“East Ayrshire Council is committed to reducing its Carbon emissions and will put CO₂ emissions reduction at the core of its business activities”
Vision Statement

“East Ayrshire Council is committed to reducing its Carbon Emissions and will put CO\textsubscript{2} emissions reduction at the core of its business activities”

Executive Summary

The Challenges

This Strategy has been developed in line with East Ayrshire Council’s Transformation Board’s agenda to “implement an energy strategy and carbon management programme to reduce energy usage to a level which mitigates anticipated increases in energy costs”

The reduction of fossil fuel consumption and the reduction of greenhouse gases, of which carbon dioxide (CO\textsubscript{2}) has the greatest effect on climate change, is a major challenge across the globe and across all sectors of society.

Achieving energy efficiency will be necessary to meet the Climate Change (Scotland) Act 2009 target of a 42% reduction in CO\textsubscript{2} emissions by 2020 and an 80% reduction in CO\textsubscript{2} emissions by 2050, based on a 1990 baseline. Furthermore, the Scottish Government’s decarbonisation agenda relevant to the Heat Generation Policy Statement and Electricity Generation Policy Statement sets out the options to deliver solutions to assist with the following:

- decarbonising our heat system
- reducing reliance on fossil fuels
- reducing pressure on household energy bills and seizing economic opportunities;

- delivering electricity consumption from renewables
- support the predominant role for renewable energy in electricity supply by thermal generation
- Carbon Capture and Storage in power stations
- largely decarbonised electricity system
- transmission upgrades and reinforcement across Scotland
- sourcing 11% of heat demand and 10% of transport fuels from renewables by 2020
- enabling local and community ownership of renewable energy
- reducing final energy consumption in Scotland

East Ayrshire Council, its Elected Members, employees, partners and communities all have an important part to play in this challenge and support appropriate Government legislation and current policy statements relevant to decarbonisation.

There is a direct financial incentive for the Council to monitor, control and reduce its overall output of CO\textsubscript{2} emissions, primarily in relation to the Carbon Reduction Commitment Energy Efficiency Scheme (CRC) for which the Council has a mandatory obligation. The CRC Scheme aims to improve energy efficiency and reduce the amount of CO\textsubscript{2} emitted in the UK. Participants are required to monitor their emissions’ levels and to purchase allowances for each tonne of CO\textsubscript{2} emitted. As such, the more CO\textsubscript{2} emitted, the more allowances are required to be purchased.
In addition, the Council is a signatory to Scotland’s Climate Change Declaration which recognises our responsibility to take action to both mitigate and adapt to climate change and to promote the sustainable development and well-being of our local communities. The declaration includes a number of commitments which have been taken account of in the development of this strategy.

**The Actions**

Energy was previously perceived as an adjunct to process and service delivery. It now must be embraced and sit at the centre of all council functions from community planning and service delivery as our commitment to reducing emissions impacts on both a local and national level.

In order to meet the challenges of climate change requirements and legislation, the Council will continue to review and change the way it operates and delivers services in line with the Transformation Strategy. This will be the case in a number of important areas including the buildings we operate from, our housing stock, waste management, street lighting, transport and procurement.

During this change process the Council will increase energy awareness of employees and ensure that energy efficiency is embedded and integrated within every process and service delivery area to ensure maximum effectiveness. Awareness will also be raised across our communities from our customers, to our business partners and those visiting our area.

The Community Plan Delivering Community Regeneration Action Plan 2011-2015 contains actions and projected outputs related to ‘Reducing our carbon emissions to minimise our contribution to climate change’ which focus delivery of tangible actions which will make a difference. These are as follows:

*Local Outcome 7 – The natural environment protected, conserved and enhanced, and the negative effects of climate change mitigated.*

*Workstream 7.1 – Reduce our Carbon Emissions to minimise our contribution to climate change.*

- Lower the energy consumption and carbon emissions arising from the Council’s activities.
- Lower energy consumption and carbon emissions throughout the East Ayrshire Community.

The Energy Strategy and Carbon Management Programme builds upon the actions identified within the Community Plan Action Plan to establish a number of key objectives linked to projected outputs and local outcomes. These are developed in more detail throughout the document and a summary of the areas identified is provided below.

**Key Objectives - Energy Strategy and Carbon Management Programme**

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<th>Objective 1</th>
<th>Reduce energy use in the buildings we operate from</th>
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The effects of burning fossil fuels and the impact that the resulting emissions, particularly Carbon Dioxide (CO\(_2\)), has on global warming is well documented. There is a growing body of evidence put forward by scientists on the alarming consequences from the planet heating up due to this so called “greenhouse gas” effect.

Whilst as individuals it might seem that our efforts are futile against such overwhelming worldwide devastation, every contribution towards reducing emissions can have a positive impact; no matter how small. Furthermore if individuals act, it will result in a positive effect to the communities they live in, which in turn will aggregate upwards, eventually to national achievements.

In the United Kingdom, and Scotland in particular, there is already much activity aimed at a concerted push to reduce fossil fuel usage. Central Government has set challenging targets to reduce CO\(_2\) emissions by 80%\(^1\) by the year 2050.

East Ayrshire Council is committed to playing its part in the fight against climate change. As a large consumer of energy itself, and as a standard bearer for our communities, it is essential that we strive to reduce our consumption of fossil fuels, and energy consumption as a whole.

There are many worldwide pressures on the provision of fossil fuels and it is recognised that reductions in usage can secure wider stability in price and supply.

The following Energy Strategy and Carbon Management Programme will map the way forward for East Ayrshire Council’s energy consumption reduction for the period to 2020 at which point the Scottish Government has set a challenging 42% reduction in CO\(_2\) emissions nationally.

It is important to note that whilst the strategy refers to the financial aspects of energy, the objective of the strategy is fundamentally intended to reduce energy consumption or where reduction is not possible, to use fuel sources that are less harmful to the environment, and as such the strategy cannot make any commitment to achieving financial savings.

To meet the Council’s carbon reduction aspirations, this strategy outlines what we propose to do, establishes an action plan detailing how we will do it and how the outcomes will be recorded and reported. The strategy will be an integral strand of the Council’s overall sustainability drive and will contribute to our carbon footprint reduction aspirations.

The Energy Strategy and Carbon Management Programme is subject to a Strategic Environmental Assessment (SEA) in accordance with all such programmes (governed by legislation, The Environmental Assessment (Scotland) Act 2005) and assess its impact on the environment. On completion of the SEA, the strategy will be presented to Cabinet for adoption and will become publicly available.

\(^1\) Climate Change Act 2008.
The Scottish Government has established a dedicated team of officers – The SEA Gateway – who are responsible for co-ordinating all SEA correspondence, thus reducing the burden on Responsible Authorities.
Drivers

There are a range of drivers that collectively provide the backdrop against which a reduction in CO₂ emissions has to be set. The drivers are summarised as follows:

Drivers - Policy/legislation

- **International**
  - Kyoto Protocol came into effect on 16ᵗʰ February 2005. Signatories commit to reduce CO₂ (and 5 other greenhouse gas) emissions or enter into emissions trading if levels not reduced. The Protocol requires 55 industrialised countries to reduce their greenhouse gas emissions to target levels 5.2% below that of 1990. If unable to, they must buy emission credits from countries that are under these levels.
  - Energy Performance Certificates (EPCs) are a statutory requirement and organisations are required to have an EPC on all their public accessed buildings over 1000 square metres. Typically for a local authority this covers most large administration offices, schools and halls.
  - East Ayrshire Council has EPCs beyond the minimum requirement and has EPCs for all of its buildings down to 50m² and they are a useful tool in identify energy saving opportunities.
  - EC Landfill Directive 1999/31/EC commits Councils to reduce their Biodegradable municipal waste (BMW) by 35% of 1995 levels by 2020.

- **UK**
  - Climate Change Act 2008 - 26ᵗʰ November 2008 – contains provisions that set a legally binding target for reducing UK carbon dioxide emissions by at least 26% by 2020 and at least 60% by 2050, compared to 1990 levels. (These have since been reviewed up to 34% and 80%)
  - Carbon Reduction Commitment Energy Efficiency Scheme – is a mandatory cap and trade scheme aimed at providing year on year reductions on CO₂ consumption by all participants. All businesses with an annual consumption of 6000 mWh over their settled half hourly meters will be included. East Ayrshire Council is registered in the scheme along with around 3000 other UK organisations. The scheme came into effect on 1ˢᵗ April 2010 and has evolved during phase 1.

• Scotland
  - Climate Change (Scotland) Act 2009 – 4th August 2009 – the Scottish Government has set even more challenging targets than the UK Government with 42% interim target by 2020, 50% by 2030 and 80% by 2050.

  - The Scottish Government paper - Energy Sector, Key Sector Report May 2009 – has highlighted the importance of renewable energy in both economic terms and in climate change benefits. Scotland has the natural resources and technical ability to maximise the growing demand for renewable technologies. The government aims to have Scotland as the green capital of Europe. The paper puts energy at the very centre of the government’s agenda for sustainable economic growth. Targets are 50% renewable electricity by 2020 with an interim target of 31% by 2011; plus a 20% target of all energy use coming from renewable sources by 2020.

  - Recycling/Composting Targets as set by The Scottish Government have been set to achieve 75% Recycling/Composting of Municipal Solid Waste (MSW) by 2025 with a series of interim targets to ensure targets remain on line.

• East Ayrshire
  - Signatory to Scottish Declaration for Climate Change – along with all other Scottish Councils. Signing up to the declaration commits Councils to:
    • Acknowledge climate change is occurring
    • Welcome the opportunity to take action
    • Make a commitment to action

  - As part of the declaration East Ayrshire Council submits an annual report that takes a look at achievements to date and priorities for the year ahead. The writing of this strategy is a priority under the governance, leadership and management section of the Climate Change Declaration Report approved by Cabinet on 20 April 2011. There are other priorities in the report that are covered throughout this strategy.

  - The Council is committed to considering green technologies as part of our capital programme in the form of wind turbines, heat pumps, bio-mass, photovoltaic cells and grey water systems that recycle rain water.

  - Other local drivers to reducing CO₂ emissions are contained in the Council’s own Community Plan that is split into themes with associated outcomes. Particularly with regard to energy efficiency the following is identified for action:
    • Community Plan Delivering Community Regeneration - continuing to protect our environment and respond to climate change.
    • Community Plan Improving Health & well-being - provide appropriate information, advice and assistance to individuals and families in order to prevent fuel poverty.
Drivers- Financial

There are 4 main areas of energy costs in East Ayrshire Council, these are

1. Property
2. Transport
3. Street Lighting
4. Waste

Property

The property estate accounts for approximately 71% of CO$_2$ emissions for the Council; energy costs themselves account for approximately 60% of the overall running costs of our buildings.

The cost of energy is unstable and annual rises are predicted to outstrip inflation over the medium term. It is therefore of the upmost importance to East Ayrshire Council to continue to identify opportunities where reductions in energy usage can be achieved in order to both mitigate these increases and potentially contribute further savings to on-going running costs.

The Carbon Reduction Commitment Energy Efficiency Scheme also places an initial direct cost on CO$_2$ emissions at £12/tonne of CO$_2$, rising to £16.40/tonne in 2014/15, with future costs set to increase to unknown levels.

In addition to revenue costs, it is important that consideration is given to effectively using capital funding to support initiatives that would allow the construction of new, more energy efficient properties, and also the refurbishment of existing buildings whereby more energy efficient measures can be introduced such as double glazing, improved insulation, heating system upgrades etc. It is also important that the Council explores opportunities to fund additional capital works on a “spend to save” basis where revenue savings or income identified may be equal to or greater than the annual debt charges.

In addition to reducing emissions related costs through our buildings, the Council is also committed to reduce emissions from other sources e.g. transport, street lighting and waste.

Transport

Carbon emissions from Transport are monitored and targeted by the local transport policy which feeds into the overall CO$_2$ reduction reports relevant to East Ayrshire Council. Carbon reduction and fuel saving plays a major part of the day to day operations in all transportation operations across the authority.

Street Lighting

Carbon savings can be achieved through street lighting upgrades. Many initiatives are being considered and implementation of energy saving technology is high on the Council’s carbon reduction agenda.
Waste

Waste management has its own waste reduction targets and associated policies which provide monitoring outputs delivered through projects which are fed into the Council’s overall energy reduction reports.

From 1st April 2015 Landfill Tax will become devolved to the Scottish Government. The UK Government announced in the 2014 budget that landfill tax will not drop below £80.00 per tonne for the next 10 years, though yet to be confirmed, it is anticipated that landfill tax in Scotland will mirror this.
Drivers - Community role and leadership

Community and Leadership

It is important that the Council leads by example with the communities that it serves and to those who visit the area for business or pleasure. By using energy efficiently and sharing our best practice, the Council demonstrates its commitment to mitigating the effects of climate change and encouraging and supporting our communities and partners to do likewise.

In encouraging our communities to be energy conscious, it is important that the Council publicises its efforts to reduce its own energy use (this is dealt with in a later section of the strategy). As well as our own reporting processes, the Environment Agency through the Carbon Reduction Commitment Energy Efficiency scheme will provide information regarding other participants and will give rise to encourage others to share information, methods and proven initiatives to incentivise future projects.

Other areas within which East Ayrshire Council participates and supports in the wider energy context includes HECA\(^3\) [Home Energy Conservation Act (1995)]. HECA requires every UK local authority with housing responsibilities to produce an energy conservation report that identifies practicable and cost-effective ways of improving the energy efficiency of all residential accommodation in their area; and to report on progress made in implementing the measures. The Council is committed to the ethos for which the act stands. Through the Act, East Ayrshire Council has a responsibility to devise strategies to achieve energy efficiency improvements across all tenures of housing stock within the local authority boundaries. Actions to date have produced over 30% energy reductions across the authority in the 10 years from 1997 - 2007\(^4\).

Activity that is geared towards achieving these reductions is a major contributor in the Council’s aim to reduce fuel poverty for its residents and we will continue through other initiatives and joint working to further reduce the burden of rising fuel costs in our communities.

Energy Champion

To ensure the Council is focussed in its leadership role, an Energy Champion has been appointed within the organisation. Energy champions can effectively raise awareness and stimulate activity within a local authority. An in-house champion brings an understanding of their organisation and community and is in a position to advise and support the best ways to achieve change.

To help achieve this goal, consideration should be given to having a reference in appropriate cabinet papers on Carbon Implications. This section would identify any increase or decrease in the Council’s carbon emissions as a result of the cabinet paper’s proposals.

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\(^3\) The Home Energy Conservation Act (1995)
\(^4\) East Ayrshire Council’s Home Energy Conservation report as at 31\(^{st}\) March 2007
The Council’s energy management practices where successfully implemented will result in an overall reduction in our energy usage and subsequent CO\textsubscript{2} emissions. These reductions will need to be realised to ensure that the Council performs well under the CRC scheme.

The Climate Change Act has set targets of a 34\% reduction in CO\textsubscript{2} emissions by 2020 and an overall reduction of 80\% by 2050 compared to the 1990 baseline position. The Scottish Government has set a more ambitious interim target of 42\% reduction by 2020 with the public sector being asked to contribute both directly from their own efficiency measures and also to encourage our communities to follow our lead. To ensure there is commitment to achieving these targets, the Government has introduced the Carbon Reduction Commitment Energy Efficiency Scheme (CRC). This is a mandatory emission trading scheme that aims to improve energy efficiency and reduce the amount of carbon dioxide (CO\textsubscript{2}) emitted in the United Kingdom. The CRC will impact upon large organisations in both the private and public sector with those that meet the qualification criteria, based upon electricity consumption in 2008, required to participate through the monitoring of their emissions levels and the purchase of allowances for each tonne of CO\textsubscript{2} emitted.

The higher the level of CO\textsubscript{2} emissions the higher the level of required allowances therefore there is a direct incentive to monitor, control and reduce overall carbon output. It is expected that not only will this reduce our carbon emissions but it will also improve the overall level of energy efficiency.

The CRC started in April 2010 and is divided into predefined periods known as phases. However, the recent Government spending review has resulted in amendments to the scheme.

**CRC Scheme Details**

There are 7 phases to the scheme. The first of the phases is the “Introductory Phase” and runs for 4 years until March 2014. Subsequent phases last for 6 years, with the exception of the 7\textsuperscript{th} phase that will only be 5 years. Each phase is further divided into:

- **A qualification period** – during which organisations must assess whether they qualify to participate. East Ayrshire Council has qualified for the scheme.
- **A registration period** – during this period information must be submitted to the scheme administrator, which in Scotland is SEPA (Scottish Environment Protection Agency). East Ayrshire Council has registered for the scheme.
- **A footprint year** – The Council must monitor total emissions and determine what emissions must be included in the CRC.
- **A series of compliance years** – during which allowances are purchased for each tonne of CO\textsubscript{2} emitted.

Participation in the scheme is compulsory for all organisations with annual electricity consumption through half hourly meters of at least 6,000 mWh. The half hourly meters comprise mandatory half hourly meters and voluntary half hourly meters.

Based on the consumption data available for 2008, the Council’s electricity consumption through half hourly meters is 7,447 mWh approx. resulting in compulsory participation; as such the Council has registered for the scheme as a mandatory participant.
**Financial Implications of CRC**

The Council’s inclusion in the scheme will result in both a substantial financial and staffing resource requirement. The financial requirement will be the cost of buying Carbon allowances for our annual emissions plus other administrative charges for the scheme.

The most significant cost involved in the scheme is the purchase of the allowances. This is calculated at £12.00 per tonne of CO$_2$, this figure is fixed at the start of the scheme but will be driven by market pressures therefore is predicted to increase by a substantial amount in future years.
Key Aims

The Council’s energy initiatives should be geared towards achieving the following key aims and objectives in the order prioritised as shown.

**Key Aims:**
1. Use energy more efficiently to reduce our Carbon Footprint
2. Use renewable energy
3. If we must use fossil fuels use those that are clean and efficient

To meet these aims and objectives the Council is developing a Carbon Management Programme (CMP). This programme is the vehicle for delivering the energy efficiency measures outlined in this strategy. The CMP will be the second one the Council has undertaken, the first covering the 5 year period up to 31 March 2010 which resulted in an overall energy saving of 11.8% (2,959 tonnes CO$_2$).

The second programme is similarly structured to the first and will contain an action plan, reflecting the priorities above and respond to the requirements of the Transformation Board reporting in terms of projects and outcomes of targeted energy reducing measures. The programme will be reported on and published on an annual basis.

The Carbon Management Programme has the following objectives.

| Objective 1 - Reduce energy use in the buildings we operate from |
| Objective 2 - Reduce energy use in our housing stock |
| Objective 3 - Contribute towards the aspirations of the “Zero Waste Plan” |
| Objective 4 - Reduce the energy requirements of our street lighting |
| Objective 5 - Reduce emissions from transport fleet |
| Objective 6 - Raise energy awareness |
| Objective 7 - Ensure that we procure goods and services that are energy efficient |
| Objective 8 - Monitor, report and review energy consumption |

An essential element of delivering the Energy Strategy and Carbon Management Plan will be the development of an effective programme of works to support the delivery of the defined action plan. Establishing an effective organisational structure for project management and development is crucial to successfully achieving these aims and aspirations.

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$^5$ Review of CMP undertaken by AEA consultants on behalf of the Carbon Trust in April 2010
Objective 1 - Reduce energy use in the buildings from which we operate

The Council has a substantial portfolio of buildings from which it delivers services ranging from large secondary schools, to offices, to cemetery bothys; each building has its own unique energy requirements. There is no specific ‘one size fits all’ energy management plan that is deployable in every property, however, the adoption of a standard structure, framework and principles will be applied to recognise and address this.

The following actions have been identified to meet this objective.

- Conduct energy audits to identify efficiency opportunities
- Integrate recommendations from energy audits into property maintenance regimes and capital projects
- Include energy management as part of the job descriptions of key personnel, including a good housekeeping guide for Premises Managers
- Include energy advice as part of design teams
- Develop the use of renewable energy

Action 1.1 - Conduct energy audits to identify efficiency opportunities

The recommendations contained in the energy audits will identify actions, and associated savings in terms of carbon emissions, energy consumption and payback periods for implemented projects.

Action 1.2 - Integrate recommendations from energy audits into property maintenance regimes and capital projects

The identified measures from energy audits will be packaged into a programme of works to be managed and monitored in line with the capital programme and property maintenance programme.

Action 1.3 – Introduce a Standard Heating Policy

The introduction of a standard heating policy will assist in the reduction of energy consumption and carbon emissions within our operational properties. We aspire to implement this policy in all buildings where it is appropriate and feasible to do so.

Action 1.4 – Premises Manager will be responsible for energy management within their buildings

Work is currently on-going within the Council to develop the role of the Premises Managers for all properties whereby officers will be responsible for a range of matters such as health & safety, welfare, statutory compliance etc. It is therefore proposed that this will include responsibility for energy consumption within their buildings.
Action 1.5 - Include energy advice as part of design teams

As part of the drive to ensure we design buildings that are energy efficient the Council’s Energy Advisor is part of design brief teams. Their role is to ensure energy efficiency is core in the design of the project and consideration is given to technology such as renewable energy alternatives and also to source grant funding that is available to Council’s to implement energy efficiency measures.

During the design phase of new buildings, energy awareness should be integrated into projects to minimise the need for energy and to consider the opportunities for installing renewable technologies.

Action 1.6 - Develop the use of renewable energy

The use of renewable technology, whilst not reducing the need for energy, does at least make sure the energy that we do use is generated from non-fossil fuel sources. It is widely accepted that in order to meet the challenging carbon emissions reduction targets, meet the requirements of CRC and support the Government’s decarbonisation agenda that the introduction of green energy will have a key role to play. In introducing and developing these technologies to all relevant sectors across East Ayrshire Council, consideration will be given to solar, biomass, wind and other renewable solutions including district heating systems. The use of heat mapping will assist in the identification of potential installation options.
Objective 2 - Reduce energy use in our housing stock

As part of the Home Energy Conservation Act 1995 (HECA) the Council was required to implement energy efficiency measures and report energy savings across East Ayrshire, across all tenures. The project ran from April 1997 to March 2007 and the savings achieved in terms of CO₂ emissions was 30.2% (274,312 tonnes) as reported in the 5th biannual report. The Council continues to provide advice and undertake programmes of measures to build on the success of HECA. Scottish Housing Quality Standard requirements determine levels of energy efficiency requirements in our own housing stock and other Government initiatives are utilised to provide financial assistance to implement these improvements.

East Ayrshire Council is committed to reducing the energy use of its own housing and other tenures and in so doing help to tackle fuel poverty.

Action 2.1 - Provide energy advice

The function of the Energy Team is to provide energy advice to our communities. The advice can range from a simple call via the energy advice helpline to a detailed survey and comprehensive home visit. Advice is available to all domestic tenures (and businesses). Each year the Energy Team deal with circa 1500 consultations through the following activities:

- Advice Helpline
- Community Surgeries
- Community Group Talks/Promotional Events
- Home Energy Visit

The Community Plan Delivering Community Regeneration Action Plan includes a target to undertake 12 workshop sessions throughout the year to share expertise on energy consumption with householders and local businesses.

Action 2.2 - Report on domestic energy initiatives

The Council participate in many initiatives ranging from Government funding schemes to national initiatives and partnership working with Government agencies and external funders to tackle fuel poverty and reduce carbon emissions within our communities.

Action 2.3 - Work with partner organisations to deliver energy efficiency measures and report on outcomes

The Council also runs its own programme of energy efficiency measures across its housing stock in conjunction with the schemes mentioned above. To support the delivery of these measures, partnership working is fundamental to the Council’s aim of tackling fuel poverty and efforts are directed at the elderly, the vulnerable and low income groups.
Objective 3 - Contribute to the aspirations of the “Zero Waste Plan”

The Council is committed to ensuring that the statutory obligations arising from the European Union Landfill Directive and national targets as set by Government will be met, or exceeded. These requirements are outlined below.

- Meet EC Landfill Directive 1991/31/EC with regard to biodegradable Municipal Waste (BMW) allowed to landfill
- Waste (Scotland) Regulations 2012
- Report progress on targets

The Zero Waste Plan aims to help Scotland become a ‘zero waste society’: reducing the amount of waste produced, re-using valuable resources and increasing the level of recycling. CO₂ reduction from waste management activities will be reported in the carbon management programme reports.
Objective 4 - Reduce the Energy Requirements of our Street Lighting

Although electricity purchased for street lighting is currently 100% carbon neutral with energy being purchased from sustainable green sources, there is still the need to reduce the total amount of energy used to reduce costs. Energy saving is not a new concept in street lighting, even the oldest technology currently using the yellow low pressure sodium lamp which is about 50% more energy efficient than modern domestic power saver ‘bulbs’. The Council continually seeks funding and develops initiatives to improve the energy efficiency and reduce the CO₂ of the street lighting.

Technology has moved on and a number of interesting technologies to save energy have evolved in the last few years. The Council’s activities in reducing its energy from street lighting are summarised below.

• Install LED lighting in new street lighting projects
• Introduce part night dimming (e.g. between midnight and 6am) where feasible
• Retrofit LED lighting or ‘white light’ technology in existing installations
• Report on projects – cost savings and CO₂ savings.
Objective 5 - Reduce emissions from transport fleet

The most significant greenhouse gas emitted from Council transport activities is carbon dioxide (CO\textsubscript{2}) from the combustion of diesel fuel. Emissions of other gases are generally much lower and despite their higher global warming potential, are not considered significant. The following actions have been identified to meet this objective:

- Reduce fuel consumption across the Council’s fleet through specification, procurement, maintenance and driver training
- Report on overall fuel consumption and CO\textsubscript{2} emissions
- Develop a sustainable transport strategy

The procurement of new fleet considers emissions and fuel consumption as the main criteria to be evaluated, in line with current EU regulations. Trials have and continue to take place with electric vehicles. East Ayrshire Council currently has one electric car in use, one electric sweeper and continues to test various electric powered vehicles. Grant funding has successfully been received for two electrical charging points in Kilmarnock and New Cumnock, and these facilities will be provided during 2014-15. Vehicles continue to be procured based on the most fuel efficient low carbon vehicles available balanced with health & safety and financial values. An on-going review of the light commercial vehicles will establish a modern fleet reducing downtime, maintenance time & cost and improved carbon emissions, which is hoped will allow a large portion of the fleet to be self-funded.

Local Transport Strategy

As well as the above measures for Council fleet, there are the wider transport issues such as travel to work where there are opportunities to reduce the number of car journeys, e.g. car sharing schemes, improved public transport, encouraging the use of cycling or walking, and home working.

East Ayrshire Council’s updated Local Transport Strategy (LTS) 2009 – 2014, sets out a long-term strategic vision and objective for such transport issues, incorporating its own 5 year Action Plan to deliver the sustainable aspirations required to address CO\textsubscript{2} reduction. The existing Local Transport Strategy is currently under review and a draft transport strategy will be presented by the Ayrshire Roads Alliance to Ayrshire Shared Service Joint Committee in 2014-15.
Objective 6 - Raise energy awareness

Achieving the objective of reducing energy use has two key threads. The first is the deployment of physical measures such as insulation, heating controls etc. but the second is just as important and essential, changing the behaviour of the occupants in our properties. The occupants have a major role to play and it is imperative that energy awareness is provided to all staff and that all staff are made aware of their role.

Energy awareness should be treated in a similar manner to Health and Safety in that we are all responsible for our own actions and should seek to make the workplace as energy efficient as possible. The following actions have been identified to meet this objective:

- Develop and deliver an energy awareness campaign
- Maintain the momentum of the campaign and create a programme of workshops and awareness initiatives
- Create energy awareness pack to be included in employee induction
- Appoint an energy representative for each Council building
- Formalise the ECO Schools support pack

Action 6.1 - Develop and deliver an energy awareness campaign

Energy Awareness sessions continue to take place across the council estate and will be developed to maintain continual and future engagement with key staff and stakeholders.

Discussion is ongoing within each service area to ensure that energy management is written into the job specifications of key staff members (i.e. premises managers) who can most influence the energy consumption of the properties for which they are responsible.

Action 6.2 - Maintain the momentum of the campaign and create a programme of workshops and awareness initiatives

The Energy Team will run different campaigns and workshops throughout the year aimed at keeping staff motivated to conserve energy use. Energy awareness should also form part of new employee induction.

Action 6.3 - Appoint an energy representative for each Council building

It is imperative that each building has a dedicated member of staff responsible for energy. It is proposed that this role be fulfilled by the Premises Managers.

Action 6.4 – Look to develop an ECO Schools support pack

The School estate as a whole is particularly an area where energy awareness needs to be successfully implemented and this can be done through the ECO Schools programme. The Energy Team does and will continue to support the programme by providing consumption data and talks at relevant parts of the programme. This support needs to be structured in order that the resources of the Energy Team can be deployed to maximum effect.

The Energy Team would be keen to develop an education programme involving all pupils; this would be developed to complement the themes of Curriculum for Excellence.
Action 6.5 - Support for local businesses / community enterprise

The Energy Team will support local businesses / community enterprise through the Energy Advice Line, whilst also working closely with organisations who lease Council property, by creating a pathway of support and assistance through the Council’s Estate Management Section.

Action 6.6 - Sustainable ICT

All areas of Council business must show a commitment to addressing environmental issues; an important contribution to sustainable goals through the effective use of ICT can be made. We will continue to develop online / paperless transactions; and we will ensure that the way in which we deploy and manage our ICT operations minimise the effect on the environment in terms of energy usage and emissions.
Objective 7 - Ensure that we procure goods and services that are energy efficient

Energy efficiency and low CO₂ emissions require to be considered as standard procedure across all sectors of procurement relevant to materials, products and services. Once embedded, this process will ensure the reduction of CO₂ from new purchases has a positive impact which improves the Council’s CO₂ and energy efficiency credentials.

The following actions have been identified to meet this objective

- Whole life cost of energy consuming products should form part of the procurement process.
- Acquire products that are energy efficient

Action 7.1 - Whole life cost of energy consuming products should form part of the procurement process

The role of procurement in energy efficiency cannot be underestimated. When deciding on which service or product to purchase, energy efficiency and the whole life cost of the purchase should be considered.

Action 7.2 - Acquire products that are energy efficient

The Council has revised its corporate procurement strategy, to incorporate the legislative changes being derived from the Procurement Reform (Scotland) Act which establishes a framework for sustainable public procurement which supports economic growth by delivering economic, social and environmental benefits.

The Corporate Procurement Strategy is supplemented by an action plan which includes the following:

<table>
<thead>
<tr>
<th>Action</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement officers will focus on individual service requirements through strategic category management</td>
<td>Development of individual commodity strategies which take consideration of key corporate objectives e.g. sustainability, risk, equalities, SME’s, market research</td>
</tr>
<tr>
<td>Within all Invitations to Tender for major contracts the Council will invite bidders to include specified community benefits (economic, social and environmental) which are relevant to the contract, benefits may include employment opportunities, training, funding of local projects, school career discussions</td>
<td>We will ensure that our procurement actions are underpinned by our commitment to economic, social and environmental factors. We will do this by ensuring that where practicable the money we spend on goods, works and services benefits the people, communities and economy of the Council</td>
</tr>
<tr>
<td>Areas of common and repetitive spend will be addressed by exploring the use of effective collaborative opportunities with our neighbouring Council’s, Scotland Excel, Scottish Procurement etc.</td>
<td>Continue to ensure the best possible pricing is being obtained from collaborative frameworks and that rationalisation and mini-competition exercises are carried out where appropriate</td>
</tr>
<tr>
<td>We will review current procurement practices against the sustainable flexible framework</td>
<td>Safeguarding the environment locally and globally through sustainable, socially responsible procurement and influencing supply chain and consumer behaviour</td>
</tr>
</tbody>
</table>

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6 Cabinet paper – 21\textsuperscript{st} May 2014 – Corporate Procurement Strategy 2014-19
Objective 8 - Monitor, report and review energy consumption

The success of this strategy and associated Carbon Management Programme will be determined by the CO₂ reductions achieved. The measurement of this reduction will have to be robust, accurate, consistent and auditable. The following actions have been identified to meet this objective:

- Install automated meter readers to provide accurate energy consumption information
- Report energy consumption

Action 8.1 - Install automated meter readers to provide accurate energy consumption information

Energy data captured through AMR technology has enabled informed decisions to be taken in relation to the reconfiguration of building energy management systems’ settings, resulting in measurable savings.

Good BEMS settings enable existing heating controls’ settings to more accurately reflect the occupational needs of the property thus reducing waste.

Data from AMRs will be reviewed by the Energy Team and energy monitors on site to determine areas of waste e.g. high electricity consumption through the night.

Ultimately the aim will be to provide proactive energy monitoring tools across the Council via the intranet and online tools.

Action 8.2 - Reporting of Energy Consumption & Performance

To keep the Corporate Management Team and Elected Members regularly updated on the Council’s performance through Transformation Board reporting, with regards to the Energy Strategy, key indicators will be included in the East Ayrshire Performs report.
Finance

The implementation of this energy strategy in its fullest will require to be supported through the identification of revenue and capital funding schemes approved by Transformation Board. Revenue costs would be at least offset by efficiencies delivered through a positive approach to energy management across the Council.

As such it is imperative that the Council sources as much external funding as possible and participates in external funding initiatives.

Central Energy Efficiency Fund (CEEF)

All Scottish Councils manage a CEEF allocation which is the Scottish Government's Central Energy Efficiency Fund and is a key vehicle for delivering energy efficiency and small-scale renewable energy measures across the public sector in Scotland. This fund is self financing in that it is paid back through the financial savings generated from the energy efficiency projects.

Feed In Tariff (FIT)

Feed in tariff (FIT) is a scheme that guarantees a minimum payment for all electricity generated by the renewable system, as well as a separate payment for the electricity exported to grid. These payments are in addition to the bill savings made by using the electricity generated on-site. The payments vary depending on the type and size of installation. Viable projects will be identified to take advantage of this incentive in both the housing and non-housing stock. Energy sources that can benefit from FITs include solar PV, wind, anaerobic digestion, hydro and micro CHP.

Renewable Heat Incentive (RHI)

The renewable heat incentive (RHI) scheme is the first of its kind in the world to provide long term support for renewable heat technologies, from household solar thermal panels to industrial wood pellet boilers. The Council is considering the feasibility of installing retrofit biomass systems at a number of the larger gas consuming sites.

It will be the role of the Energy Team to source and apply for funding from the above and any other available income sources accessible by the Council.

Carbon costs

CO₂ emissions are an additional cost which has the potential to be overlooked by project managers; it is therefore essential that project managers take account of the cost of CO₂ emissions as a financial constraint. Carbon allowances will be a commodity for sale on a competitive market basis – this additional cost of purchasing carbon allowances should be built in to finance models when costing capital works.
Revenue budgets

In order to achieve CO₂ reductions across the Council as a whole, the cost of energy has to be clearly conveyed to those paying the bills as well as those consuming the energy. The connection between consumption and cost can become detached particularly with the introduction of group wide statement billing whereby the energy bill is received and paid centrally with recharges to services made thereafter.

Statement billing is a cost effective method of consolidating the high volume of individual bills into a single monthly payment, it is however recognised that this can be viewed simply as a fixed central recharge for energy consumption that management has little influence or control over. It is therefore important that steps are taken to improve the overall level of energy and carbon reporting routinely available to budget holders. This requires that those managers are provided not only with periodic financial information but also the related consumption figures in order that the impact of good housekeeping feeds through to the budget management process. Consideration should be given to achieving Council wide energy saving targets of 2% year on year.
<table>
<thead>
<tr>
<th>Action ID</th>
<th>Action</th>
<th>Linked to</th>
<th>Responsible</th>
<th>Date</th>
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<tbody>
<tr>
<td>Whole document</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>0.1</td>
<td>Create Draft Energy Strategy and Carbon Management Programme</td>
<td>Community Plan Workstream 7.1 action a.</td>
<td>Head of Corporate Infrastructure</td>
<td>2014</td>
</tr>
<tr>
<td>0.2</td>
<td>Subject draft Energy Strategy and Carbon Management Programme to Strategic Environmental Assessment (SEA)</td>
<td>The Environmental Assessment (Scotland) Act 2005 East Ayrshire Council Cabinet Sustainable Development &amp; Scottish Climate Change Declaration</td>
<td>Head of Corporate Infrastructure</td>
<td>2014</td>
</tr>
<tr>
<td>0.3</td>
<td>Appoint an Energy Champion</td>
<td>Best practice guidance from Carbon Trust.</td>
<td>Corporate Management Team</td>
<td>Appointed 2013</td>
</tr>
<tr>
<td>0.4</td>
<td>Adopt Energy Strategy and Carbon Management Programme after SEA</td>
<td>N/A</td>
<td>Cabinet</td>
<td>2014/15</td>
</tr>
<tr>
<td>0.5</td>
<td>Submit finalised Energy Strategy and Carbon Management Programme to Transformation Board</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>2014</td>
</tr>
<tr>
<td>0.6</td>
<td>Publish a copy of the Energy Strategy and Carbon Management Programme on the Council's website.</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>2014</td>
</tr>
<tr>
<td>0.7</td>
<td>Review strategy and associated documents annually</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>Annually</td>
</tr>
<tr>
<td>Action ID</td>
<td>Action</td>
<td>Linked to</td>
<td>Responsible</td>
<td>Date</td>
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<td>-------------------------------------------</td>
</tr>
<tr>
<td>0.8</td>
<td>Submit Footprint Report</td>
<td>N/A</td>
<td>Energy Team</td>
<td>Completed 29th July 2011. Updated annually</td>
</tr>
<tr>
<td>0.9</td>
<td>Submit annual reports</td>
<td>N/A</td>
<td>Energy Team</td>
<td>Annually</td>
</tr>
<tr>
<td>0.10</td>
<td>Report cost of carbon allowances to finance for budget purposes</td>
<td>N/A</td>
<td>Energy Team</td>
<td>Annually</td>
</tr>
<tr>
<td>0.11</td>
<td>Ensure compliance with scheme requirements</td>
<td>N/A</td>
<td>Energy Team / Internal Audit</td>
<td>Annually</td>
</tr>
</tbody>
</table>

**Energy Management**

**Objective 1 - Reduce energy use in the buildings we operate from**

<table>
<thead>
<tr>
<th>Action ID</th>
<th>Action</th>
<th>Linked to</th>
<th>Responsible</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Undertake energy audits within our highest energy consuming operational properties</td>
<td>Community Plan Workstream 7.1 Action a.</td>
<td>Energy Team</td>
<td>On-going</td>
</tr>
<tr>
<td>1.2</td>
<td>Integrate recommendations from energy audits into property maintenance regimes and capital projects</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>1.3</td>
<td>Introduce a Standard Heating Policy</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>1.4</td>
<td>Premises Managers will be responsible for energy management as part of the revised job descriptions</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>Complete</td>
</tr>
<tr>
<td>1.5</td>
<td>Include energy advice as part of design teams</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>1.6</td>
<td>Develop the use of renewable energy</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going discussion with Resource Efficient Scotland to assist</td>
</tr>
<tr>
<td>Action ID</td>
<td>Action</td>
<td>Linked to</td>
<td>Responsible</td>
<td>Date</td>
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</tbody>
</table>
| 2.1      | Provide energy advice through Helpline, surgeries, community talks, home energy visits.  
• 12 surgeries  
• 12 community talks  | Community Plan Workstream 7.1 action b. | Head of Corporate Infrastructure | Annually  |
| 2.2      | Report on domestic energy initiatives | N/A                                           | Head of Corporate Infrastructure | Annually  |
| 2.3      | Work with partner organisations to deliver energy efficiency measures and report on outcomes | N/A                                           | Head of Corporate Infrastructure | Annually  |
| **Objective 3 - Contribute to the aspirations of the “Zero Waste Plan”** |                                                                 |                                              |           |
| 3.1      | Meet EC Landfill Directive 1999/31/EC with regard to Biodegradable Municipal Waste (BMW) allowed to landfill  
Community Plan Workstream 7.1 action a.  |                   | Commercial Waste and Recycling Manager | As prescribed |
<p>| 3.2      | Meet Waste (Scotland) Regulations 2012 | N/A                                           | Commercial Waste and Recycling Manager | As prescribed |
| 3.3      | Report progress against above targets | N/A                                           | Commercial Waste and Recycling Manager | Annually  |
| <strong>Objective 4 - Reduce the energy requirements of our street lighting</strong> |                                                                 |                                              |           |
| 4.1      | Install LED lighting in new street lighting projects | N/A                                           | Street Lighting Manager | On-going |
| 4.2      | Introduce part night dimming where feasible | N/A                                           | Street Lighting Manager | On-going |
| 4.3      | Retrofit LED lighting or ‘white light’ technology in existing installations | N/A                                           | Street Lighting Manager | On-going |
| 4.4      | Report on projects – costs savings and CO₂ savings | N/A                                           | Street Lighting Manager | Annually |</p>
<table>
<thead>
<tr>
<th>Action ID</th>
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<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Objective 5 - Reduce emissions from transport fleet</td>
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</tr>
<tr>
<td>5.1</td>
<td>Reduce fuel consumption across the Council’s fleet by</td>
<td>N/A</td>
<td>Transport Manager</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>• Specification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Procurement</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Driver training</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5.2</td>
<td>Report on overall fuel consumption and CO₂ emissions</td>
<td>N/A</td>
<td>Transport Manager</td>
<td>Annually</td>
</tr>
<tr>
<td>5.3</td>
<td>Develop a sustainable transport strategy</td>
<td>N/A</td>
<td>Transport Manager</td>
<td>2015</td>
</tr>
<tr>
<td>Objective 6 - Raise energy awareness</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6.1</td>
<td>Develop and deliver an energy awareness campaign</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>6.2</td>
<td>Maintain the momentum of the campaign</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Create a programme of workshops and awareness initiatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3</td>
<td>Appoint an energy representative for each Council building</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>6.4</td>
<td>Look to develop an ECO School support pack</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>6.5</td>
<td>Support for local businesses / community enterprise</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>6.6</td>
<td>Sustainable ICT</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>Action ID</td>
<td>Action</td>
<td>Linked to</td>
<td>Responsible</td>
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<tr>
<td><strong>Objective 7 - Ensure that we procure services that are energy efficient</strong></td>
<td>7.1 Whole life costs of energy consuming products should form part of the procurement process</td>
<td>N/A</td>
<td>Procurement Manager</td>
<td>On-going</td>
</tr>
<tr>
<td>7.2 Acquire products that are energy efficient</td>
<td>N/A</td>
<td>Procurement Manager</td>
<td>On-going</td>
<td></td>
</tr>
<tr>
<td><strong>Objective 8 - Monitor, report and review energy consumption</strong></td>
<td>8.1 Install automated meter readers to provide accurate energy consumption</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>Complete</td>
</tr>
<tr>
<td>8.2 Report on energy consumption and performance</td>
<td>Community Plan Workstream 7.1 action a.</td>
<td>Head of Corporate Infrastructure</td>
<td>Annually</td>
<td></td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td>9.1 Review funding options for energy efficiency</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
</tr>
<tr>
<td>9.2 Report on all funding successfully sourced</td>
<td>N/A</td>
<td>Head of Corporate Infrastructure</td>
<td>On-going</td>
<td></td>
</tr>
</tbody>
</table>