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**REPORT TO: POLICY AND RESOURCES COMMITTEE ON 3 SEPTEMBER 2019**

**SUBJECT: ANNUAL REPORT ON ENERGY STRATEGY/ACTIONS**

**BY: CORPORATE DIRECTOR (ECONOMIC DEVELOPMENT, PLANNING AND INFRASTRUCTURE)**

**1. REASON FOR REPORT**

- 1.1 This report presents the Annual Energy Report for 2018/19 and advises Committee on actions to minimise the Council's energy consumption, as well as progress and developments on a number of energy issues.
- 1.2 This report is submitted to Committee in terms of Section III (A) (39) of the Council's Administrative Scheme relating to ensuring that the organisation, administrative and management processes of the Council are designed to make the most effective contribution to achieving the Council's objectives.

**2. RECOMMENDATION**

**2.1 It is recommended that Committee:-**

- i) considers and notes the terms of the 2018/19 Annual Report; and**
- ii) notes that in 2018/19 the Council's energy consumption in non-domestic operational properties fell by 9.6%, and the energy bill decreased by 0.9% (£27,814).**

**3. BACKGROUND**

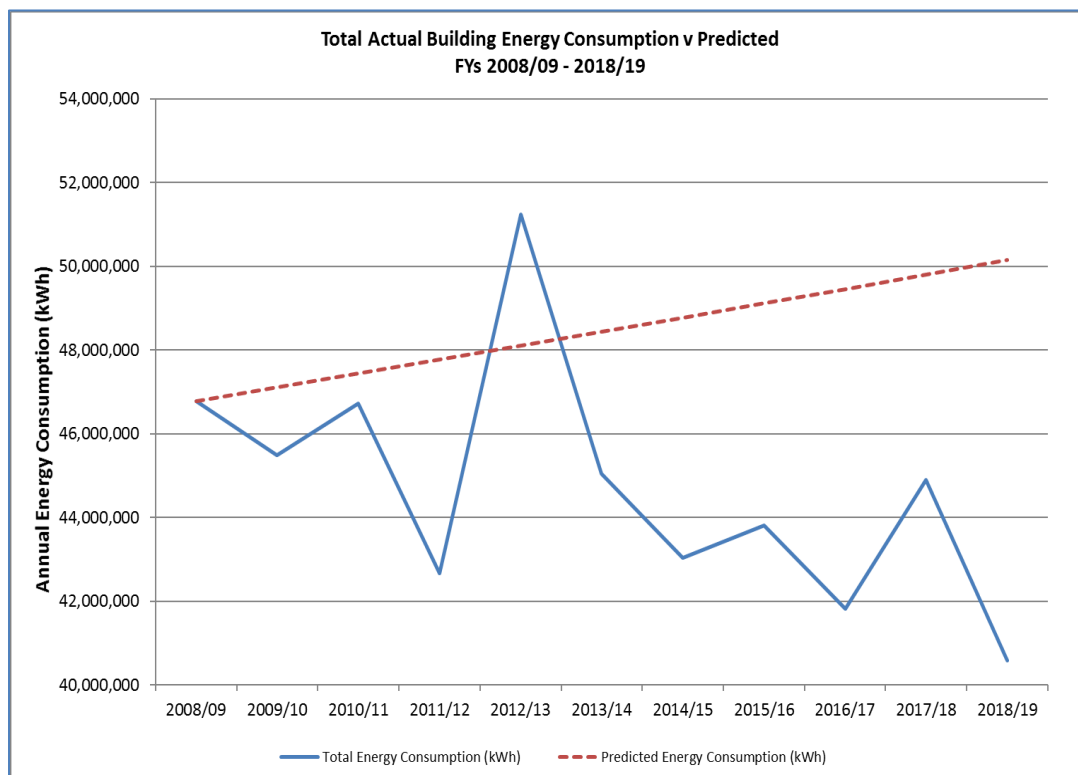
- 3.1 The 13<sup>th</sup> Annual Energy Report, which relates to 2018/19, is attached to this report as **APPENDIX I**, with the main issues summarised below.

**4. PERFORMANCE**

Energy Consumption

- 4.1 The Council's energy consumption (excluding street lighting) for 2018/19 was 40,584,897 kWh compared with consumption of 44,901,152 kWh for 2017/18. This is a 9.6% decrease on the previous years' consumption, compared to the target of an annual 2% reduction as set out in the Council's Energy Policy and Strategy.

- 4.2 The graph below shows the Council's total energy consumption for the last 11 years, compared to predicted increases based on Department of Energy and Climate Change advice.



- 4.3 It is difficult to pinpoint the reasons for reduced consumption, but the sale/closure of a number of Council buildings combined with warmer weather conditions would have been significant contributory factors. It is also likely that there is an increased level of awareness amongst staff on energy and climate issues, which would have had a positive impact on good energy house-keeping practises.

#### Energy Costs

- 4.4 In 2018/19 the Council's energy bill at its non-domestic properties totalled £2,600,554 – a decrease of £27,814 (0.9%) compared to 2017/18.
- 4.5 The percentage fall in energy costs was much smaller than the fall in energy consumption as the unit costs of oil, gas and electricity all increased significantly in 2018/19.

#### Carbon Emissions

- 4.6 In 2018/19 the Council's carbon emissions for its non-domestic properties amounted to 10,135 tonnes of CO<sub>2</sub>e - a decrease of 2,697 tonnes of CO<sub>2</sub>e (21%) compared to 2017/18.
- 4.7 The following are significant contributory factors to carbon emissions levels:-
- Lower consumptions for all utilities except water
  - Reduced carbon intensity of grid electricity
  - More street lighting provided from LED technology

- Decreased heat requirement due to warmer weather

## 5. ENERGY MANAGEMENT

### Carbon Reduction Commitment Energy Efficiency Scheme (CRC)

- 5.1 CRC costs decreased from £192,649 in 2017/18 to £156,266 in 2018/19.
- 5.2 The CRC scheme was abolished in April 2019 and the Climate Change Levy has increased from 1 April 2019 to cover the cost of the CRC abolition. However, overall the annual net cost to the council is predicted to reduce by approximately £100,000.

### Energy Policy and Strategy

- 5.3 Reducing energy consumption in the Council's non-domestic operational properties by 2% per annum remains the main objective of the Council's Energy Policy set out in **APPENDIX V**. However it is considered that the an energy based reduction target is no longer appropriate, particularly given that national targets are based on carbon emissions reduction and that Moray is currently out of step with other Scottish Local Authorities.
- 5.4 With the Council's declaration of a Climate and Ecological Emergency on the 27 June 2019 (para 6 of the Minute refers) it is expected that the Energy Policy and Strategy will be reviewed/superseded by a Climate Change Strategy which will be based on carbon reduction targets.

### Building Energy Management System (BEMS)

- 5.5 There are BEMS systems in 33 Council buildings and the Energy Team use them to regularly monitor temperatures in buildings, identify anomalies early and adjust heating settings accordingly. A new technical specification is improving consistency across the Council's properties, including new-build projects and refurbishments. This continues to be rolled out as and when the opportunity arises. Current financial constraints are restricting work in this area, but potential spend to save prospects will be kept under review.

### Energy Awareness

- 5.6 As detailed in Section 6.1 of **APPENDIX I** various energy awareness briefings and training sessions were carried out in 2018/19, including presentations at staff inductions and school assemblies/ eco groups. These reached 200 council staff and over 753 pupils. Other initiatives have included regular articles in the staff Connect magazine, posters and participation in Earth Hour. More such measures are being implemented in 2019/20.

### Energy Audits

- 5.7 In 2018/19 the Energy Team carried out audits at 6 Schools. This has resulted in a number of energy saving measures being implemented and potential energy saving projects being identified. Audits of 6 further schools are scheduled in 2019-20.

### Utility Invoice Processing

- 5.8 Almost all utility invoices relevant to the non-domestic council estate are processed by the Energy Team; over 13,500 in 2018/19. The active

management, checking and validation of utility consumptions and invoices identified over £88,000 of erroneous charges in 2018/19. Full details can be found in **APPENDIX III**.

#### Projects

- 5.9 Projects carried out in 2018/19 and potential future energy saving projects are set out in **APPENDIX VI**. Over 50 individual energy saving projects and initiatives were carried out in 2018/19 and the costs and estimated annual savings are detailed in the Appendix. Future energy saving projects currently being considered are also detailed.
- 5.10 **APPENDIX VII** contains graphical profiles and pictures in relation to energy saving projects. Post Project Reviews of larger projects are undertaken to determine if targeted savings are actually being realised. The Appendix shows graphically the energy savings made at Forres Academy gym hall (where estimated savings are being exceeded) and thermal photographs at Burghead Primary School and Buckie High School show the dramatic reduction in heat loss from insulating un-lagged pipework.
- 5.11 During 2018/19 Internal Audit undertook a review of the Energy Section with respect to CRC and energy management procedures. A report on the findings was approved by the Audit and Scrutiny Committee on 27 February 2019 (para 7 of the Minute refers). Progress on implementation of recommendations is detailed in **APPENDIX IV**.

## **6. SUMMARY OF IMPLICATIONS**

### **(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))**

The Energy Policy and Strategy and actions to minimise the Council's energy use support the aim of the Corporate Plan of a financially stable Council.

The Council's Corporate Plan 2018 -2023 and 10-year Moray Local Outcome Improvement Plan (LOIP) make no specific reference to energy efficiency or carbon emissions reduction, with the exception of the Energy from Waste project. This was identified by an Internal Audit review and is in the process of being addressed.

### **(b) Policy and Legal**

Climate Change (Scotland) Act 2009 places a duty on public bodies to act in a way they consider most sustainable and in the way best calculated to deliver emission reduction targets set in the Act.

### **(c) Financial/Risks Implications**

In 2018/19 the Council's energy bill for non-domestic properties was £2,600,554 – a decrease of £27,814 (0.9%) 2017/18.

During 2018-19 electricity, gas and oil prices rose 3.7%, 18% and 12% respectively. Compared to 2018-19, unit costs for electricity and gas in 2019-20 rose by 4.3% and 5.6% respectively. Budget guidance issued in June 2019 by Scottish Procurement indicates that by 2021-22 increases of 13% and 2%

are forecast for electricity and gas compared to 2019-20. This would cumulatively increase the Council's costs by £293,500 compared to 2019/20.

The above figures do not include CRC costs which decreased from £192,649 in 2017/18 to £156,266 in 2018/19. The unit charge increased to £17.80 per tonne CO<sub>2</sub> in 2018/19, compared to £16.60 per tonne CO<sub>2</sub> in 2017/18. The scheme ended and was replaced from 1<sup>st</sup> April 2019 by increases in the Climate Change Levy. The surrender of held allowances in September 2019 will conclude the CRC scheme.

During 2018-19 the active management, checking and validation of utility consumptions and invoices identified over £88,000 of erroneous charges.

In recent years electricity non-energy costs (a mixture of fixed charges and others relating to transmission, metering etc.) have accounted for an increasing element of the overall charge and for 2019-20 amounts to 59%.

These costs are predicted to continue to increase, as energy consumers rather than taxpayers, meet the costs of moving to a low carbon society, as well as infrastructure improvements. Allied to anticipated increases in consumption charges (per kWh) overall energy costs are set to rise in coming years.

Unit charges for gas consumption accounted for 79%, whilst the indirect charges accounted for approximately 21% of the Council's overall gas costs.

£15,000 has been allocated in the Council's 2018/19 capital plan and £19,200 in the Council's revenue plan for energy saving projects and awareness raising initiatives, although officers will also continue to take forward spend to save proposals.

**(d) Staffing Implications**

There are no staffing implications.

**(e) Property**

The property implications are as set out in this report.

**(f) Equalities**

There are no equalities implications.

**(g) Consultations**

The Acting Head of Housing and Property, the Head of Financial Services, the Head of Development Services, the Design Manager, the Legal Services Manager, the Equal Opportunities Officer have been consulted and any comments incorporated in this report as appropriate.

**7. CONCLUSION**

**7.1 The Council's utility consumption and costs fell by 9.6% and 0.9% respectively in 2018/19.**

**7.2 There is still potential for reductions in energy consumption through a programme of energy projects, property rationalisation, use of Building Energy Management Systems and staff awareness/behaviour changes. These are necessary to minimise the Council's carbon emissions, energy costs and the associated impact of the Climate Change Levy.**

Author of Report: Ronnie Macdonald, Energy Officer  
Background Papers: As referred to in this report.  
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