

Sustainable Energy Action Plan (SEAP) template

This is a <u>working version for Covenant signatories</u> to help in data collection. However the <u>on line SEAP template</u>
available in the Signatories Corner (password restricted area) at: http://members.eumayors.eu/
is the only REQUIRED template that all the signatories have to fill in at the same time when submitting the SEAP in their own (national) language.

OVERALL STRATEGY

1)	Overall CO2 emission reduction target	21 (%) by 2020	? Instructions
	Please tick the corresponding box:	Absolute reduction	
		☐ Per capita reduction	
2)	Long-term vision of your local authority (please include priority areas o	of action, main trends and challenges)	
_	Middlesbrough's Climate Change Community Action Plan aims to:	- dotton, main it ondo and ondiongoty	
	Aims		
	 To reduce Middlesbrough's contributions to climate change To increase Middlesbrough's preparedness for the impacts of climate change To improve people's awareness and understanding of climate change and its To encourage and support behavioural change to help tackle climate change. 		
	Objectives		
	 To contribute to the achievement of climate change National Indicator target To prepare, deliver, monitor, and report on annual work programmes on tack To engage all sectors of the Middlesbrough community in tackling climate ch To contribute to sub-regional, regional, and national initiatives to tackle climate To support potential opportunities for businesses and the wider Middlesbrough 	ling climate change ange Ite change	
I	Middlesbrough's long term aim is an 80% reduction of CO2 based on a 2005 ba	seline.	
3) (Organisational and financial aspects		
	Coordination and organisational structures created/ass	The Middlesbrough Climate Change Partnership was formed in 2003. It brings together organisations from across the town to act on climate change, projects from the have reduced emissions in Middlesbrough by 50,000 tonnes of CO2.	ne annual action plans are estimated to
	Staff capacity allo	One full time member of staff from Middlesbrough Council's Environmental Sustainability team is dedicated to climate change mitigation work. However, certain as undertaken by many members of staff throughout the council.	pects of climate change work are

Involvement of stakeholders and citizens The Local Strategic Partnership is involved in the promotion of climate change mitigation work. Organisations from Middlesbrough's Climate Change Partnership are responsible for many of the projects

Planned measures for monitoring and follow up The Environmental Sustainability team and Middlesbrough Climate Change Partnership will be the main bodies responsible for monitoring progress on carbon dioxide emission reductions. National

Overall estimated budget One Officer's salary from the Environmental Sustainability team. Occasional external funding from Government sources, for example, £400,000 from the Low Carbon Communities Fund from the

Indicators 185 (CO2 reduction from local authority operations) and 186 (per capita emissions in the LA area) will provide an annual update on progress in reducing emissions.

Middlesbrough Environment City is a significant partner in the communication and education of climate change to local residents.

Go to the second part of the SEAP template -> dedicated to your Baseline Emission Inventory!

that focus on CO2 reductions.

Department of Energy and Climate Change.

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Foreseen financing sources for the investments within your action plan Potential funding from central council budget. Funding from central Government. Individual organisations financing action through schemes such as the Carbon Reduction Commitment.

More information: www.eumayors.eu.



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BASELINE EMISSION INVENTORY

	Inventory year For Covenant signatories who calculate their CO2 emissions per capita, please	2005 precise here the number of inhabitants during the inventory year:	? Instructions
2)	Emission factors		
	Please tick the corresponding box:	✓ Standard emission factors in line with the IPCC principles	
		☐ LCA (Life Cycle Assessment) factors	
	Emission reporting unit		
	Please tick the corresponding box:	☑ CO2 emissions	
		□ CO2 equivalent emissions	
	Key results of the Baseline Emission Inventory Green cells are compulsory fields	Grey fields are non editable	
	A. Final energy consumption		

	FINAL ENERGY CONSUMPTION [MWh]															
						Fossil f	uels					Re	newable ene	rgies		
Category	Electricity	Heat/cold	Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES:																
Municipal buildings, equipment/facilities	23637189		63745075		815251											88197515
Tertiary (non municipal) buildings, equipment/facilities																0
Residential buildings	224264		997135							18379						1239778
Municipal public lighting	10842313															10842313.17
Industries (excluding industries involved in the EU Emission trading scheme - ETS)	542792		411081							141600						1095473
Subtotal buildings, equipments/facilities and industries	35246558	O	65153291	0	815251	0	0	0	0	159979	0	0	0	0		101375079.2
TRANSPORT:																
Municipal fleet				18640		716603	81136			91797						908176
Public transport																0
Private and commercial transport										1230000						1230000
Subtotal transport				18640	0	716603	81136	0	0	1321797						2138176
Total	70493116	0	130306582	37280	1630502	1433206	162272	0	0	2963552	0	0	0	0	0	4276352

Municipal purchases of certified green electricity (if any) [MWh]:	
CO2 emission factor for certified green electricity purchases (for	
LCA approach):	

B. CO2 or CO2 equivalent emissions

Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

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I			CO2 emissions [t]/ CO2 equivalent emissions [t]															
					Fossil fuels								Renewable energies					
	Category	Electricity	Heat/cold	Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal	Total	
	BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES:																	

Municipal buildings, equipment/facilities	12528	1	793		212											24533
Tertiary (non municipal) buildings, equipement/facilities																0
Residential buildings	118860	18	470						5330							308660
Municipal public lighting	5746															5746
Industries (excluding industries involved in the EU Emission trading																
scheme - ETS)	287680	7	050						35400							399130
Subtotal buildings, equipments/facilities and industries	424814	0 27	2313	0	212	0	0	0	0 40730	0	0	0		0	0	738069
TRANSPORT:																
Municipal fleet				28		1885	187		245							
Public transport																
Private and commercial transport									329640							329640
Subtotal transport	0	0	0	28	0	1885	187	0	0 329885	0	0	0		0	0	329640
OTHER:																
Waste management			·					,	•	•						
Waste water management																
Please specify here your other emissions																1
Total	406540	0 2605	0 0		0	0	0	0 0	370370	0	0	0	0		0	1037430
												•				
Corresponding CO2-emission factors in [t/MWh]																1

Corresponding CO2-emission factors in [t/MWh] CO2 emission factor for electricity not produced locally [t/MWh]

C. Local electricity production and corresponding CO2 emissions

Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

Locally generated electricity	Locally generated	Energy carrier input [MWh]							CO2 / CO2- eq	Corresponding CO2- emission factors for				
(excluding ETS plants , and all plants/units > 20 MW)	electricity		Fossil fuels				Steam	Waste	Plant oil	Other Ot	Other	other	emissions	electricity production in
	[MWh]	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Steam	waste	Flant on	biomass	renewable	Other	[t]	[t/MWh]
Wind power														
Hydroelectric power														
Photovoltaic														
Combined Heat and Power														
Other														
Please specify:														
Total		0	0	0	0	0	0	0	0	0	0	0	0	

D. Local heat/cold production (district heating/cooling, CHPs...) and corresponding CO2 emissions

Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

Locally generated heat/cold	Locally generated		Energy carrier input [MWh] Co										Corresponding CO2- emission factors for	
, ,	heat/cold						Waste	Plant oil	Other	Other	other	[t]	neat/cold production in	
	[MWh]	Natural gas	Liquid gas	Heating oil	Lignite	Coal			biomass	renewable			[t/MWh]	
Combined Heat and Power														
District Heating plant(s)														
Other														
Please specify:														
Total	0	0	0	0	0	0	0	0	0	0	0	0		

4) Other CO2 emission inventories

If other inventory(ies) have been carried out, please click here->

Otherwise go to the <u>last part of the SEAP template -></u> dedicated to your Sustainable Energy Action Plan

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Municipal public lighting

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SUSTAINABLE ENERGY ACTION PLAN

Title of your Sustainable Energy Action Plan Middlesbrough's Climate Change Community Action Plan]				?	<u>Instructions</u>				
Date	of formal approval Authority appr	oving the plan Middlesbro	ugh Council]]						
Key elements of your Sustainable Energy Action Plan										
Green cells are compulsory fields	Grey fields are non editable		1							
SECTORS & fields of action	KEY actions/measures per field of action	Responsible department person or company (in case of involvement of 3rd parties)	Implementation [start & end time]	Estimated costs per action/measure	Expected energy saving <u>per</u> <u>measure</u> [MWh/a]	Expected renewable energy production per measure [MWh/a]	Expected CO2 reduction per measure [t/a]	Energy saving target <u>per sector</u> [MWh] in 2020	renewable energy production target per sector [MWh]	CO2 reductio target <u>per sector</u> [t in 2020
BUILDINGS, EQUIPMENT / FACILITIES & INDUSTRIES:									in 2020	21760
Municipal buildings, equipment/facilities	Middlesbrough Council has a commitment to reduce emissions from buildings by at least 3% in 2010. This is included within the Industry and enterprise saving below. Middlesbrough Council is committed to reducing council CO2 emissions by 30% by 2020 based on a 2005 baseline.									
	Middlesbrough council will continue with emission reductions past 2020.	1: 2:	1: 2010-2020 	1: Building energy efficiency measures included in 10 year £10 million maintenance budget.	1: 2: 	1: 2: 	1: 2: 			
Tertiary (non municipal) buildings, equipment/facilities										
Residential buildings	 Between 2005-2010, organisation across Middlesbrough installed cavity wall and loft insulation in over 1,600 homes From 2010 to 2020, Middlesbrough will aim to insulate 50% of remaining unfilled cavity walls (9,250) From 2010 to 2020, Middlesbrough should aim to commit to insulating 50% of the remaining uninsulated lofts (15,350). From 2010 to 2020, Middlesbrough should aim to insulate 20% of all remaining solid walled properties (4,973), particularly in wards susceptible to fuel poverty. From 2010 to 2020, Middlesbrough should aim to commit to fitting double glazing to 30% of remaining homes.(3,060) Increase the uptake of micro renewables by households As part of a wider, national shift to the installation of more efficient boilers, rising fuel prices and changes in behaviour, a 10% saving in domestic gas use is expected. Due to the EU's product Policy, the rising cost of fuel, and behaviour change it is expected that a 10% reduction in electricity use will be achieved. As part of Middlesbrough's Low Carbon Communities project, up to 600 homes will receive an energy monitor. This should give an indication as to potential future energy savings. The UK Government is committed to sourcing 30% of electricity from renewable energy sources by 2020. A 15% saving has been assumed for the SEAP. 	Middlesbrough Council, Fabrick Housing group, WarmFront, Tees Valley Energy Savers, Go Warm 2. Middlesbrough Council, Fabrick Housing group, WarmFront, Go Warm, Government Middlesbrough Council, Fabrick Housing group, WarmFront, Go Warm, Government Middlesbrough Council, Fabrick Housing group, WarmFront, Go Warm, Government Middlesbrough Council, Fabrick Housing group, WarmFront, Go Warm, Government Middlesbrough Council, Fabrick Housing group, Government Middlesbrough Council, Fabrick Housing group, Government Government	1. 2005-2010 2. 2010-2020 3. 2010-2020 4. 2010-2020 5. 2010-2020 7. 2010-2020 8. 2010-2020	1. 0 2. 4865280 3. 2736072 4. 55950000 5. 420000 6. 12000000 7. 0 8. 0 9. 0	1. 0 2. 44577 3. 43029 4. 179308 5. 16860 6. 10896 7. 104092 8. 55942 9. 0		1. 1335 2. 5669 3. 5472 4. 12160 5. 2089 6. 0 7. 21180 8. 28531 9. 17941			

	1. The Carbon Reduction Commitment energy efficiency scheme affects all organizations with an energy use of at least 6,000MWh. Combined with changes in behaviour and increasing energy efficiency a 20% saving in gas is expected. 2. The Carbon Reduction Commitment should also see a reduction in commercia electricity use. Along with the introduction of the EU's Product Policy and behaviour change, a 10% reduction in electricity use is expected. 3. Middlesbrough Green Business Project. This provides support and guidance to SMEs across Middlesbrough in reducing energy and resource use. 4. The UK Government expects 30% of the UK's electricity to be generated by renewable sources by 2020. Again, we have used a more conservative 15% reduction in the carbon intensity of electricity. CO2 saved	Industry and Commercial organisations, Middlesbrough Council, Government Industry and Commercial organisations, Middlesbrough Council, Government Middlesbrough Council, Tees Valley Green Business network Government	1. 2010-2020 2. 2010-2020 3. 2010-2020 4. 2010-2020		1. 85828 2. 23113		1. 79800 2. Included in above 3. 0 4. 43423		
Industries (excluding industries involved in the EU Emission trading scheme - ETS) & Small and Medium Sized Enterprises (SMEs) Other - please specify:									
TRANSPORT:									48700
Municipal fleet		1: 2:	1: 2:	1: 2:	1: 2:	1: 2: 	1: 2:		
Public transport									
Private and commercial transport	1. Based on the results of a campaign to reduce personal car use in a neighbouring authority, a 4% reduction in car use is assumed. 2. Based on improvements in the fuel efficiency of cars, there is an expectation that emissions from private and commercial vehicles will reduce by 13% 3. A switch to 10% of road fuels from biofuels is based on EU Directive 2009/28/EC, the promotion of the use of renewable sources 4. Based on a One North East study into electric vehicle use within the region in 2020, a mid range scenario suggests the percentage of fuel displaced by electric vehicles would be in the region of 3%		1. 2010-2020 2. 2010-2020 3. 2010-2020 4. 2010-2020		1. 0 2. 400000		1. 9963 2. 32300 3. 1787 4. 4650		
Other - please specify:									
LOCAL ELECTRICITY PRODUCTION:									2.12
Hydroelectric power	Action 1: Action 2: 	1: 2:	1: 2:	1: 2:	1: 2:	1: 2: 	1: 2:		
Wind power Photovoltaic	2. From 2010, Erimus Housing intends to install solar PV on 115 homes.	Erimus Housing	1. 2005-2010 2. 2010-2020	602,000	2.5kWp per home (estimated)	2125 kWh	2. 124		
Combined Heat and Power									
Other - please specify:									
LOCAL DISTRICT HEATING / COOLING, CHPs:									23000
Combined Heat and Power	Action 1: Action 2: 	1: 2: 	1: 2:	1: 2:	1: 2:	1: 2:	1: 2:		
District heating plant	An initial study of district heating potential in Middlesbrough has suggested that 6MWh of heat could be supplied to buildings in the Middlehaven area and the town centre. A separate study has concluded that the combined domestic and industrial heating requirement is 62 MWh. For this SEAP scenario, it has been assumed that 30% of the community heating potential (19MWh) will be met by district heating in 2020.	Regional collaboration - Public and private sector	2010 -2010	estimated cost for a 6MWh systen is between £9 to 12 million.	n	19	9 23,000		
Other - please specify:									
LAND LICE DI ANNUNC								1	
LAND USE PLANNING:	Middlesbrough Council will follow national planning guidelines. The Code for								
Strategic urban planning	Sustainable homes will require all new built homes from 2016 to be zero carbon	Government, Local Authority Planning department, private developers.	2016	N/A	1: 2: 	1: 2: 	1: 2: 		
Transport / mobility planning							1		
Standards for refurbishment and new development	1								

Other - please specify:								
PUBLIC PROCUREMENT OF PRODUCTS AND SERVICE	ES:							
Energy efficiency requirements/standards	Action 1: Action 2:	1: 2:	1: 2:	1: 2:	1: 2: 2:	1: 2:		
Renewable energy requirements/standards								
Other - please specify:								
WORKING WITH THE CITIZENS AND STAKEHOLDERS:	:							
Advisory services	Promotion of energy saving advice to businesses through the Green Business Network	1: 2:	1: 2:	1: 2:	1: 1: 2: 2:	1: 2:		
Financial support and grants	2. Promotion of energy saving advice to local residents							
Awareness raising and local networking	 Consultation with residents and businesses in Middlesbrough over the adoption of a One Planet Living approach to sustainability for the town 							
Training and education	4. All schools in Middlesbrough to follow the Sustainable School scheme by 2020							
Other - please specify:								
OTHER SECTOR(S) Please specify:	<u> </u>							
Other - Please specify:	Action 1: Action 2: 	1: 2: 	1: 2:	1: 2:	1: 1: 2: 2: 	1: 2: 		
					ΤΟΤΔΙ ·		280	9302 12

3) Web address

Direct link to the webpage dedicated to your SEAP (if any)

www.middlesbrough.gov.uk/climatechange

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