# Sustainable Energy Action Plan Covenant of Mayors

«Progress report»



Signatory information:
Lefkosia Municipality
Country:
Cyprus
Contact person:
Mrs. Konstantina Lortzie
Adhesion to CoM:
17/05/2012
17/03/2012
SEAP Council approval:
02/01/2014
02,02,202
SEAP submission to CoM office:
08/01/2014
SEAP Approval by JRC:
28/01/2015
Monitoring period:
2014-2016
□ Action report (2 years)
☐ Detailed implementation report including MEI (4 years)
Date of submission:
05/10/2016
Dranarad and submitted by
Prepared and submitted by :
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### **OVERVIEW**

### Overall budget spent so far:

€ 18,622,135

### **Key Actions Status:**

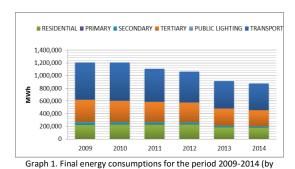
, ,							
	Not	In	Completed	Postponed	Canceled	Additional	New
	started	progress				measures	measures
						implemented	foreseen or
							in progress
Number	10	24	6	15	1	1	2

### CO<sub>2</sub> emissions:

Baseline total	Monitoring year total	Estimated CO <sub>2</sub>	Balance of CO <sub>2</sub>
emissions (2009)	emissions estimation	Reduction compared to	emissions objective
	(2016)	baseline	(2020)
524,103 tonnes	360,000 tonnes CO <sub>2</sub>	31%	351,790 tonnes CO <sub>2</sub>
CO <sub>2</sub>			

### **SEAP** measures effect so far:

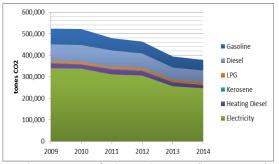
Energy Savings	Renewable energy sources production	CO <sub>2</sub> savings
17,206 MWh/year	4,311 MWh/year	12,178 tonnes CO <sub>2</sub> /year



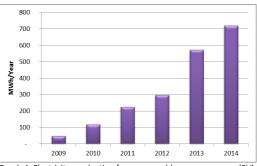
sector)

■ LPG ■ Electricity ■ Heating Diesel ■ Kerosene ■ Natural Gas ■ Biomass ■ Chorcoal ■ Solar ■ Wind Diesel ■ Gasoline 1,400,000 1,200,000 1,000,000 800,000 600.000 400,000 200,000 2010 2011 2012 2013

Graph 2. Final energy consumptions for the period 2009-2014 (by energy source)



Graph 3. CO<sub>2</sub> emissions for the period 2009-2014 (by energy source)



Graph 4. Electricity production from renewable energy sources (PV) for the period 2009-2014











# PART I – My overall strategy

### 1. Overall CO<sub>2</sub> reduction target (%) for 2020:

33%

### 2. Long term CO<sub>2</sub> reduction target (%):

It will be defined for 2030 in the framework of new CoM and the preparation of SECAP 2020-2030

### 3. Baseline year:

2009

### 4. CO<sub>2</sub> objectives:

☐ Per capita reduction	

### 5. Population estimates by 2020:

61,478

#### 6. Vision:

"Nicosia Municipality is governed by the principle of sustainable development and sustainable design. These two concepts have multidimensional character, directly related to the financial sector as well as the social and environmental development."

### 7. Coordination and organizational structures created/assigned:

Municipal Energy Team which is responsible for the implementation and monitoring of SEAP constituted with the following members:

- Mayor and General secretary
- Municipal Staff (Technical and Financial Department, European affairs)
- Municipal Councillor (Environmental Committee, European affairs Committee)

The Cyprus Energy Agency act's as covenant supporter by providing technical and other assistance.

### 8. Staff capacity allocated:

	Number of persons (n):	Man months per year (m):	Full time equivalent jobs:(E)=(n)*(m)/12
	4	3	1
⊠ Energy Agency	2	2	0.3
□ External Consultant			
☐ Covenant territorial			
coordinator			
Other (students,	4	2	0.6
volunteers)			

### 9. Involvement of stakeholders and citizens:

The following stakeholders are directly involved during the SEAP implementation:

- Youth Committee
- Schools Parents associations
- Volunteer Network "Lefkosiazo"
- Local schools











10. Overall budget for your SEAP implementation:

	Budget spent so far (€)		foreseen implement	budget for SEAP tation 2020 nitted 2011	Overall budget foreseen for SEAP implementation 2020 (€) – Revised 2016		
⊠Investment	44,580		5,84	2,900	5,842,900		
⊠Non investment	3,026,350		994,900		62,024,318		
⊠Investment	23,605						
⊠Non investment	15,527,600						
Time period:	2014	2016	2014	2020	2014	2020	

11. Financing sources used so far for SEAP implementation:

	Percentage (%)
□ Local Authority's own resources	16.49
□ National funds and programmes	8.77
☑ EU Funds and programmes	74.69
<b>⊠</b> Private	0.05

### 12. Monitoring process:

The Energy Team along with the support of the Cyprus Energy Agency are dealing with the implementation and the monitoring of the SEAP. The key tools for the successful monitoring are the SEAP document, the monitoring tools provided and the SEAP annual budgeting.

13. Please rate (little/fair/strong/not applicable) the main problems encountered during SEAP implementation, either overall or by key Covenant sector.

	All sectors	Municipal	Tertiary	Residential	Transport
Limited financial sources		Fair	Strong	Fair	Fair
Absence of/weak regulatory framework		Fair	Fair	Fair	Fair
Lack of technical expertise		Little	Not applicable	Not applicable	Not applicable
Lack of support from stakeholders	Little				
Lack of political support at other administrative levels	Little				
Changes in the local political priorities	Not applicable				
Incompatibility with national policy orientations	Not applicable				
Immature or high cost technologies	Little				

### 14. Additional comments:

Financial crisis in Cyprus, the memorandum and the reconstruction plans for the local authorities of Cyprus are the major barriers for the implementation of SEAPs. The local political priorities have made a positive shift towards sustainable development issues and as a result become supporters for the implementation of SEAP. Nicosia is now looking forward for the energy and climate objectives of 2030 and the development of new strategy for the mitigation and adaptation to climate change covering the period 2020-2030. The SEAP results by 2020 and the experiences gained will guide the Municipality for more successful energy actions.











# PART III – My Sustainable Energy Action Plan

### 1. Title:

The Sustainable Energy Plan of Lefkosia Municipality

### 2. Decision body approving the plan:

**Municipal Council of Lefkosia** 

### 3. SEAP webpage:

http://www.nicosia.org.cy/el-GR/home/ http://www.cea.org.cy/LocalEnergy.html

### 4. Business as usual projections by 2020:

CO <sub>2</sub> emissions (tonnes/year)	408,637
Final energy consumption (MWh/year)	952,948

### 5. Acronyms

MU: Municipal funds EU: European funds NF: National funds

CEA: Cyprus Energy Agency

## 6. Key Actions of the SEAP (coding explained in ANNEX):

<u> </u>	ney residue of the office of t												
									Estimated		Estimates in 2020		
	Key actions	Area of intervention	Policy instrument	Origin of the action	Responsible body	•	Implementation timeframe	Status	implementation cost	Implementation cost spent so far	Energy savings	Renewable energy production	CO <sub>2</sub> reductions
						Start	End		(€)	(€)	MWh/year	MWh/year	tCO₂/year
				N	IUNICIPAL BUILI	DINGS, EC	QUIPMEN	T/FACILIT	IES				
	MB.1 - Energy Efficiency									11,380 MU			
1.	Improvement of	A16	B112	C1	Lefkosia	2014	2018	D2	327,400	3,540 CEA	128		112
	Municipal Buildings									20,065 EU			
	MB.1.1 – Energy Audits to	A16	B112	C1	Lefkosia	2014	2015	D3	15,000	3,390 CEA	_	_	_
	Municipal swimming pool	AIU	B112	CI	Lejkosia	2014	2013	DS	13,000	19,215 EU	-	-	-





	(in the framework of NoE					1							
	Sport Facilities project) and												
	to Municipal Multipurpose												
	Center (in the framework of												
	Euronet 50/50 project)												
	MB.1.2 - Issue of EPC for												
	Municipal Multipurpose												
	Center (class C), Ayios									2,380 MU			
		A16	B13	C1	Lefkosia	2015	2016	D3	11,000	150 CEA	-	-	-
	Antonios market (class E)									850 EU			
	and Melina Mercouri Hall												
	(class H)												
	MB.1.3 - Roof thermal							D4	445.000				
	insulation in Municipal	A11	B19	C1	Lefkosia	2016	2018	2018	115,000	-	-	-	-
	Buildings												
	MB.1.4 - Replacement of												
	existing cooling units in												
	Municipal Buildings with	A11	B19	C1	Lefkosia	2016	2018	D2	185,000	9,000	128		112
	high energy efficiency												
	system (So far 14 new units)												
	MB.1.5 – Educational												
	presentations to Municipal	A18	B11	C1	Lefkosia	2014	2014	D4	200				
	staff on Energy saving in	A18	B11	CI	Lejkosia	2014	2014	2017	200	-	-	-	-
	office												
	MB.1.6 - Internal												
	administrative order for the							5.4					
	strict implementation of	A19	B112	C1	Lefkosia	2014	2014	D4	1,200	-	-	-	-
	recycling in offices				•			2016					
	(purchase recycling bins)												
	MB.1.7 - Guidelines to					1							
	Municipal staff on Energy	A18	B11	C1	Lefkosia	2014	2014	D4	0	-	_	_	_
	saving in offices				,			2016					
	,gjj,				TERTIARY BUI	DINGS	FOLIPMI	ENT/FACIL	ITIES				
	TB.1 - Construction of						- Con-III						
	parking space for												
2.	bicycles in new	A19	B110	C1	Lefkosia	2014	2020	D4	_	_	_	_	_
	buildings (5% of the car	717	5110		ECIROSIA		2020	2017					
	park) (Special provision												
	in building permit)												
	TB.2 - Construction of							D4					
3.	charging point for	A19	B110	C1	Lefkosia	2014	2020	2017	-	-	-		-
	charging point for					<u> </u>	<u> </u>	2017					





		1		•					,	•			,
	Electric Vehicles in new												
	buildings (Special												
	provision in building												
	permit)												
	TB.3 - Enhancing the												
	Implementation of the												
	Energy Performance of												
١.	Buildings Law N.210	446	D40	-	1 - 61 1 -	2045	2020	D4					
4.	(I)/2012 (Audits	A16	B19	C1	Lefkosia	2015	2020	2017	-	-	-	-	-
	whether the new or												
	existing buildings												
	comply with the law)												
	TB.4 - Increase the												
_	energy renovation rate	446	D46	-	1 - 61 1 -	2045	2020	D4					
5.	of buildings (Motivating	A16	B16	C1	Lefkosia	2015	2020	2017	-	-	-	-	-
	people e.g less taxes)												
					RES	SIDENTIA	L BUILDII	NGS					
	RB.1 - Construction of												
	parking space for												
1_	bicycles in new							D4					
6.	buildings (5% of the car	A19	B110	C1	Lefkosia	2014	2020	2017	-	-	-	-	-
	park) (Special provision												
	in building permit)												
	RB.2 - Construction of												
	charging point for												
1_	Electric Vehicles in new							D4					
7.	buildings (Special	A19	B110	C1	Lefkosia	2014	2020	2017	-	-	-		-
	provision in building												
	permit)												
	RB.3 - Enhancing the					1							
	Implementation of the												
	Energy Performance of												
	Buildings Law N.210							D4					
8.	(I)/2012 (Audits	A16	B19	C1	Lefkosia	2015	2020	2017	-	-	-	-	-
	whether the new or												
	existing buildings												
	comply with the law)												
	F /	L	L	l		L	L	L	1	I .	L	L	1





9.	RB.4 - Increase the energy renovation rate of buildings (Motivating people e.g less taxes)	A16	B16	C1	Lefkosia	2015	2020	D4 2017	-	-	-	-	-
10.	RB.5 - Energy Audits in residential buildings of Municipality (So far 20 houses)	A16	B112	C1	Lefkosia	2015	2020	D2	20,000	800	31		18
11.	RB.6 - Providing informative material and guidelines through the Municipal website and newspaper on the use and proper siting of solar and PV panels	A19	B11	C1	Lefkosia	2015	2020	D3	-	250	-	239	209
						<b>PUBLIC L</b>	IGHTING						
12.	PL.1 – Energy efficient street lighting	A21	B23	C1, C2	Lefkosia, Cyprus Energy Agency	2014	2017	D2	1,958,000	6,200 MU	-		-
13.	PL.2 – Energy efficient traffic lighting	A21	B24	C1, C3	Lefkosia, Department of Public Works	2015	2016	D4 2016	1,184,000	-	-		-
14.	PL.3 - Energy Efficiency Improvement of public places lighting – replacement of lighting across Pedieos river with LED lamps	A21	B26	C1	Lefkosia	2016	2017	D2	20,000	10,000	14.6		12.8
15.	PL.4 – Maintenance of festive decoration lighting (LED lamps for festive decoration lighting is a requirement in public procurement)	A21	B24	<b>C1</b>	Lefkosia	2016	2017	D3 2014	-	6,000	9		8





						INDUST	RY						
16.	IN.1 – Establishment of working group between the Municipality and representatives of industry	A35	В39	C1	Lefkosia	2016	2017	D1 2016	-	-	-	-	-
						TRANSP	ORT						
17.	TR.1 – Municipal fleet renewal with more efficient and low- emission vehicles	A41	B47	C1	Lefkosia	2014	2020	D1 2016	2,000,000	-	-		-
18.	TR.2 - Establishment of Municipal fleet management office for more efficient use and control of municipal vehicles	A411	B410	C1	Lefkosia	2014	2020	D2 2015	102,500	7,500	18		5
19.	TR.3 - Training of the staff (drivers) on eco- driving	A410	B41	C1	Lefkosia	2014	2014	D4 2017	500	-	-		-
20.	TR.4 - Utilization of bicycles by Municipal police (10 bicycles are in use)	A44	B410	C1	Lefkosia	2015	2018	D3 2013	500	3,500	3.3		1
21.	TR.5 - Promotion and implementation of tram system in Nicosia territory	A43	B43	C1 C3	Lefkosia	2014	2020	D2	250,000	160,000	-		-
22.	TR.6 - Purchase of 13 small buses (Euro 6) promoting public transport	A43	B47	C1	Lefkosia	2016	2017	D1 2016	400,000	1,300,000	-		-
23.	TR.7 - Improving bus stops infrastructure	A47	B410	C1	Lefkosia	2015	2020	D4 2017	80,000	-	-		-
24.	TR.8 – Park and Ride (Bus station and bike	A45	B410	C1	Lefkosia	2015	2020	D4 2018	40,000	-	-		-





	renting facilities)			1	T	1	1				Γ		
25.	TR.9 – Upgrading the bicycle rental system (failed to operate)	A44	B44	C1	Lefkosia	2016	2020	D5	-				
26.	TR.10 - Upgrading the network of cycle paths	A44	B44	C1	Lefkosia	2016	2020	D2 2016- 18	100,000	-	-		-
27.	TR.11 – Electric vehicle charging stations ( out of 5)	A42	B42	C1, C3	Lefkosia, Electricity Authority of Cyprus	2014	2020	D2 2014	40,000	4,000 EAC	400		107
28.	TR.12 - Free parking for electric and hybrid cars in public spaces	A41	B42	C1	Lefkosia	2014	2020	D2	-	-	1,000		267
29.	TR.13 – Construction of bicycle parking spaces in squares, parking areas, bus stops and parks	Д44	B410	C1	Lefkosia	2015	2020	D1	4,000	-	-	-	-
30.	TR.14 – Implementing measures such as strict fine for illegal parking and obstacles preventing illegal parking, facilitating the movement of pedestrians and promoting walking	А44	B410	C1	Lefkosia	2015	2020	D3	8,000	211,000	2,933		741
31.	TR.15* - Events promoting electric vehicles	A42	B41	C1	Lefkosia	2015	2020	D2	-	-	450		120
32.	TR.16* - European Cycling Competition	A44	B410	C1	Lefkosia	2015	2020	D2	4,800	1,800	176	-	47
				1	LOCAL	ELECTRIC	ITY PROD	UCTION					
33.	LE.1 – Photovoltaic system to municipal building (50 kW)-	A53	B58	C1	Lefkosia	2017	2017	D1	250,000	-	-	-	-





	Installation PV to the												
	new Municipal Town												
	Hall												
						ОТ	HER						
34.	OT.1 - Reconstruction of the Municipality's Urban Center (Eleftheria Square) – Construction of pavements, bus stops, bicycle rental stations etc.	A71	B74	C1	Lefkosia	2011	2015	D2 2016- 2017	27,200,000 EU 3,200,000 NF 1,600,000 MU	13,600,000 EU 1,600,000 NF 800,000 MU	-	-	-
35.	OT.2 - Reconstruction of Municipality's Shopping Centre	A71	B74	C1	Lefkosia	2012	2015	D2 2016- 2018	28,794,118	400,000	-	-	-
36.	OT.3 - Exploitation of squares and public open spaces for the implementation of events (Energy week contributing to modal shift to walking and cycling	A71	B74	C1	Lefkosia	2013	2020	D1 2017	-	-	-	-	-
37.	OT.4 - Landscaping public spaces (benches, pedestrian paths, green spaces) - promoting walking in the Municipality's Urban Centre	A71	B74	C1	Lefkosia	2014	2020	D2	20,000	35,300	1,173		296
38.	OT.5 - Planting trees and installing shades and fountains in squares, and outdoor public spaces in order to improve the pedestrian streets during the summer months	A71	B74	C1	Lefkosia	2017	2020	D3 2015	40,000	95,200	1,173		296





39.	OT.6 - Development of Green Spaces (200 OUT OF 5000 tree planting)	A73	B72	C1	Lefkosia	2014	2020	D2 2016	20,000	400 NF	-	-	8
40.	OT.7 – Reducing the volume of municipal waste - Objective is to reduce solid waste by 15% by 2020¹: • Information and awareness of the citizens and business premises about recycling (PMD, Paper, Glass, Electric Appliances) • Cleaning campaign under the action of a national voluntary cleaning campaign "Let's do it Cyprus" • participation in the national recycling program run by Green Dot (Cyprus) Ltd for Municipal solid waste • participation in Europe-wide annual • clean-up day "Let's Clean Up Europe" • voluntary cleaning campaign of Pedieos river on the initiative of students and the	A72	B74	C1	Lefkosia	2014	2020	D2	40,000	-	8,831		7,718

<sup>&</sup>lt;sup>1</sup> EPA (2012). WAste Reduction Model (WARM). U.S. Environmental Protection Agency (2.67 metric tons CO2 equivalent /ton of waste recycled instead of landfilled)





_		I	I	1	I	1		1	I		I	T	1
	organization "Cyprus												
	Sustainable Tourism												
	Initiative"												
	<ul> <li>voluntary cleaning</li> </ul>												
	campaign of												
	municipal parks												
	through the												
	international Eco-												
	Schools program												
	Providing informative												
	material about												
	recycling												
	Increase the number												
	of collection bins for												
	disposing recyclable												
	items (3% increase												
	annually)												
	Informative materials												
	and articles on												
	recycling through the												
	press and the												
	municipal magazine												
	OT.8 – Exploitation of												
	green waste for												
41.	compost and	A72	B74	C1	Lefkosia	2014	2020	D2	_	_	_	3,420	913
	production of biomass												
	products												
	ОТ.9 -												
42.	Adoption of green	A75	B74	C1	Lefkosia	2013	2020	D1	_	_	_		_
	procurement practices							2016					
	OT.10 - Green Public												
	procurement.												
43.	Environmental criteria	A75	B74	C1	Lefkosia	2013	2020	D1	_	_	_		_
	in products and						1	2016					
	services												
	30.7.003	<u>I</u>	l .	I	l .	l	1	1	I	l	l .	1	





44.	OT.11 - Green Public procurement. Energy efficiency criteria in products and services (13 Mini buses-EURO 6)	A75	B74	C1	Lefkosia	2013	2020	D1 2016	-	-	46		12
45.	OT.12 – Contact point for energy advices to the public	A75	B71	C1, C2	Lefkosia, Cyprus Energy Agency	2016	2020	D4 2017	50,000	-	-	-	-
46.	OT.13 – Educational presentations at schools on Renewable Energy Sources, Energy Saving, Sustainable transport – through the project Euronet 50/50	A75	B71	C1, C2	Lefkosia, Cyprus Energy Agency	2014	2020	D2	3,000	200 CEA	9	9	16
47.	OT.14 – Establishment of Green Fund in the municipality	A75	B74	C1	Lefkosia	2014	2020	D4 2016	-	-	-	-	-
48.	OT.15 - Energy awards to active citizens	A75	B71	C1	Lefkosia	2015	2020	D4 2017	2,000	-	-	-	-
49.	OT.16 - Annual sustainable energy week	A75	B71	C1	Lefkosia	2014	2020	D2 Annual	24,400	4,500	51	50	88
50.	OT.17– No lighting day (Earth day)	A75	B71	C1	Lefkosia	2014	2020	D2 Annual	3,000	-	96		84
51.	OT.18 - Development cooperation between local authorities (Bicycle path network, Traffic lights, mobility plan)	A75	B74	C1	Lefkosia	2014	2020	D2	-	-	-		-
52.	OT.19 – Building partnership with stakeholders and organizations	A75	B74	C1	Lefkosia	2014	2020	D1 2016	-	-	-	-	-





53.	OT.20 - Participation in 6 co-funded European projects (Pending approval for 6 projects)	A75	B74	C1	Lefkosia	2014	2020	D2 2016	62,500	17,000 MU 289,000 EU 34,000 NF	-	-	-
54.	OT.21 – Information and awareness of the citizens on climate change, energy, sustainable transport, recycling through the Municipal website and social media sites	A75	B71	C1	Lefkosia	2014	2020	D2 Annual	-	-	405	405	708
55.	OT.22 - Informational messages to citizens	A75	B71	C1	Lefkosia	2014	2020	D2 Annual	18,000	-	187	188	328
56.	OT.23* - Primary school children wrote a song about the green point of the municipality and turned it into a video clip. The purpose of the song is to raise public awareness about recycling and proper placement of waste materials in particular point	A75	B71	C1	Lefkosia	2016	2016	D3	500	500	72		63

- The staff cost for the above actions was not included
- Numbers with green color considered as investments. With red color are those expenditures considered as non investments.





# **ANNEX I – CATEGORIES OF ACTIONS**

AREA OF IN	TERVENTION
A1	Municipal-Residential-Tertiary Buildings
A11	Building envelope
A12	Renewable energy for space heating and hot water
A13	Energy efficiency in space heating and hot water
A14	Energy efficient lighting systems
A15	Energy efficient electrical appliances
A16	Integrated action (all above)
A17	Information and Communication Technologies
A18	Behavioural changes
A19	Other
A2	Public Lighting
A21	Energy efficiency
A22	Integrated renewable power
A23	Information and Communication Technologies
A24	Other

A3	Industry
A31	Energy efficiency in industrial processes
A32	Energy efficiency in buildings
A33	Renewable energy
A34	Information and Communication Technologies
A35	Other

TRUMENT
Buildings
Awareness raising / training
Energy management
Energy certification / labelling
Energy suppliers obligations
Energy / carbon taxes
Grants and subsidies
Third party financing. PPP
Public procurement
Building standards
Land use planning regulation
Not applicable
Other

B2	Public Lighting
B21	Energy management
B22	Energy suppliers obligations
B23	Third party financing. PPP
B24	Public procurement
B25	Not applicable
B26	other

В3	Industry
B31	Awareness raising / training
B32	Energy management
B33	Energy certification / labelling
B34	Energy performance standards
B35	Energy / carbon taxes
B36	Grants and subsidies
B37	Third party financing. PPP
B38	Not applicable
B39	Other





## AREA OF INTERVENTION

A4	Municipal - Public - Private Transport
A41	Cleaner/efficient vehicles
A42	Electric vehicles (incl. infrastructure)
A43	Modal shift to public transport
A44	Modal shift to walking & cycling
A45	Car sharing/pooling
A46	Improvement of logistics and urban freight transport
A47	Road network optimisation
A48	Mixed use development and sprawl containment
A49	Information and Communication Technologies
A410	Eco-driving
A411	Other

A5	Local Electricity Production
A51	Hydroelectric power
A52	Wind power
A53	Photovoltaics
A54	Biomass power plant
A55	Combined Heat and Power
A56	Smart grids
A57	Other

A7	Other
A71	Urban regeneration
A72	Waste & wastewater management
A73	Tree planting in urban areas
A74	Agriculture and forestry related
A75	Other

## POLICY INSTRUMENT

B4	Transport
B41	Awareness raising/training
B42	Integrated ticketing and charging
B43	Grants and subsidies
B44	Road pricing
B45	Land use planning regulation
B46	Transport / mobility planning regulation
B47	Public procurement
B48	Voluntary agreements with stakeholders
B49	Not applicable
B410	Other

B5	Local Electricity Production
B51	Awareness raising / training
B52	Energy suppliers obligations
B53	Grants and subsidies
B54	Third party financing. PPP
B55	Building standards
B56	Land use planning
B57	Not applicable
B58	Other

B7	Other
B71	Awareness raising / training
B72	Land use planning
B73	Not applicable
B74	Other





Origin of th	Origin of the actions	
C1	Local Authority	
C2	Covenant Territorial Coordiantor	
C3	Other (national, regional,)	
C4	Not possible to say	

Progress		
D1	Not started	
D1 D2	In progress	
D3	Completed	
D4	Postponed	
D5	Canceled	





# ANNEX II – BUSINESS AS USUAL AND SEAP SCENARIOS

# 1. BUSINESS AS USUAL SCENARIO

1. BUSINESS AS USUAL SCENARIO	Urban davalanad
BAU Scenario:	Urban developed
RESIDENTIAL SECTOR	
Residential	2.0%
Residential storage heaters	2.0%
PRIMARY SECTOR	
Agriculture, Forestry and Fishing [A]	0.5%
Mining and Quarrying [B]	0.5%
SECONDARY SECTOR	0.370
	1.5%
Manufacturing [C]	
Electricity, Gas, Steam and Air Conditioning Supply [D]	0.0%
Water Supply; Sewerage, Waste Management and Remediation Activities [E]	1.0%
Construction [F]	2.0%
TERTIARY SECTOR	
Wholesale and Retail Trade; Repair of Motor Vehicles and	2.0%
Motorcycles [G]	
Transportation and Storage [H]	2.0%
Accommodation and Food Service Activities [I]	2.0%
Information and Communication [J]	2.0%
Financial and Insurance Activities [K]	2.0%
Real Estate Activities [L]	2.0%
Professional, Scientific and Technical Activities [M]	2.0%
Administrative and Support Service Activities [N]	2.0%
Public Administration and Defence; Compulsory Social Security [O]	2.0%
Education [P]	2.0%
Human Health and Social Work Activities [Q]	2.0%
Arts, Entertainment and Recreation [R]	2.0%
Other Service Activities [S]	2.0%
Activities of Households As Employers [T]	2.0%
Activities of Extraterritorial Organisations and Bodies [U]	2.0%
PUBLIC LIGHTING	
Public Lighting - Urban areas	2.5%
Public Lighting - Rural areas	2.5%
Public Lighting - Traffic Lights	2.5%
Public Lighting - Other Lighting	2.5%
TRANSPORTS	
Urban and suburban passenger road land transport	3.0%
Other passenger road transport services (taxi, tourism, school buses,	3.0%
etc.)	4.651
Local Electricity Production from Renewable Energy Sources	4.0%



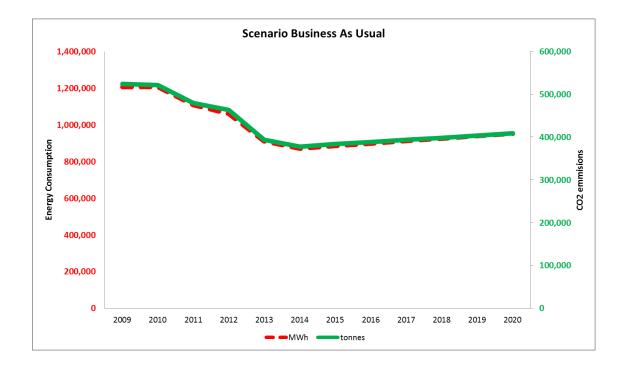


Annual rate of change

	Change
Increase of Energy efficiency (National Energy	
Efficiency Action Plan)	1%

	tonnes	MWh
	Total CO2	Total Energy
	emmisions	Consumption
2009	524,103	1,207,023
2010	521,577	1,206,624
2011	479,117	1,107,382
2012	463,365	1,061,285
2013	393,764	910,223
2014	377,839	871,650
2015	383,844	885,857
2016	388,661	898,836
2017	393,547	912,031
2018	398,504	925,445
2019	403,534	939,082
2020	408,637	952,948

% of change	-22.0%	-21.0%
70 Or Gridinge		







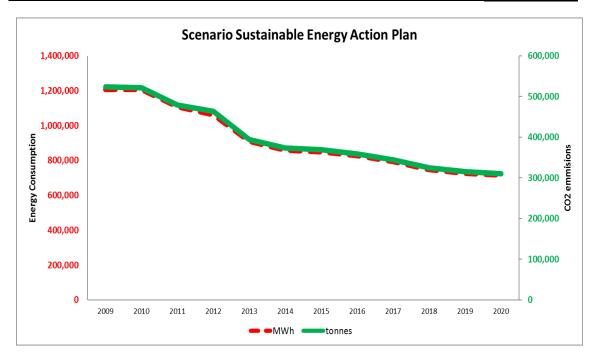
# 2. SUSTAINABLE ENERGY ACTION PLAN SCENARIO

Enter the Energy savings from the SEAP

Enter the Energy savings from the SEAP		
estimated for year 2020- Local Actions	236,345	MWh
Enter the CO2 savings from the SEAP estimated		
for year 2020 - Local Actions	98,436	tonnes

	MWh tonnes	
	Total Energy	Total CO2
	Consumption	emmisions
2009	1,207,023	524,103
2010	1,206,624	521,577
2011	1,107,382	479,117
2012	1,061,285	463,365
2013	910,223	393,764
2014	859,833	372,918
2015	850,405	369,079
2016	827,933	359,130
2017	793,858	344,329
2018	748,186	324,677
2019	726,372	314,942
2020	716,603	310,201

% of change	-40.6%	-40.8%











## **ANNEX III – MONITORING OF SEAP**

# **ACTUAL ENERGY RESULTS**

	MWh	tonnes
	ACTUAL DATA	ACTUAL DATA
	<b>Total Energy Consumption</b>	Total CO2 emmistions
2009	1,207,023	524,103
2010	1,206,624	521,577
2011	1,107,382	479,117
2012	1,061,285	463,365
2013	910,223	393,764
2014	871,650	377,839

