibility on the actions undertaken, those to be undertaken, and the state of their progress. It gives an overview on the coherence of all activities and their contributions to the achievement of NDC objectives.

The dynamic nature of this document makes partner ownership easy, makes it adaptable to the needs of each partner, makes it easily integrable into action programs of sectors, and gives it the quality of being perfectible and evolving.

This is all justified given that the NDC is being updated, the NAP is well advanced for its food security part, and other initiatives underway are likely, in the long term, to provide material to supplement and adapt this plan.

b. Main components of the PP

The PP is organized in three sections:

- The first contains actions and activities deemed to be transversal and related to the two components: mitigation and adaptation. It brings together the areas of governance (institutional, MRV and finance), sensitization, communication, and capacity building.
- The second was devoted to the mitigation component with a small distinction, which consisted in grouping first the transversal actions and activities related to all the sectors involved in this area, then the actions and specific actions to each of them (Energy, AFOLU, solid waste, and liquid waste).
- The same was done for adaptation, where the same organization was followed: first transversal then sectoral actions (agriculture, water resources, coastline, tourism, and health).

The graph below is a schematic representation of the Partnership Plan:

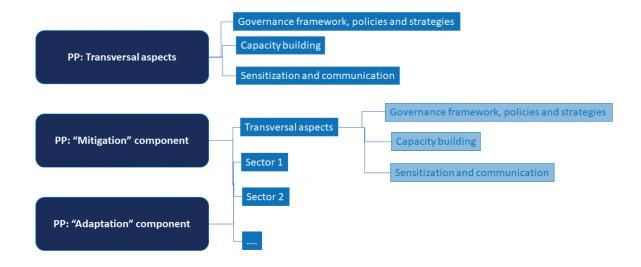


Figure 1: Main components of the PP

a. Key figures

The consultation process which started in 2017 with various stakeholders to simultaneously develop the roadmap for NDC implementation, acceleration plans for the Tunisian Solar Plan and the energy efficiency programs, and the Partnership Plan resulted in the development of a comprehensive document, reflecting national priorities in terms of needs and investment projects for combating climate change.

It contains 35 objectives and 119 results broken down by area, as shown in the table below:

Table 1: Objectives and expected results of the PP by area

Component	Objectives	Results
Transversal axes	03	14
Mitigation	10	39
Adaptation	22	66
Total	35	119

The overall budget required to implement all actions included in the Partnership Plan amounts to approximately **USD 7,362 million**.

This budget is broken down as follows:

• Mitigation: USD 5,724million (77.75 %),

• Adaptation: **USD 1,634million** (22.19%),

• Transversal actions: **USD 4 million** (0.05%).

The share of the PP's overall budget, which will be devoted to investment projects (adaptation and mitigation) will be around **USD 7,333million** (99.6%) against **USD 29 million** (0.4%) for technical assistance.

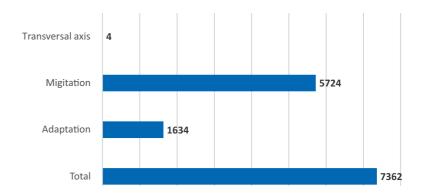


Figure 2: Total budget of the Partnership Plan by area (M\$ US)

Regarding the mitigation component, the breakdown of the required budget is shown in the following graph.

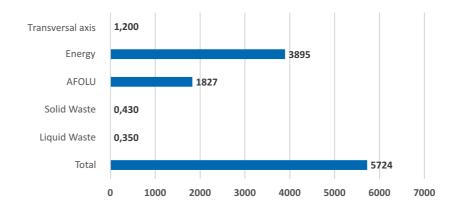


Figure 3: Breakdown of the PP budget by sector - "Mitigation" component (M\$ US)

The energy sector comes in first place with a total budget of around **USD 3,900 million**, followed by the Agriculture, Forestry and Other Land Use (AFOLU) sector, with a budget of around **USD 1,830million**. The solid and liquid waste sectors come last, with **USD 0,43million** and **USD 0,35 million**, respectively.

It should also be noted that for the mitigation component, the budgets required for technical assistance and investment projects amount to **USD 9,75million** and **USD 5,714million**, respectively. The planned investment budgets are mainly carried by renewable energy projects for the production of electricity connected to the electricity grid.

Regarding the adaptation component, the breakdown of the budget to be mobilized according to the sectors is provided in the graph below.

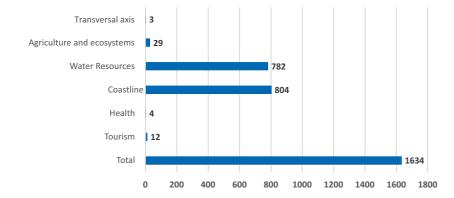
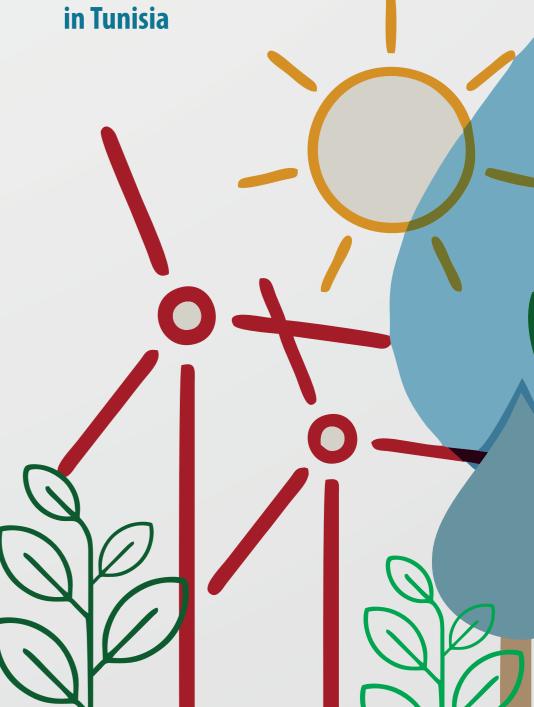


Figure 4: Breakdown by sector of the PP Budget - "Adaptation" component (M\$ US)

Thus, as the graph shows, we distinguish the importance of the investments to be mobilized in the coastline and water resources sectors, which come first, followed respectively by agriculture, tourism, and health.

Furthermore, it should be noted that for the adaptation component, total investments are estimated at **USD 1,619 million**, while those allocated to technical assistance amounts to **USD 15 million**.

4. Partnership Plan for the implementation of the Nationally Determined Contribution





Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 T1 T2 T3 T4	2022 T1 T2 T3 T
Governance framew	vork, policies and strategies										
1. Effective Climate Change govern- ance and a frame- work for mobilizing stakeholders,	1.1. The insitutional framework steering and monitoring the NDC im- plementation is reinforced	1.1.1. Existence of Leading partner" institutions, within each sector, in charge of steering and monitoring the NDC implementation	For each key sector, assignment of the institution that will be in charge of steering and monitoring the implementation of projects included in the NDC.	Ministry of Environment		-	300 kUS\$	Technical assistance	Not achieved (no needed assistance)		
maintaining politi- cal will at all levels and mobilizing the necessary funding is in place		1.1.2. Existence of working groups formally assigned and operational within each Leading partner" institution	- Formalisation of working groups within each "Leading Partner"" institution by defining its com- position, mission and intervention mode Preparation of annual work plans for each work- ing group and its implementation Organizational capacity building for the opera- tionalization of the NDC transparency system	ANME, MAPRH, ANGED, ONAS, APAL, Health and Tourism		- UNDP (NDC programme) - NDC project, GIZ (energy working group)			Partially achieved		
		1.1.3. Existence of an NDC focal point , formally assigned, within each Leading partner" insitution	Assignment of an NDC focal point within each Leading partner" institution and definition of its prerogatives.	ANME, MAPRH, ANGED, ONAS, APAL, Health and Tourism in collaboration with the Ministry of Environment		-			Partially achieved		
		1.1.4. Existence of a formal coordination mechanism between different institutions in charge of steering the NDC and the GOMU (Goal-Oriented Management Unit) (Ministry of Environment)	-Development of a coordination mechanism between the GOMU and the different institutions concerned; -Setting partnership conventions between the GOMU and the different key insitutions, if needed Establishment of a framework for communication and exchange on the NDC progress and the results achieved	Ministry of Environment in collaboration with the MAPRH, ANME, ANGED, ONAS, APAL, Health and Tourism.		- Technical assistance from GIZ (Adapt-CC and NDC) - UNDP (NDC programme) ;"			Tentative		
	1.2. Projects/actions of the NDC are integrated in the process of sectorial development planification and Gender" dimension is considered	1.2.1. The number of NDC projects integrated in the five-year development plan 1.2.2. The volume of leveraged amounts (private and public funding) for NDC projects implementation 1.2.3. The number of indicators related to NDC projects, integrated in the sector/department performance assessment process (Goal-Oriented Budget Management) 1.2.4. Existence of national budgeting and financing procedures integrating climate risks	 Integrate updated NDC objectives in the 2021-2025 development plan Organise training sessions for planners in different key sectors on techniques and tools for integrating NDC objectives / projects in the planning process. Organise awareness-raising sessions for ARP committee members on NDC implementing challenges, etc. Develop tools and procedures facilitating investment projects assessment, presented by sectors and local authorities, according to a climate prism, Organize information and awareness sessions for the benefit of resource persons involved in the planning process in the various key sectors, on the objectives of the NDC. Introduce new provisions in future regulations which codify the new organic finance law to provide guidance on the integration of adaptation needs into sector and local budgets Identify the projects that are part of the policies to fight against climate change (mitigation and adaptation) and their coding in the budget. Analyse the existing sector / department performance assessment process and define indicators to assess the progress of NDC projects." 	Ministry of Environment in collaboration with the MDICI, Ministry of Finance, MAPRH, ANME, ANGED, ONAS, APAL, Ministry of Health and Ministry of Tourism		- UNDP (Territory planning and NDC programme) - Bilateral funding - Multilateral funding"	400 kUS\$	Technical assistance	Tentattive (partially)		
		1.2.5. Existence of an action plan to integrate Gender" dimension into climate policy	Develop an action plan to integrate the gender dimension into climate action	Ministry of Environment in collaboration with ministry of women, the MDICI, Ministry of Finance, MAPRH, ANME, ANGED, ONAS, APAL, Ministry of Health and Ministry of Tourism		UNDP (NDC programme)		Technical support	On going		

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 T1 T2 T3 T4	022 2 T3 T4
	1.3. A strategy for the mobilisation of Climate" funding is developed:	1.3.1. A mapping of Climate" funding opportunities is available	Map out the different funding opportunities (dedicated funds, bilateral cooperation, multilateral cooperation, etc.) including the eligibility criteria and access procedures for each.	Ministry of Environment in collaboration with the MAPRH, ANME, ANGED, ONAS, APAL, Health and Tourism		Technical assistance from GIZ (Adapt-CC and NDC)	50 kUS\$	Technical assistance	Tentative		
		1.3.2. Existence of a bankable" projects portfolio	Develop portfolios of bankable" projects	ANME, MAPRH, ANGED, ONAS, APAL, Health ad Tourism		- UNDP (NDC programme) - Multilateral funding: GIZ "NDC" project -Bilateral funding	70 kUS\$/ sector	Technical assistance	Without support for sectors other than energy and industrial processes		
		1.3.3. Existence of a detailed investment plan for each sector	- Develop, in consultation with main stakeholders, investment plans by sub-sector for mitigation - Develop an investment plan for adaptation	ANME, MAPRH, ANGED, ONAS, APAL, Health and Tourism		- UNDP (NDC programme) - Multilateral funding NDC Project, GIZ - Bilateral finding	300 kUS\$	Technical assistance	Planned		
		1.3.4. Existence of at least one innovative financing mechanism promoting private sector participation	- Conduct a study to identify the potential for private sector financing in NDC projects - Develop innovative financing mechanisms to target certain market segments in at least one of the following sectors: Energy; AFAT; Solid waste; liquid waste; Littoral; Health; Tourism	ANME, MAPRH, ANGED, ONAS, APAL, Health and Tourism		- UNDP - Multilateral funding NDC project, GIZ -Bilateral funding	- 140 kUS\$ for the study - 80 kUS\$/ mechanism	Technical assistance	Planned		
	1.4. A Finance" MRV system is set up and operational:	1.4.1. An MRV system is set up to monitor public and private expenses leveraged to implement mitigation projects as well as international funding received to promote technology transfer and strengthen national capacities in the field.	Define climate funding and identify the type of projects that fit into it Identify public and private expenses in the field of mitigation Develop a methodology for financial flows accounting Develop and implement an MRV system capable of tracking and reporting public and private expenses as well as funding received in the field of mitigation	Ministry of Environment, MAPRH, ANME, ANGED and ONAS.	Ministry of Finance	- GIZ "Institutional capacity building for the NDC implementation" project - UNDP	100 kUS\$	Technical assistance	Planned		
		1.4.2. An MRV Finance system, adapted to each of the considered sectors, is developed and implemented.	- Explore the possibilities of integrating the components of climate finance (inputs, outputs, impacts of climate funding monitoring) in current national models for monitoring public finance and automating impact calculations;	* MAPRH - AFAT and Water Ressources * M.HEALTH * MALE - APAL * M.TOURISM-ONTT	* MALE - other departments * MESRS * MDICI-INS, * M. Defense -	*National budget * Bilateral funding * International funding (partly the NDC project, GIZ)	300 kUS\$	Technical assistance	No support		
		1.4.3. The reporting model is published and known from all sectors and partners. 1.4.4. At least one report / year is published.	- Adopt a standard cash flow reporting template; - Build the capacities of the actors concerned.		CNCT						
	1.5. A framework for NDC updating is put in place	1.5.1. Existence of a framework for NDC updating	Based on the monitoring of NDC implementation: - Identify implementation constraints - Identify the shortcomings linked to the consideration of social concerns in climate policies - Identify the enabling factors that allow an adequacy between the increase of the objectives and the means of implementation -Update the CDN and develop the roadmap for its implementation	MALE, MARHP, ANME, ANGED, ONAS, APAL, Min- istry of Health and Ministry ofTourism	MDICI, Minsitry of Finnaces	UNDP (NDC programme)	300 KUS\$	Technical assistance	Planned		

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
Awareness-raising, i	nformation and capacity bui	lding of national actors								
2. The technical capacities of the various national actors involved in the fight against CC are built in order to facilitate the NDC implementation	2.1. The various key players are informed and their capacities are built on national and international climate finance mechanisms as well as on the requirements of funders and the means to access these funds.	2.1.1. Number of institutions participating in information / training sessions on climate finance as well as funders requirements and ways to access these funds 2.1.2. Number of persons participating in information / training sessions on climate finance as well as funders requirements and ways to access these funds	Organize training sessions for the benefit of the various key actors (public institutions, financial institutions, civil society, etc.) on national and international climate finance mechanisms as well as on the requirements of funders and ways to access these funds.	Ministry of environment and leading partner" institutions		UNDP (NDC programme) - Bilateral funding - Multilateral funding: Technical support from GIZ (Adapt-CC and NDC)	70 kUS\$	Technical assistance	Planned	
	2.2. Sector departments and key decision-makers have knowledge and necessary tools for integrating gender and CC into development planning processes.	2.2.1. Number of sector departments and key decision-makers with knowledge and necessary tools for mainstreaming gender and CC in the development planning process	Training of sector departments representatives and key decision-makers on methodologies and necessary tools for the integration of gender in development planning processes			UNDP (NDC programme)	50 US\$	Technical assistance	Planned	
	2.3. Technological transfer mechanisms in the fields of mitigation & adaptation are reinforced	2.3.1. Number of partnership agreements / contracts signed between national actors (public institutions, industrial company, research institutions) and their foreign counterparts working in the fields of mitigation and adaptation	- Assess technological needs (identify technological needs, potential risks and benefits of these technologies and capacity building needs in response to national priorities and policies to fight climate change). - Reinforce national, regional and international information systems that allow to collect and diffuse relevant information on technology transfer and cooperation as well as scientific and technical cooperation. - Formulate and set up an enabling institutional, administrative, legal and political environment for the transfer of technology and technical cooperation.		- Ministry of scientific research, - Ministry of coopération and University institutions concerned by the CC theme	- Bilateral funding - Multilateral funding	200 kUS\$	Technical assistance	No support	
	2.4. Technical capacities of civil society active in the field of adaptation and mitigation are built.	2.4.1. Number of NGOs having participated in training sessions on themes related to climate change	- Identification of the capacity building needs of the various actors of civil society in the field of fight against Climate Change (CC) - Development of a capacity building plan - Design and development of training materials - Organisation of training sessions for NGOs on identified themes	Ministry of environment and leading partner" institutions		- Bilateral funding - Multilateral funding Technical support from GIZ (Adapt-CC and NDC) - UNDP (NDC programme)	70 kUS\$	Technical assistance	Tentative	
	2.5. Relevant research projects in the field of fight against Climate Change (CC) are identified and implemented	2.5.1. Number of research projects in the field of mitigation (of which 5 target women or are designed to respond to gender considerations) 2.5.2. Number of research projects in the field of adaptation (of which 10 target women or are designed to respond to gender considerations)	- Organisation of awareness-raising / information workshops for the benefit of the research laboratories concerned on the different components of the NDC and the role of research universities in achieving the defined objectives Identification of research needs in the areas of mitigation and adaptation Setting up research projects and signing partnership agreements between the various stakeholders (public institutions, research laboratories, etc.).	Ministry of environment and leading partner" institutions	Ministry of sci- entific research and research institutions concerned by the CC theme	- UNDP - Bilateral funding - Multilateral funding NDC project,GIZ	100 kUS\$	Technical assistance	Tentative	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
3. The key actors active in the fight against the impacts of CC are informed of the	3.1. An awareness-raising / communication plan for the various key actors on the NDC objectives and the challenges of its im-	3.1.1. Existence of an awareness-raising / communication plan on the NDC objectives and the challenges of its implementation.	- Identification of awareness-raising & communication actions on the NDC according to the needs and nature of the activities of each targeted actor - Development of the awareness-raising / communication plan for each key actor including the	Ministry of Environment and leading partner" institutions		- Bilateral funding - Multilateral funding Technical support from GIZ (Adapt-CC and NDC)	150 US\$	Technical assistance	No support	
climate issues and the challenges of implementing the NDC	plementation is prepared and implemented.	3.1.2. Number of participants who attended the awareness-raising / information workshops on the NDC objectives (of which 50% women and 50% men)	development of action sheets - Design and implementation of communication / awareness-raising materials - Implementation of the awareness-raising / communication plan							
		3.1.3. Number of sectors / commissions that have been covered by awareness-raising and communication workshops.								
	3.2. A platform for sharing climate and technical information is set up.	3.2.1. Existence of a platform for sharing climate and technical information	- Identification of the climate information needs (mitigation and adaptation) of the various key actors - Preparation of terms of reference related to the development of the climate information sharing platform - Development of the climate information sharing platform - Establishment of a memorandum of understanding on access to information between the various institutions concerned, including civil society	Ministry of Environment and leading partner" institutions		Technical support from GIZ (Adapt-CC and NDC)	130 kUS\$	Technical assistance	In progress	
	3.3. Sector actors involved in the development planning process are aware of and informed about the NDC with the purpose of a better integration of its objectives in sectoral development plans (sectoral Ministries and their relevant supervised institutions, Ministry of Development, Investment and International Cooperation, Ministry of Finance, members of specialized committees within the ARP)	3.4.1. Number of executives involved in the development planning process who participated in the awareness-raising / information workshops on the NDC objectives	Organisation of information and awareness-raising workshops for the benefit of administrative officials involved in the development planning process and members of parliamentary committees	Ministry of Environment and leading partner" institutions	Ministry of Women	- Bilateral funding - Multilateral funding Technical support from GIZ (Adapt-CC and NDC)	80 kUS\$	Technical assistance	Tentative	
	3.4. The results achieved by the sectoral working	3.4.1. Number of organised workshops	- Edit communication materials - Produce annual activity reports	Leading partner" institutions in coordination with the		Technical support from GIZ (Adapt-CC and NDC)	200 kUS\$	Technical assistance	Tentative	
	groups are communicated and presented to the various stakeholders concerned by the CC theme.	3.4.2. Number of activity reports produced	- Organise workshops to present the main results achieved by the sectoral working groups	Ministry of Environment						



Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
Transversal aspects	5									
Governance framev	work, policies and strategies									
1. Effective climate governance and a framework for mobilising stakeholders, maintaining political will at all levels and mobilising the necessary funding is set	1.1. The overall objective of reducing the carbon intensity of the NDC is broken down into sectoral objectives.	1.1.1. Existence of carbon intensity reduction targets for each sector (energy, AFOLU, solid waste and liquid waste).	Initiate a study to: - Take into account and analyse, for each sub-sector (industry, construction, transport, AFOLU, liquid and solid waste), the mitigation actions included in the NDC - Set up a methodology for calculating the CO2 emissions avoided for each type of action and estimate the quantities that will be reduced in each sector - Express the emission reduction targets for each sector / sub-sector in carbon intensity reduction targets - Introduce monitoring indicators linked to the reduction of GHG emissions in the monitoring dashboards of the various institutions"	Ministry of environment et responsible sectoral institu- tions (ANME, AFOLU, ANGED and ONAS)	-	UNDP (NDC programme)	50 kUS\$	Technical assitance	Planned	
	1.2. The role of the private sector in the NDC implementation is strengthened	1.2.1. Existence of an amended PPP law that reinforces the role of the private sector in the implementation of mitigation projects	- Assess the existing PPP law and identify the constraints / weaknesses impeding the role of the private sector in the implementation of mitigation projects - Propose corrective measures to strengthen the role of the private sector - Draft a PPP bill incorporating the new measures"	Ministry of Environment in collaboration with the re- sponsible sectoral insitutions (MAPRH, ANME, ANGED, ONAS)	Ministry of Economy, Finance and Investment Support, IGPPP	GIZ "Refom capacity building"" project"	50 kUS\$	Technical assitance	Tentative	
	1.3. The transparency framework for monitor- ing and reporting the NDC implementation is strengthened	1.3.1. The "GHG inventory" function within the various institutions concerned is strengthened and its implementation is maintained annually.	- Formalise the "GHG Inventory" groups within each sector (energy, AFOLU, solid and liquid waste) - Institutionalise the data collection processes in each sector - Operationalise the data collection system related to the GHG inventory - Enhance the technical capacities of members of the "GHG Inventory" groups"	Ministry of Environment with ANME, MAPRH, ANGED and ONAS		- UNDP (NDC programme) - GIZ : Project "Institutional capacity building for the NDC implementation"	200 kUS\$	Technical assitance	Tentative	
		1.3.2. A global MRV system is set up to assess and monitor the impacts of mitigation programs / projects included in the NDC.	1/ Define an approach / process for monitoring the implementation of mitigation projects in the different sectors, including: - The definition of aggregated and disaggregated indicators; - The implementation of a data collection system; - The definition of a methodology for calculating indicators; - The results analysis and reporting. 2/ Define a protocol for the exchange of information and reporting between institutions and set up partnership agreements between the various sectoral institutions required and the Ministry of Environment defining the roles and responsibilities of each to ensure the monitoring and reporting and guarantee the sustainability of the system.	Ministry of Environment in collaboration with MAPRH, ANME, ANGED, ONAS		- UNDP (NDC programme) - GIZ : Project "Institutional capacity building for the NDC implementation"	300 kUS\$	Technical assitance	Planned (except for the imple- mentation of the sys- tem which is not yet planned)"	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
Capacity building	of national actors in the field o	of mitigation								
2. The technical capacities of the various national actors in charge of implementing mitigation policies are built	2.1. The technical capacities of stakeholders are enhanced, particularly in the areas of GHG inventories; emissions modeling and socioeconomic scenarios, MRV and climate finance	2.1.1. Number of persons trained in the different areas identified	- Develop a capacity building plan for national actors covering at least the areas related to GHG inventories; the prospective / modeling and socioeconomic scenarios; construction of mitigation scenarios; the MRV; preparation of funding requests; international negotiations on CC - Design and develop the related training materials - Organize training sessions for the benefit of the various stakeholders on the selected priority themes"	Ministry of Environment and leading partner" institutions		- UNDP (NDC programme) - GIZ: Project "Institutional capacity building for the NDC implementation"	100 KUS\$	Technical assitance	Planned	
		2.1.2. Existence of new modeling tools facilitating the NDC updating	- Strengthen national modeling capacities in the energy sector and its sub-sectors in order to simulate long-term GHG emissions - Evaluate the macroeconomic impacts of an ambitious mitigation goal	Ministry of Environment with ANME, MAPRH, ANGED and ONAS		UNDP (NDC programme)	500 kUS\$	Technical assistance	Tentative	
Energy sector										
	3.1. NDC mitigation targets for the energy and industrial process sectors are disaggregated by sub-sector and by technology	3.1.1. Existence of mitigation objectives for each sub-sector and by technology	- Update, for each sub-sector (industry, construction, transport, AFOLU, liquid and solid waste), the mitigation actions that will allow the achievement of NDC objectives - Establish a methodology for calculating avoided CO2 emissions for each type of action Express the emission reduction objectives for each sector / sub-sector in carbon intensity reduction objectives - Introduce monitoring indicators linked to the reduction of GHG emissions in the monitoring dashboards of the various establishments	ANME, MARHP, ANGED and ONAS	Ministry of environment Ministry of transport, Ministry of equipment"	UNDP (NDC programme)	180 kUS\$	Technical assistance	Tentative	
	3.2. The share of renewa- ble energies in electricity production reaches 30% in 2030	3.2.1. Total installed capacity of the wind farm for electricity production	Build wind power plants for the production of electricity, according to concession, authorization and self-production regimes to achieve a total additional installed capacity of 1260 MW by 2030.	Ministry in charge of energy, STEG and ANME	Financial institutions & Private sector	STEG & private sector	1693 MUS\$	Investment project	Planned	
		3.2.2. Total installed electric power of the PV park	Build PV plants for the production of electricity according to the different regimes (net-metering, self-production, authorization and concession) to achieve a total additional installed power of 2100 MW by 2030.			Private sector and State budget (STEG and Energy Transition Fund)	1711 MUS\$	Investment project	Planned	
		3.2.3. The total installed capacity of CSP installations for the production of electricity	Build CSP plants for the production of electricity reaching a total capacity of 50 MW by 2030.			STEG & private sector	236 MUS\$	Investment project	Planned	
		3.2.4. Total installed electric power of biomass installations	Build biomass power plants with a total capacity of up to 30 MW by 2030.	ANGED, ONAS with the sup- port of ANME		public sector & private sector	116 MUS\$	Investment project	Planned	
	3.3. The installed base of thermal solar collectors reaches 220 m ² per 1000 inhabitant by 2030	3.3.1. Number of m ² of solar collectors installed	- Optimizing the management of the residential Prosol program - Conduct communication and awareness-raising campaigns with customers from the industrial and tertiary sectors - Develop new thermal solar applications"	ANME		State budget	300 kUS\$	Technical assistance	No support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T
	3.4. The terms and acceleration measures of the Tunisian Solar Plan (PST) are implemented.	3.4.1. Existence of an improved version, meeting market requirements, of the Power Purchase Agreement (PPA)	- Carry out a broad consultation with the actors concerned to assess the PPA and identify its weaknesses - Develop an improved power purchase agreement project and test its acceptability by the different actors (STEG and project developers) - Collect the relevant opinions and publish the model of the new power purchase agreement	MIEM	ANME and STEG	BERD	30 kUS\$	Technical assistance	In progress (A new version of PPA produced, but criticism from private op- erators still remains!)	
		3.4.2. Existence of simplified procedures for low power and self-production RE projects as well as simplified electricity surplus metering systems	- Proposal of simplified authorization procedures for RE projects whose power is below a certain limit - Monitoring and evaluation of the new modalities proposed and guarantee of their relevance	MIEM	ANME	GIZ APST et RMS Projects	150 kUS\$	Technical assistance	Planned	
			Proposal of simplified procedures and a guide of procedures for self-production projects Monitoring and evaluation of new procedures and ensuring their relevance	ANME		GIZ RMS Project		Technical assistance	Partially achieved (guide)	
			- Examination of the tariffs for purchases of surpluses and for the transportation of existing electricity - Proposal, in a win-win approach, of new tariffs for purchasing surpluses and electricity transportation more favorable to the development of RE projects - Proposal for a transparent adjustment mechanism, tariffs for purchasing surpluses and electricity transportation	ANME	STEG	GIZ RMS Project		Technical Attem	Attempt	
		3.4.3. Existence of an operational social PV program targeting households with low electricity consumption	PV program targeting households with consumption and delimitation of the scope of (Tunisian State)		Technical assistance	Attempt				
				consumption and delimitation of the scope of intervention - Preparation of the technical specifications of the equipment and the related specifications - Launch of the tender and selection of the supplier	ANME			1,3 MUS\$	Investment project	Planned
		3.4.4. Existence of at least one RE development program that has benefited from Green Climate Fund (GCF) support	- Analyze existing pilot RE programs (PV in public institutions, Social PV program, economic PV program) and prioritization according to country priorities and GCF requirements - Design, on the basis of feedback from pilot projects, the national program selected as a priority - Develop a concept note for the priority program - Monitor the process until obtaining funding from the GCF	ANME		Not yet identified	100 kUS\$	Technical assistance	No support	
		3.4.5. Improved access to land for RE investors	- Prepare a guide presenting the procedures for accessing land according to the land use	ANME		GIZ	50 kUS\$	Technical assistance	In progress	
		3.4.6. Existence of an independent regulator of the electricity sector	- Update of the study related to the development of a mechanism to regulate the activity of electricity production from RE connected to the grid - Proposal for a regulatory framework allowing the implementation and operationalization of the independent regulator - Preparation of laws & decrees and their adoption and publication	ANME	Ministry in charge of ener- gy; STEG	UNDP	60 kUS\$	Technical assistance	In progress	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
		3.4.7. Existence of a planning and programming framework for the Tunisian Solar Plan (PST)	Carry out studies to define the planning and programming framework of the PST. This will include, among others, studies on the planning of the conventional electricity park, the planning of RE power by technology, the mapping of available RE resources, the mapping of land resources and exclusion zones and the mapping of the current and future electricity grid.	MIEM	STEG and ANME	GIZ APST Project	500 kUS\$	Technical assistance	In progress	
		3.4.8. Existence of a RE code allowing the consistency of all regulations in relation to the development of RE	Launch a study to summarize all the legislation in relation to the development of RE and develop the RE code allowing the development of the main sectors in the country.	ANME		UNDP	80 kUS\$	Technical assistance	In progress	
		3.4.9. Projects improving the integration of RE in the electricity grid are planned	3.3.15.1. Carry out a study on the flexibility of the electricity grid over the period 2025-2030 that will allow to identify the most efficient technological options to be adopted to reinforce the capacity of the grid to integrate RE.	STEG		GIZ APST Project	200 kUS\$	Technical assistance	In progress	
			3.3.15.2. Install 400 000 smart metering systems in a pilot region (Sfax region)	STEG		AFD	130 MUS\$	Investment project	In progress	
		3.4.10. Existence of a mechanism for monitoring and assessing the acceleration plan	Design and prepare a monitoring and assessment mechanism for the PST acceleration plan. This will involve defining (i) roles and responsibilities, (ii) collection and reporting procedures and (iii) monitoring and performance indicators	MIEM	ANME and STEG	GIZ APST Project	70 kUS\$	Technical assistance	In progress (partially achieved)	
		3.4.11. The implementation of large CSP and PV projects with batteries, for the production of electricity is facilitated	Mobilize international expertise to support the Ministry in charge of energy and STEG in the preparation of contractual documents and the negotiation process with the winners	MIEM	STEG	World Banque project	500 kUS\$	Technical assistance	In progress	
		3.4.12. The implementation of large wind and PV projects for the production of electricity connected to the grid is facilitated				APST, RMS - GIZ	1000 kUS\$	Technical assiatnce	In progress	
4. Energy efficiency is promoted in all energy consuming economic sectors	4.1. Engagement of energy efficiency potential in the industrial sector is strengthened	4.1.1. Number of Program Contracts (PC) signed with subject and non-subject industrial companies	- Carry out information and communication campaigns (awareness-raising workshops, door to door, etc.) to inform and communicate about the various EE programs and the economic and financial bene-	ANME		- State budget - Bilateral or multilateral funder not yet identified - GIZ APEET Project"	300 kUS\$	Technical assistance	In progress	
		4.1.2. Number of energy efficiency actions targeting utilities (compressed air, cooling, electric motors, etc.) in the industrial sector	fits that can result from them - Develop / revise the technical specifications related to energy audits of utilities - Reinforce field control of energy audit campaigns - Simplify grant award procedures - Support manufacturers in the implementation of							
		4.1.3. Number of industrial companies that have implemented energy management systems (SME ISO-50001) - Support manufacturers in the implementation of EE actions - Make companies in the sector aware of the need to set up SME 50001 systems and support them throughout the implementation process								
		4.1.4. Installed capacity of cogeneration units (MW) in the industrial sector	Support manufacturers in the creation of subsidy files Promote cogeneration projects and support project leaders in their implementation"							

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4			
	4.2. The use of energy efficiency technologies in the buildings sector is increased	4.2.1. Number of Program Contracts (PC) signed with subject and non-subject companies from to the tertiary sector 4.2.2. Number of energy efficiency actions targeting utilities in tertiary facilities 4.2.3. Number of tertiary companies that have implemented energy management systems (SME ISO-50001) 4.2.4. Installed capacity of cogeneration and trigeneration units in the building	- Carry out communication campaigns (awareness-raising workshops, door to door, etc.) to inform and communicate about the various EE programs and the economic and financial benefits that can result from them - Develop / revise the technical specifications related to energy audits of utilities - Reinforce field control of energy audit campaigns - Simplify grant award procedures - Support the recipients of the building sector in the implementation of EE actions - Make companies in the sector aware of the need to set up SME 50001 systems and support them throughout the implementation process - Support recipients of the building sector in the creation of grant files - Promote cogeneration / trigeneration projects and support project leaders in the implementation"	ANME		- State budget - Bilateral or multilateral funder not yet identified - GIZ PEEB Project -GIZ APEET Project"	250 kUS\$	Technical assistance	In progress				
		4.2.5. Existence of a regulatory text prohibiting the marketing of filament lamps on the market	- Put in place support mechanisms to limit the supply of inefficient light bulbs and sustain demand for efficient substitutes. - Reinforce the quality control system of efficient	ANME	Ministry in charge of trade, CETIME test laboratory,	- State budget - Bilateral or multilateral funder not yet identified"	150 kUS\$	Technical assistance	No support				
		4.2.6. Percentage of LED lamps compared to the total number of lamps installed in the building sector (tertiary and residential)	bulbs on the market - Organize a collection and disposal and / or recycling channel for used bulbs."		Lamp manu- facturers and importers								
		4.2.7. Existence of a regulatory text prohibiting the marketing of class 2 and 3 refrigerators and introducing super efficient classes (1+ and 1++)	- Enact regulatory texts prohibiting the marketing of class 2 and 3 refrigerators and introducing super efficient classes (1+ and 1 ++) on the market - Reinforce the control system to ensure compliance with the current regulations	ANME	Ministry in charge of trade, CETIME test laboratory, Manufacturers and importers	- State budget - Bilateral or multilateral funder not yet identified"	300 kUS\$	Technical assistance	No support				
		4.2.8. Existent allowing the of class 4 or g class 1 and m	4.2.8. Existence of a specific mechanism allowing the renewal of old refrigerators of class 4 or greater by refrigerators of class 1 and more (1+ and 1 ++)	- Design and implement a mechanism to retrieve used refrigerators of class 4 or greater and replace them with new ones of class 1 and more"		of refrigerators							
			_	_			4.2.9. Percentage of class 1 and more refrigerators in the total installed base						
		4.2.10. Existence of a specific mechanism allowing the renewal of old air conditioners of class 4 or greater by air conditioners of class 1 and more (1+ and 1 ++)	- Design and put in place a support mechanism to replace old air conditioners of class 4 and more by air conditioners of class 1 and more. - Develop and implement an awareness-raising plan for the general public on the existing mechanism and the economic impacts of using efficient	ANME	Ministry in charge of trade, CETIME test laboratory, Manufacturers and importers	- State budget - Bilateral or multilateral funder not yet identified"	200 kUS\$	Technical assistance	No support				
		4.2.11. Percentage of class 1 and more air conditioners in the total installed base	air conditioners."		of air condi- tioners								

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
		4.2.12. Existence of more stringent requirements setting the minimum thermal performance of collective and tertiary residential buildings	- Enact regulatory texts strengthening the minimum performance requirements for collective and tertiary residential buildings - Reinforce the control system to ensure compliance with the current regulations - Prepare and implement a communication and awareness-raising plan - Support and technical assistance in the design and implementation phases of EE actions"	ANME	Ministry of Equipment, municipalities	- State budget - Bilateral or multilateral funder not yet identified"	300 kUS\$	Technical assistance	No support	
		4.2.13. Number of insulated dwellings (thermally)	- Design and implement a support mechanism for large-scale housing insulation Develop and implement an awareness-raising and communication plan for the population targeted by the program"	ANME	Ministry of Equipment, municipalities		300 kUS\$	Technical assistance	No support	
		4.2.14. Number of existing public facilities having insulated their roofs	- Design an incentive mechanism for public buildings - Prepare a communication and awareness-raising plan for stakeholders and implement it - Support and technical assistance in the identification and implementation of EE actions"	ANME		- State budget - Energy Transition Fund (FTE) - kFW"	300 kUS\$	Technical assistance	Planned	
	4.3. The use of electric cars is promoted	4.3.1. Existence of a regulatory framework favorable to the penetration of private electric cars in the local market	- Integrate incentives for the use of electric cars (e.g. tax allowance, subsidy, etc.)	ANME	Ministry of finance	-	-		In progress (no needed assistance)	
		4.3.2. The energy, environmental and social impacts linked to the development of electric cars are assessed	- Launch a study to assess the energy, environ- mental and social impacts linked to the develop- ment of the electric car market in Tunisia	ANME		PNUE	100 kUS\$	Technical assistance	Planned	
		4.3.3. The impact of car charging stations on the electricity grid is assessed	- Launch a study to assess the impact of charging stations on the electricity grid	ANME	STEG	GIZ		Technical assistance	Planned	
		4.3.4. A pilot phase for the integration of electric cars on the market is launched	- Launch a pilot phase to promote the use of electric cars in three pilot cities (Sfax, Jerba and Bizerte)	ANME	Ministry of transport	GEF	1 MUS\$	Technical assistance	Planned	
	4.4. Energy efficiency in the transport sector is promoted	4.4.1. Number of Program Contracts (CP) signed with the subject companies (passenger transport and freight transport)	- Carry out information and communication campaigns (awareness-raising workshops, door to door, etc.) to inform and communicate about the various EE programs and the economic and financial benefits that can result from them - Reinforce field control of energy audit campaigns - Simplify grant award procedures - Support companies in the transport sector in implementing EE actions - Support companies in the transport sector in the creation of subsidy files - Make companies in the sector aware of the need to set up SME ISO 50001 systems and support them throughout the implementation process - Carry out tire control, rational driving and onboard equipment actions - Provide training sessions for drivers on rational vehicle driving"	ANME		- State budget - Bilateral or multilateral funder -GIZ APEET Project"	200 kUS\$	Technical assistance	No support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
		4.4.2. Number of tire control, rational driving and on-board equipment (NTIC) actions carried out								
		4.4.3. Number of drivers who have successfully completed training sessions on rational driving								
		4.4.4. Number of companies in the transport sector that have implemented energy management systems (EMS ISO-50001)								
		4.4.5. Number of Urban Travel Plans (UTP) completed	 Organize training sessions for the benefit of municipalities Develop a toolkit for the realization of UTPs Carry out Urban Travel Plans (UTP) in 15 Tunisian cities of more than 100,000 inhabitants" 	ANME	Ministry of Equipment; Ministry of Transport, Mu- nicipalities	- State budget - Bilateral or multilateral funder"	100 kUS\$	Technical assistance	No support	
	4.5. Energy-efficient public lighting technologies are promoted	4.5.1. Penetration rate of LED lamps on the urban lighting network	- Prepare a funding request from funders for a massive replacement of LED lamps - Prepare the financial plan for the LED lamp replacement program"	ANME		- State budget - Bilateral or multilateral funder - GIZ APEET Project"	50 kUS\$	Technical assistance	No support	
AFAT										
5. The Forests and Rangelands sectors achieve a cumu- lative reduction in emissions of around 17000 (1000tEqCO2) over the period 2015- 2030	5.1. Forest lands whose cover is currently less than 10% (scrubland or bush wooded or not) and all lands for forestry which owners voluntarily choose the afforestation are reforested at the horizons considered. (BaU: 5000ha /year - Low Carbon: 12000ha /year)"	5.1.1. Number of ha reforested in the public domain 5.1.2. Number of ha reforested in the private domain 5.1.3. Success rate of new plantings 5.1.4. Economic value of the goods and services provided by the ecosystem considered."	1.Review the institutional arrangement of the PGIPF project and transfer the management of forestry and pastoral activities to the services of the DGF, 2. Provide the team in charge of project management with the human and logistical resources necessary to accelerate the implementation of the planned activities, 3. Identify the forests and rangelands that will be the subject of the planned activities: reforestation, densification, development, improvement, etc. 4. Integrate in the Annual Performance Project (Program-based Planning) of MARPRH-Program 4, indicators to measure the mitigation effort (forests	- Ministry of Agriculture - General Directorate of Forests (Forests and rangelands under regime) - OEP (Private tour)"	- The other concerned general directorates of the ministry of agriculture - ODESYPANO - Municipalities - GDAPs, OSCs, ONGs - Secteur privé"	- PGIPF Project + Japanese Project (DGF / BM / JICA), - State budget - Private sector"	70 MUS\$	-Technical assistance - Investment projects"	- Ongoing 2694ha PGIPF-2024 + PGIF2- 2021 + National Prog.) - Less than BaU. - Low carbon sce- nario: No support"	
	5.2. Loose and bare forests, with a cover rate between 10-50%, are densified and stabilized. (BaU: 0ha / year-Low Carbon: 3000ha / year)"	5.2.1. Number of ha of densified open forests	and CES), 5. Consolidate the funding request for the courses intended for the GCF and accepted at first reading by the OSS, 6. Carry out a profitability / comparative study on certain forestry actions (reforestation, plantation of semi-forest and multipurpose trees, etc.) for the private sector, 7. Initiate the design, construction and use of the				30 MUS\$	-Technical assistance - Investment projects"	- Low carbon sce- nario: No support	
	5.3. Old forest stands where natural regeneration is blocked as well as deteriorated forests are regenerated artificially to rejuvenate them and improve their profitability, (BaU / Oha / year-Low Carbon: 3000ha / year)"	5.3.1. Number of ha of forests regenerated iartificially 5.3.2. Success rate in regenerated forests"	MRV-Mitigation and Finance systems that will be developed.				30 MUS\$	-Technical assistance - Investment projects"	Low carbon scenario: No support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 T1 T2 T3 T4	2022 4 T1 T2 T3 T4
	5.4. Deteriorated natural rangelands, steppes and marginal lands are planted with woody fodder shrubs which will contribute to the increase of fodder resources and improve the feeding of livestock. (BaU: 2000ha / year-Low Carbon: 5000ha / year)."	5.4.3. Available standing pastoral (estimated biomass, MS, UF)"					50 MUS\$	-Technical assistance - Investment projects"	* Less than BaU. * Low carbon: No support"		
	5.5. Deteriorated rangelands, marginal agricultural lands and wasteland will be planted with cactus (Opuntia ficus indica) to improve the available forage in these areas. (BaU: 2500ha / year-Low Carbon: 5000ha / year)"	5.5.1. Number of ha of rangelands improved by cactus plantations 5.5.2. Available standing pastoral (estimated biomass, MS, UF)"					25 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon: No support"		
	5.6. Deteriorated range- lands, public and / or private, will be improved by reseeding and planting multi-year and annual forage species, (BaU: 6250ha / year-Low Carbon: 12500ha / year)."	5.6.1. Number of ha of improved rangelands in the domain of the State and sub-scheme 5.6.2. Number of ha of improved rangelands in the private domain 5.6.3. Available standing pastoral 5.6.4. Number of ha of rangelands improved by native species					65 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon: No support"		
	5.7. Reduction of GHG emissions from the carbonization sector by avoidance (decrease in production and / or improvement of processes).	5.7.1. Number of tonnes of charcoal removed from forests / year 5.7.2. Number of decarbonisation units that adopted modern transformation processes (emitting less CO2)"	I. Identify new carbonization processes (which emit less GHGs than conventional processes) and initiate pilot action (in Sejnane for example), Carry out demonstrations, raise awareness and initiate the generalization of the best process."				10 MUS\$	-Technical assistance - Investment projects"	Low carbon scenario: No support		
6. The Water and Soil Conservation sector achieves a cumulative mitiga- tion gain of 2367 (1000tEqCO2) over the period 2015- 2030	6.1. The lands vulnerable to erosion, the lands treated manually and / or mechanically are consolidated by a wooded biological fixation (according to the owners' choice). (BaU: 1750ha / year-Low Carbon: 3500ha / year)."	6.1.1. Number of ha consolidated by trees other than olive and fruit trees 6.1.2. Success rate of installed sites"	1. Identify areas favorable to each model of consolidation of CES work using a participatory approach that respects the farmers' choice, 2. Carry out the planned consolidation work, 3. Dissemination of good practices for the efficiency and durability of structures, 4. Support the current study in Tataouine on Neutrality in Land Deterioration (NLD) and carbon in soils and propose a funding request for its gen-	Ministry of agriculture- DGACTA	-The other concerned general directorates of the ministry of agriculture - Municipalities - GDAPs, CSOs, NGOs - Secteur privé"	- PACTE project (DGACTA / AFD) - State budget"	175 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon sce- nario: No support"		
	6.2. Lands vulnerable to erosion and treated manually or mechanically will see their CES structures consolidated by olive tree plantations (according to the owners' choice). (BaU: 1250ha / year-Low Carbon: 2500ha / year)."	6.2.1. Number of ha consolidated by olive trees 6.2.2. Number of olive trees per ha 6.2.3. Success rate of installed olive cultivation"	eralization on the national territory, 5. Make new funding requests to generalize the best approaches to other regions."				15 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon sce- nario: No support"		

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 T1 T2 T3 T4	2022 T1 T2 T3 T4
	6.3. Lands vulnerable to erosion and treated manually or mechanically will see their CES structures consolidated by fruit plantations (according to the owners' choice). (BaU: 750ha / year-Low Carbon: 1500ha / year)."	6.3.1. Number of ha consolidated by fruit trees 6.3.2. Number of fruit trees per ha 6.3.3. Success rate of installed tree plantations"					10 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon sce- nario: No support"		
7. Agriculture's carbon footprint is improved by optimizing the diet of domestic animals and energy recovery from their waste	7.1. Rations of ruminants are improved by additives which increase the productivity of the breeding (enteric CH4) (Low carbon: Gradual livestock coverage rate, to reach 90% / year from 2020)"	7.1.1. Amounts of food for cattle, improved by additives. 7.1.2. Number of farms having adopted this process 7.1.3. Quantity of conventional food saved with equivalent yield (meat, milk, etc.) in tonnes"	- Procede to the international benchmark on the technologies used in these different fields; - Develop a performance monitoring and evaluation approach, including the definition of indicators, calculation methodologies; - Carry out pilot tests in situ: Monitor, assess and report the performance results obtained; - Carry out partnership agreements with specialized research institutions to contextualize transferable technological processes - Develop funding requests and work to obtain	Ministry of agriculture- DGPA	- The other concerned general directorates of the ministry of agriculture - OEP (Livestock and pasture office) -national institute of field crops (INGC)	- National budget - Bilateral funder - Multilateral funder - Private sector"	500 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon sce- nario: No support"		
	7.2. Poultry droppings are introduced in composting processes in order to recover them as manure (BaU: Gradual coverage rate of the target group (Broilers) to reach 75% / year from 2020 - Low carbon: Gradual coverage rate of the target group (Broilers) to reach 100% / year from from 2020"	7.2.1. Quantity of droppings transformed into manure 7.2.2. Quantity of manure made from poultry droppings marketed"	funding for the scaling up of successful experiences"		- Ministry of Research and Higher Educa- tion - GDAPs, CSOs, NGOs - Private sector"		100 MUS\$	-Technical assistance - Investment projects"	Low carbon sce- nario: No support		
	7.3. Poultry droppings are transformed into energy (Low carbon scenario: around 14MW)"	7.3.1. Number of tonnes of droppings transformed into energy 7.3.2. Number of units for transforming droppings into energy 7.3.3. Amount of energy produced from droppings"					280 MUS\$	-Technical assistance - Investment projects"	Low carbon sce- nario: No support		
	7.4. Ruminant manure is transformed into energy (Low carbon scenario: around 5MW)"	7.4.1. Number of tonnes of ruminant manure converted into energy 7.4.2. Number of units for converting manure into energy 7.4.3. Amount of energy produced from manure"					100 MUS\$	-Technical assistance - Investment projects"	Low carbon sce- nario: No support		

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 T1 T2 T3 T4	2022 T1 T2 T3 T4
8. Agriculture's carbon footprint is reduced by promoting organic / sustainable agriculture and good conservation and recovery practices	8.1. Farms eligible to switch to Organic Farming are asked to reduce or even stop their use of synthetic chemicals and nitrogen fertilizers and the adoption of adapted farming techniques. (BaU: 324,000 ha by 2020, and 556,000 by 2030, i.e. 20,000 ha / year additional - Low carbon: 394,000 ha by 2020, and almost 780,000 by 2030 - i.e. 40,000 ha / year additional)"	8.1.1. Number of new organic farms (comparison) 8.1.2. Number of hectares conducted and organic farming, all speculations combined"	Activity 1: Development of organic farming sectors and implementation of a governance process for the organic farming sector Activity 2: Conversion of the 05 pilot areas into organic farming: Kef Abbed -Sejnene / El Garia North-Kesra / Zougueg -Haouaria / Oum Laksab - Mejel BelAbbes / Ouled Ghrissi –Hazoua Activity 3: Creation of organic buffer zones around drinking water catchment areas Activity 4: Creation of Organic-Tourism circuits in the 24 governorates	MARHP- DGAB	MARHP- Other Services MALE M.Tourism	'- National budget - Bilateral funder - Multilateral funder - Secteur privé"	50 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon sce- nario: No support"		
	8.2. Conservation agriculture based on cultivation techniques that save on fossil energies and promote carbon sequestration are applied by farmers: cereals, olive growers, etc. (BaU-12,000ha / year - Low carbon: 34,000ha / year in 2030)"	8.2.1. Number of ha where conservation agriculture is practiced: Zero ploughing, biological crop protection, fallows, mulching, etc.	- Identify good practices, document them and disseminate them - Carry out "Cost / benefit"" profitability studies compared to conventional agriculture - Develop the approach to monitoring and assessing the various programs, including the definition of indicators and the methodology for calculating reductions in CO2 emissions Initiate and fund contractual action research (obligation of results on the real problems of the sector): machinery; production systems; varieties; biological control Organize the sectors and encourage the labeling of products and landscapes	MARHP DGPA/PV"	-The other concerned general directorates of the ministry of agriculture -OEP livestock and pasture office -INGC national institute of field crops - GDAPs, CSOs, NGOs - Private sector"	'- National budget - Bilateral funder - Multilateral funder - Secteur privé"	300 MUS\$	-Technical assistance - Investment projects"	Low carbon sce- nario: No support		
	8.3. The share of food and fodder legumes is increased (BaU: Coverage rate 9.8% of arable land / year over the period 2020-2030 - i.e. 3000ha / year - Low carbon: Coverage rate 11.4% of arable land / year over the period 2020-2030 - i.e. 5000ha / year)"	8.3.1. Number of additional ha of legumes sown each year	- Design and implement an awareness-raising / communication plan - Reinforce collaboration with extension and vocational training."				7 MUS\$	-Technical assistance - Investment projects"	- BaU exceeded - Low carbon sce- nario: No support"		
	8.4. The use of synthetic mineral fertilizers is optimized and revised downwards (BaU: 15% / year reduction in synthetic mineral fertilizers on 75% of arable land over the period 2020-2030, i.e. 2000ha / year - Low Carbon: 15% / year reduction in synthetic mineral fertilizers on 100% of the land arable over the period 2020-2030, i.e. 400ha / year)"	8.4.1. Quantity of synthetic mineral fertilizers distributed each year (in tonnes)					7 MUS\$	-Technical assistance - Investment projects"	- Less than BaU. - Low carbon sce- nario: No support"		

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
	8.5. The energy potential of vegetable waters is estimated. (Low carbon: Use of 560,000 tonnes of vegetable water / year (out of 700,000) over the period 2020-2030)"	8.5.1. Quantities of vegetable water recovered for energy	- Carry out an international benchmarking on the state of development of this sector and draw the best practices / success factors - Conduct a study of the sector's potential and identify the technical, economic, regulatory and institutional constraints - Make pilot tests and assess performance; - Organize training sessions for the benefit of the various actors in the field - Design a support mechanism for the sector - Carry out awareness-raising and communication campaigns to promote the development of this sector				3 MUS\$	-Technical assistance - Investment projects"	Low carbon sce- nario: No support	
Solid waste sector										
9. A solid waste management framework conducive to the implementation of the NDC is set up	9.1. The most relevant options for reducing GHG emissions are identified and the regulatory framework favorable to their implementation is set up	9.1.1. Existence of specifications, for the landfill concession, oriented towards the selected GHG reduction options 9.1.2. Existence of GHG" performance indicators in the selection of dealers	- Carry out a study to (i) examine the different options for reducing GHG emissions possible in solid waste landfills, (ii) analyze the cost / benefit of the different options and (iii) prioritize them according to pre-defined assessment criteria - Integrate GHG emission reduction targets in the overall solid waste management strategy - Make the necessary adjustments on the specifications to guide the dealers towards the GHG reduction options selected - Incorporate criteria to assess their "GHG"" performance into the dealer evaluation methodology"	ANGED		GIZ	130 kUS\$	Technical assistance	Attempt	
	9.2. The quantities of waste collected to produce RDF are increased	9.2.1. The quantities of RDF produced	- Organize information / awareness-raising work- shops on RDF development opportunities, bring- ing together dealers and cement manufacturers - Develop a support mechanism for the production of RDF and its sale to cement manufacturers - Develop and implement the necessary mecha- nisms for product quality control (RDF)	ANGED	Ministry of environment, cement manu- facturers	GIZ	100 kUS\$	Technical assistance	Attempt	
	9.3. Degassing systems on waste that is buried are set up	9.3.1. The quantities of landfilled waste connected to degassing systems	- Carry out the technical-economic studies necessary for the degassing systems to be set up - Develop funding requests and complete the financing plan for the various facilities - Prepare bidding documents and launch tenders - Carry out the various installations - Monitor and report on the performance indicators of the different installations"	ANGED	Ministry of environment	GIZ	200 kUS\$	Technical assistance	Attempt	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
Liquid waste sector										
10. The implementation of mitigation projects in the liquid waste sector is strengthened	10.1. Mitigation projects in the sector are identified and prioritized	10.1.1. Existence of an updated Sanitation" NAMA	- Launch a study to update the NAMA "Sanitation"" Prioritize mitigation projects - Prepare "concept notes"" / funding requests"	National Sanitation Office (ONAS)	Ministry of environment	Bilateral or multilateral funder	60 kUS\$	Technical assistance	No support	
	10.2. ONAS's technical capacities in the management and operation of PV, digestion and cogeneration facilities are built	10.2.1. Number of ONAS executives trained	Organize training sessions for the benefit of ONAS executives which should at least cover the following topics: - The procedures for accessing and connecting to the electrical grid used for all of the ONAS cogeneration facilities - Management and operation of PV, digestion and cogeneration installations"	ONAS		Bilateral or multilateral funder	40 kUS\$	Technical assistance	No support	
	10.3. A 10 MW PV capacity is installed in the WWTPs	10.3.1. PV power installed in WWTPs	- Carry out the necessary technical-economic studies related to the achievement of these two projects (PV plant and biogas digesters)	ONAS		Bilateral or multilateral funder	150 kUS\$	Technical assistance	No support	
	10.4. A capacity of biogas digesters, for the production of electricity, with a capacity of 4 MW is installed	10.4.1. Power of biogas digesters installed for electricity production.	- Prepare funding requests and seek the necessary funding for the achievement of these projects - Prepare the tender documents related to the two projects - Carry out the two projects and ensure their maintenance"							
	10.5. The capacities of ONAS and ANPE in terms of supervision and moni- toring of industrial water discharges are built	10.5.1. Rate of compliance with discharge standards in the sanitation grid and in the receiving environment	- Capacity building of ANPE and ONAS in terms of control and monitoring Capacity building for manufacturers in terms of "in-situ"" treatment - The transfer of advanced technologies related to the treatment of industrial water pollution The organization of awareness-raising campaigns for the various stakeholders (industrialists, professionals, civil society, etc.) in the management of industrial water waste."	ONAS and ANPE	MALE - UTICA - MIPME	Bilateral or multilateral funder	100 kUS\$	Technical assistance	No support	



Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
Transversal aspects	ork, policies and strategies									
1. Effective governance of sector adaptation to climate change and an MRV system to enhance transparency, accountability and decision-making	1.1. Adaptation programmes/projects/actions are divided into quantified objectives.	1.1.1. Minimum criteria for quantifying Climate Change impacts are identified. 1.1.2. At least one vulnerability study by sector/year is updated"	1. Define adaptation indicators in key sectors. 2. Undertake sectoral vulnerability studies, validate and disseminate the results. 3. Make a study of socio-economic vulnerabilities throughout the Tunisian territory 4. Make a global analysis of CC impacts on the Tunisian economy (regionalized multisectoral) taking into account gender sensitivity 5. Map out "high risk" areas	* MARHP - AFAT & Water Resouces * M. HEALTH * MALE - APAL * M.TOURISM-ONTT	* MALE - Other departments * MDICI * M. Finances"	* National budget * Bilateral funding * International financing * UNDP (NAP-Land use planning)"	900 KUS\$	* Technical assistance,	* NAP- Food Se- curity - In Progress * NAP land use planning, Planned * Other studies: Without support	
	1.2. The "Cost/Benefit" analysis of the impacts of climate change on the sector or its components is carried out and contains a prioritized list of adaptation options to be implemented at the sectoral, subnational and national levels.	1.2.1. The number of partners involved in the choice of the appropriate cost/benefit analysis method for each sector, 1.2.2. At least a dozen priority adaptation options are proposed, taking into account social justice and gender, 1.2.3. At least 25% of adaptation options involve the private sector (win/win)."	1. Launch sector-specific studies to assess the current state of play on cost-benefit analysis of CC effects and prioritization of adaptation options, 2. Propose, discuss and adopt the appropriate methodology, 3. Discuss, validate, publish and share the results of the study, 4. Communicate the results to the partners and actors so that it can be used as a reference for requests for projects, communications and other reports produced on the theme of the CC on the sector concerned.	* MARHP - AFAT et Water Resouce * M. HEALTH * APAL-Littoral * M.TOURISM-ONTT	* MALE * MESRS * ONGs et OSCs	* National budget * Bilateral funding * International financing	- 250 KUS\$ (FAO) - 500 kUS\$ (UNDP)	* Technical assistance,	* MARPH: In progress with the NAP-Food Safety, Other sectors: Tentative	
	1.3. NDC adaptation projects are integrated into sectoral development planning and plans and target-based budget management	1.3.1. The volume of funding allocated by the Tunisian State to NDC adaptation projects, 1.3.2. At least two performance indicators/sectors shall be integrated into the assessment processes of the sector or departments acting in the field of adaptation (Budget management by objectives - GBO),"	1, Integrating NDC projects into sectoral strategies, 2. Introduce NDC projects into the five-year development plan 2021-2025 (MIDCI) 3, Raising awareness among decision-makers (Ministers, Heads of Programs, Directors-General and Directors) of the usefulness of integrating NDC objectives and projects in the planning of the development of their sector through their budgeting, the use of performance indicators in relation to the CC in the evaluation processes, etc.), 4. Introduce in the benchmarks for assessing the performance of sectors (the annual RAP performance reports) concrete indicators for measuring adaptation to CC	* MARHP - AFAT et Water Resouce * M. HEALTH * MALE - APALI * M.TOURISM-ONTT	* MALE - Other departments * MIDCI	* National budget * UNDP (Readiness NAP/ GCF readiness Fund) * UNDP (NDC implementa- tion acceleration project)	100 KUS\$	* Technical assistance,	MARHP: In progress Other sectors: Tentative	
	1.4. A comprehensive MRV system integrating adaptation measures in sectors is designed and implemented,	1.4.1. An MRV system adapted to each of the sectors concerned is selected, developed and implemented, 1.4.2. Number of indicators for measuring the adaptation measured/total of the indicators planned, 1.4.3. The reporting model is published and known to all sectors and partners, 1.4.4. Number of reports issued.	1. The official name of technical service responsible for MRV system and identification of its tasks and responsibilities, 2. Design, development and implementation of the recommended MRV system and identification of vulnerability indicators with reference to adaptation (See activity 1.1.) 3. Approach and monitoring process validated and adopted 4. Capacity-building (Actions, Monitoring and Evaluation, Reports), 5. Acquisition of measurement tools (Software and Hardware) and training of MRV personnel in its operation, maintenance and updating. 6. Capitalization and exchange of information between partners	* MALE * MARHP - AFAT & Water Resouce * M. HEALTH * MALE - APAL * M.TOURISM- ONTT	* MALE - Other departments * MESRS * MDICI. Na- tional Institute of Statistics * M. Défense - CNCT	* National budget * Bilateral funding * International financing	150 KUS\$	* Technical assistance,	Planned (partially)	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
	1.5. A national adaptation framework is developed and adopted	1.5.1. Existence of a framework document of the National Adaptation Plan (NAP) adopted by the advisory adaptation committee	- Develop a methodology to develop and institutionalize, at national level, the risk and vulnerability analyzes that integrate social and economic dimensions and whose results can inform development planning with relevant indicators for decision-making - Develop guidelines for the development of sectoral adaptation plans - Develop the structure of an M&E system for adaptation planning and define the main components and indicators - Define the objectives, guiding principles and main components of the NAP framework document, taking into account the gender dimension - Finalize and validate the framework document of the NAP by the adaptation advisory committee	* MALE * MARHP - AFAT & Water Resouce * M. HEALTH * MALE - APAL * M.TOURISM- ONTT"	* MDICI, * Ministry of finance"	UNDP (Readiness NAP- Land use planning) GIZ FAO Budget National AFD"	100 kUS\$	Technical assistance	Tentative	
2. Combined financing: public and private, national and international are mobilized to better act against the impacts of climate change	2.1. A portfolio of adaptation projects and funding requests are established	2.1.1. At least five bankable adaptation projects are drafted and contained in the portfolio, 2.1.2. All four sectors have a project portfolio (the four considered sectors have a project portfolio) 2.1.3. At least one application/sector/year is submitted for funding."	1. Launch sector-specific studies to provide an overview of the projects currently under way (if any) and those which are considered as masts, 2. Explore sectoral strategies, programs and action plans available and capable of being transformed into adaptation projects, 3. Propose, discuss and adopt a model sheet of adaptation projects designed according to the requirements of national authorities (State budget) and donors, 4. Establish sectoral steering committees for the studies envisaged to select the best projects to propose for financing, select the accredited entities to mobilize and target the donors to be solicited, 5. Propose projects for funding, accompany the process and make the necessary lobbying to make them succeed."	* MARHP - AFAT et Water Resouce * M. HEALTH * MALE - APAL * M.TOURISM-ONTT"	* MALE - Other departments * MDICI, * M. Finances"	* National budget * Bilateral funding * International financing"	200 KUS\$	* Technical assistance,	Without support	
	2.2. National and international climate finance schemes and other sources of financing (models of applications, requirements,) are known to potential applicants (Sectors, CSOs, Banks, Private, Experts,)	2.2.1. The number of funding request templates adopted by the funders (CC templates) translated into French and Arabic languages, 2.2.2. At least one CC/year request for funding is initiated and developed by a Civil Society Organization (CSO) and/or the private sector."	1. Launch an expression of interest for a training session on climate finance, 2. Monitor and assist in the production of the session materials in accordance with the requirements stipulated in the TDRs, 3. Validation of materials and preparation of the session, 4. Implementation of the session, evaluation and sharing of support with other actors and partners, 5. Publication of training materials and templates on the proposed platform"	* MARHP - AFAT et Water Resouce * M. HEALTH * MALE - APAL * M.TOURISM-ONTT"	* MALE - Other departments * MESRS * ONGs et OSCs * Parliamen- tarians and local elected representatives (municipali- ties)"	* National budget * Bilateral funding * International financing"	100 KUS\$	* Technical assistance, * Projects"	* MARPH: Planned * Other sectors: Without support"	
	2.3. The human and material capacities of the various key institutions involved in adaptation to the effects of climate change are strengthened	2.3.1. The budgets allocated to the strengthening of the logistic and human resources of sectors and departments active in the field of adaptation to the effects of CC are increased by 5%/year, 2.3.2. At least 80% of field missions shall be carried out within the specified time limits, 2.3.3. Number of new staff recruited and/or seconded/year assigned to the sector's Adaptation Service."	1. Launch a study to assess the state of the available equipment and personnel involved in the CC adaptation activities in the sectors concerned, the adequacy of available/needs in relation to the effort requested and the complementary needs to be mobilized, 2. Propose the results of the study for discussion, improvement and validation, 3. Transform these requirements into a statement of reasons and then a project with a request for funding, 4. Advocate with national and international authorities for the funds necessary for the implementation of the project, 5. Mobilize funds and implement them, 6. Assess the impacts of the project on improving the resilience of sectors or their components to the effects of CC."	* MARHP - AFAT et Water Resouce * M. HEALTH * MALE - APAL * M.TOURISM-ONTT"	* MALE * MFFE, * MDICI"	* National budget * Bilateral funding * International financing"	300 KUS\$	* Technical assistance, * Projects"	Without support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
3. Facilitating access to information for adaptation actors and their targeted awareness-raising is a greater commitment to action.	climate and technical information is in place	3.1.1. The platform shall be designed, hosted and open to the targeted public, 3.1.2. Number of references contained in the platform, 3.1.3. Number of visitors to the platform/month 3.1.4. Number of citations in studies and published works, 3.1.5. Number of documents added to the platform (Per unit of time).	1. Launch a consultation to define the type of platform to be set up (conceptual layout, contents, interactivity, update,), 2. Platform Validation and Implementation, Testing, Commissioning, 3. Training in the use, maintenance and updating of the platform, 4. Quality test, feedback, arrangements and final receipt of the platform.	* MALE	* MARHP - AFAT et R.Eau * M. SANTE * MALE - APA * M.TOUR- ISME-ONTT * ONGs et OSCs"	* National budget * GIZ (Adapt-CC project) *UNDP (Readiness NAP- Land use planification)	100 KUS\$	* Technical assistance, * Projects	* MALE : Planned	
	3.2. Education, awareness of the effects of climate change and good adaptation practices.	3.2.1.At least two good practices/year/sector, considered effective against the effects of CC, are identified, documented and ready to be transferred to the actors (Popularizers, farmers, researchers, students,),	1. Conduct a study to define the criteria for classifying a good practice in relation to its role in adaptation to CC, 2. Conduct a bibliographic review of good practices: old and/or new and choice of the best of them, 3. To draw up a model sheet for good practice and information on selected practices, 4. Presentation of the results of the study, validation and definition of the process of their extension to the target audiences, 5. Translation of the proposed awareness process into a funding application. 6. To carry out communication materials and awareness-raising and communication campaigns, 7. Assessment of experience and generalization.	* MARHP - AFAT et Water Resouce * M. HEALTH * MALE - APAL * M.TOURISM-ONTT	* MALE * MFFE * MDICI"	* National budget * Bilateral funding * International financing	100 KUS\$	* Technical assistance, * Projects	Without support	
4. Strengthening the capacity of actors to improve their response to the effects of climate	The capacities of the various actors involved in climate change adaptation are strengthened in the following themes, 4.1. Monitoring, reporting (investigation tools, information gathering, capitalization, exploitation 4.2. Integration of climate change in development planning, 4.3. Management of genetic resources (collection, conservation, valorization), 4.4. Negotiations on CCs to strengthen Tunisian diplomacy and create sustainable and strategic alliances in the field, 4.5. Drafting of requests. 4.6. Rehabilitation of local know-how and increase knowledge sharing	4.1.1 Total number of participants who have successfully completed training sessions (attendance, participation in group work, etc.) 4.1.2. Number of female participants, 4.1.3. Number of young participants, 4.5.1. Number of exercises: written request, know how to do identified and informed by learners.	1. Launch an expression of interest for training sessions on the subject, 2. Monitor and assist in the production of media as required by the TDRs, 3. Validation of materials and preparation of the session, 4. Implementation of the session, evaluation and sharing of support with other actors and partners, 5. Placing of open-access media (on the platform),	* MARHP - AFAT et Water Resouce * M. HEALTH * MALE - APAL * M.TOURISM-ONTT	* MALE * MESRS * ONGs et OSCs * Parliamentarians and local elected representatives (communes)	* National budget * Bilateral funding * International financing	150 KUS\$	* Technical assistance, * Projects	* MARPH: Planned (Adapt'Ac- tion) * Other sectors: Without support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
AFAT										
5. Forest and pastoral ecosystems are developed and their resources managed in an integrated and rational manner.	produced	5.1.1. At least one modern above ground nursery per year put into service, 5.1.2. Percentage of number of plants of indigenous species/total number of plants, 5.1.3. At least one modern nursery rehabilitated/year and become operational, 5.1.4. At least 50% of the plants of indigenous multi-use species are distributed to the private sector and farmers."	1. Development and equipment of FIVE nurseries with the material means and modern techniques of production of plants above ground, 2. Consolidation and rehabilitation of SIXTEEN existing modern nurseries, 3. Equipment of the seed section of additional means to improve the quality of seeds towards international standards 4. Characterization and creation of senmencian peoples and development of indigenous species for multiple uses, 5. Development and implementation of a multi-use species planting program on uncultivated lands and in individuals."	* MARHP-DGF	* MALE * MESRS"	* National budget * Bilateral funding * International financing"	1 MUS\$	* Technical assistance, * Projects"	* DGF / PGIP: Concluded (10%), * Rest (90%): without support"	
	5.2. Cork oak forests in high fire risk areas shall be managed in a sustainable and integrated manner,	5.2.1. The map of sensitivity of the Tunisian suberaie to fires is made and validated: at least 3 levels of vulnerability, 5.2.2. Number of hectares of burned suberary per fire declared at least equal to the national average, 5.2.3. Rate of trenches per fire and runways / Ha of suberaie at least equal to the national average, 5.2.4. Time elapsed between the outbreak of a fire, the declaration and the arrival of the fire brigade not exceeding the national average."	1. Preparation of a map of areas at high risk of fire in the suberaie, 2. Completion of Verbal Forest Management Trials and a plan for the rational exploitation of forest products, 3. Rehabilitating trenches by fire and opening new tracks, vigies and buried tanks, 4. Pasture management and removal of biomass stocks, 5. Involvement of the population in the management model and fire prevention."	* MARHP-DGF	* MARHP - Other services * M. INTERIEUR - Civil security * M. DEFENSE, * MALE"	* National budget * Bilateral funding * International financing"	1 MUS\$	* Technical assistance, * Projects"	* DGF / PGIP: Concluded (10%), * Rest (90%): without support"	
	5.3. The degraded pastures and steppes of the Center and the South are developed and the work envisaged is carried out,	5.3.1. Percentage, number of hectares of degraded rangelands defended/total number of degraded rangelands, 5.3.2. The economic value of ecosystem goods and services is improved by at least 10% compared to the 2012 benchmark, 5.3.3. Percentage, Number of ha of managed routes/total number of routes in the country, 5.3.4. Increase in the quantity of alfa produced by at least 10% compared to the previous year, 5.3.5. Improvement of the standard of living of households (women) compared to the previous year"	1. Development of plans for the development of alpine tablecloths and degraded pathways, 2. Implementation of approved development projects, 3. Pastoral plantings, remits, etc., for the improvement of the goods and services rendered by the ecosystems concerned, 4. Cactus plantations and payment of ecosystem services: biological rest, fallow, 5. Development of models for the management and rational use of improved rangelands 6. Preparation of a guide for the recognition of annual and perennial pastoral species."	* MARHP (DGF, OEP, DGACTA)	* MARHP - Other services * MALE, * GDAPs, SMSAs,"	* National budget * Bilateral funding * International financing"	4 MUS\$	* Technical assistance, * Projects"	* DGF / PGIP: Concluded (10%), * Rest (90%): without support"	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
6. Extreme events have limited and controlled impacts on watersheds and low-lying coastal areas.	6.1. Floods in the Med- jerda watershed are con- trolled and regulated	6.1.1. Percentage, Number of persons affected by the flood/Number recorded in the most devastating incident experienced, 6.1.2. Reduction in the amount of economic damage/family damage caused by floods compared to the most devastating incident experienced, 6.1.3. Time (in minutes) between alert and response."	1. Strengthening the function of reservoirs in flood control 2. strengthening of the current flood forecasting and warning system (SPIA), 3. Development of the evacuation and flood control system, 4. Management/regulation of flood plains"	MARHP (DGGRE-DGACTA-DG-BTH)	* M. Equipe- ment * MALE"	* National budget * Bilateral funding * International financing"	3 MUS\$	* Technical assistance, * Projects"	Without support	
	6.2. Vulnerable watersheds and sub-watersheds benefit from integrated management and watercourses are regulated.	6.2.1. Number of hill lakes built, 6.2.2. At least 1 watershed or sub-wa- tershed is developed/year and the work envisaged is carried out, 6.2.3. Number of income-generating micro-projects allocated to women,"	Construction of hillside lakes in appropriate locations, Development of the watershed, implementation of the actions and activities envisaged Creation of income-generating micro-projects for local populations, especially women."	* MARHP - DGACTA	* MARHP - Other services, * MALE: Communes * MALE - Other departments"	* National budget * Bilateral funding * International financing"	2 MUS\$	* Technical assistance, * Projects"	* DGACTA / PACTE: Concluded (10%), * Rest (90%): without support"	
	6.3. The low-lying coastal areas (182000ha-Sebkhas, Garâa, lagoon,) have their ecological functions preserved.	6.3.1. Number of Sebkhas transformed into a permanent lake of water, 6.3.2. Number of waterfowl frequenting the Sebkha, 6.3.3. Number of waterbirds returned, endemic or threatened with extinction, or newly settled in the Sebkha."	Undertake rehabilitation work to transform the Seb- khas into permanent bodies of water and to exchange continuously with the sea, Development of the banks of the rehabilitated Sebkhas"	* MARHP - DGF	* MALE * MALE - APAL, * GDAPs, SMSAs,"	* National budget * Bilateral funding * International financing"	3 MUS\$	* Technical assistance, * Projects"	Without support	
7. Rainfed and irrigated agriculture benefits from innovative and transformational adaptation options that improve their resilience to climate change.	7.1. Innovative field crop systems are identified and developed.	7.1.1. Number of innovative practices identified and transferable to farmers, 7.1.2. Number of Ha affected by innovative new practices."	I. Identification and development of technical routes for innovative cultivation systems, Extension, introduction and/or reintroduction of innovative farming systems to farmers, generalization, Support for research and training on innovative technologies for the conservation and optimization of natural resources, whether or not diplomatically based,"	* MARHP - INGC	* MESRS, * UTAP, * GDAPs, SMSA, Coopéra- tives,"	* National budget * Bilateral funding * International financing"	1 MUS\$	* Technical assistance, * Projects"	* Good practices: in progress (PACTE- SGP-Other actors) * General- ization, S / E: Without support"	
	7.2. Irrigated crops in the Central Regions are adapt- ed to climate change	7.2.1. At least 1 route and technical packages transformed/year, 7.2.2. Volume of water avoided on a crop cycle/ha, 7.2.3. At least one current species substituted by another resilient and less water-intensive species in 100."	1. Diagnostic analysis of current methods of exploitation of irrigated areas, 2. Identification of farming methods adapted to climate change (variety choice, water saving, cultivation techniques, etc.), 3. Implementation of model projects for the optimal use of irrigated areas.	* MARHP	* MALE - ONAS, * GDAPs, SMSAs,"	* National budget * Bilateral funding * International financing"	1 MUS\$	* Technical assistance, * Projects"	Without support	
	7.3. Polyculture/livestock production systems are adapted to climate change and more resilient.	7.3.1. At least one good practice/year/ sector is identified, informed and publi- cized, 7.3.2. Number of holdings which have adopted these good practices, 7.3.3. Number of ha of crops where chemical fertilizer inputs are replaced by organic fertilizers."	1. Diagnosis of current production systems and proposals for transformative operating techniques, 2. Extension of suitable or new technical routes to agro-entrepreneurs capable of mitigating the impact of CC, 3. Monitoring and evaluation of planned actions, scaling and generalization."	*MARHP	* MALE	* National budget * Bilateral funding * International financing"	3 MUS\$	* Technical assistance, * Projects"	Without support	
	7.4. Water points used for irrigation and pastoral hydraulics as well as consolidated shade areas and service centers are equipped with photovoltaic energy.	7.4.1. Percentage, Number of water points equipped with photovoltaics/ number of irrigated farms, 7.4.2. The amount of fossil energy avoided, 7.4.3. Decrease in production costs in DT/ irrigated Ha."	Project of equipping a selected number of water points or drilling in photovoltaic energy for the extraction of water, the watering of flocks in pastoral environment and the irrigation of small irrigated areas."	* MARPH-DGGR * ANME"	* MARHP * M. Energie (STEG) * M. Finance, * MALE-CITET"	* National budget * Bilateral funding * International financing"	1 MUS\$	* Technical assistance, * Projects"	* Pilot: Concluded * Scaling: Without support"	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
8. Protecting biodiversity improves the resilience of ecosystems and agrosystems.	8.1. Efforts to combat the silting of the South of Tunisia are being organically consolidated and regional action plans to combat desertification are being implemented.	8.1.1. Number of structures for protection against silting consolidated by biological control means (ha), 8.1.2. Percentage, Number of hectares of land protected against desertification risks / Number of ha of land to be protected: erosion, land degradation, salinization, etc."	I. Identification of priority sites, Implementation of biological consolidation programs for protective works, Environmental, social and economic monitoring/assessment of the effects of projects implemented."	* MARHP, * MALE"	* M. Défense, * GDAPs, SMSAs,"	* National budget * Bilateral funding * International financing"	2 MUS\$	* Technical assistance, * Projects"	Without support	
	8.2. The national genetic heritage is known, conserved and valued to improve the adaptation of cereal crops to the effects of Climate Change.	8.2.1. Catalog of indigenous cereal species produced, 8.2.2. Number of cereal species resilient to CC reintroduced in farmers, 8.2.3. Percentage, Number of Ha of cereals grown with resilient species / Total area of Ha of cereals"	Research Convention on Indigenous and CC-resilient cereal species between MARHP-Scientific Research and Genetics National Bank, In situ (operator) expression and results, Identification of resilient species and varieties and development of technical routes adapted to climate stress, Popularization and generalization.	* MARHP * MESRS"	* MALE - BNG * GDAPs, * UTAP, * CCGC, OC, CCSPS, * Coopératives"	* National budget * Bilateral funding * International financing"	1,5 MUS\$	* Technical assistance, * Projects"	Without support	
9. An information management system for adaptation planning, climate and environmental monitoring, insurance and payment of ecosystem	9.1. A climate monitoring and early warning system is in place and operational	9.1.1. Number of alerts issued / year, 8.1.2. Number of climate disasters avoided (fires, floods, diseases, etc.),"	1. Study for the design of the appropriate system and the approval of the partners and actors (benchmarking and adaptation to the national context), 2. Commissioning, testing, arrangements, updating and maintenance."	* MARHP * INM"	* M. Env.	* National budget * Bilateral funding * International financing"	2 MUS\$	*Technical assistance, *Projects"	Without support	
services is in place and operational."	9.2. The agricultural map is updated and the accuracy of its products improved	9.2.1. The number of layers of thematic information contained in the agricultural map, 9.2.2. The level of accuracy of the information contained in the tables allotted to the map layers, 9.2.3. Number of requests for geospatial analyzes related to adaptation to CC provided in the delivered version."	1. Updating the agricultural map: improving geographical and attribution accuracy and integrating new layers, 2. Integration of MRV adaptation tracking indicators through pre-established queries and possibilities for their adaptation, 3. Training of managers and engineers in charge of the management of the agricultural map and process of transfer of products, processes and responsibilities to the regions."	* MARHP	* MALE * INS, * MESRS"	* National budget * Bilateral funding * International financing"	2 MUS\$	*Technical assistance, *Projects"	* Old database: Concluded, * Updating and adaptation: In progress, * Generalization: without support"	
	9.3. A payment mechanism for environmental services in agriculture is established and operational.	9.3.1. Number of paid environmental services defined and approved, 9.3.2. Amounts paid to farmers, breeders and other actors in the agricultural sector for environmental services rendered in DT/year."	Benchmarking on international and regional experiences in the field, identification of environmental services rendered and approval of institutional, legal, regulatory, and financial mechanisms in question. Application of the approved system to a pilot case. Assessment, corrections, arrangements and scaling."	* MARHP, * MALE"	* M. Finances, * UTAP * GDAPs, ONGs,"	* National budget * Bilateral funding * International financing"	100 KUS\$	* Technical assistance, * Projects"	Without support"	
	9.4. A payment mechanism for environmental services in agriculture is established and operational.	9.4.1. Number of insurance contracts against the effects of CC signed, 9.4.2. Amount of compensation paid to insured persons following damage of the CC in DT/year."	1. Feasibility study for the establishment of a climate risk insurance scheme, 2. Communication, outreach 3. Progressive implementation of the climate risk insurance scheme."	* MARHP * Assurances * Banques"	* M. Finances, * Banques, * Insurance companies * UTAP,"	* National budget * Bilateral funding * International financing"	150 KUS\$	* Technical assistance,	* Study: concluded * Com- munica- tion. and commis- sioning: Without support"	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
10. Effective governance of climate change in agriculture, ecosystems and water resources is established	10.1. The Forest Code is revised and incorporates the concept of CC	10.1.1. The project to update the Forest Code, which incorporates the CC component, is approved by the Parliament, 10.1.2. The new Forest Code and its implementing texts shall be published in the Official Journal"	1. The results of the consultation on the state of play and the identification of the articles to be amended or introduced shall be presented, discussed and validated, 2. Initiate the public inquiry, summarize feedback from partners and stakeholders and make the necessary changes, 3. To approve the texts proposed by the legal services of MARHP, 4. Bring new certificates to the Government and Parliament for approval, 5. Intensify the information and awareness-raising campaign for the approval of the Water Code among decision-makers and parliamentarians, 6. Federate and mobilize civil society on the project, 7. Organize and conduct an information campaign for the new texts of the Water Code among all users (central, regional and local) and using appropriate and targeted means of communication to the target public."	MARHP: DGGRE, BPEH, DGBGTH	* MARHP - AFAT * M.SANTE * APAL-Littoral * M.TOUR- ISM-ONTT * MALE"	* National budget * Bilateral funding * International financing"	200 KUS\$	* Technical assistance, * Projects"	* Water code: In progress * Rest of steps: Without support"	
	10.2. Regional or local climate change coordination committees attached to the Central Committee (within the Ministry of Agriculture) are established and operational.	10.2.1. A climate change coordination committee of a pilot nature is set up within a Regional Commissariat for Agricultural Development (CRDA), its advisory committee and its prerogatives are contained in an official decree published by the supervisory authorities, 10.2.2. The Regional Coordination Committee shall include women among its members, 10.2.3. Number of meetings of this CC Regional Coordination Committee, 10.2.4. Number of Verbal Trials of CC Regional Committee meetings published, 10.2.5. Number of CC Regional Focal Points officially designated in the RDCs. 10.2.6. Number of meetings of the CC Central Advisory Committee in MARHP (Tunis) attended by at least one member of the regional committees 10.2.7. Number of missions, COPs, trainings and other CC-related events involving members of regional committees, 10.2.8. Number of requests for funding submitted by regional and local technical services, supervised by regional committees, and received either by the Central Committee or by other national structures or accredited entities (UNDP, FAO, BM, ADB, AFD, soon APIA)."	1. Launch a study to analyze the organization of the CRDA pilot and propose the best institutional arrangement for the envisaged CC Coordination Committee, 2. Organize the consultation meetings with the senior management of the CRDA and their partners: Research, trade unions, CSOs, NGOs, GDAPs, private sector,, 3. Assisting and ensuring the publication of the decision establishing the CC Regional Committee (members, prerogatives and areas of intervention), 4. Support the new committee established through training sessions (general and in-depth), 5. Set up the process of evaluating the experience of the new committee, 6. Propose the necessary adaptations and make generalizations in the other 23 governorates of the country.	MRPRH - G3C	* MARHP - AFAT+R.Eau * M.SANTE * APAL-Littoral * M.TOUR- ISME-ONTT * MALE"	* National budget * Bilateral funding * International financing"	1 MUS\$	* Technical assistance, * Projects"	* CRDA Mannou- ba: In progress * 23 other CRDAs: Without support"	
	10.3. Develop a system for monitoring land reallocation, changing cultures, races, etc. (Adapt the LDN Concept: Neutrality of Land Degradation (which includes a land-use change variable),	10.3.1. The map of fixed plots and typical holdings shall be drawn up and published with GPS position and geographical limits (GIS format), 10.3.2. Protocol for monitoring land use, occupation (in accordance with the updated IPCC standards) and livestock shall be validated and controlled by the investigators, 10.3.3. Number of training sessions and participants in modern land use monitoring tools and methods: remote sensing, cartography, geospatial statistics, (Open Foris-Collect Earth,)."	Assess the experience of DGF/FAO collaboration in monitoring land use change using the provided Open-Foris and Collect Earth means: strengths, weaknesses, possible developments, Develop and adapt tools as necessary, Renew the protocol of collaboration with FAO, Acquisition of the necessary equipment (hardware and software + other equipment) Conduct staff training, Test the outputers, validate the protocol and start.	MARHP-AFAT	* MARHP Other directions * APAL-Littoral, * M. Equipment * MALE,"	* National budget * Bilateral funding * International financing"	150 KUS\$	* Technical assistance, * Projects"	* MARHP / FAO pilot test: Con- cluded * Oper- ational stage: Without support"	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
11. National and international funding opportunities are being explored and reactivated.	11.1. Reactivate the forest fund and other funds if they exist.	11.1.1. Results of a study on the inventory of national funds available for adaptation to CC, including the forest fund, and the usefulness of their reactivation are published, 11.1.2. Number of participants, quality and decision-making capacity mobilized during the advocacy process for the reactivation of these funds, 11.1.3. Application to reactivate the forest fund is made and submitted to the Ministry of Finance for approval and payment of the funds."	1. The results of a consultation on: the revision of the Forest Fund, the justification for its reactivation, the proposals for improvement, the sources of funding, the levels of contributions, are presented, discussed and validated by the actors and partners, 2. A statement of reasons shall be made, submitted to the Government and defended to the Ministry of Finance, 3. Accompany the DGF in the commissioning of the fund, its management procedures and the processes for monitoring achievements. 4. Feed the bottom."	MARHP-DGF	* MARHP, * M. Finances, * OSCs, ONGs"	* National budget	150 KUS\$	* Technical assistance,	* Forest Fund "creation"": Concluded * Oper- ational stage: Without support"	
WATER RESOURCES	11.2. Establish funding mechanisms to encourage the private sector to contribute to the objectives of the NDC (e.g. co-management of forests).	11.2.1. The results of a study on the profitable activities, the incentives and subsidies allowed by the Tunisian investment code and the possible facilitations of administrative procedures are published and presented to private financiers (References: the law and implementing regulations on the Private Public Partnership of 04-2015 and 47-2019), 11.2.2. At least 10 institutions per year are involved in the advocacy process for the promotion of partnership contracts."	1. Initiate consultation on private sector funding mechanisms for NDC objectives, select and contract service provider, 2. Present the results of the consultation containing the possible mechanisms, discuss them and validate them by the actors and partners, 3. Present, discuss and validate with stakeholders and partners the process of operationalization of the chosen mechanism (presentation of reasons, regulatory texts,), 4. Present the results to decision makers, local elected officials and parliamentarians, 5. Mobilize sectors to identify (profitable) niches and growth areas and produce communication products for domestic and international investors, 5. Communicate, raise investor awareness."	* MARHP - AFAT et R.Eau * M. HEALTH * MALE - APAL * M.TOURISM-ONTT"	* MALE - Other departments	* National budget * Bilateral funding * International financing"	150 KUS\$	* Technical assistance, * Projects"	Without support	
12. All national	12.1. The governorates of	12.1.1. Percentage, Volume of drinking	Project is launched since 04.2017 over a period of 7	* MARHP - SONEDE / SECADE-	* MARHP,	* National budget	80 MUS\$ =	* Technical	* In	
capacities are mobilized to provide more conventional and unconventional water resources to the various users.	Cap-Bon, Sahel and Sfax will receive an additional 100 million m3 of water	water in millions of m3/year transferred from the north to the targeted governorates/Total volume of water transferable in Mm3/year, 12.1.2. Rural drinking water supply rate, 12.1.3. Service rate among poor households, 12.1.4. Reduction in hours/Day of water drudgery for rural women 12.1.5. Increase in the piezometric level of the tablecloths of Kairouanis and Sidi Bouzid."	years.	NORD	* M. SANTE, * MALE"	* Bilateral funding * International financing"	60 M euros Crédit AFD"	assistance, * Projects"	progress: duration 7 years (estimated achieve- ment of 25%) * Without support for additional funding"	
	12.2. The reuse of treated wastewater in the northern, central and southern regions is being extended to new territories and new activities.	by sectors: agriculture, industry, 12.2.2. Volume of EUT (in M3/year) in accordance with the national standard in force, 12.2.3. Percentage, Number of hectares irrigated with TMEs/Total number of Ha irrigated. 12.2.4. Impacts of TMEs on soil (Salinity concentration level, conductivity level, carbon rate, etc.), 12.2.5. Impacts of TMEs on the water table (Concentration of persistent organic pollutants, heavy metals, nitrate,)"	Feasibility study on high-capacity and agricultural potential STEPs, Implementation and operation, Environmental awareness, monitoring and monitoring."	* MALE - ONAS	* MARHP, * M. SANTE"	* National budget * Bilateral funding * International financing"	180 MUS\$	* Technical assistance, * Projects"	* In progress: (32 Waste-water Treatment) 15% of the potential for 8,530ha irrigated, * Without support: 90 Waste-water Treatment (horizon 2030)."	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
	12.3. The distribution by major coastal economic pole of desalination stations and the protection of coastal aquifers is implemented according to an approved national plan.	12.3.1. At least 1 desalination plant per major coastal economic pole shall be put into service every 2 years, 12.3.2. Volume of water supplied by desalination plants by major coastal economic pole, 12.3.3. Drinking water needs/availability balances by major coastal economic pole."	Diagnostic studies, needs, number of locations and capacities of desalination plants by coastal economic pole, Feasibility and impact studies, Environmental implementation and monitoring, awareness-raising and capacity-building	* MARPRH - SONEDE	* MALE * MDICI, * MESRS, * UTAP, * GDAPs, OSCs,"	* National budget * Bilateral funding * International financing"	20 MUS\$	* Technical assistance * Projects"	* Sta- tions: In progress, (Program 30% of achieve- ments. Jer- ba station functional) * Other stations: Without support"	
	12.4 Rainwater in cities is collected: in the case of the greater Tunis for cleaning uses, water used to extinguish fires, population protected against floods.	12.4.1.Volume of water collected in m3 12.4.2. Volume of water of the PROBE saved in m3 12.4.3. Downtown Tunis is protected at the level by 2022 12.4.4. Number of flood-protected towns/ protected population"	1. To determine the territory in downtown Tunis and to carry out the necessary technical studies, 2. Perform the construction of the recommended devices.	M. Equipment	MARHP, MALE(- municipalites) MALE (Onas)"	* National budget * Bilateral funding * International financing"	1,5 MUS\$	* Technical assistance	Without support	
13. Adaptation to CC for proposed or to be developed projects is assessed in terms of cost/ benefit effective- ness - adaptation	13.1. Water Strategy 2050 addresses adaptation to the effects of CC in a distinguished way	13.1.1. A chapter of the Water Strategy 2050 is devoted to the adaptation to climate change and water resources. 13.1.2. The water2050 strategy contains realistic adaptation options, 13.1.3. The adaptation options contained in the water 2050 strategy are presented as a project request,"	1. Water Strategy 2050: Diagnostic study and adaptive options feasible for mitigate the effects of CC on water resources in Tunisia,"	* MARHP - BPEH	* MARHP, * SONEDE, * SECADE- NORD, * ONAS, * M. SANTE"	* National budget * Bilateral funding * International financing"	_	* Technical assistance	In progress	
	13.2. Component CC is integrated into the Water Code	13.2.1. The project to update the water code, which incorporates the CC component, is approved by the Parliament, 13.2.2. The new Water Code and the implementing texts shall be published in the Official Journal."	Intensify the information and awareness-raising campaign for the approval of the Water Code and its implementing legislation among decision-makers and parliamentarians, Federate and mobilize civil society on the project, Organize and conduct an information campaign for the new texts of the Water Code among all users (central, regional and local) and using appropriate and targeted means of communication to the target public"	MARHP (DGGRE, BPEH,DGBGTH)	* MARHP - AFAT * M.SANTE * APAL-Littoral * M.TOUR- ISME-ONTT * MALE"	* National budget * Bilateral funding * International financing"	-	* Technical assistance, * Projects"	Water Code: In progress Rest of steps: Without support"	
	13.3. Projects for the transfer and reuse of treated wastewater are evaluated in terms of cost-effectiveness in order to decide on the follow-up to NDC projects and the selected options implemented and operational.	13.3.1. Projects for the transfer and reuse of treated wastewater are validated by the profession and published, 13.3.2. The volume in m3/year of Treated Wastewater transferred to the regions,"	1. Updating the study on the transfer of TMEs to inland regions (study carried out in 2010), 2. The results of the study shall be presented, discussed and validated by stakeholders and partners on the methodological approach, the benchmarks to be considered and the indicators for the evaluation of ongoing projects, 3. The planned alterations and works shall be carried out in an operational manner.	* MARHP - DGGRE, * MALE - ONAS."	* MARHP - R. Eau, * MALE - Other departments * OSCs, ONGs"	* National budget * Bilateral funding * International financing"	500 MUS\$	* Assistance technique * Inves- tissements (Projets) * Technical assistance * Investments (Projects)"	* Without support Horizon 2040	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
LITTORAL 14. Vulnerable coasts and coastal infrastructure are rehabilitated and protected from the effects of climate change.	14.1. Vulnerable coasts threatened by marine erosion are identified and rehabilitated	14.1.1. Number of km of beaches protected against marine erosion / Vulnerable site, 14.1.2. Improvement of coastal and marine biodiversity (fauna, flora and micro-organism). Measurements made on the basis of indicator species.	1. Study on the identification, mapping and estimation of coasts susceptible to marine erosion, 2. Implementation of projects by selected area, 3. Environmental monitoring and approach to approaches and means employed.	* MALE - APAL	* M. Equip- ment, * MALE - Other departments * MESRS, * M. Intérieur	* National budget * Bilateral funding * International financing * UNDP (GEF Coastal resilience)	800 MUS\$	* Technical assistance, * Projects	300Km of very threatened sandy coast out of a total of 670 considered moderately threatened, * Concluded: 21.5Km * In progress: 9.5Km * Planned: 80Km * Without support: the rest * Stage of studies carried out: 90Km * Equipped beaches: 37beaches	
	14.2. Coastal industrial zones are redeveloped to improve their resilience to the effects of CC if not relocated.	14.2.1. Number of establishments in the coastal industrial zone protected and rehabilitated from the effects of CC, 14.2.2. Number of coastal industrial zone establishments relocated for shelter.	Analysis and identification of industrial zones threatened by the effects of CC on the Tunisian coasts, Plan for the protection, rehabilitation and relocation of threatened establishments. Implementation of the approved plan and monitoring/impact assessment.	* MALE - APAL, * M. TOURISM - ONTT * MARHP	* MALE - Other departments * M. Tourisme, * Syndicats, * GDAPs, * M. Economie, * M. Industrie	* National budget * Bilateral funding * International financing	3 MUS\$	* Technical assistance, * Projects	Without support	
	14.3. Coastal infrastructure is rehabilitated and protected from the effects of CC	14.3.1. Number of economic infrastructure protected from the "ENM"" and marine erosion, 14.3.2. Annual change in turnover of protected structures	Feasibility study, Protection plan, rehabilitation of existing infrastructure.	* MALE APAL, * M. TOURISM - ONTT * MARHP"	* MALE * M. Tourism, * Trade unionists, * GDAPs, * M. Economie, * M. Industrie	* National budget * Bilateral funding * International financing * UNDP (GEF Coastal resilience)	500 KUS\$	* Technical assistance, * Projects	Tentative	
15. The organizational and legal framework of the Coastal Protection and Development Agency is being reviewed and its action on the effects of the CC is being improved	15.1. the Coastal Protection and Development Agency is restructured in order to strengthen its mission in the management of the coastline and adaptation to the current and projected effects of the CC	15.1.1. The organization chart of the APAL is adjusted to strengthen its mission in coastal management and its adaptation to the effects of CC, 15.1.2. APAL's performance in adapting to the effects of CC is improved: Efficiency of project implementation, Proposals for applications, Drained financing,	1. Initiate consultation to carry out the review and redesign of the PALA organization chart, select and contract the service provider, 2. Present the different options and choose the most appropriate flowchart, 3. Select APAL's performance indicators for adaptation to CC effects, establish the benchmark status and make it known to all staff 4. Operate the new organization chart and evaluate its performance.	* MALE - APAL	* MALE - Other departments * M. Public function, * M. Finances	* National budget	100 KUS\$	* Technical assistance,	Without support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
	15.2. The legal and institutional framework governing the coastline in Tunisia is being reviewed"	15.2.1. The current text on the delimitation of the territory of intervention of the APAL and its responsibilities are removed and the responsibilities of the APAL are specified,	Launch the consultation for review of the legal and institutional framework governing the coastline in Tunisia, The new Juridical Framework is approved and operational	* MALE - APAL	* MALE - Other departments * M. Equipment * MARHP"	* UNDP (Coastal resilience project)		* Technical assistance : political support and approval"	In progress	
	15.3. Local committees for monitoring achievements at APAL and non-standing committees are established and operational	15.3.1. A local committee (multi-stake-holder) to monitor the achievements of the APAL with a pilot character is created, its prerogatives and its mode of operation are contained in an order published officially by the supervisory authorities (Governor,), 15.3.2. Number of local technical and/or administrative services are represented on this committee. 15.3.3. Number of meetings of the Local Committee, 15.3.4. Number of Verbals of Local Committee meetings published, 15.3.5. Number of missions, trainings and other events related to the adaptation to the CC, involving members of the local committee,	1. Launch a study to define the structure to which will be attached these local committees for monitoring the achievements of the APAL (institutional level) and propose their status (advisory,) their adM administrative anchoring, their assignments and prerogatives, 2. Propose the institutional setting and operationalization mechanism, discuss its details and approve it, 3. Assisting and ensuring the publication of the order establishing these local committees by the designated competent authority, at least in a region on a pilot basis.	* MALE - APAL	* MALE - Other departments * M.ALE: Com- munes, * M. TOUR- ISME-ONTT * MARHP - AFAT+R.Eau * M.SANTE * M. Equipment	* National budget * Bilateral funding * International financing	100 KUS\$	* Technical assistance, * Projects	Without support	
	15.4. An MRV system of the rib line is designed, constructed, implemented and operational,	15.4.1. Appointment of the technical service officially responsible for the MRV system and definition of tasks, 15.4.2. A dynamic, modern, user-friendly and scalable MRV system is operational at APAL. 15.4.3. A validated access to information facilitation mechanism is established within the sector and information exchange agreements are signed between the partner sectors.	1. Initiate a Benchamrking study on the "MRV-Littoral - Adaptation systems carried out elsewhere in the World with a particular interest for countries similar to Tunisia (availability of information, nature, quality, precision, institutional arrangements,), 2, Choice of the MRV-Littoral system adapted to each of the sectors considered, proceed with its development and implementation (Observatory), 3. Information and awareness-raising campaign among actors and partners, 4. Support and support the implementation and commissioning of the MRV-Littoral system in each of the sectors, 5. Acquisition of measurement tools (Software and Hardware) and training of MRV-Littoral personnel in its operation, maintenance and updating.	* MALE - APAL	* MALE - Other departments * M. Equipment * MESRS * MDICI. INS, * M. Défense - CNCT"	* National budget * Bilateral funding * International financing * UNDP (GEF Coastal resilience)	100 KUS\$	* Technical assistance, * Projects	Tentative	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
16. The work of the Coastal Protection and Development Agency in the field of the adaptation of the coastline to the effects of CC is now targeted, planned and evaluated.		16.1.1. The results of the strategic recoil assessment study with different fallback scenarios shall be validated and published, 16.1.2. Project sheets based on the recoil options according to the selected scenario are contained in the study and published, 16.1.3. Each option is presented in the form of a project with a request for funding directed to the target lessor,"	1. Initiate consultation to conduct the strategic rollback option assessment study and fallback scenarios, select and contract the service provider, 2. Present the results of the consultation, discuss them and validate them by stakeholders and partners on possible options for retreat, the methodological approach, the benchmarks to be considered and the indicators for evaluation, 3. Present the results of the retreat option evaluations and the retreat scenario selected and validate the content and action plan by the business and partners, 4. Communicate, raise awareness among decision makers and donors (national and international) to engage in the implementation of the approved action plan 5. The summary of results and recommendations shall be published and communicated to partners and stakeholders.	* MALE - APAL	* MALE - Other departments * M. Equipment * MARHP , * OSCs, ONGs	* National budget * Bilateral funding * International financing	150 KUS\$	* Technical assistance, * Projects	Without support	
	16.2. The action plan of the national coastal adaptation strategy to the effects of the CC is updated	16.2.1. The results of the action plan in terms of activities, budget,, and implementation plan shall be validated by the actors and published, 16.2.2. Number of actions and activities that have received national and/or international funding, 16.2.3. Number of performance indicators of actions and activities of the action plan adopted and used by the budget management services by objectives of the APAL, 16.2.4. The action plan contains a plan for the sustainability of existing works.	1. Launch the consultation in order to carry out the study of updating the Action Plan for the adaptation of the Tunisian coastline to the effects of the CC, to select and contract the service provider, 2. Translating the actions and activities of the Plan of Action into a portfolio of financial projects, 3. Mobilize national and international financial partners (including the private sector) and advocate for their involvement in the financing of the Action Plan or some of its components,	* MALE - APAL	* MALE - Other departments * MARHP * M. Equipment * OSCs, ONGs	* National budget * Bilateral funding * International financing * UNDP (GEF Coastal resilience)	200 KUS\$	* Technical assistance,	Without support	
17. New pollution taxes are collected to improve the resilience of the coastline to the effects of CC and its adaptation	17.1. A mechanism for the application of the Polluter/Payor principle (taxing implemented restoration units) is designed, adopted and operational.	17.1.1. The results of a consultation on the mechanism for the application of the polluter-pays principle shall be validated and published and the appropriate mechanism shall be selected and adopted, 17.1.2. The results of an acceptability survey shall be validated and published, 17.1.3. The text promulgating the new tax shall be published in the official journal together with its application,	1. Initiate a study by Benchamrking on experiences applying the polluter-pays principle against coastal pollution, 2. Choose the mechanism to be implemented, design it and have it validated by the actors and partners 3. Support and accompany the process of implementation and implementation of the mechanism,	* MALE - APAL	* MALE - Other departments * M. Equipment * M. Finances * trade union- ists	* National budget * Bilateral funding * International financing	150 KUS\$	* Technical assistance,	Without support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
18. The capacity of APAL agents and partners is strengthened in the area of Integrated Coastal Zone Management (ICZM)	18.1. Monitoring and sustainability of Integrat- ed Coastal Zone Manage- ment works	18.1.1. The content of a training session on ICZM and the role in adapting to the effects of CC is ready, 18.1.2. Number of training sessions at central, regional and local levels, 18.1.3. Number of successful women and youth participants, 18.1.4. Number of digital, shareable and shared online training materials,"	1. Realize the concept note of the training, solicit service providers and contract for the operation, 2. Conduct a bibliographic review of the methods, tools and processes for monitoring and perpetuating the ICZM works, 3. Complete training materials and have them validated by the competent structure 4. Organize and conduct the training session(s) (at least one training per major region: North-North East, Center East and South-East. 5. Evaluate training, correct materials and publish content.	* MALE - APAL	* MALE - Other departments * MARHP, * M. Tourisme, * OSCs et ONGs	* National budget * Bilateral funding * International financing * UNDP (GEF Coastal resilience)	150 KUS\$	* Technical assistance, * Projects	Tentative	
HEALTH										
19. climate change -amplified and emerging diseases are monitored on a real-time basis, their risks assessed and operational protocols for action	19.1. The risks of increased respiratory pathologies linked to climate change are estimated and monitoring indicators and preventive measures are implemented.	19.1.1. List of respiratory diseases influenced by climate change, 19.1.2. Current level of health risks related to CC: reference status 19.1.3. Changes in the risk of respiratory diseases according to CC (comparison with the reference status).	1. Collection of epidemiological, climatic, air quality, allergens, 2. Development of a prevention and adaptation strategy 3. Capacity-building of medical personnel and medical personnel, 4. Information, awareness-raising and education of populations at risk (especially women, young people and children) 5. Establish mechanisms for the exchange of information with other health monitoring services of the Ministry of Health and its partners.	Ministry of Health - Basic Health Care Specialized Hospital	* M. SANTE - DHMPE, * Regional Directorates of Health, * MALE	* National budget * Bilateral funding * International financing	900 KUS\$	* Technical assistance, * Projects	* In progress: 20% * Without support: 80%"	
	19.2. A network of epidemiological surveillance of the main vector diseases is established and operational (leishmaniasis, malaria,) and the mapping of mosquitoes of health interest is established and updated.	19.2.1. At least 1 institution, services and/ or units per major region is involved in the monitoring network, 19.2.2. At least 1 newsletter published / quarter on the epidemiological situation,	Development of geographical databases and appropriate software, Laboratory equipment in specific reagents and test kits, Capacity-building of network staff (central, regional and local), Specific and ad hoc epidemiological surveys and studies, Experience-sharing workshops and presentation, dissemination of results	Ministry of Health - Basic Health Care Directorate + National Ob- servatory on New and Emerging Diseases	* M. Health - DHMPE, * Pasteur Institut * Regional Directorates of Health, * MALE * MAPRH	* National budget * Bilateral funding * International financing	500 KUS\$	* Technical assistance, * Projects	* In progress: 20% * Without support: 80%"	
	19.3. A program for adaptation of the health sector to climate change is implemented and all priority themes are taken into account.	19.3.1. Water-borne diseases are known, 19.3.2. Number of persons trained in the means and methods of identification and monitoring of water-borne diseases, 19.3.3. Number of regional health structures involved in the project and part of the monitoring network	1. Health monitoring of the drinking water supply system in rural and urban areas, 2. Adaptation measures to the health risks associated with interaction with river waters, 3. Procedure for the protection of the health of summer resort residents, 4. Health monitoring of the use of treated wastewater, recommendations and publication of results.	Ministry of Health - Basic Health Care Directorate + National Ob- servatory on New and Emerging Diseases	* M. Health- DHMPE, * Pasteur Institut * Regional Directorates of Health, * MALE * MAPRH	* National budget * Bilateral funding * International financing	800 KUS\$	* Technical assistance, * Projects	* In progress: 20% * Without support: 80%"	
	20.1. A communication strategy on the health risks arising from climate change is carried out and implemented and the impact of CC on the occurrence of influenza episodes and Covid-19 is highlighted	20.1.1. Number of communication documents developed, 20.1.2. Number of awareness-raising materials for women and children 20.1.3. Number of public advertising spots broadcast, 20.1.4. Diversity of communication media: website, social networks, documents, videos, soundtracks,	Mapping of actors, identification of target audiences and analysis of needs, Production and communication of information, awareness-raising and educational materials, Evaluation of the impact of communication campaigns, adaptation of products and communication vehicles.	* Health Ministry	* MTCEN * Radios and TV, * MALE	* National budget * Bilateral funding * International financing	950 KUS\$	* Technical assistance, * Projects	* In progress: 20% * Without support: 80%"	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 2022 T1 T2 T3 T4 T1 T2 T3 T4
21. Health sector legislation is reviewed, incor- porates climate change and allows for strong regional involvement in ad- aptation processes	21.1. The regional health departments responsi- ble for prevention will have their prerogatives expanded by considering aspects of the CC	21.1.1. An internal memorandum to the Ministry of Health is published to inform Regional Directorates of Emerging Diseases in relation to the CC."	1. Prepare the content of the note, sign and broadcast, 2. Recall the regional directorates of the objectives of the note and the expanded responsibilities in relation to the CC, 3. Prepare and disseminate a synthesis brochure on the effects of CC and the links with new and emerging diseases, 4. Check and improve the functioning of information traffic circuits: equipment, digitization of information, rapid transfers (Internet, etc.), 5. Integrate activities into the normal operation of the prevention system.	* Health Ministry	* MALE * MARHP, * M. TOUR- ISM-ONTT * MALE: Com- munes	* National budget * Bilateral funding * International financing	250 KUS\$	*Technical assistance, * Projects	Without support	
	21.2. The Health Code incorporates aspects related to the CC	21.2.1. The health code incorporating the CC component is approved by the Parliament, 21.2.2. The new Health Code and its implementing texts shall be published in the Official Journal."	1. Present, discuss and validate the results of the consultation, 2. Initiate the public inquiry, summarize feedback from partners and stakeholders and make the necessary changes, 3. Proceed to the approval of the texts proposed by the legal services of MrHealth, 4. Bring new certificates to the Government and Parliament for approval, 5. Intensify the information and awareness-raising campaign for the approval of the health code among decision-makers, parliamentarians, professionals, trade unions and other actors 6. Federate and mobilize civil society and parliamentarians on the project, 7. Organize and conduct an information campaign for the new code among all users and the general public using appropriate and targeted means of communication to the target audiences,	* Health Ministry	* Other Ministries * trade unionists * OSCs et ONGs	* National budget * Bilateral funding * International financing	100 KUS\$	* Technical assistance, * Projects	Without support	
TOURISM										
22. Tourism infrastructure and the coastline are rehabilitated and protected against the effects of climate change, with a diversified tourist offer and a limited use of conventional	22.1. The Tunisian coast- line is rehabilitated and protected against coastal erosion and the effects of the Sea Level Rise (SLR)	22.1.1. Number of km of beaches rehabilitated and protected against marine erosion and sea level rise, 22.1.2. Number of km of sandy beaches with increased sand level,	1. Studies, calibration of the model to be used and monitoring of the evolution of the ranges, 2. Charging operations on pilot sections of 1 km each (North-West, North-East, Center-East and South-East). Number and locations, close to hotel establishments, defined by the study 3. Continuation of the project by sector.	* M. Tourism - ONT, * APAL * Hotel establishments	M. TOURISME - ONTT, MALE	* National budget * Bilateral funding * International financing * Private sector	10 MUS\$	* Technical assistance, * Projects	Without support	
waters	22.2. Alternative tourism contributes to the development of regional potentialities and the integration of rural societies in the sector improves their resilience to various impacts, including those of the climate change	22.2.1. Number of ecotourism destinations introduced into the official circuits of the ONTT, 22.2.2. Number of micro-tourism projects run by women (catering, guidance, housing, crafts,), 22.2.3. Number of visitors to the promoted destinations.	1.Eco-tourism of promising destinations, financing of micro-projects, support, 2. Sales and marketing support, labeling support, networking, etc. 3. Involvement of actors and organization of the sector	* M. Tourism - ONTT, * MARHP-DGAB	* MDICI, * Micro-finance agencies, * Tourist agen- cies, * Syndicates.	* National budget * Bilateral funding * International financing * Private sector	1 MUS\$	* Technical assistance, * Projects	* First pilot experi- ences: In Progress * Other destina- tions and scaling: Without support	
	22.3. The national territory is divided into climate-tourism regions which consider natural resources	22.3.1. Number of climate and tourism regions identified, 22.3.2. Charter of the ecotourist in a natural environment (maritime and/or terrestrial)."	Study for the identification of climato-tourist regions, Proposal of ecotourism destinations and technical and financial processes for their introduction into ecotourism,	* M. Tourism - ONTT, * MARHP-DGAB	* MDICI, * Micro-finance agencies, * Tourist agen- cies, * Syndicates.	* National budget * Bilateral funding * International financing	50 KUS\$	* Technical assistance, * Projects	Without support	

Objective	Outcome	Monitoring indicator	Activity details (optional)	Implementation officer	Other national stakeholders (optional)	Funding source	Estimated cost in US\$	Type of assis- tance	Status	2021 T1 T2 T3 T4 ⁻	2022 Г1 Т2 Т3 Т4
	22.4. The ecological hotel concept is promoted and developed	22.4.1. Text governing Ecological Hotels is published in the Official Journal of the Tunisian Republic 22.4.2. Number of ecological hotels established or transformed, 22.4.3. Total number of nights spent in Ecological Hotels"	Publication of the regulations governing ecological hotels, Institutional approval process and compliance monitoring mechanism."	* M. Tourism - ONTT,	* Tourist agencies, * Syndicates. * Professionals"	* National budget * Bilateral funding * International financing - Private sector"	500 KUS\$	* Technical assistance, * Projects"	*Texts published: concluded, * Rest of the process: Without support"		
	22.5. Optimized water resources and a progressive use of unconventional water and renewable energy	22.5.1. The volume of consumption of conventional water/other sources (desalination, TWW,) by tourist establishment, 22.5.2. Number of tourist establishments with an M.i sewage treatment plant, 22.5.3. Number of tourist establishments with a seawater desalination station."	1. Identification of hotels in a position to diversify water sources: number of beds, number of m2, economic analysis of profitability,, 2. Approval of the implementation mechanism by the trade, the Ministry of Guardianship and other partners 3. Publication of the results of the study, awareness-raising, advice and support of the structures involved in the project."	* M. Tourism - ONTT,	* Synndicates, * Professionals, * MARHP, * ONAS, ANPE, CITET"	* National budget * Bilateral funding * International financing - Private sector"	250 KUS\$	* Technical assistance, * Projects"	Without support		





