



GREENING THE ISLANDS OBSERVATORY

“GREENING THE ISLANDS OBSERVATORY – GLOBAL INDEX”

DATA COLLECTION SHEET

Name of the island: **Crete**

0. GENERAL INFORMATION ABOUT THE ISLAND

0.1. Population residing on the island 623.065 (2011)

0.2. Average population in the peak tourist month: more than 1million (2011)

0.3. Surface area: 8,303 km²

0.4. Presence of energy and/or environmental planning tools on the island (e.g. energy plans, waste management plans, water management plans, sustainable mobility plans)

1. “Regional Waste Management Plan of Crete”, 2016 <https://www.crete.gov.gr/prefecture>

2. “Water Management Plan of Crete”, 2017 <https://www.apdkritis.gov.gr/el/dataset/>

3. “Energy Planning Region of Crete”, 2016

0.5. If existing, specify the names of such plans and approval details

0.6. Links to dedicated web sites

0.7. Attach any suitable documentation

0.8. Presence of any protected natural areas (parks, reserves, marine protected areas, etc.) Yes

0.9. If existing, specify the year when they were created, the entity in charge, the type of protected area and restrictions; briefly describe protection legislation, local regulations, restrictions, percentage of protected area, surface area and any other suitable information

NATURA 2000 sites:

There are 54 sites in Crete included in the European Ecological Network NATURA 2000. They integrate both terrestrial and marine areas and are designated either as Special Protected Areas or Sites of Community Importance. The total surface of the 53 sites corresponds to about 30% of Crete’s total area. There are two Management Bodies for the sites, one for Western Crete (23 sites) and one for Central and Eastern Crete (31 sites).

0.10. Links to dedicated web sites

0.11. Attach any suitable documentation

0.12. Any environmental quality certifications and/or quality labels recognized by the local government

Green key <https://www.greenkey.gr>

0.13. If such certifications/labels were granted, specify the type, year, entity and briefly describe the certification

0.14. Links to dedicated web sites

0.15. Attach any suitable documentation





0.16. Presence of companies operating in the tourism sector which were granted officially recognized environmental quality certifications and/or labels

<https://www.greenkey.gr>

0.17. If existing, specify the number and briefly describe the type of certification, type of company and meaning of the certification

0.18. Attach any suitable documentation

0.19. Significant projects in the "Sustainable tourism" sector

- INTERREG EUROPE "BRANDTour" - Building Regional Actions for New Developments in Tourism
- INTERREG MED "PANORAMED" - Mediterranean Governance Platform
- INTERREG MED «BLUEISLANDS» Seasonal variation of waste as an effect of tourism
- INTERREG MED "MISTRAL" Mediterranean Innovation STRAtegy for transnational activity of clusters and networks of the Blue Growth
- INTERREG ADRION "TOUREST" Tourism Water Management For Sustainable Adrion Coastal Areas

0.20. If existing, briefly describe the most relevant projects carried out on the island, including by private entities, to promote sustainable and responsible tourism

0.21. Links to dedicated web sites

0.22. Attach any suitable documentation



2 WATER CYCLE

Reference year of data: 2017

2.1 PRODUCTION PHASE

OAK SA water supply – irrigation networks of Crete. The project of former OADYK “Integrated Water Resources Management of Western Crete” has been expanded with the water networks of Eastern Crete. The networks of OAK SA include: 430 km mains and distribution irrigation networks in Western Crete (irrigation area of 135.000 ha) and water supply network 70 km in Eastern Crete (Water supply for 264.000 residents and 125.000 hotel beds). OAK SA distributes annually 45 million m³ water, through the water network, with about 28 pump stations and many water drillings.

- 2.1.1. Type of drinking water production (desalination/ local springs/import/treatment facilities/etc.)
Water Treatment Plant with Capacity 110.600 m³/day of Aposelemis Dam (Heraklio). Water Supply of the cities of Heraklio, Chersonisos , Agios Nikolaos, Malia, Elounda, Neapolis. Water supply for 264.000 residents and 125.000 hotel beds.
- 2.1.2. Total per capita water volume produced: 36 cubic metres/inhabitant*year (data for potable water from WTP of Aposelemis Dam).
- 2.1.3. Annual volume of water produced locally (specify the type of production): 46.714.356,34 cubic metres

Type of production	Water Volume (m ³ /year) 2017
Water drillings	12.438.158,00
Springs	14.387.689,50
Rivers	156.100,00
Lakes	4.843.350,00
Dams' Reservoirs	14.631.966,04
Lakes' Reservoirs	257.092,80
Total	46.714.356,34

- 2.1.4. Annual volume of water supplied by tankers (barges): 0 cubic metres
- 2.1.5. Annual volume of water supplied by submarine pipelines: 0 cubic metres
- 2.1.6. Annual volume of water produced by desalination plants: 0 cubic metres
- 2.1.7. Total annual electricity needs of desalination plants connected to the grid: MWh
- 2.1.8. Average cost of electricity supplied to desalination plants connected to the grid: €/MWh
- 2.1.9. Annual consumption of diesel fuel used by desalination plants using independent generators: litres or kilograms
- 2.1.10. Average cost of diesel fuel to feed desalination plants using independent generators:€/litre or €/kg
- 2.1.11. Percentage of electricity used for desalination generated from renewable sources:%



2.2. DISTRIBUTION PHASE

- 2.2.1. Annual volume of water supplied to the local distribution network: 37.759.016 cubic metres
- 2.2.2. Monthly volume of water supplied to the local distribution network: cubic metres
(specify cubic metres for each month of the reference year)
- 2.2.3. Percentage of water losses in the water network: 20 %

2.3. TREATMENT PHASE

- 2.3.1. Is there a treatment facility? (Yes/No) YES See 2.1.1
- 2.3.2. Treatment capacity of facilities (in inhabitant equivalent): See 2.1.1
- 2.3.3. Percentage of wastewater treated:
- 2.3.4. Reuse of treated wastewater: (Yes/No) (If so, specify what type or reuse)
- 2.3.5. Total annual electricity consumption by treatment systems: MWh

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2.4. ADDITIONAL INFORMATION

- 2.4.1. Awareness-raising actions, distribution of flow restrictors, monitoring and control of the water network, etc.: (Yes/No) (If existing, describe the type of action and attach any supporting documentation)
- 2.4.2. Other actions/activities/projects aimed at loss reduction, consumption reduction and/or water resource recovery: (Yes/No) (If existing, describe the type of action and attach any supporting documentation for each action)

