

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

SEAP Council approval:

02/01/2014

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

Prepared and submitted by :

Cyprus Energy Agency

Contact person:

Mr. Savvas Vlachos

Savvas.vlachos@cea.org.cy

Mr. Panayiotis Kastanias

Panayiotis.kastanias@cea.org.cy



OVERVIEW

Overall budget spent so far :

€ 18,622,135

Key Actions Status:

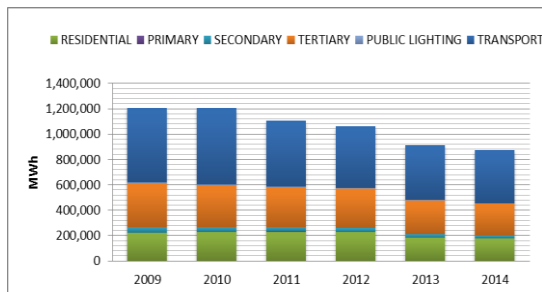
	Not started	In progress	Completed	Postponed	Canceled	Additional measures implemented	New measures foreseen or in progress
Number	10	24	6	15	1	1	2

CO₂ emissions:

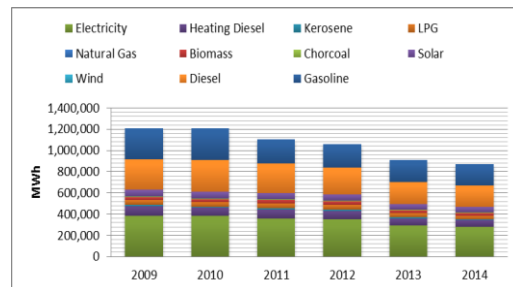
Baseline total emissions (2009)	Monitoring year total emissions estimation (2016)	Estimated CO ₂ Reduction compared to baseline	Balance of CO ₂ emissions objective (2020)
524,103 tonnes CO ₂	360,000 tonnes CO ₂	31%	351,790 tonnes CO ₂

SEAP measures effect so far:

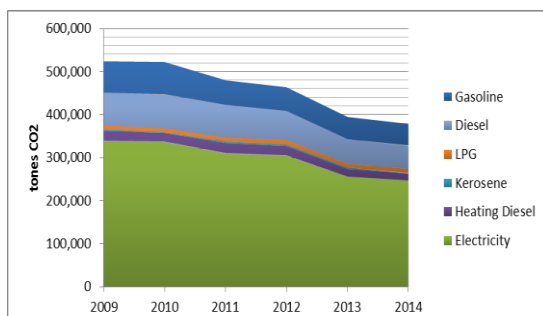
Energy Savings	Renewable energy sources production	CO ₂ savings
17,206 MWh/year	4,311 MWh/year	12,178 tonnes CO ₂ /year



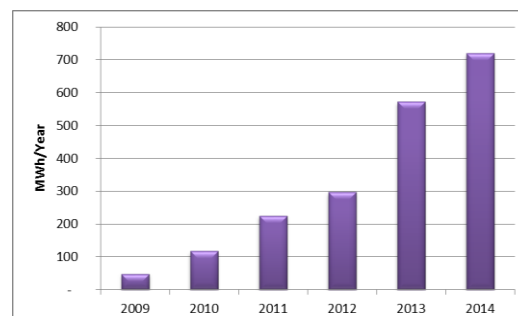
Graph 1. Final energy consumptions for the period 2009-2014 (by sector)



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



Graph 3. CO₂ 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 CO₂ reduction target (%) for 2020:

33%

2. Long term CO₂ 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. CO₂ objectives:

Absolute reduction

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
<input checked="" type="checkbox"/> Local authority	4	3	1
<input checked="" type="checkbox"/> Energy Agency	2	2	0.3
<input type="checkbox"/> External Consultant			
<input type="checkbox"/> Covenant territorial coordinator			
<input checked="" type="checkbox"/> Other (students, volunteers)	4	2	0.6

9. Involvement of stakeholders and citizens:

The following stakeholders are directly involved during the SEAP implementation:

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



10. Overall budget for your SEAP implementation:

		Budget spent so far (€)		Overall budget foreseen for SEAP implementation 2020 (€) – Submitted 2011		Overall budget foreseen for SEAP implementation 2020 (€) – Revised 2016	
		2014	2016	2014	2020	2014	2020
<input checked="" type="checkbox"/> Local authority	<input checked="" type="checkbox"/> Investment	44,580		5,842,900		5,842,900	
	<input checked="" type="checkbox"/> Non investment	3,026,350		994,900		62,024,318	
<input checked="" type="checkbox"/> Other actors	<input checked="" type="checkbox"/> Investment	23,605					
	<input checked="" type="checkbox"/> Non investment	15,527,600					
	Time period:	2014	2016	2014	2020	2014	2020

11. Financing sources used so far for SEAP implementation:

	Percentage (%)
<input checked="" type="checkbox"/> Local Authority's own resources	16.49
<input checked="" type="checkbox"/> National funds and programmes	8.77
<input checked="" type="checkbox"/> EU Funds and programmes	74.69
<input checked="" type="checkbox"/> 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 ₂ 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):

	Key actions	Area of intervention	Policy instrument	Origin of the action	Responsible body	Implementation timeframe		Status	Estimated implementation cost (€)	Implementation cost spent so far (€)	Estimates in 2020		
						Start	End				Energy savings MWh/year	Renewable energy production MWh/year	CO ₂ reductions tCO ₂ /year
MUNICIPAL BUILDINGS, EQUIPMENT/FACILITIES													
1.	MB.1 - Energy Efficiency Improvement of Municipal Buildings	A16	B112	C1	Lefkosia	2014	2018	D2	327,400	11,380 MU 3,540 CEA 20,065 EU	128		112
	<i>MB.1.1 – Energy Audits to Municipal swimming pool</i>	A16	B112	C1	Lefkosia	2014	2015	D3	15,000	3,390 CEA 19,215 EU	-	-	-



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



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



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
PUBLIC LIGHTING													
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	C1	Lefkosia	2016	2017	D3 2014	-	6,000	9		8



INDUSTRY													
16.	IN.1 – Establishment of working group between the Municipality and representatives of industry	A35	B39	C1	Lefkosia	2016	2017	D1 2016	-	-	-	-	-
TRANSPORT													
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)												
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	A44	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	A44	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
LOCAL ELECTRICITY PRODUCTION													
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													
OTHER														
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 2020 ¹ : <ul style="list-style-type: none"> • 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

¹ EPA (2012). WASTE Reduction Model (WARM). U.S. Environmental Protection Agency (2.67 metric tons CO2 equivalent /ton of waste recycled instead of landfilled)



	<p>organization “Cyprus Sustainable Tourism Initiative”</p> <ul style="list-style-type: none"> • voluntary cleaning 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 												
41.	OT.8 – Exploitation of green waste for compost and production of biomass products	A72	B74	C1	Lefkosia	2014	2020	D2	-	-	-	3,420	913
42.	OT.9 - Adoption of green procurement practices	A75	B74	C1	Lefkosia	2013	2020	D1 2016	-	-	-		-
43.	OT.10 - Green Public procurement. Environmental criteria in products and services	A75	B74	C1	Lefkosia	2013	2020	D1 2016	-	-	-		-



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 INTERVENTION	
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

POLICY INSTRUMENT	
B1	Buildings
B11	Awareness raising / training
B12	Energy management
B13	Energy certification / labelling
B14	Energy suppliers obligations
B15	Energy / carbon taxes
B16	Grants and subsidies
B17	Third party financing. PPP
B18	Public procurement
B19	Building standards
B110	Land use planning regulation
B111	Not applicable
B112	Other
B2	Public Lighting
B21	Energy management
B22	Energy suppliers obligations
B23	Third party financing. PPP
B24	Public procurement
B25	Not applicable
B26	other
B3	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 the actions	
C1	Local Authority
C2	Covenant Territorial Coordinator
C3	Other (national, regional,...)
C4	Not possible to say

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



ANNEX II – BUSINESS AS USUAL AND SEAP SCENARIOS

1. BUSINESS AS USUAL SCENARIO

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	
Manufacturing [C]	1.5%
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 Motorcycles [G]	2.0%
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, etc.)	3.0%
Local Electricity Production from Renewable Energy Sources	4.0%

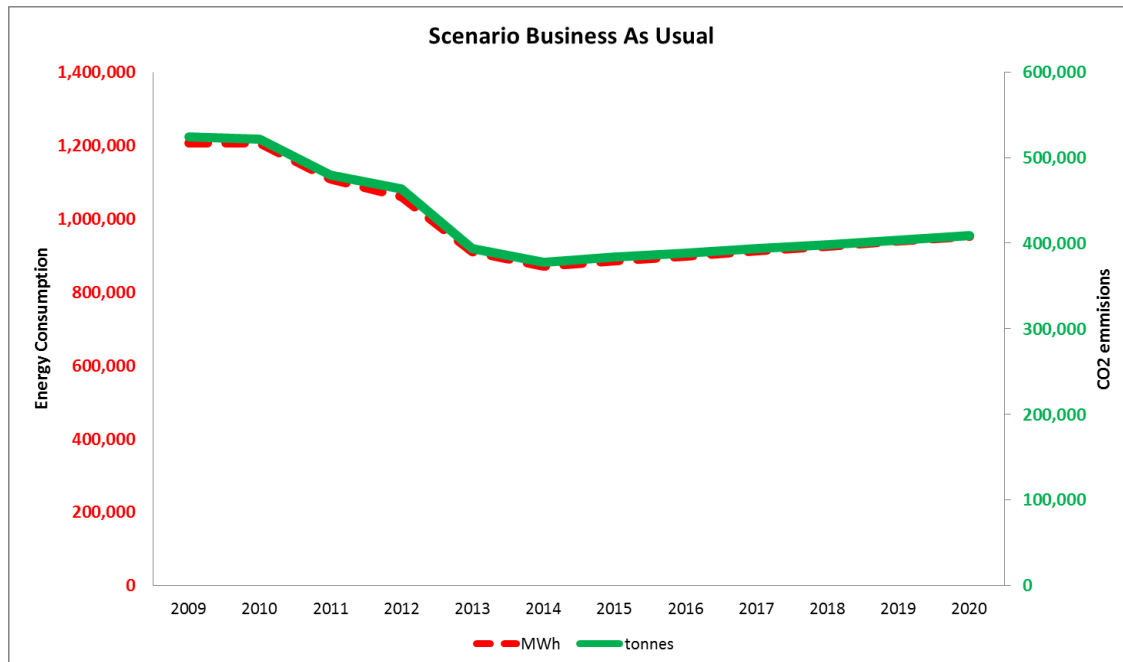


Annual rate of change

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

	tonnes Total CO2 emissions	MWh Total Energy 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%
-------------	--------	--------



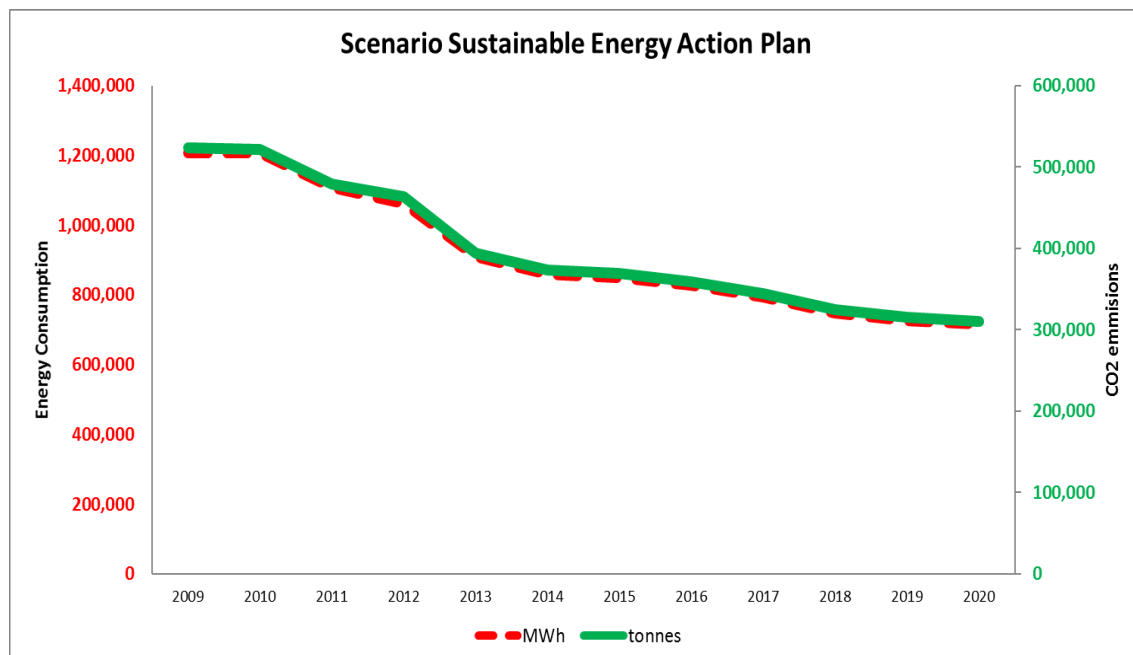
2. SUSTAINABLE ENERGY ACTION PLAN SCENARIO

Select SEAP Scenario: **Long term**

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 Consumption	Total CO2 emmissions
	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 Total Energy Consumption	ACTUAL DATA Total CO2 emmissions
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

