



Hotels4Climate

Fostering GHG reduction in the Cypriot and Greek hotel industry

Anthi Charalambous Director of Energy & Environment Department Cyprus Employers & Industrialists Federation (OEB) acharalambous@oeb.org.cy

On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



of the Federal Republic of Germany





General Information about Hotels4Climate project

Start date: 1/10/2019

Duration: 23 months (August 2021)

Funding source: European Climate Initiative (EUKI)



On behalf of:







Collaborating partners

<u>Cyprus</u>

Cyprus Employers and Industrialists Federation (OEB)

<u>Greece</u>

Institute of Greek Tourism Confederation (INSETE)

Germany

adelphi research gGmbH (adelphi)













Hotels4Climate Objective and Targets





Final goal is to reduce GHG emissions from Hotels in Greece & Cyprus





Estimating greenhouse gas emissions

Cyprus: 221.873 tonnes CO_2 -eq per year Greece: 1.616.813 tonnes CO_2 -eq per year

Hotels4Climate

Estimating greenhouse gas emissions after project completion

Cyprus: 7.872 tonnes CO_2 -eq per year Greece: 130.000 tonnes CO_2 -eq/yr.

On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



I. Assessment of the current state of the hotel industry in Cyprus and Greece and its potential for GHG emission reduction

- 1. Assessment of characteristics of the hotel industry through desk-based research and interviews
 - Design of questionnaire
 - Data collection via 20 questionnaires & 25 interviews with hotels to map the current state of the hotel industry
 - Report on the characteristics of the hotel industry
- 2. Suitable GHG reduction measures for Cyprus and Greece
 - Report on 20 suitable low, medium and high-cost measures for GHG reduction considering the characteristics of hotel industry in Cyprus and Greece
- 3. Assessment of potential for financing GHG reduction measures
 - Report on potential financing actions for GHG reductions
- 4. Workshops with key stakeholders to identify business models and best practices
 - 1 workshop to identify 20 good practices and business models (hotels, financial institutions, local authorities) 20 participants
- 5. Green opportunities of the hotel industry after the COVID-19 lockdown exit
 - Report on potential green restart measures of the hotel industry after the COVID-19 lockdown exit

On behalf of:

of the Federal Republic of Germany





I: Assessment of the current state of the hotel industry in Cyprus and Greece and its potential for GHG emission reduction

- 1. Assessment of characteristics of the hotel industry through desk-based research and interviews
 - Design of data collection questionnaire
 - Data collection via **20** questionnaires & 25 interviews with hotels to map the current state of the hotel industry
 - Report on the characteristics of the hotel industry (expected December 2020)



Federal Ministry for the Environment, Nature Conservation and Nuclear Safety





A2.	ГЕЛІКН ПЕРІГРАФН					
Έτος κα						
Αριθμός ορόφων του κτιρίου						
Εμβαδό	ν καλυμμένων χώρων					
Αριθμός	; δωματίων και κλινών					
Αριθμός	; επισκεπτών					
Αριθμός	; εργαζομένων					
Ετήσιο μέσο ποσοστό πληρότητας του ξενοδοχείου (%)						
Μήνες λ	λειτουργίας					
κουζινά γυμνασ	; πισινών, εστιατορίων, ών, Bars, πλυντηρίων, τηρίων, Salgon, ημάτων, κέντρων ευεξίας auna)					
Διατίμη	ση Ηλεκτρισμού					
ΠΕΑ και	ενεργειακή κατηγορία	NAI		ОXI		Αν ναι, αμερ.:
Ενεργει	ακός έλεγχος (ΝΑΙ/ΟΧΙ)	NAI		ОXI		Αν ναι, αμερ.:
περιβαλ	ατα ενεργειακής και λοντικής διαχείρισης (π.χ. 01, ISO 50001, EMAS)					Anó:
	οηση συστημάτων θέρμανση; ιατισμού (ΝΑΙ/ΟΧΙ)	NAI		хо		
Ενεργειακός διαχειριστής (ΝΑΙ/ΟΧΙ)		NAI		DХО		

On behalf of

A1.



Snapshots from data collection through visits













Number of Hotels and hotel appartments in Cyprus

Total number of accommodation establishments	Number	Green certified 4* (4-star) and 5* (5-star) hotels in Cyprus				
5* hotels	29	(EC, 2020o; Travelife, OEB 2020)				
4* hotels	65	***	Eco-Management and	6 hotels		
3* hotels	84	VERIFIC EMAS VERIFIC REALEMENT	Audit Scheme (EMAS)			
2* hotels	51	CERTIFIED		l 19 hotels		
1* hotels	26	ISO 14001:2015	ISO14001 Environmental Management System			
A' hotel apartments	65	COMPANY				
B' hotel apartments	84	Accommodation	Travelife	24 hotels		
C' hotel apartments	20	stay better				
Other hotels and hotel apartments	396			5 hotels		
Total	820	Green Key	Green Key			



Τελική κατανάλωση ηλεκτρικής ενέργειας (MWh) ανά οικονομική δραστηριότητα στον τριτογενή τομέα για το 2018



Πηγή: Στατιστική Υπηρεσία Κύπρου

Συγκριτικό κόστος ηλεκτρικής ενέργειας σε κράτη μέλη και γειτονικές χώρες για μεγάλους καταναλωτές (2019 S2)

Το κόστος ηλεκτρισμού στην Κύπρο είναι από τα υψηλότερα στην Ευρώπη

Total Electricity Price (All taxes and levies included) 500 MWh < Consumption < 2 000 MWh



OEB

I. Assessment of the current state of the hotel industry in Cyprus and Greece and its potential for GHG emission reduction

2. Suitable GHG reduction measures for Cyprus and Greece

 Report on 20 suitable low, medium and high-cost measures for GHG reduction considering the characteristics of hotel industry in Cyprus and Greece (expected in December 2020)



http://airconditioning-nyc.com/energy-savings-hotels-get/



On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



of the Federal Republic of Germany

I. Assessment of the current state of the hotel industry in Cyprus and Greece and its potential for GHG emission reduction

- 3. Assessment of potential for financing GHG reduction measures
 - Report on potential financing actions for GHG reductions (March 2020)

The report it is also available also on line:

https://www.oeb.org.cy/drasis/hotels4climate/ektheseismeletes/

On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety







Financing options to support GHG reductions in Cypriot and Greek hotels

Experiences from focal countries and the EU

Hotels4Climate





Available support schemes & financial instruments for hotels



I. Assessment of the current state of the hotel industry in Cyprus and Greece and its potential for GHG emission reduction

4. Workshops with key stakeholders to identify business models and best practices

- 1 workshop to identify 20 good practices and business models (hotels, financial institutions, local authorities) - 20 participants
 - Greece 18 December 2019
 - Cyprus 13 January 2020



On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety





On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



of the Federal Republic of Germany

Main conclusions from Round Table discussions

- Multiple hotels already proceeded in implementing good practices as part of their social responsibility and as a result they
 contribute to the greenhouse gas emissions reduction. Additionally, environmentally friendly hotels are increasingly
 preferred by tourists.
- Hotel representatives mentioned that information about certification (e.g. EMAS, ISO14001) is usually included in all communication activities with customers and suppliers as part of their communication strategies.
- Hotel representatives highlighted that apart from the environmental impact that is usually assessed before the implementation of any good practice, it is also very important to ensure that it will be economically sustainable.
- The National Action Plan for Climate and Energy includes provision for the development of support schemes on greenhouse gas reduction projects.
- Most of the bank representatives mentioned that they don't develop specific financing models for energy projects or climate projects. They normally examine those projects through the standard procedure of the bank of any loan. They operate on a project-basis. If an enterprise is capable to pay off a loan, then they will proceed with financing.









Hotels Good Practices in Cyprus



On behalf of: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

European Climate Initiative EUKI





Hotels Good Practices in Germany



On behalf of: or the Environmen and Nuclear Safety

of the Federal Republic of Germany

European Climate Initiative





Hotels Good Practices in Greece





I. Assessment of the current state of the hotel industry in Cyprus and Greece and its potential for GHG emission reduction

5. Green opportunities of the hotel industry after the COVID-19 lockdown exit

 Report on potential green restart measures of the hotel industry after the COVID-19 lockdown exit (October 2020)



On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



Major findings of COVID-19 and Green opportunities Report

 Arrivals at tourist accommodation establishments – monthly data for Germany, Greece, and Cyprus (Source of data: Eurostat 2020b)



Major findings of COVID-19 and Green opportunities Report



Electricity Consumption in the hotel industry 2020 provided by the Cyprus Distribution System Operator (DSO, August 2020)

Tourists arrivals in Cyprus

Number of Visitors





Source: Statistical Service of the Republic of Cyprus

Tourists arrivals in Cyprus (2019-2020)

	January	February	March	April	May	June	July	August	September
2019	81.970	105.571	169.934	329.308	434.578	509.662	550.971	553.845	524.707
2020	85.622	105.592	55.342	0*	0*	9.119	64.914	104.261	87.334

Change +4,5% 0% -67,4% -100% -100% -98,2% -88,2% -81,2% -83,4%

*In April and May 2020 there were no arrivals of tourists in Cyprus due to the travel restrictions imposed.

Additional financial support instruments to support the hotel industry in implementing GHG reduction measures (OEB, 2020)



Additional non-financial support instruments to support the hotel industry in implementing GHG reduction measures (OEB, 2020)





II. Capacity Building – Study Visits

3 study visits, 5 executives of hotel units from each partner country, in hotel units – good practices in Cyprus, Greece and Germany.

- September/October 2020 Cyprus
- > January 2021 Greece
- June/ July 2021 Germany

1 workshop - training and capacity building (hotels) – 20 participants

1 networking event (hotels, financial institutions) – 25 participants

Development of training materials



On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



II. Capacity Building – Selected Study Visits Cyprus



II. Capacity Building Development of training material

- Project partners have developed training material that will be used for the workshops
- 20 Participants from Greece and 20 from Cyprus will participate for free in the capacity building workshops
- The workshops are targeted to chief engineers, engineers or other hotel staff that want to improve knowledge on "green hotels"
- Areas covered are:
 - Carbon footprint
 - Energy efficiency
 - Renewable energy
 - Waste management
 - Good practices regarding communication and other activities
- Training material is available online:
 - <u>https://www.oeb.org.cy/drasis/hotels4climate/ekpaideytiko-yliko/</u>







Hotel Sector: How to reduce greenhouse gas emissions

Experiences from Greece, Cyprus, Germany and the $\ensuremath{\mathsf{EU}}$

Hotels4Climate



Cyprus workshop is planned for 25 November 2020

ଚ

adelphi

SETE

OFP

σεθέ	ματα εξοικονόμησης ενέργειας και περιβαλλο <u>ξενοδοχειακό τομέα</u> 25 Νοεμβρίου 2020, <mark>ΟΕΒ, Λευκι</mark> (Διάρκεια: 6 ώρες)		
Ώρα	Θέμα	Εισηγητής/τρια	
8:30-9:00	Καλωσόρισμα/Καφές		
09:00-9:30	Εισαγωγή στο Φαινόμενο του θερμοκηπίου, ευρωπαϊκοί και εθνικοί στόχοι για το κλίμα και την ενέργεια	Μάριος Παπαγεωργίου, Οί	
09:30-10:00	Ψυκτικές συσκευές και φθοριούχα αέρια του θερμοκηπίου	<u>Χρύσω</u> Σωτηρίου Υποψήφια Διδάκτωρ, ΤΕΠΑ	
10:00-10:30	Εξοικονόμηση ενέργειας μέσω θερμομονωτικών λύσεων στο κτιριακό κέλυφος	Παναγιώτης Καστανιάς, ΟΙ	
10:30-11:00	Διάλεψμα		
11:00-11:30	Εξοικονόμηση ενέργειας σε ηλεκτρικά φορτία	Επικ. Καθ. Αλέξης Πολυκάρπ Τμήμα Ηλεκτρολόγων Μηχανικών, Πανεπιστήμιο Φρέντερικ	
11:30-12:00	Εξοικονόμηση ενέργειας στο φωτισμό		
12:00-13:00	Εξοικονόμηση ενέργειας στα συστήματα Θέρμανσης / Κλιματισμού / Αερισμού	Φλουρής Ξενή Μηχανολόγος Μηχανικός ΕΙ	
13:00-14:30	Γεύμα		
14:30-15:00	Χρήση τεχνολογιών ανανεώσιμων πηγών ενέργειας σε κτίρια	Δρ. Δημοκράτης Γρηγοριάδι Τμήμα Μηχανικών Μηχανολογίας και Κατασκευαστικής, Πανεπιστι Κύπρου	
15:00-15:30	Ορθολογική διαχείριση αποβλήτων ξενοδοχειακών μονάδων		
15:30-16:00	Συστήματα περιβαλλοντικής διαχείρισης, Εκστρατείες ευαισθητοποίησης και επικοινωνιακή στρατηγική για περιβαλλοντικές δράσεις ξενοδοχείων	Ανθή Χαραλάμπους, OEE	

<u>τις 20</u> Νοεμβρίου 2020

Climate Initiative



Η Ομοσπονδία Εργοδοτών & Βιομηχάνων (OEB)

Σας προσκαλεί στο Εξειδικευμένο Εκπαιδευτικό οναστήριο Ανάπτυξης δεξιοτήτων (6 ωρών) σε θέματα Εξοικονόμησης Ενέργειας και Περιβαλλοντικής Διαχείρισης στον ξενοδοχειακό τομέα

> Δηλώσεις Συμμετοχής μέχρι τις 10 Νοεμβρίου 2020 https://forms.gle/R7Uf9MQNdJ5zLjj3A Περιορισμένος αριθμός θέσεων

Supported by:

. . .



. . .

1.1 0

European **Climate Initiative** FUKI



III. Development of online information hub with tools and information exchange database

Development of **website** and **database** to include **best practices**, **business models**, **case studies and information**, which will be developed from WP1 & WP2 activities. The platform will be utilized for **networking**, **information exchange** και **marketplace for extending the life cycle of hotel equipment**.

Development of the **online tool 'Virtual Hotel'** to enable the assessment and evaluation of opportunities of reducing greenhouse gas emissions.

Successful examples:

- http://www.oeb.org.cy/drasis/business4climateplus/ergaleiothiki/
- http://cypruscircular.oeb.org.cy/

On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety







IV. Promotion of Circular Economy in Hotels in Greece & Cyprus



- 1. Preliminary assessment of circular economy in the hotel industry for Cyprus and Greece
 - Design of questionnaire
 - Data collection via online survey with hotels to assess the current status of the hotel industry, including the priority sectors and high impact areas (accommodation, food, and hospitality activities), and current good practices
 - Report on the Preliminary assessment of circular economy in the hotel industry
- 2. Development of circular economy training material
 - Training material on circular economy in the hotel industry to be used for capacity building
- 3. Workshops on circular economy for climate neutrality
 - 1 workshop to 20 participants
- 4. Deliver hotel business coaching on circular economy
 - Eligibility criteria for screening participants to identify hoteliers to receive tailored business coaching
 - Business coaching to 2 hotels



Preliminary assessment of circular economy in the hotel industry for Cyprus and Greece





European Climate Initiative

On behalf of

37



Cyprus		Greece
21%	Yes, my knowledge and/ or understanding is good	38%
79%	Yes, but my knowledge and/ or understanding is not sufficient	62%
0%	Νο	0%

Are you aware of the term Circular Economy?







Capacity Building for Circular Economy in Hotels in Cyprus and Greece



1. Development of circular economy training material

Training material on circular economy in the hotel industry to be used for capacity building

2. Workshops on circular economy for climate neutrality

1 workshop to 20 participants (Greece & Cyprus)

3. Deliver hotel business coaching on circular economy

Eligibility criteria for screening participants to identify hoteliers to receive tailored business coaching Business coaching to 2 hotels

Workshop on Circular Economy in Cyprus will be delivered 1st December 2020







Reducing Energy Use in the Ho... ecovisionslc.org



How to Improve Your Hotel's En... hospitalitynet.org



ENERGY EFFICIENCY IN HOTEL... buildtrack.in



Targeting energy savings in the... ec.europa.eu



Green Building - Energy Efficien... menerga-adria.com



Eυχαριστώ Thank you Dankeschön

On behalf of:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

επιχειρώ για το κλίμα



of the Federal Republic of Germany