

# Readiness and Preparatory Support Interim Progress Report

Country and Title: Tunisia "Development of Strategic Framework for upgradation to a smart water network system through technological interventions in Sousse and Monastir in Tunisia"

**Grant Reference Number (TUN-RS-004)** 

**Delivery Partner Name: United Nations Environment Programme** (UNEP)

#### **Sections in this report:**

- Section 1: General Information
- Section 2: Reporting on Country Readiness Logical Framework
- Section 3: Actual Implementation Timetable
- Section 4: Budget Reporting
- Section 5: Procurement Plan for the Next Reporting Period
- Section 6: Challenges, Lessons Learned, and Way Forward
- Annex: Subsequent Disbursement Request Form

For more information, please refer to the GCF Readiness and Preparatory Support Programme guidebook available <u>online</u>. Please submit the Interim Progress Report to <u>opm@gcfund.org</u>.

Interim Progress report should be prepared and signed by Delivery Partner and/or National Designated Authority (NDA).

Name and Title (DP):	<b>^</b> ,		
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Position: Head, Green Climate Fund	Signature:	Date:	28.07.2022
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Programme			



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Name and Title (NDA):			
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Position: Director of General Directorate of	S:	Datas	
Sustainable Development,	Signature:	Date:	
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l'Environnement			

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#### **EXECUTIVE SUMMARY**

This Readiness and Preparatory Support proposal was approved by the Green Climate Fund (GCF) on 22 April 2021. The grant became effective on 29 April 2021. The expected completion date of the project is 28 March 2023<sup>1</sup> (a nocost extension will be submitted to GCF in view of expected delays). The total budget for the project is USD 437,280. The first disbursement of USD 393,551.47 was requested on 21 May 2021 and received by UNEP on 25 June 2021. The cumulative expenditure to June 2022 including the commitments is USD 369,898.77 This reporting period covers from 1 January to 30 June 2022; the total budget expended during this period is USD 362,721.00 (including the commitments for the reporting period)

#### Summary of activities during reporting period (1 January to 30 June 2022):

During this reporting period, the project cooperation agreement between UNEP and the CTCN Consortium Partner approved as an implementing institution in the readiness proposal, namely DHI A/S (here from in text: DHI), was signed. Signature of PCA was finalized on 15 March 2022.

A kick-off meeting between CTCN, NDE, national proponent SONEDE and the consortium partner DHI took place virtually 1 April 2022.

Since then, implementation activities have been underway. The process of recruitment of national experts has been launched, including preparation of terms of reference (shared with NDE and SONEDE). The recruitment is still ongoing, in close collaboration with SONEDE, and is planned to be finalized by the end of August 2022.

DHI has built a team of international experts according to the qualifications and experiences required in the Readiness and Preparatory Support proposal some of which have initiated the work.

Specifications for the communication platform for data collection related to activities 2.2.1 and 2.2.4 have been discussed and the related data infrastructure almost in place. Data collection related to activity 2.2.1 "Assessment of the performance of the current water supply system in the pilot area completed and an analysis of the benefits of introducing a smart-water network in Tunisia conducted" has been initiated.

<sup>&</sup>lt;sup>1</sup> The implementation of the project is supposed to be done in 18 months + 5 additional months for all UNEP projects approved after June,02,2020 in application of clause 3.07 of the FWA.



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# During the next reporting period, from July to December 2022, the following activities are expected to be implemented:

- Delivery on output 2.2.1 "Assessment of the performance of the current water supply system in the pilot area completed and an analysis of the benefits of introducing a smart-water network in Tunisia conducted" will be continued. The activity 2.2.1a "Assessing the status of current water supply system" is foreseen to be completed during the next reporting period.
- Work to deliver on output 2.2.2 "Pilot work conducted on various smart end user metering technologies in the Tunisian context and feasibility of integration into existing infrastructure assessed" will be initiated.
- Work on output 2.2.3 "Smart water end user application developed and tested to assess the impacts on the water consumption including possible underlying behavioural changes by the water users" will be initiated.
- Work on output 2.2.4 "Hydraulic model of the study area set up and deployed to assess potential for reduction of water losses at the district area scale" will be initiated.

As the project is still in a starting phase, no activities have been substantially affected by COVID-19 during this reporting period.

#### Possible operational delays and mitigation measures:

The COVID-19 pandemic could still represent a challenge for implementing the project during the next reporting period. However, since the project is implemented by international and local experts, and there is the possibility to conduct workshops in online format, the impact of the pandemic should be mitigated, at least for the activities expected to be implemented during next reporting period.

Due to delay in project start (including legal delays in PCA signature), implementation delay is expected – no-cost extension is in preparation for GCF (see following section).

#### Adaptive Management requests expected to be submitted between July and December 2022

A No Cost Extension will be requested and submitted to the GCF secretariat at least 60 days prior to project expiry.

The project was approved on 22 April 2021, and between approval date and inception date, UNEP undertook preinception activities, including disbursement requests, internalising the project, and the selection and contracting process for the CTCN network partner. In line with UN procurement requirements UNEP - CTCN cannot initiate any process for legal contracts until the funding for the grant has been received by UNEP. However, the contract signing took more time than anticipated since the due diligence and the Fiduciary Assessments have to be conducted again because of slight change of status of DHI

In the case of this Readiness Proposal, the timeframe between the start of implementation (in March 2022) and the expected completion date (28 March 2023) only leaves 12 months for implementation, compared to the 18 months planned in the Readiness Proposal, thus justifying the need to request a No Cost Extension.



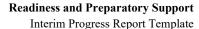
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#### **SECTION 1: GENERAL INFORMATION**

This section provides information on completing the General Information of the Readiness Support Interim Progress Report template.

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1.	Country	Tunisia		
2.	Grant agreement number	TUN-RS-004		
3.	Implementing Entity	UN Environment Programme (UNEP)		
4.	Date of grant agreement signed	Second Further Amended and Restated Framework Readiness and Preparatory Support Grant Agreement dated 2 June 2020		
5.	Grant effectiveness date	29/04/21		
6.	Date of 1st disbursement received from GCF	25/06/21		
7.	Tranche number of the committed funding during the reporting period	First tranche		
8.	Reporting period	From: 01/01/22 To: 30/06/22		
9.	Total approved grant amount	USD 437,280		
10.	Total grant amount received from GCF during the reporting period	USD 0		
11.	Total grant amount expended during the reporting period	USD 362 721		
12.	Documents provided (Please tick the relevant boxes)	<ul> <li>☑ Interim Progress Report</li> <li>☐ Procurement Plan</li> <li>☐ Subsequent Disbursement Request</li> <li>☐ Audited Financial Report</li> </ul>		





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#### SECTION 2: REPORTING ON COUNTRY READINESS LOGICAL FRAMEWORK

This section requires an update on progress in implementing the planned Readiness activities. Any draft to the expected output should be submitted with progress report.

From: 1/1/2022 To: 6/30/2022 Progress is reported for the period (should be consistent with section 1.8)

Outcome 2: GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF programming in low-emission investment.

Outcome narrative: The contractual arrangements with the CTCN Consortium partner, DHI, and UNEP were formalized March 2022. Only one activity has started yet so there are limited achievements contributing to the Outcome.

Outputs	Baseline summary	Activities	Targets achieved	Indicators	Milestones and deliverables achieved <sup>2</sup>	Variance explanation	Qualitative assessment of activities undertaken	Planned activities and corresponding deliverables/milestones for the next reporting period
Output 2.2.1:	The potential gains in	Activity 2.2.1: Assessing	0 Feasibility of all	Please note that	A kick-off meeting took	Contract with CTCN	A kick-off meeting took	The delivery of the activity
Assessment of the	terms of water and	the status of current	prioritized	indicators for all	place the 1st of April	Consortium partner	place virtually 1st April	2.2.1 "Assessing the status of
performance of the	energy savings by	water supply system	technologies has not	activities will be	2022. Please find	was signed 15 March	2022.	current water supply system"
current water supply	implementation of		been assessed yet	provided during the	attached the minutes	2022 and kick-off		and the deliverables 2.2.1a
system in the pilot	smart water meters	Sub-activity 2.2.1a: Assess	and potential	next reporting period.	from the meeting.	meeting was held 1st	The creation of the	and 2.2.1b are foreseen to be
area completed and	and system	water supply system	benefits to water and			April 2022.	Steering Committee and	initiated during the next
an analysis of the	optimization are not	performance	energy savings at				a technical committee	reporting period. Deliverable
benefits of	known to Tunisian		pilot sides and at			The process of	has been initiated.	2.2.1 should be finalized by
introducing a smart-	water managers and	Sub-activity 2.2.1b:	national level yet to			recruiting local		next reporting period.
water network in	decision makers.	Analyse case studies of	be estimated			experts has been	The activity of data	
Tunisia conducted.		Smart Water state-of-the-				initiated. It is	collection has been	
		art technologies in 5 other				expected to be	initiated.	
		countries/utilities				finalized in August	Communication	
						2022.	platform has been	
							discussed and is almost	
						The work for this	in place.	
						output will be		
						initiated in the next		
						reporting period.		

<sup>&</sup>lt;sup>2</sup> If possible, please provide hyperlinks to supporting documents.



Output 2.2.2: Pilot Activity 2.2.2: Test and work conducted on evaluate feasibility of various smart end integration of different user metering technologies for smart technologies in the end- user metering in the **Tunisian context and** local context feasibility of The activity will include: integration into - Benchmarking of the existing infrastructure technologies of the smart assessed meter or automatic meter reading (AMR) systems currently used worldwide, and their respective relevance in the Tunisian context. - Identification of institutional and legal framework needs in collaboration with the relevant institutions. - Inventory, analysis and evaluation of communication technologies and protocols for data transfer (PLC, 2G, radio, IoT etc.) - Assessment of the feasibility of integrating the smart water meter project into the smart grid project of the STEG (Société Tunisienne de l'Electricité et du Gaz) - Field implementation or experimentation of

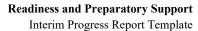
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Please note that	No progress so far	Contract with CTCN	No activities undertaken	The delivery of the activity
indicators for all		Consortium partner	to be assessed	2.2.2 "Test and evaluate
activities will be		was signed 15 March	qualitatively during the	feasibility of integration of
provided during the		2022 and kick-off	reporting period	different technologies for
next reporting period.		meeting was held 1st		smart end- user metering in
		April 2022.		the local context" is expected
				to be initiated under this
		The process of		output during next reporting
		recruiting local		period.
		experts has been		
		initiated. It is		
		expected to be		
		finalized in August		
		2022.		
		The work for this		
		output will be		
		initiated in the next		
		reporting period.		





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	(retrofit) on existing
	flowmeters
Output 2.2.3: Smart	Activity 2.2.3: Prototype
water end user	of a smart water end-user
application developed	application
and tested to assess	The activity is divided into
the impacts on the	the following steps:
water consumption	- develop an application
including possible	based on design thinking
underlying	method <sup>3</sup>
behavioural changes	- define consumer panel
by the water users.	with representatives from
	the regional context
	(residential, industrial and
	tourist activity area)
	- establish an
	experimentation protocol
	- consumer panel testing
	of the developed
	application and water use
	impact assessment
	- assess trends/changes in
	end-user behaviour in
	relation to the information
	provided.
	- estimate potential gains
	from the installation of
	smart meters on a larger
	scale.

Please note that indicators for all activities will be provided during the next reporting period.	No progress so far	Contract with CTCN Consortium partner was signed 15 March 2022 and kick-off meeting was held 1st April 2022. (Minute of the meeting available)  The process of recruiting local experts has been initiated. It is expected to be finalized in August 2022.  The work for this output will be initiated in the next reporting period.	No activities undertaken to be assessed qualitatively during the reporting period.	The delivery of the activity 2.2.3 "Prototype of a smart water end-user application" is expected to be initiated under this output during next reporting period.

<sup>&</sup>lt;sup>3</sup> Clarification on design thinking method: A specific application will be developed following a global approach called collaborative design or design thinking. This approach is based on a co-creativity process involving feedback from the end user very early in the design process. At the stage of writing the readiness proposal, no application adapted to the Tunisian context is known. Therefore, it is proposed to develop such a specific application for the evaluation of the behaviour of smart meters end-users



Output 2.2.4:
Hydraulic model of
the study area set up
and deployed to
assess potential for
reduction of water
losses at the district
area scale

Activity 2.2.4: Establish the hydraulic profile of the production and distribution systems

Sub-Activity 2.2.4a: Analyse the hydraulic operation of the water production system

The activity is divided in the following steps:

- Collection and analysis of data (SCADA, GIS, Customer Information Systems)
- Building of the hydraulic model
- Calibration of the model from available measurement data
- Conducting hydraulic analysis of the existing system (identification of weakness/deficiency)
- Setup of a hydraulic model scenario of future water production (including Kalaa Kebira dam and the new desalination water plant in Sousse). The future model scenario will include increased future consumption due to population growth and the

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	No progress so far	Contract with CTCN	No activities undertaken	
Please note that	i to progress so tur	Consortium partner	to be assessed	The delivery of the activity
indicators for all		was signed 15 March	qualitatively during the	2.2.4 "Establish the hydraulic
activities will be		2022 and kick-off	reporting period	profile of the production and
provided during the		meeting was held 1st	reporting period	distribution systems" and the
next reporting period.		April 2022. (Minute		deliverables 2.2.4a and 2.2.4b
next reporting period.		<u>available)</u>		is expected to be initiated
		<u>avanabiej</u>		under this output during next
		The process of		reporting period.
		recruiting local		reporting period.
		experts has been		
		initiated. It is		
		expected to be		
		finalized in August		
		2022.		
		2022.		
		The work for this		
		output will be		
		initiated in the next		
		reporting period.		
		reporting period.		



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future network required			
to service this demand.			
- Workshop to present the			
models and the impacts of			
the future water			
production. The workshop			
will involve the managers			
of department of the DR1			
(production, distribution,			
engineering, energy			
department), i.e., about			
10 to 15 people			
Sub-Activity 2.2.4b:			
Analyse the hydraulic			
operation of the water			
distribution system			
The activity is divided into			
the following steps:			
- Collection and analysis of			
GIS data			
- Build-up of a hydraulic			
model			
- Hydraulic analysis of the			
theoretical system as			
there is no measurement			
data available currently.			
- Dividing network into			
District Metered Areas			
(DMAs) to install			
flowmeters on the			
distribution network. (The			
data from the flowmeters			
will enable a better			
quantification and			



	localization of the physical water loss components of non-revenue water).  - Workshop to present the models and the benefits expected in reduction of water wastage from non-revenue water. The workshop will involve the managers of department of the DR1 (production, distribution, engineering,
	energy department), i.e.,
	about 10 to 15 people
Output 2.2.5:	Activity 2.2.5: Assessing
Hydraulic model	energy savings from
piloted with	optimization of water
optimization for	production and
energy use and	distribution system
potential energy	
savings from	Optimization will be
deploying smart water	performed for the
meters estimated.	following scenarios:
	- Existing water
	production system
	- Future water production
	system (including Kalaa
	Kebira dam and the
	desalination plant)
	- Consumption profile
	including estimated
	reduction from smart
	meters and changed end
	user behaviour

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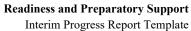
Please note that indicators for all activities will be provided during the next reporting period.	No progress so far	Contract with CTCN Consortium partner was signed 15 March 2022 and kick-off meeting was held 1st April 2022. (Minute available)  The process of recruiting local experts has been initiated. It is expected to be finalized in August 2022.	No activities undertaken to be assessed qualitatively during the reporting period	No deliverables are expected to be initiated under this output during next reporting period.



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- Estimated reduction of			
non-revenue water			
- Estimation of the future			
population changes in the			
pilot study areas			
The activity is divided in			
different tasks:			
- Definition of the			
constraints of the system			
(e.g., water supply 24/7,			
water levels in the storage			
tanks, minimum service			
pressure, electricity			
pricing)			
- Definition of the			
objective function (e.g.,			
reduce energy			
consumption)			
- Development of an			
optimization algorithm			
- Delivery of the operating			
controls/rules/set points			
for different			
configurations of network			
water consumption and			
availability.			
-Evaluation of			
optimization benefits			
-Workshop to present the			
expected benefits of water			
optimization. The			
workshop will involve the			
managers of department			
of the DR1 (production,			
distribution, engineering,			





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energy department), i.e., about 10 to 15 people.			
40041 10 to 15 people.			

# Outcome 2.4. Strategies for transforming and attracting private sector investment for low emissions and resilience developed and being used

Outcome narrative: The contractual arrangements with the CTCN Consortium partner, DHI, were formalized in March 2022. The activities have not started yet so there are no achievements contributing to the Outcome.

Outputs	Baseline summary	Activities	Targets achieved	Indicators	Milestones and deliverables achieved <sup>4</sup>	Variance explanation	Qualitative assessment of activities undertaken	Planned activities and corresponding deliverables/milestones for the next reporting period
Output 2.4.1:	There is currently no	Activity 2.4.1:	0 Action plan for		No progress so far	Contract with CTCN	No activities undertaken	
Preparing the national	technical, legal, and	Preparing the national	upscaling and	Please note that		Consortium partner	to be assessed	No deliverables are expected
action plan for smart	institutional framework	action plan for smart	implementation of	indicators for all		was signed 15 March	qualitatively during the	to be initiated under this
water network	in Tunisia for the	water network	smart water network	activities will be		2022 and kick-off	reporting period	output during next reporting
deployment strategy	coordinated national	deployment strategy	as well as the	provided during the		meeting was held 1st		period.
using pilot findings	implementation of	using pilot findings	necessary regulatory	next reporting period.		April 2022. (Minute		
	smart water systems	The activity includes the	and institutional			<u>available)</u>		
	and thus lack of	following steps:	amendments					
	investments in more	- Cost and benefit	enabling			The process of		
	efficient water systems.	analysis for each	development of a			recruiting local		
		segment of the smart	feasible business			experts has been		
		network: optimization	model for			initiated. It is		
		of water production,	engagement of			expected to be		
		reduction of non-	private sector yet to			finalized in August		
		revenue water and	be developed			2022.		
		reduction of						
		consumption.						
		- Development of an						

<sup>&</sup>lt;sup>4</sup> If possible, please provide hyperlinks to supporting documents.



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#### Outcome 2.4. Strategies for transforming and attracting private sector investment for low emissions and resilience developed and being used

Outcome narrative: The contractual arrangements with the CTCN Consortium partner, DHI, were formalized in March 2022. The activities have not started yet so there are no achievements contributing to the Outcome.

Outputs	Baseline summary	Activities	Targets achieved	Indicators	Milestones and deliverables achieved <sup>4</sup>	Variance explanation	Qualitative assessment of activities undertaken	Planned activities and corresponding deliverables/milestones for the next reporting period
		action plan including a						
		business model for						
		private sector						
		participation						
		(consulting firms,						
		providers of equipment,						
		maintenance services,						
		privately owned water						
		networks (e.g.						
		industries, irrigation						
		schemes etc)						
		- Recommendations for						
		an awareness program						
		to support scale up the						
		deployment and						
		management of the						
		smart water network						
		nationally.						
		- Workshop to present						
		the action plan and the						
		business model. The						
		workshop will involve						
		the NDE, NDA, MARHP,						
		managers of SONEDE						
		and DR1 i.e., about 15						
		to 20 people						



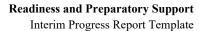
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#### Outcome 4.3: An increase in the number of quality project concept notes developed and submitted that target SIDS, LDCs and African states.

Outcome narrative: The contractual arrangements with the CTCN Consortium partner, DHI, were formalized in March 2022. The activities have not started yet so there are no achievements contributing to the Outcome.

Outputs	Baseline summary	Activities	Targets achieved	Indicators	Milestones and deliverables achieved <sup>5</sup>	Variance explanation	Qualitative assessment of activities undertaken	period
Output 4.3.1  1 Concept Note developed and submitted that targets SIDS, LDCs and African states.	2 Concept Notes on Climate Resilient Agriculture, resilience of ecosystems has been developed, and one Concept Note on Food and Energy Nexus to address Climate Change Impacts.	Activity 4.3.1 Develop and submit 1 project Concept Note that targets SIDS, LDCs and African States.  The activity includes identifying, prioritizing, and selecting 1 viable project idea emerged from the TAP, which will be developed into 1 GCF Concept Note that targets SIDS, LDCs and African States.  One Concept Note developed and submitted that targets SIDS, LDCs and African states.	O quality climate sensitive technology related Concept Note developed and submitted that target SIDS, LDCs and African states. Country pipeline in line with its international climate commitments yet to be strengthened	Please note that indicators for all activities will be provided during the next reporting period.	No progress so far	Contract with CTCN Consortium partner was signed 15 March 2022 and kick-off meeting was held 1st April 2022. (Minute available)  The process of recruiting local experts has been initiated. It is expected to be finalized in August 2022.	No activities undertaken to be assessed qualitatively during the reporting period	No deliverables are expected to be initiated under this output during next reporting period.

<sup>&</sup>lt;sup>5</sup> If possible, please provide hyperlinks to supporting documents.





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#### SECTION 3: ACTUAL IMPLEMENTATION TIMETABLE

Please provide the timeline of the Readiness Support activities and deliverables described in the outcomes in the Gantt chart below according to the actual progress of the activities and month(s) in which the deliverable was completed. Please ensure the outcomes/outputs/activities match those highlighted in Section 3.

Progress is reported for the period (should be consistent with section 1.8) From: 1/1/2022 To: 6/30/2022

	A.11 111			<u>Act</u>	ual Tim	eline of	f Implen	nentatio	n of Ac	tivities	During	the Rep	orting F	Period [	2]		
Outputs [1]	Activities		(Num	nber of	column	is can b	e adjust	ed depe	nding c	on the a	greed p	roject o	luratior	n and m	nileston	es.)	
	1		9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		Apr – Dec 21	Jan 2022	Feb 2022	March 2022	April 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sept 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2022	Feb 2023	March 2023
	Activity 2.2.1: Assessing the status of current water supply system																
	Sub-activity 2.2.1a: Assess water supply system performance																
Output 2.2.1: Assessment of the performance	Sub-activity 2.2.1b: Analyse case studies of Smart Water state-of-the-art technologies in 5 other countries/utilities																
of the current water supply system in the	Deliverable 2.2.1:																
pilot area completed and an analysis of the benefits of introducing a smart-water network in Tunisia conducted.	The report will include:  - a presentation of the collected data  - a quality assessment of the data  - a statistical analysis  - a list of the key performance indicators focusing on system losses  - identification of examples of smart water systems and analysis																



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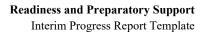
	of five relevant cases - the progress of smart water network for each studied case - the chosen action plan, technologies and tools deployed for each case studied - the identified barriers and challenges - inventory and assessment of observed or expected benefits in smart water network								
	Workshop report and presentation material								
	Activity 2.2.2: Test and evaluate feasibility of integration of different technologies for smart end- user metering in the local context								
Output 2.2.2: Pilot work conducted on various smart end user metering technologies in the Tunisian context and feasibility of integration into existing	Deliverable 2.2.2: Report describing: - the different technologies available and their relevance to the Tunisian context the requirements and the adjustments needed in the legal and regulatory frameworks for water management for their integration								
infrastructure assessed	- the identified opportunities and challenges of collaboration with STEG  - the experimentation and its results on installation and maintenance of the smart meters, data transfer and management reliability and energy consumption.  - an estimate of installation and maintenance costs								
	Activity 2.2.3: Prototype of a smart water end-user application								
Output 2.2.3: Smart water end user application developed and tested to assess the impacts on the water consumption including possible underlying behavioural I changes by the water users	Deliverable 2.2.3: Report describing: -the developed smart water end user application - methodology and the implementation of the pilot testing - definition of a sampling process (household, industry, hotel, etc.) - the impact on the behavioural changes of the water users - an initial rough estimation of the potential reduction in water and energy consumption for the pilot area (will be further refined under Activity 2.2.4 and 2.2.5).								



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				 ı	1	 				
	Activity 2.2.4: Establish the hydraulic profile of the production and distribution systems									
	Sub-activity 2.2.4 a: Analyse the hydraulic operation of the water production system  Sub-activity 2.2.4.b: Analyse the hydraulic operation of the water									
	distribution system									
Output 2.2.4: Hydraulic model of the study	Deliverable 2.2.4:									
area set up and deployed to assess potential for reduction of water losses at the district area scale	Hydraulic model with: - the existing water production system - the future water production system - water distribution system over the studied area									
	Report: - describing model development and calibration results - short analysis of the existing system performance - flowmeters location plan which are required to be installed to quantify and manage non-revenue water - an estimation of the expected reduction of water losses									
	Workshop reports and materials.									
Output 2.2.5: Hydraulic model piloted with	Activity 2.2.5: Assessing energy savings from optimization of water production and distribution system									
optimization for energy use and potential energy savings from deploying smart water	Deliverable 2.2.5:									
meters estimated	An upgraded hydraulic model with optimized operating strategy for energy savings.									





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	The report will include: - proposed action plan and measures and related expected benefits - suggestions on complementary monitoring equipment and the development of the SCADA system already planned by the client - estimation of energy savings for the proposed optimization measures.								
	Workshop reports and materials  Activity 2.4.1: Preparing the national action plan for smart water network deployment strategy using pilot findings								
	Deliverable 2.4.1:								
	Report compiling results of the pilot work								
Output 2.4.1: National Action Plan for implementation of smart water network deployment developed.	Documentation describing recommendations for further development of the smart water network. (These recommendations can then be used for a project proposition to the GCF.)								
	Proposed Business Model for private sector participation								
	Action Plan Publication								
	Workshop report and presentation materials								
Output 4.3.1	Activity 4.3.1: Develop and submit 1 project Concept Note that targets SIDS, LDCs and African States								
1 Concept Note developed and submitted	<u>Deliverable 4.3.1 (i):</u> Report on project ideas considered, prioritized, and selected								
that targets SIDS, LDCs and African states.	Deliverable 4.3.1 (ii): 1 Concept Note developed and submitted that targets SIDS, LDCs and African states.								

A No Cost Extension will be requested and submitted to the GCF secretariat during the next reporting period.



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#### **SECTION 4: BUDGET & EXPENDITURE REPORTING**

This section requires the applicant to report on the proposed budget.

Budget and expenditure reporting is separately provided.

#### SECTION 5: PROCUREMENT PLAN FOR THE NEXT IMPLEMENTATION PERIOD

List the items planned to be procured during the next implementation period (including consultants) and explain what procedures will be used for these procurements (e.g., direct procurement, open tender, others). Double-click the table below to edit the spreadsheet.

Item to procure	Unit Number or Work month/day	Lump sum or Unit rate	Total Budget	Procurement procedures used
	i	ii	iii = (i x ii )	

No changes to the procurement plan in the next reporting period

Please note that as described in the approved proposal, the CTCN Consortium partner, DHI, was selected to implement this Readiness project. DHI will deliver all the activities as per the approved budget and timeline. This is in line with art 2(c) of the "modalities and procedures of the Climate Technology Centre and Network" as approved by the UNFCCC COP at its 19th session in decision 25/CP.19.



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#### SECTION 6: CHALLENGES, LESSONS LEARNED AND WAY FORWARD

Please describe what were the challenges encountered during the current reporting period; what were the solutions to mitigate them; and what were the key lessons learned and what will the project do to undertake course corrections during the next reporting period.

#### Way forward

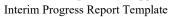
The contracts with the local experts are expected to be signed in August 2022. National expert involvement will be important in delivering high quality outputs, in close cooperation with SONEDE.

The first sub-activity "Assess water supply system performance" of the output 2.2.1 "Assessment of the performance of the current water supply system in the pilot area completed and an analysis of the benefits of introducing a smart-water network in Tunisia conducted" is foreseen to be completed during the next reporting period.

The outputs 2.2.2 "Pilot work conducted on various smart end user metering technologies in the Tunisian context and feasibility of integration into existing infrastructure assessed", 2.2.3 "Smart water end user application developed and tested to assess the impacts on the water consumption including possible underlying behavioural changes by the water users." and 2.2.4 "Hydraulic model of the study area set up and deployed to assess potential for reduction of water losses at the district area scale" will be initiated during the next reporting period.

#### Challenges that are likely to arise and mitigation measures are listed below:

- Challenge 1: The communication with the stakeholder SONEDE is a key to the success of the readiness project implementation. Its role is essential to access to data, but SONEDE staff availability to engage on CTCN project is subject to general business with main SONEDE work tasks. Some delays might be incurred during the busiest periods at SONEDE (e.g., summer due to tourism high season).
  - Solution to mitigate: Direct work coordination will take place between the key national experts and DHI in facilitating work and quality of outputs (with SONEDE regularly consulted and informed). Status meetings will be scheduled on monthly basis with the stakeholder SONEDE, mostly virtually to make sure that the project objectives and implementation activities are fully aligned.
- Challenge 2: Delay in original project timeline due to substantial delay in start of project implementation Solutions to mitigate: a NCE will be requested to the GCF, currently in preparation.





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Comments								
Reviewed by:		Date:						
Name and Title (Reviewer):	Signature:	(DD-MM-YYYY)						
Position:								
Final assessment by:		Date:						
(Satisfactory to GCF)	Signatura	(DD-MM-YYYY)						
Name and Title (Reviewer):	Signature:							
Position:								



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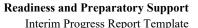
## **Annex. Subsequent Disbursement Request Form**

Please fill the below form to request for the subsequent disbursement when the interim progress report along with unaudited financial statement/financial audit report/certified financial statements as applicable in accordance with Grant Agreement has been submitted to GCF (please note that the disbursement request can be processed only after these conditions are met).

SU	BSEQUENT DISBURSEMENT REQUES	Т
1.	Total amount approved for the project	Choose an item. Example: USD 300,000
2.	Disbursement from GCF made to date/Percentage of Total Grant (%)	Choose an item. Example: USD 120,000 /40 % (refer to Grant Agreement)
3.	Total expenditure to date	Choose an item. Example: USD 118,000
4.	Expenditure rate as of the Interim Progress Report submission date (%)	Please divide the received amount (2) by the executed amount (3). Example: 70%
5.	Total amount of the subsequent disbursement to request/Percentage of Total Grant (%)	Choose an item. Example: USD 130,000/43 % (refer to Grant Agreement)
6.	Name of Beneficiary Bank and located country	
7.	Account number	
8.	Bank address	
9.	SWIFT (BIC)	
10.	IBAN Code	
11.	Date of the disbursement request	Click or tap to enter a date.

Name and Title*: Position:	Signature:	Date:
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<sup>\*</sup>The signatory of grant agreement (either NDA or Delivery Partner) or any authorized person who is certified in the letter of authorization submitted to the Fund can sign here. When this is not plausible, please kindly consult with the Fund (opm@gcfund.org) prior to the submission of the disbursement request.





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#### SPECIAL ADDENDUM: COVID-19 RELATED IMPACTS

This section provides information on temporary measures to support project implementation through the extension period. Please be advised that the measures do not constitute a permanent change in policy. If you have any questions, please feel free to send an inquiry to <a href="mailto:opm@gcfund.org">opm@gcfund.org</a>.

GCF has granted up to six-months extension of the grant term/anticipated duration of readiness activities for specific grants that had been approved by the GCF prior to the pandemic having arisen and which expire after 1 March 2020 and are effective prior to 8 April 2020. GCF has granted additional flexibilities with guidelines as outlined below.

#### No-Cost Extension

- i. All grants will be automatically extended by six months. However, please be informed that the willingness on the part of the GCF to provide this sixmonth extension since the COVID-19 pandemic is not intended to prevent RPSP activities from being delivered under the pre-pandemic existing contractual timelines. Delivery partners and National Designated Authorities/Focal Points (NDA/FP) can complete the grant implementation sooner than the full no-cost extension period. Therefore, the GCF expects that delivery partners will fully coordinate with NDA/FPs in relation to the application of the said extension as a result of the COVID-19 pandemic.
- ii. Delivery partners should include a revised workplan for the new period in the next reporting cycle.
- iii. Grants requiring an extension longer than the six-months must submit well justified requests in line with standard practices and procedures for the GCF's consideration and approval.
- iv. The originally agreed grant sum required to complete the activities under the respective legal agreements remains unchanged for grants accepting the no-cost extension.

**Project management costs:** The project management costs (PMC) cap has been increased from 7.5 percent to 12.5 percent of the total activity budget approved. Partners can tap into the approved contingency fund to meet these additional costs up to the 12.5% cap. If the delivery partner increases the PMC, then the delivery partner is required to provide detailed documentation and justification supporting the increase in PMC and clearly outlining how the additional costs are related to the COVID-19 pandemic. This justification should be included in the interim progress report or completion reports due for submission as detailed in the grant

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**Contingency budget:** The approved contingency amount included in the budgets for these activities may be used to cover unforeseen costs relating the COVID-19 pandemic without prior approval from GCF. The contingency budget may be used for project management costs (PMC). The said contingency expenses will need to be justified and included in the detailed reports that are required to be submitted by the delivery partner/recipient under the respective legal agreement between the delivery partner/recipient and the GCF.

**Budget Re-allocation**: The reallocation of approved budget among the budget line items can be made from one budget category to another up to 25 percent variation across the categories. The receiver and giver budget category can only take or give without prior fund approval up to 25 percent based on the previously approved budget. Budget can also be reallocated from outputs without changing the project scope to PMC if the contingency budget is insufficient to meet the increases in PMC. The delivery partner is required to provide detailed documentation and justification supporting the budget reallocation in the submitted reports in line with the grant agreement.

Types of Measures	Output	Activity No.	Implementation and Deliverables Schedule (Please provide details of the change to activities, deliverables, etc.)				Dudostom Implications
Types of Measures	No.		Impact on delivery modality	Deliverable	Original Date	Revised Date	Budgetary Implications
No Cost Extension	2	2.4.1	Delays in implementation	2.4.1	18 months after grant became effective	To be defined in the NCE	None.
No Cost Extension	4	4.3.1	Delays in implementation	4.3.1	18 months after grant became effective	To be defined in the NCE	None.
Choose an item.							

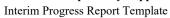


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Choose an item.				
Choose an item.				
Choose an item.				
Choose an item.				

In-country Status (Please provide an update of the status of the country due to COVID-19 pandemic.)	In Tunisia, from 3 January 2020 to 2:19pm CET, 29 June 2022, there have been 1,046,703 confirmed cases of COVID-19 with 28,670 deaths, reported to WHO. As of 27 June 2022, a total of 13,192,714 vaccine doses have been administered.
Justification for Requests and Implications (Please provide details of the changes to support utilization of temporary measures.)	No requests were made during the current reporting period.
Mitigation Measures (Please provide details of how risks will be mitigated)	Member of the international team are planning to travel to Tunisia during the next 6-month period and are following closely the evolution of COVID-19 pandemic.  The following contingency measures are taken to avoid further project delays and mitigate the risks of COVID-19:  - Virtual meetings will be held in case in-person meetings are not allowed.  - DHI would engage more local consultants  - DHI would be requested to expedite the delivery through an accelerated delivery plan.







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Comments						
Reviewed by: Name and Title: Position: DSS Finance	Signature:	Date: (DD-MM-YYYY)				
Certified by: Name and Title: Position: DSS Finance	Signature:	Date: (DD-MM-YYYY)				
Approved by: Name and Title: Position: CFO	Signature:	Date: (DD-MM-YYYY)				
	GREEN CLIMATE FUND'S SEC	RETARIAT USE ONLY				
Comments						
Reviewed by:	Signature:	Date:				
Name and Title (Reviewer): Position:	oig.ia.a.o.	(DD-MM-YYYY)				
Final assessment by: (Satisfactory to GCF) Name and Title (Reviewer):	Signature:	Date: (DD-MM-YYYY)				
Position:						