

CLIMATE PROOFING IN GREECE

**National Coordination Agency
General Secretariat of Public Investments and PA
Special Service of Institutional Support and Information Systems**

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**HELLENIC REPUBLIC
Ministry of National Economy and Finance**

Why?

Reg 1060/2021 art73 states that MS ensure the climate proofing of investments in infrastructure which have an expected lifespan of at least 5 years.

To start with



INPUTS national level

National Climate Law
4936/2022

- Art. 18: Strengthens the climate proofing/climate change dimension in the Environmental Impact Assessment Report starting 1/1/2024
- Art. 16: Provides for the preparation of Municipal plans for GHGs reduction starting mid 2023


Regional Adaptation
Action Plans

- Approved by Regional Councils –
- Include regional climate change vulnerability & impacts assessments (CCIVs): hazards, vulnerability, impacts per sector

LIFE-IP AdaptInG
climate projection
data base

- Climate projection data and GIS maps for 22 climatic indices for 3 GHG scenarios (RCP 2.6, RCP4.5 and RCP8.5) and 2 future periods (2031-2060 and 2071-2100, baseline 1971-2000)

Cooperation in order to use the inputs

- National Coordination Agency responsible for Management and Control System of EU Funds
 - Ministry of Environment and Energy responsible for Environmental Impact Assessment and National Climate law
 - Ministry of Infrastructure responsible for public works and infrastructure
 - JASPERS team with the long standing experience in infrastructure development and climate proofing
 - External consultant to provide applicable examples and tools
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RESULT

Provisional Framework for climate proofing assessment

1. Basic instruction text

Largely based on the provisions of the Technical Guidance with appropriate adjustments to the national context

2. Template for report for climate proofing assessment based on the text of the temporary framework addressed to the beneficiaries

The report can be based on an excel tool for the assessment of climate adaptation

3. Help desk operation

4. Examples of climate proofing report

5. Checklist for Managing Authorities until climate proofing becomes part of the EIA

RESULT Excel Tool

Climate hazard		Sensitivity					Exposure			Vulnerability
		Construction	Operation	Products/Services	Location	Sensitivity	Current conditions	Future Conditions	Exposure	
Heat wave		L	L	M	L	M	L	L	L	L
Cold wave	Advice Index Number of days with TX>35C or 30C at https://geo.adaptivegreecehub.gr									
Frost										
Wildfire										
Hurricane										
Drought	Advice Index Max duration of draught in days at, https://geo.adaptivegreecehub.gr									
heavy rain										
Flood										
landslide										
Urban heat island effect	Advice Mean max/min temp at https://geo.adaptivegreecehub.gr									
Thermal stress										
Temperature variation										
Solar radiation change	Advice Index average speed at https://geo.adaptivegreecehub.gr									
Wind changing										
Sea level rise										
Water stress										
Coastal erosion										

Drop down menu

Low
Medium
High

RESULT Excel Tool

Risk analysis							
Climate hazard	Vulnerability	Likeelihood	Impact	Risk level	Adaptation measures	Risk decrease	Residual Risk
				Quote			Quote
Heat wave		rare	Insignificant	Automatic calculation of risk level scale 1-25			
Cold wave		Unlike	Minor				
Frost		Moderate	Moderate				
Wildfire		Possible	Major				
Hurricane		Almost certain	Disastrous				
Frost							
Wildfire							
Hurricane							
Frost							
Wildfire							
Hurricane							
Frost							
Wildfire							
Hurricane							

RESULT

Examples of climate proofing report

1. Infrastructure projects (Administrative building, tourist resort, educational institution building, hospital, Shopping mall)
 2. Wastewater treatment (sewage treatment facilities (WTP) 16,000 i.c., WTP 170,000 i.c., WTP 230,000 i.c., Sewer network)
 3. Municipal solid waste management projects (Recycling centre, landfill site, Green Point, Composting Project)
 4. Renewable energy production projects (Wind energy project, Small hydroelectric project, Photovoltaic power station)
 5. Road transport (Motorway, Regional road, Highway bypass)
 6. Flood protection, landslides or coastal erosion projects (Flood Prevention Project, Landslide protection project, Coastline protection against erosion)
 7. Water infrastructures (Enrichment of underground aquifer, Desalination unit, Water supply network)
 8. Urban regeneration projects
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RESULT

Checklist for Managing Authorities

CHECK LIST FOR CLIMATE PROOFING REPORT

A/A	CHECK POINTS	ANSWER	COMMENTS
GENERAL			
1.	Does the report comprise three sections: introduction, climate change mitigation and climate change adaptation?	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected
B.1. INTRODUCTION			
2.	Does the description of the project, which is included in the report, corresponds to the studies as submitted in the application for funding (e.g. dimensioning, location, etc)?	YES/NO	If YES, MA proceeds on to the next question. If NO, the report is rejected
3.	Are climate change issues briefly presented and if detailed analysis is required, are the main conclusions also presented?	YES/NO	If YES, MA proceeds on to the next question. If NO, the report is rejected
B.2. CLIMATE CHANGE MITIGATION			
B.2.1. SCREENING			
4.	Does the project fall into the category of operations where a carbon footprint calculation is required?	YES/NO	If YES, MA proceeds to the questions in section B.2.2. "DETAILED ANALYSIS" If NO, proceed to the questions in section B.3 "ADAPTATION"
B.2.2. DETAILED ANALYSIS			
5.	Does the beneficiary indicate the standard on the basis of which the GHG emissions were calculated?	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected. State the standard.
6.	Do the calculated GHG emissions exceed the threshold of 20.000 tones CO ₂ eq/year (positive or negative)	YES/NO	If YES MA proceeds to the next question. If NO, MA proceeds to the last question of this section. State the amount of emissions
7.	Are the GHG emissions positive?	YES/NO	If YES MA proceeds n to the next question. If NO, MA proceeds to the last question of this section
8.	Has an economic assessment of emissions/cost benefit study been carried out?	YES/NO	If YES, MA moves on to the next question. If NO, the report is rejected
9.	Is the project compatible with the objective of climate neutrality?	YES/NO	If YES, MA proceeds to the questions in section B.3 "ADAPTATION" If NO, the report is rejected

RESULT

Checklist for Managing Authorities

B.3. ADAPTATION			
B.3.1. SCREENING			
1.	Have the climate hazards, referred to in the temporary framework, related to sensitivity of the project, been identified correctly and documented? (i.e. the hazards related to the type of project)	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected.
2.	Have the climate hazards, referred to in the temporary framework, related to exposure of the project and been identified correctly and documented? (i.e. the hazards related to the location of project)	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected
3.	Have sensitivity and exposure of the project been identified correctly for both current and future climate conditions and documented?	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected
4.	Are data sources reported?	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected
5.	Did the above analysis identify at least one climate hazard risk for which the vulnerability level of the project is estimated to be moderate or high.	YES/NO	If YES, MA proceeds to the next section " DETAILED ANALYSIS" If no, the evaluation stops here.
B.3.2. DETAILED ANALYSIS			
6.	The likelihood of occurrence and the impact for each hazard have been determined and are correctly assessed.	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected.
7.	Based on the risk analysis, are adaptation measures required for one or more of the hazards assessed?	YES/NO	If YES, MA proceeds to the next question. If NO, MA goes to the last question.
8.	Have adaptation measures been identified, for each hazard that requires measures?	YES/NO	If YES, MA proceeds to the next question. If NO, the report is rejected
9.	Do adaptation measures for each hazard achieve an acceptable level of residual climate hazard?	YES/NO	If YES, MA proceeds to the last question. If NO, additional measures that reduce the hazard to an acceptable level should be described. Otherwise, the report is rejected.
10.	Is the consistency of the project with the adaptation strategies and plans and especially the Regional Climate Change Adaptation Plans, stated?	YES/NO	If YES, the check is completed If NO, the report shall be rejected.

CLIMATE RESILIENCE ASSESSMENT RESULTS:

Training

- JASPERS and the Ministry of Environment and Energy are planning a number of training courses for the dissemination of the results

**Thank you for
your attention**

