



**NORFOLK & SUFFOLK
CONSTABULARIES**

JOINT

ENVIRONMENTAL STRATEGY

Version 0.7 dated April 2014

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Record of Amendments

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1. INTRODUCTION

- 1.1 This Norfolk and Suffolk Constabularies Joint Environmental Strategy document details our approach to environmental management. It sets out our commitment to continuously review overall management performance in support of sustainable improvement in service delivery and minimising any adverse impact that we have on the environment.
- 1.2 On Norfolk Constabulary's entry into the Local Authority Carbon Management Programme (LACMP), in conjunction with the Carbon Trust, Norfolk Constabulary assessed the baseline of energy consumption and carbon emissions from 2009/10, and a target of a 30% reduction over the five year period from 2011/12 – 2015/16 was set. This 30% figure was subsequently adopted for Suffolk. Our intention remains to meet this undertaking through proper management of all our buildings and facilities. To achieve this, a Joint Norfolk & Suffolk Carbon Management Programme Board (CMPB) was set up. Meeting at regular intervals to discuss not only an energy efficiency projects register but also any aspect relating to carbon emissions, the CMPB considers all initiatives and gives direction, approving funding as necessary. Successful projects have included: boiler replacements, heating system upgrades, LED light replacements, wall and loft insulations, double glazing, ICT power savings, management of waste products, and more recently and in coming years photo-voltaic (PV) panel placements.
- 1.3. The impact since initiation over the 3 years 2010/11 to 2012/13 has seen changes in utilities consumption of:

Electricity

Norfolk OCC	(-5.6%)	Suffolk PHQ	+ 3.0%
Norfolk Other Premises	(-1.7%)	Suffolk Other Premises	(-18.0%)

Gas

Norfolk OCC	+17.1%	Suffolk PHQ	+1.4%
Norfolk Other Premises	(-11.3%)	Suffolk Other Premises	(-14.6%)

Water

Norfolk OCC	(-2.3%)	Suffolk PHQ	+ 3.1%
Norfolk Other Premises	(-24.2%)	Suffolk Other Premises	(-22.2%)

These changes vary between years, and depend partly on changes made or yet to be made to environmental efficiency, variations in numbers of staff, changes to numbers of buildings, changes to equipment (particularly ICT), and weather (hot or cold). More detailed analysis is contained in Annex A.

- 1.4 The importance of implementing carbon reduction initiatives is heightened by the possibility of the constabularies exceeding the threshold for the government's Carbon Reduction Commitment Energy Efficiency Scheme (CRC) . The CRC is a government initiative to reduce CO₂ emissions from organisations meeting certain qualification criteria, participation in which is mandatory. Once registered the constabularies will be required to report on energy use for the following 5 years and purchase allowances to cover CO₂ emissions; an incentive in itself to use our energy more efficiently. Norfolk in particular is very close to exceeding the threshold, with the cost of allowances amounting to over £100k under current policy.

- 1.5 In pursuing the aims set out in this strategy we will also be contributing to performance in other areas. For example, a reduction in energy consumption will help contribute to efficiency targets, and underlining it all is that better monitoring and greater efficiencies will equate to savings which can help bridge the constabularies' funding gaps and help sustain the frontline.

2. ENVIRONMENTAL STRATEGY VISION AND MISSION STATEMENT

2.1 Vision:

To minimise any adverse impact that the constabularies have on the environment, so far as is associated with their statutory duties and responsibilities.

2.2 Mission:

The constabularies are committed to minimising the impact of their operations on the environment and preventing pollution in an accountable manner by means of a programme of continual improvement, assessments and setting and meeting of targets. This will take into account balancing the needs of the environment with operational obligations and available resources.

In particular, we:

- are committed to meeting the requirements of all relevant legislation and best practice.
- undertaking sensitive estates management to enhance the natural environment.
- are committed to fuel and utility saving management by reducing usage of energy, fuel, water and raw materials through using more efficient approaches or products.
- are committed to exploring methods to reduce the level of harmful emissions by understanding which of our operations produce most carbon and then targeting these areas as a priority.
- are committed to the use of recycling methods, reducing the levels of waste generated.
- consider the environmental impact of our suppliers of goods and services within our commissioning and procurement decisions and will continue working with them to achieve improvements.
- are committed to raising staff awareness on environmental issues and actively engage with departments and teams across both counties, and externally, ensuring aims and future objectives are realised.
- manage green travel plans that aim to create healthier and more environmentally friendly travel (to and from work and for business).
- are, by means of this Environmental Strategy, better placed to monitor our daily business and ensure that the business impact we have on the environment within the community we serve is ecologically sound.

3. ENERGY MANAGEMENT

- 3.1 Since 1 April 2013 all energy has been purchased using the government procurement scheme framework, managed by Eastern Facilities Management (EFMS) Solutions. Energy consumption has been closely monitored for some years and Annex A gives all figures and consumption data including baseline sums for both constabularies.
- 3.2 Whilst operational obligations largely dictate the size and content of our police estate we will continue to seek the most economic use of energy commensurate with maintaining an efficient and acceptable working environment. In both near and long term there will be influencing factors on our ability to reduce consumption of electricity:
- The steady growth of information technology in daily use.
 - Raising awareness of the impact of police activities on the environment and encouraging participation in initiatives to reduce energy and resource usage (car sharing/cycling to work).
 - Our continued commitment to raising staff awareness (cultural change – switching off lights/computers).
 - Our continued effort in providing energy efficient properties, ensuring best environmental practices are adhered to during refurbishment and new build projects.
 - Our continued approach towards sharing premises with other external agencies.
 - Meeting short term legislative targets and government initiatives such as the requirement for Display Energy Certificates (DEC) in buildings over 500m².
 - Keeping accurate data and information updated.
- 3.3 Display Energy Certificates. Annex B is a typical DEC together with its Advisory Report (AR) which is produced by an accredited DEC assessor in line with government approved methodology and developed following physical visits. Each report contains recommendations for the improvement of energy performance of the building, giving short (<3 years), medium (between 3-7 years) and long payback (>7 years) periods. DEC legislation was introduced 1 October 2008 and originally applied to all public authority buildings over 1000m². However, legislation mentioned above has seen this threshold reduce to 500 m² from January 2013.
- 3.4 DECs include a Display Energy Rating and AR. The AR is intended to help the occupier identify factors that could improve the building energy management thus reducing energy use and CO₂ emissions. DECs come with a validity of one year and must be updated annually; the AR is valid for 7 years and currently it is not mandatory to comply with its recommendations.

- 3.5 DEC's must be publicly displayed. The penalty is £500 for failing to display a DEC at all times and / or £1000 for failing to have possession of a valid report.
- 3.6 The requirements for DEC's in constabulary premises are detailed below, including those mandated by the recently introduced legislation. Currently buildings are rated between A to G; with both counties rated on average as D. Selected work within the AR reports is included within the CMPB project register for consideration and funding as necessary.

DEC Requirement (*including Jan 13 revision)		
Attleborough* - C	Beccles - C	
Bethel St, Norwich - D	Bury St Edmunds - D	
Carmelite House N - C	Felixstowe - C	
Dereham - G	Halesworth - D	
Downham Mkt* - C	Haverhill - D	
Earlham* - E	Ipswich - D	
Gorleston* - D	Leiston - D	
Gt Yarmouth - C	Lowestoft - D	
Kings Lynn - C	Mildenhall* - D	
North Walsham - D	Newmarket - C	
Swaffham* - C	Stowmarket* - C	
Thetford - C	Sudbury - C	
	Woodbridge - D	
OCC Wymondham: Building 1 - G Building 2 - G Building 3 - G Building 4 - G Building 5 - D Building 7 - D Building 8* - C Building 9* - D 8-10 Penfold Drive* - C	PHQ (4 Blocks): F Block/Amenity/LEC - D Residential & Training - D Traffic & Procurement - D Workshops - D	PICs: Aylsham - E Bury St Edmunds - D Kings Lynn - D Martlesham* - D Gt Yarmouth - E Wymondham - D

- 3.7 Regarding the DEC and AR example at Annex (B) (Gorleston), no action is being taken on the recommendations as this building is due for major works or replacement in the current Estates Programme.

4. WATER MANAGEMENT

- 4.1 Our region is one of the driest in the country, receiving on average only 600mm of rain a year. Common sense therefore dictates the use of water wisely, a sentiment that is echoed throughout both constabularies. The reduction in the use of water also underpins our financial strategy in managing utility costs. As such we have an ongoing commitment towards minimising water consumption and its waste; baseline and current usage figures are at Annex A.
- 4.2 From 2013 and over the following 5 years selected premises are being surveyed and evaluated with the aim of installing further water saving technologies.

5. AIR MANAGEMENT

- 5.1 Vehicle Fuel: Both constabularies continue to pursue policies of running efficient diesel fuelled vehicles and have been gradually phasing out petrol vehicles to achieve better fuel efficiency, lower fuel consumption, and reducing the need to maintain bunkered stocks of petrol.
- 5.2 Asbestos: All buildings have been surveyed and the location of asbestos identified and recorded in a register held by the Estates Unit. Monitoring is undertaken by an external contractor every year.
- 5.3 Refrigerants in Air-Conditioning (AC) equipment: At OCC, all gases in AC are ozone friendly. In the remainder of the Norfolk and Suffolk county-wide estate the following sites contain R22 refrigerant.
- 2 Penfold Drive, Wymondham
 - Norwich City Police Station – Bethel Street
 - Thetford Police Station
 - PHQ – F Block & Forest Lodge
 - Wattisham Site

The Estates Unit is seeking cost estimates to replace the above systems prior to 1 Jan 15, which is the date when the recycled use of HCFC's is banned therefore making future repairs of R22 refrigerant systems illegal after this date.

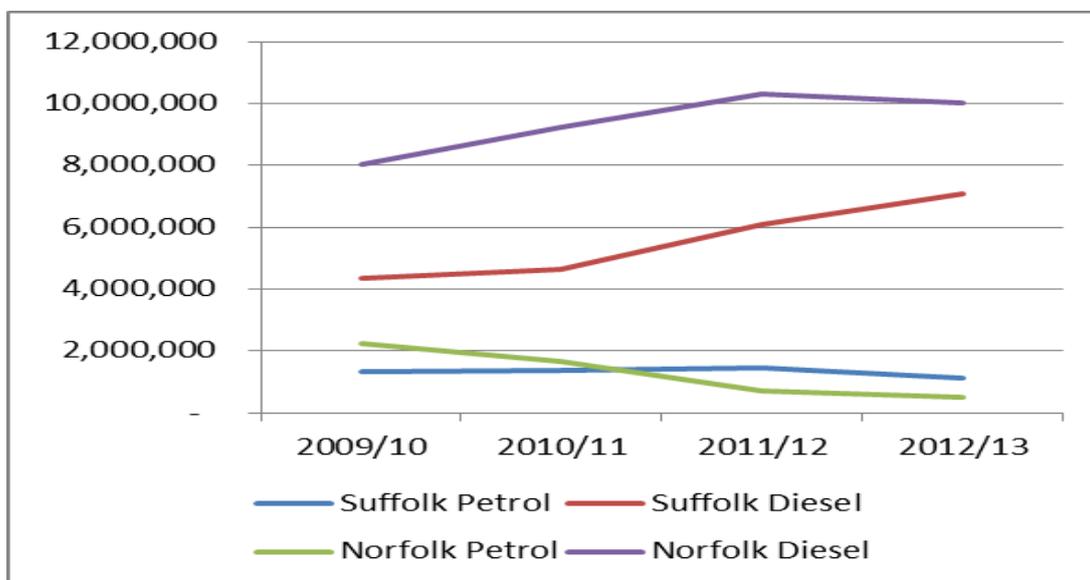
6. WASTE MANAGEMENT

- 6.1 With the introduction of accredited waste management contractors, all waste is now disposed of via recycling centres in a process that conforms to current legislation. Majority of premises waste is managed by Norland via the Facilities Management (FM) contract and is taken to a material recovery facility for segregation and recycling. Waste at OCC is managed by Initial as part of the PFI partnership. Both FM and IFM are committed to an efficient Waste Management System in accordance with their ISO accreditation. Waste in PICs managed by the FM contractor - Tascor
- 6.2 Confidential Waste: Confidential waste is disposed of under contract albeit under differing methods of between the two counties. The ultimate aim will be to align both processes without compromising security or confidentiality.
- 6.3 Hazardous/Clinical waste: Hazardous/clinical waste at the OCC is disposed of by IFM. For other Norfolk premises the same is disposed of by Norland. Suffolk make use of fleet drivers to collect their hazardous/clinical waste, which is then stored at one central location prior to incineration at Ipswich hospital.
- 6.4 Uniform and Clothing Waste: Redundant uniform and clothing is all disposed of through the Ministry of Defence Disposal Service Authority. Items that are still in good condition are dry-cleaned and re-issued. Items such as handcuffs, belts, batons etc are reconditioned and reused. Unsalvageable equipment is recycled through local scrap merchants.

- 6.5 Office Machinery, ICT and Metals Waste: There is a 'take-back' agreement between the constabularies and supplier of Fax machines. Computers are disposed of via SHP Solutions. There is very little redundant radio equipment from the constabularies. Unserviceable items are collected by a specialist company (ASCO) as they can contain hazardous substances which require specialist disposal. Metals from ICT at OCC are placed in a skip for recycling. Constabulary mobile phones, as well as personal ones, are collected and sent to SHP Solutions for recycling.
- 6.6 All used Konica toner and printer cartridges are collected by eReco. Plastic and cardboard packaging are recycled, bottles and cartridges are granulated and reprocessed into high quality polymer and the toner is removed and used in the production of asphalt concrete or to colour tarmac. Non Konica products are sold to a local company. Any cartridges that cannot be used by their remanufacturing customers are broken down into various raw material component parts and used again in other walks of life.
- 6.7 Firearms: Confiscated firearms are shredded with the waste recycled or taken to the appropriate site and disposed of. Cartridges are destroyed by the Army at Colchester.
- 6.8 Indoor Firearms Range: Rubber entrapments are serviced quarterly through ECC. Lead & brass is recycled as part of this servicing regime. Outgoing air-filters are changed by IFM, and returned to specialist supplier. Disposal of all other associated waste (oil rags and cleaning material) is through a specialist contractor.
- 6.9 Outdoor Firearms Range: The grounds and mobile unit are maintained under contract by specialists. The bullet catcher has been replaced with a rubber granular trap, and de-lead via a specialist contractor.
- 6.10 All cartridge cases & lead are collected and recycled through the OCC range servicing contractor and money generated is returned to the constabulary.

7. **TRANSPORT/MILEAGE**

- 7.1 Joint Transport Services Dept strives to continually reduce its carbon emissions and its environmental impact through examining opportunities to incorporate best practice in all forms across its fleet where cost effective to do so. The introduction of initiatives such as switching to diesel engines and, where possible, the use of recycled components have been followed through. Future projects will include investigating the use of electric powered vehicles.
- 7.2 Workshop waste is disposed of through an approved contract, encompassing the disposal of used tyres, waste oils, oil filters, brake pads, batteries, etc. Vehicles deemed a total loss or uneconomic repairs are disposed of, using NPIA Disposal Frameworks. Metal waste is collected in provided skips and general waste in provided bins.
- 7.3 A programme to replace a proportion of older vehicles and those with high mileage is in place each year. The programme to transfer to a diesel based fleet has been concluded. Total mileage against fuel type is shown in the following graph.



Casual Mileage Payments				
Expense	2009/10*	2010/11	2011/12	2012/13
Suffolk	£177,216	£194,850	£176,910	£148,605
Norfolk	£249,537	£226,394	£196,144	£216,234

*09/10 pre-collaboration

8. ESTATE MODERNISATION AND LONG TERM STRATEGY

8.1 The joint Estates Strategy sets out the vision and principles under which the Estate will be reviewed and delivered for the future:

“Norfolk & Suffolk Constabularies/PCCs require a fit-for-purpose estates portfolio which is responsive to current and future needs, that effectively supports service delivery and which is focused on improving public confidence and reducing costs”.

8.2 Norfolk Constabulary operates 61 front line properties throughout the county. Some 34 buildings are owned. The remainder are occupied on widely varying terms with a mixture of user rights, leases and licences.

8.3 Suffolk Constabulary operates 48 front line properties throughout the county. Some 29 buildings are owned. The remainder are occupied on varying terms with a mixture of user rights, leases and licences.

8.4 The use of the estate falls into the following main categories:

The Current Estate by Asset Type			
Premises Type	Norfolk	Suffolk	Total
County Command Police Stations & Other Sites	42	35	77
Protective Services Offices & Other	12	10	22
Criminal Justice	6	2	8
Corporate Property HQ, car parks, land held in advance and surplus assets	14	8	22
Communication Masts standalone sites	14	7	21
Police Houses	4	8	12
TOTAL PREMISES	92	70	162

- 8.5 The Norfolk estate totals circa 61,000 sqm and is planned to downsize by circa 11% over the period 2012 – 2016.
- 8.6 The Suffolk estate totals circa 55,600 sqm and is planned to downsize by circa 20% over the period 2012 - 2016.
- 8.7 Decisions about the estate must demonstrate environmental awareness in the development and management of property and associated utilities, in accordance with the Norfolk and Suffolk Environmental Strategy. Flexible working methods including more widespread use of office workstation sharing will also be pursued, to minimise our CO₂ footprint and ultimate cost of the estate.
- 8.8 The following external and internal environmental drivers have been identified in order to aid the future development of our estate:
- The need to capture and understand our energy use.
 - The undertaking of the Carbon Trust commitment
 - Increased environmental expectations of staff, partners and general public
 - The introduction of new technology to buildings to enhance environmental performance.
- 8.9 Both Norfolk and Suffolk are undertaking estate changes to aid the advancement of our Carbon Reduction Commitment and to seek to reduce building energy/resource consumption by the use of; PV panels, air source heat pumps, solar hot water, sedum moss roofs, sun pipes, LED lights, enhanced insulation, efficient gas boilers and controls, new heating pipe work, splitting heating systems and provision of smaller fit for purpose buildings.

9. CARBON MANAGEMENT PROJECTS

- 9.1 Carbon Management Projects are scrutinised by the Carbon Management Programme Board in accordance with its terms of reference (Annex C). Progress is updated and where necessary new initiatives are discussed for impact and possible funding.
- 9.2 Full details of Norfolk and Suffolk projects completed over the first 3 years of the Carbon Management Programme are contained in the Projects Register, available through the Estates and Facilities Department. A summary of these is as follows:

Initiatives	Stats
Carbon Reduction Projects Completed	85
Total Investment	£500K
Total Savings Per Annum	£94K
Average Payback Period	5.3 years
Kilowatt Hour Savings Per Annum	1,300,000
CO ₂ Savings Per Annum	422,000Kgs / 422 tons

10. PROGRESS TOWARDS ACHIEVEMENT OF REDUCTION TARGET

- 10.1 The target of a 30% reduction of carbon emissions by 31 March 2016 equates to a saving of 5,329 tons of CO₂ across both forces, of which we have achieved 422 tons as above together with a further 98 tons reduced as a result of building closures. This represents a reduction of 10% over the first 3 years.

10.2 Some 50 further projects are being progressed in Year 4.

NORFOLK AND SUFFOLK BASELINE AND CONSUMPTION DATA TO END 2012/13

Norfolk Constabulary - Electricity Consumption							
STATIONS	2009/10 BASELINE	2010/11	% Compared to Baseline	2011/12	% Compared to Baseline	2012/13	% Compared to Baseline
Total Electricity Consumed (kWh)	3,730,752	4,252,143	14.0%	3,771,551	1.1%	3,668,356	-1.7%
Total Electricity Emissions (tonnes CO ₂)	1,957	2,231	14.0%	1,979	1.1%	1,924	-1.7%
Total Electricity Consumed per Head (kWh)	1,618	1,800	11.3%	1,684	4.1%	1,971	21.8%
Total Electricity Consumed per m ² (kWh)	142	156	9.9%	136	-4.2%	137	-3.5%
OCC							
Total Electricity Consumed (kWh)	4,195,184	4,125,361	-1.7%	4,071,077	-3.0%	3,958,932	-5.6%
Total Electricity Emissions (tonnes CO ₂)	2,201	2,164	-1.7%	2,136	-3.0%	2,077	-5.6%
Total Electricity Consumed per Head (kWh)	5,564	5,303	-4.7%	5,816	4.5%	5,265	-5.4%
Total Electricity Consumed per m ² (kWh)	313	308	-1.7%	304	-3.0%	295	-5.6%
PICs (Norfolk)	The PICs have a shared service arrangement. Norfolk's element of consumption is calculated at 56.5% for Aylsham, Gt Yarmouth, Wymondham, BSE and Martlesham & 37.7% at Kings Lynn. Opening dates for the PICs, Aylsham - 28 Feb 2011, BSE - 8 July 2011, Gt Yarmouth - 11 Nov 2011, Kings Lynn - 6 May 2011, Martlesham - 10 June 2011 & Wymondham 8 April 2011.						
% Electricity Consumed (kWh)		38,998		1,842,308		2,117,065	
% Electricity Emissions (tonnes CO ₂)		20		966		1,111	
STATIONS / OCC / PICs COMBINED							
Total Electricity Consumed (kWh)	7,925,936	8,416,502	6.2%	9,684,936	22.2%	9,744,353	22.9%
Total Electricity Emissions (tonnes CO ₂)	4,158	4,415	6.2%	5,081	22.2%	5,112	22.9%

Data refer to sites where electricity invoices are processed by Facilities Dept. Data includes masts.

Headcount refers to PCC, PCSOs, Police Officers, Police Staff and is specific to those sites where electricity is consumed.

Suffolk Constabulary - Electricity Consumption

STATIONS	2009/10 BASELINE	2010/11	% Compared to Baseline	2011/12	% Compared to Baseline	2012/13	% Compared to Baseline
Total Electricity Consumed (kWh)	2,976,769	2,899,083	-2.6%	2,647,618	-11.1%	2,432,006	-18.3%
Total Electricity Emissions (tonnes CO2)	1,562	1,521	-2.6%	1,389	-11.1%	1,276	-18.3%
Total Electricity Consumed per Head (kWh)	1,961	1,905	-2.9%	1,718	-12.4%	1,855	-5.4%
Total Electricity Consumed per m2 (kWh)	123	121	-1.6%	107	-13.0%	100	-18.7%
PHQ							
Total Electricity Consumed (kWh)	2,231,040	2,320,691	4.0%	2,273,556	1.9%	2,304,164	3.3%
Total Electricity Emissions (tonnes CO2)	1,170	1,217	4.0%	1,193	1.9%	1,209	3.3%
Total Electricity Consumed per Head (kWh)	2,936	3,054	4.0%	2,786	-5.1%	2,636	-10.2%
Total Electricity Consumed per m2 (kWh)	166	172	3.6%	169	1.8%	171	3.0%
PICs (Suffolk)	The PICs have a shared service arrangement. Suffolk's element of consumption is calculated at 43.5% for Aylsham, Gt Yarmouth, Wymondham, BSE and Martlesham & 29% at Kings Lynn. Opening dates for the PICs, Aylsham - 28 Feb 2011, BSE - 8 July 2011, Gt Yarmouth - 11 Nov 2011, Kings Lynn - 6 May 2011, Martlesham - 10 June 2011 & Wymondham 8 April 2011						
% Electricity Consumed (kWh)		30,025		1,418,234		1,629,789	
% Electricity Emissions (tonnes CO2)		16		744		855	
STATIONS / PHQ / PICs COMBINED							
Total Electricity Consumed (kWh)	5,207,809	5,249,799	0.8%	6,339,408	21.7%	6,365,959	22.2%
Total Electricity Emissions (tonnes CO2)	2,732	2,754	0.8%	3,326	21.7%	3,340	22.2%

Data refer to sites where electricity invoices are processed by EFMS. Data does not include masts.

Headcount refers to PCC, PCSOs, Police Officers, Police Staff and is specific to those sites where electricity is consumed.

Norfolk Constabulary - Gas Consumption

STATIONS	2009/10 BASELINE	2010/11	% Compared to Baseline	2011/12	% Compared to Baseline	2012/13	% Compared to Baseline
Total Gas Consumed (kWh)	3,874,475	3,770,166	-2.7%	2,960,843	-23.6%	3,436,163	-11.3%
Total Gas Emissions (tonnes CO2)	711	692	-2.7%	544	-23.6%	631	-11.3%
Total Gas Consumed per Head (kWh)	2,118	2,135	0.8%	1,713	-19.1%	2,477	16.9%
Total Gas Consumed per m2 (kWh)	187	177	-5.3%	139	-25.7%	166	-11.2%
OCC							
Total Gas Consumed (kWh)	2,663,274	2,964,119	11.3%	2,404,261	-9.7%	3,118,484	17.1%
Total Gas Emissions (tonnes CO2)	489	544	11.3%	441	-9.7%	573	17.1%
Total Gas Consumed per Head (kWh)	3,532	3,810	7.9%	3,435	-2.8%	4,147	17.4%
Total Gas Consumed per m2 (kWh)	199	221	11.3%	179	-9.7%	233	17.1%
STATIONS / OCC COMBINED							
Total Gas Consumed (kWh)	6,537,749	6,734,285	3.0%	5,365,104	-17.9%	6,554,647	0.3%
Total Gas Emissions (tonnes CO2)	1,200	1,236	3.0%	985	-17.9%	1,203	0.3%

Data refers to sites where gas invoices are processed by Facilities Dept and where gas is consumed.

Headcount refers to PCC, PCSOs, Police Officers, Police Staff and is specific to those sites where gas is consumed.

Gas data as verified by EFMS against invoices and does not 100% reflect consumption. Inconsistent meter reads are being clarified by EFMS.

Severe winter 12/13

Suffolk Constabulary - Gas Consumption

STATIONS	2009/10 BASELINE	2010/11	% Compared to Baseline	2011/12	% Compared to Baseline	2012/13	% Compared to Baseline
Total Gas Consumed (kWh)	6,028,618	5,754,605	-4.5%	4,856,653	-19.4%	5,138,420	-14.8%
Total Gas Emissions (tonnes CO2)	1,107	1,057	-4.5%	892	-19.4%	943	-14.8%
Total Gas Consumed per Head (kWh)	4,213	4,090	-2.9%	3447	-18.2%	4,358	3.4%
Total Gas Consumed per m2 (kWh)	266	262	-1.5%	218	-18.0%	233	-12.4%
PHQ							
Total Gas Consumed (kWh)	2,718,865	2,648,110	-2.6%	2,202,410	-19.0%	2,756,675	1.4%
Total Gas Emissions (tonnes CO2)	499	486	-2.6%	404	-19.0%	506	1.4%
Total Gas Consumed per Head (kWh)	3,577	3,484	-2.6%	2699	-24.5%	3,154	-11.8%
Total Gas Consumed per m2 (kWh)	202	197	-2.5%	164	-18.8%	205	1.5%
STATIONS / PHQ COMBINED							
Total Gas Consumed (kWh)	8,747,483	8,402,715	-3.9%	7,059,063	-19.3%	7,895,095	-9.7%
Total Gas Emissions (tonnes CO2)	1,606	1,543	-3.9%	1,296	-19.3%	1,450	-9.7%

Data refer to sites where gas invoices are processed by EFMS.

Headcount refers to PCC, PCSOs, Police Officers, Police Staff and is specific to those sites where gas is consumed.

Severe winter 12/13

Norfolk Constabulary - Water Consumption

STATIONS	2009/10 BASELINE	2010/11	% Compared to Baseline	2011/12	% Compared to Baseline	2012/13	% Compared to Baseline
Total Water Consumed (M ³)	19,629	19,442	-1.0%	15,743	-19.8%	14,880	-24.2%
Total Water Emissions (tonnes CO ₂)	8	8	-1.0%	6	-19.8%	6	-24.2%
Total Water Consumed per Head (M ³)	10.22	9.17	-10.3%	7.82	-23.5%	9.27	-9.3%
Total Water Consumed per m2 (M ³)	0.94	0.80	-14.9%	0.64	-31.9%	0.61	-35.1%
OCC							
Total Water Consumed (M ³)	7,727	7,295	-5.6%	7,494	-3.0%	7,548	-2.3%
Total Water Emissions (tonnes CO ₂)	3	3	-5.6%	3	-3.0%	3	-2.3%
Total Water Consumed per Head (M ³)	10.25	9.38	-8.5%	10.71	4.5%	10.04	-2.1%
Total Water Consumed per m2 (M ³)	0.58	0.54	-5.6%	0.56	-3.0%	0.56	-2.9%
PICs (Norfolk)		The PICs have a shared service arrangement. Suffolk's element of consumption is calculated at 43.5% for Aylsham, Gt Yarmouth, Wymondham, BSE and Martlesham & 29% at Kings Lynn. Opening dates for the PICs, Aylsham - 28 Feb 2011, BSE - 8 July 2011, Gt Yarmouth - 11 Nov 2011, Kings Lynn - 6 May 2011, Martlesham - 10 June 2011 & Wymondham 8 April 2011					
Total Water Consumed (M ³)				2,956		3,489	
Total Emissions (tonnes)				1.19		1.41	
STATIONS / OCC / PICs COMBINED							
Total Water Consumed (M ³)	27,356	26,737	-2.3%	26,193	-4.3%	25,917	-5.3%
Total Water Emissions (tonnes CO ₂)	11	11	-2.3%	11	-4.3%	10	-5.3%

Data refer to sites where water invoices are processed by Facilities Dept.

Headcount refers to PCC, PCSOs, Police Officers and Police Staff.

Water consumption is based on averages due to irregularity of billing and estimated billing.

Suffolk Constabulary - Water Consumption							
STATIONS	2009/10 BASELINE	2010/11	% Compared to Baseline	2011/12	% Compared to Baseline	2012/13	% Compared to Baseline
Total Water Consumed (kWh)	11,309	11,582	2.4%	11,297	-0.1%	8,787	-22.3%
Total Water Emissions (tonnes CO2)	4.57	4.68	2.4%	4.56	-0.1%	3.55	-22.3%
Total Water Consumed per Head (kWh)	7.50	7.74	3.2%	7.42	-1.1%	6.81	-9.2%
Total Water Consumed per m2 (kWh)	0.47	0.49	4.3%	0.47	0.0%	0.37	-21.3%
PHQ							
Total Water Consumed (kWh)	7,495	9,618	28.3%	7,629	1.8%	7,711	2.9%
Total Water Emissions (tonnes CO2)	3	4	28.3%	3	1.8%	3	2.9%
Total Water Consumed per Head (kWh)	9.86	12.66	28.4%	9.35	-5.2%	8.82	-10.5%
Total Water Consumed per m2 (kWh)	0.56	0.71	26.8%	0.57	1.8%	0.57	1.8%
PICs (Suffolk)	The PICs have a shared service arrangement. Suffolk's element of consumption is calculated at 43.5% for Aylsham, Gt Yarmouth, Wymondham, BSE and Martlesham & 29% at Kings Lynn. Opening dates for the PICs, Aylsham - 28 Feb 2011, BSE - 8 July 2011, Gt Yarmouth - 11 Nov 2011, Kings Lynn - 6 May 2011, Martlesham - 10 June 2011 & Wymondham 8 April 2011						
Total Water Consumed (kWh)				2,037		2,686	
Total Emissions (tonnes)				0.82		1.09	
STATIONS / PHQ / PICs COMBINED							
Total Water Consumed (kWh)	18804	21,200	12.7%	20,963	11.5%	19,184	2.0%
Total Water Emissions (tonnes CO2)	8	9	12.7%	8	11.5%	8	2.0%

Data refer to sites where water invoices are processed by EFMS.
Headcount refers to PCC, PCSOs, Police Officers and Police Staff.

TYPICAL DISPLAY ENERGY CERTIFICATE**Display Energy Certificate**

How efficiently is this building being used?



Gorleston Police Station
Norfolk Constabulary
Police Station, Suffolk Road
Gorleston
GREAT YARMOUTH
NR31 7AW

Certificate Reference Number:
0530-0117-4459-1021-5006

This certificate indicates how much energy is being used to operate this building. The operational rating is based on meter readings of all the energy actually used in the building. It is compared to a benchmark that represents performance indicative of all buildings of this type. There is more advice on how to interpret this information on the Government's website www.communities.gov.uk/cpbd.

Energy Performance Operational Rating

This tells you how efficiently energy has been used in the building. The numbers do not represent actual units of energy consumed; they represent comparative energy efficiency. 100 would be typical for this kind of building.

More energy efficient

A 0-25**B** 26-50**C** 51-75**D** 76-100 **82**

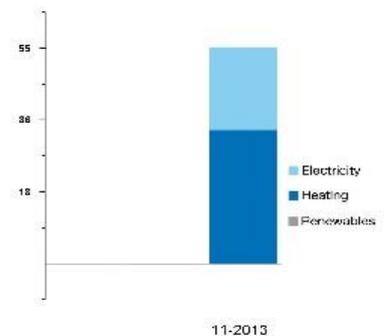
..... 100 would be typical

E 101-125**F** 126-150**G** Over 150

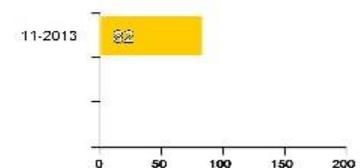
Less energy efficient

Total CO₂ Emissions

This tells you how much carbon dioxide the building emits. It shows tonnes per year of CO₂.

**Previous Operational Ratings**

This tells you how efficiently energy has been used in this building over the last three accounting periods

**Technical information**

This tells you technical information about how energy is used in this building. Consumption data based on estimates

Main heating fuel: Natural Gas
Building Environment: Heating and Natural Ventilation
Total useful floor area (m²): 534.95
Asset Rating: Not available.

	Heating	Electricity
Annual Energy Use (kWh/m²/year)	326	72
Typical Energy Use (kWh/m²/year)	446	70
Energy from renewables	0.0%	0.0%

Administrative information

This is a Display Energy Certificate as defined in SI 2007/991 as amended.

Assessment Software: SystemsLink ORToolkit v3.6
Property Reference: 315451040000
Assessor Name: David Mordow
Assessor Number: STRO012515
Accreditation Scheme: Stroma Certification Ltd
Employer/Trading Name: Utility Partnership Ltd
Employer/Trading Address: Copse Walk, Cardiff Gate Business Park, CF23 8XH
Issue Date: 12-11-2013
Nominated Date: 12-11-2013
Valid Until: 11-11-2014
Related Party Disclosure: Not related to the occupier

Recommendations for improving the energy efficiency of the building are contained in the accompanying Advisory Report.

Advisory Report

Report Reference Number: 0210-3945-0257-4500-1010

Building Occupier	Address
Gorleston Police Station	Norfolk Constabulary Police Station, Suffield Road Gorleston GREATYARMOUTH NR31 7AW

Building Type(s): Emergency Services

ADMINISTRATIVE INFORMATION	
Issue Date:	2013-11-12
Valid Until:	2023-11-11
Total Useful Floor Area (m ²)	534.96
Assessment Software	SystemsLink, ORToolkit, v3.6
Property Reference	315451040000
Type of Inspection	Physical

ENERGY ASSESSOR DETAILS	
Assessor Name:	David Mundow
Employer/Trading Name:	Utility Partnership Ltd
Employer/Trading Address:	Copse Walk, Cardiff Gate Business Park, CF23 8XH
Assessor Number	STR0012515
Accreditation Scheme:	Stroma Certification Ltd

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1. Background

Statutory Instrument 2007 No. 991, *The Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007*, as amended, transposes the requirements of Articles 7.2 and 7.3 of the Energy Performance of Buildings Directive 2002/91/EC.

This report is an Advisory Report as required under regulations 16(2)(a) and 19 of the Statutory Instrument SI 2007/991.

This section provides general information regarding the building:

Total Useful Floor Area (m2):	534.96
Building Description:	Police Station
Building Environment:	Heating and Natural Ventilation
On-site renewable energy sources:	None
Separable energy uses discounted:	None

Fuel Types:	Quantity Used (kWh)
Natural Gas	175635
Electricity	38427
None	0

2. Introduction

This Advisory Report was produced in line with the Government's approved methodology and is based on assessment software SystemsLink, ORToolkit, v3.6. This advisory report was developed based on a physical visit of the building.

In accordance with Government's current guidance, the Energy Assessor did undertake a walk around survey of the building on inspection date prior to producing this Advisory Report.

3. Recommendations

The following sections list recommendations selected by the energy assessor for the improvement of the energy performance of the building. The recommendations are listed under four headings: short payback, medium payback, long payback, and other measures.

a) *Recommendations with a short payback*

This section lists recommendations with a payback of less than 3 years:

Recommendation	Potential
Consider with experts implementation of an energy efficient equipment procurement regime that will upgrade existing equipment and renew in a planned cost-effective	HIGH
Consider upgrading major time controls to include optimum start/ stop.	HIGH
Consider introducing or improving loft insulation.	HIGH
Consider how building fabric air tightness could be improved, for example sealing, draught stripping and closing off unused ventilation openings, chimneys.	HIGH
Consider fitting 24 hour/7 day time controls onto electric HWS cylinders.	HIGH
Engage experts to review the HVAC control systems settings and propose alterations and/or upgrades and adjust to suit current occupancy patterns.	HIGH
Consider installing automated controls and monitoring systems to electrical equipment and portable appliances to minimise electricity waste.	HIGH
Enable power save settings and power down management on computers and associated equipment.	HIGH
Consider installing weather compensator controls on heating and cooling systems.	HIGH
Review staffing arrangements and set up formal systems for delegating authority for Building Energy Management System alterations and/or temporary overrides.	HIGH
Consider introducing a system of regular checks of Heating, Ventilation and Air Conditioning (HVAC) time and temperature settings and provisions to prevent unauthorised	HIGH

b) Recommendations with a medium payback

This section lists recommendations with a payback of between 3 and 7 years

No recommendations were specified by the energy assessor.

c) Recommendations with a long payback

This section lists recommendations with a payback of more than 7 years:

Recommendation	Potential
Consider installing building mounted photovoltaic electricity generating panels.	HIGH
Consider introducing or improving insulation of flat roofs.	HIGH
Consider installing building mounted solar water heating.	HIGH
Engage experts to review the HWS systems provisions and propose remedial works, upgrades and/or alternative provisions to improve effectiveness and efficiency and plan	HIGH
Engage experts to review the building lighting strategies and propose alterations and/or upgrades to daylighting provisions, luminaires and their control systems and an	HIGH

d) Other Recommendations

Recommendation	Potential
Replace existing heating controls to provide optimum start/stop and weather compensated control of heating. Existing Satchwell Climatronic Controller appears to be defunct and there is no obvious control of heating.	HIGH
	LOW

This section lists other recommendations selected by the energy assessor, based on an understanding of the building, and /or based on a valid existing energy report.

4. Next Steps

a) **Your Advisory Report**

As the building occupier, regulation 16(2)(a) of SI 2007/991 requires that you have in your '*possession or control at all times a valid advisory report*'. Regulation 16(4) specifies that '*an advisory report is valid for a period of seven years beginning with the date it is issued*'.

You must be able to produce a copy of this Advisory Report within seven days if requested by an Enforcement Authority under regulation 39 of SI 2007/991.

This Advisory Report has also been lodged on the Governments central register. Access to the report, to the data used to compile the report, and to previous similar documents relating to the same building can be obtained by request through the Non Dwellings Register (www.epcregister.com) using the report reference number of this document.

You must commission a new Advisory Report in seven years from the date this Advisory Report is issued. However, a new Advisory Report may be commissioned earlier.

b) **Implementing recommendations**

The recommendations provided within this Advisory Report have been selected by the accredited assessor from a central list of recommendations, based on his / her knowledge of the building fabric, building services, the operation of plant and equipment within the curtilage of the building, and the general management of the building.

The accredited assessor may have inserted additional measures in section 3d (Other Recommendations). The recommendations are provided as an indication of opportunities that appear to exist to improve the buildings energy efficiency.

c) **Legal disclaimer**

The advice provided in this Advisory Report is intended to be for information only. Recipients of this Advisory Report are advised to seek further detailed professional advice before reaching any decision on how to improve the energy performance of the building.

d) **Complaints**

Details of the assessor and the relevant accreditation scheme are on this report and the display energy certificate. You can get contact details of the accreditation scheme from our website at www.communities.gov.uklepbd, together with details of their procedures for confirming authenticity of a report and for making a complaint.

5. Glossary

a) *Payback*

The payback periods are based on data provided by Good Practice Guides and carbon Trust energy survey reports and are average figures calculated using a simple payback method. It is assumed that the source data is correct and accurate using up to date information.

The figures have been calculated as an average across a range of buildings and may differ from the actual payback period for the building being assessed. Therefore, it is recommended that each suggested measure be further investigated before reaching any decision on how to improve the energy efficiency of the building.

b) *Carbon impact*

The High / Medium / Low carbon impact indicators against each recommendation are provided to distinguish, between the suggested recommendations, those that would most effectively reduce carbon emissions from the building. The carbon impact indicators are determined by the assessor based on his / her knowledge of the building. In most instances, the carbon impact has not been calculated accurately.

c) *Valid report*

A valid existing report is defined at the Energy Assessor's discretion

ANNEX C

TERMS OF REFERENCE – JOINT NORFOLK & SUFFOLK CARBON MANAGEMENT PROGRAMME BOARD (CMPB)

1. The aim of the CMPB is to reduce carbon emissions for Norfolk and Suffolk Constabularies by way of a programme of initiatives to reduce consumption of utilities and fuel and where possible to reduce related ongoing revenue expenditure.
2. The CMPB shall convene once every 2 months and its membership will be decided by the Chairman (currently agreed as):
 - ACO Norfolk (Chairman)
 - ACO Suffolk
 - Head of Estates & Facilities
 - Head of Transport Services
 - Head of ICT
 - Facilities Manager
 - PFI Manager
 - PFI Facilities Manager
 - Estates Manager
 - Senior Facilities Officer
 - Facilities Assistant (Environmental)
3. The CMPB will:
 - Encompass the objectives of the Chief Constables
 - Set targets to meet its objectives
 - Offer guidance for all carbon reduction initiatives
 - Monitor the progress of carbon management and assist in removing obstacles which would prevent the successful completion of carbon reduction projects
 - Seek to obtain funding for CMPB approved projects (the funding criteria of projects will depend upon the payback).
 - Capture the impact of any carbon-related Constabulary-wide projects
4. In the spirit of environmental values, video conference facilities will be made available for all meetings to reduce unnecessary travel.