

**NORTH LINCOLNSHIRE COUNCIL**

**CORPORATE SERVICES  
CABINET MEMBER**

**ENERGY MANAGER**

**1. OBJECT AND KEY POINTS IN THIS REPORT**

- 1.1 To approve the re-establishment of a post of Energy Manager within the Asset Management and Culture Service.

**2. BACKGROUND INFORMATION**

- 2.1 Until 2004, a post of *Energy and Sustainability Manager* formed part of the establishment of the former Property Services. The post was deleted from the establishment to meet spending targets for the service.
- 2.2 Since 2004, the issue of climate change has received even greater prominence, internationally, nationally and locally.
- 2.3 Climate Change is now recognised as one of the greatest threats of the twenty-first century and is the key driver for a raft of international and national policy aimed at reducing carbon emissions.
- 2.4 The UK ratified the *Kyoto Protocol* in 2003 and is committed to a 12.5% cut in greenhouse gases compared to 1990 levels by 2010. As well as this international commitment, the UK has its own Climate Change programme, which commits it to reducing CO<sub>2</sub> emissions by 20% by 2010. The 2003 Energy White Paper '*Our energy future – creating a low carbon economy*' also commits the UK to reduce CO<sub>2</sub> emissions by 60% by 2050 and expects energy to be a strategic priority in local government. The Prime Minister has recently indicated his ambition to increase the reduction in CO<sub>2</sub> emissions from 60% to 80% by 2050 and this is now incorporated into latest drafts of the *Climate Change Bill 2007-08* currently progressing through Parliament.
- 2.5 The Local Government White Paper '*Strong and Prosperous Communities*', published in October 2006 identified the leading role expected of local government in responding to the climate change agenda. In particular "leading by example through its own practices and the services it delivers". It states that "local authorities can

manage their own estate to reduce emissions through managing the energy consumption of their own buildings...”

- 2.6 Following on from this, “*The New Performance Framework for Local Authorities and Local Authority Partnerships: Single Set of National Indicators*” was published in October 2007. It includes a number of indicators relating to Environmental Sustainability. **National Indicator 186 – Per capita CO<sub>2</sub> emissions in the LA area** was subsequently chosen as a priority target within the second generation Local Area Agreement for North Lincolnshire, recently agreed with government.
- 2.7 The proposed ‘Use of Resources’ element of the Comprehensive Area Assessment includes key lines of enquiry relating to management of natural resources and environmental management.
- 2.8 Local Authorities dealing with Climate Change need to consider taking action in two complementary ways. Firstly councils need to reduce their own emissions of greenhouse gases so as to mitigate the impact of climate change in the future and then work with stakeholders in their community to help them reduce their emissions. Secondly councils need to understand how their services and communities will be affected by climate change and begin now to adapt services accordingly, including taking advantage of any opportunities that the climate change agenda might offer.
- 2.9 Cabinet agreed a Climate Change Action Plan in March 2007. The action plan included for investigation of the reinstatement of the Energy Manager’s post in Property Services.
- 2.10 Recently, the costs of energy supplies (gas, electricity, fuel oil and solid fuel) have increased dramatically. The council’s gas contract price rose by 36% in June 2008. The contract price for electricity has increased by around 72% since the contracts were originally agreed. For 2008/09, the planned spending on energy across the council’s buildings totals £3.206m. In addition there is planned spending amounting to around £324,000 on water and related sewage treatment. These figures exclude schools.
- 2.11 In the future, the council will be required to participate in the ‘*Carbon Reduction Commitment Scheme*’. This is a new cap and trade scheme aimed at incentivising significant carbon abatement in the hope of delivering bottom-line financial benefits. Failure to achieve carbon reductions however could expose the council to additional financial burden. It is therefore essential for organisations required to participate in this scheme to improve their energy and carbon management skills and capacity, particularly in relation to metering, reporting and reduction. As the scheme is intended to commence in April 2010, action is needed now in preparation.

2.12 In response to these various issues it is proposed to re-establish the post of Energy Manager within the Property Services division of Asset Management and Culture.

### **3. OPTIONS FOR CONSIDERATION**

3.1 The Cabinet Member has two options available for consideration:

- Option 1 – approve the proposal
- Option 2 – do nothing

### **4. ANALYSIS OF OPTIONS**

4.1 Adopting option 1 enables the council to respond positively to the challenges it faces in leading the climate change agenda locally. In particular the post of Energy Manager will lead on a range of issues related to reducing CO<sub>2</sub> emissions via the improved energy performance of the council's buildings. A job description for the post was prepared. This is attached as an appendix to this paper for reference. It sets out the range of duties etc expected of the post. The Human Resources Service, using the council's approved job evaluation process evaluated the job description. This yielded a Grade 9 for the post.

4.2 The Carbon Trust suggests that financial savings of between 5 and 10% of expenditure on energy and water are achievable by instigating a programme of improved housekeeping and/or simple low cost energy and water saving measures. If achieved, this could amount to between £176,500 and £353,000 of cost efficiency savings for this council based upon current planned expenditure in our buildings.

4.3 The do nothing option is not sustainable in light of the current expectations on local government or the priorities of this council and its partners. The ability of the council to reduce its own carbon footprint, meet statutory obligations and realise cost efficiencies will be significantly inhibited.

### **5. RESOURCE IMPLICATIONS (FINANCIAL, STAFFING, PROPERTY, IT)**

5.1 Financial

The annual gross cost of the proposal amounts to £40,805, based upon the mid point of Grade 9, including 29.5% on costs. It is proposed to meet these costs in full via annual savings on energy and water expenditure and should prove easily achievable. This would require a saving of only 1.1% on current spending.

## 5.2 Staffing

The re-established post of Energy Manager will sit in the Maintenance Services team in Property Services. A revised establishment chart is attached for reference. The post will be supported by the existing post of Energy Management Officer (Grade 6) and report to the Maintenance Services Manager (Grade 11).

5.3 There are no consequential property or IT implications.

## 6. OTHER IMPLICATIONS (STATUTORY, ENVIRONMENTAL, DIVERSITY, SECTION 17 - CRIME AND DISORDER, RISK AND OTHER)

### 6.1 Statutory

Re-establishing the post of Energy Manager will help the council meet its statutory duties including in relation to the following:

- *The Energy White Paper: Meeting the energy challenge* published in May 2007
- *The Energy Bill 2007-2008* which was introduced in Parliament in January 2008
- *The Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007*
- *Building Regulations Part L 2006*

### 6.2 Environmental

Adopting the proposal will make a positive contribution to achieving a reduction in the council's carbon footprint.

6.3 There are no other implications.

## 7. OUTCOMES OF CONSULTATION

7.1 The recognised trade unions were consulted and support the proposal.

7.2 The Service Director Finance supports the proposal. He feels that it will support the CAA Use of Resources assessment and the wider efficiency agenda. He agrees with the proposal to fund the post from future savings on energy and water costs. For 2009/10, he intends holding a central contingency to deal with the volatility of energy prices, which will allow the allocation of the funds required for the post without directly top-slicing service budgets. One of the first tasks of the post will be to develop an energy saving plan, which will identify where these savings could be achieved. This will be repeated annually.

- 7.3 Cabinet tasked the Chief Executive with leading on delivering the council's Climate Change Action Plan. He agrees with the proposal to reinstate the post of Energy Manager at the earliest opportunity as contributing to meeting our climate change ambitions and obligations.

## 8. **RECOMMENDATIONS**

- 8.1 That the Cabinet member approves the re-establishment of the post of Energy Manager within the Asset Management and Culture Service.

### SERVICE DIRECTOR ASSET MANAGEMENT AND CULTURE

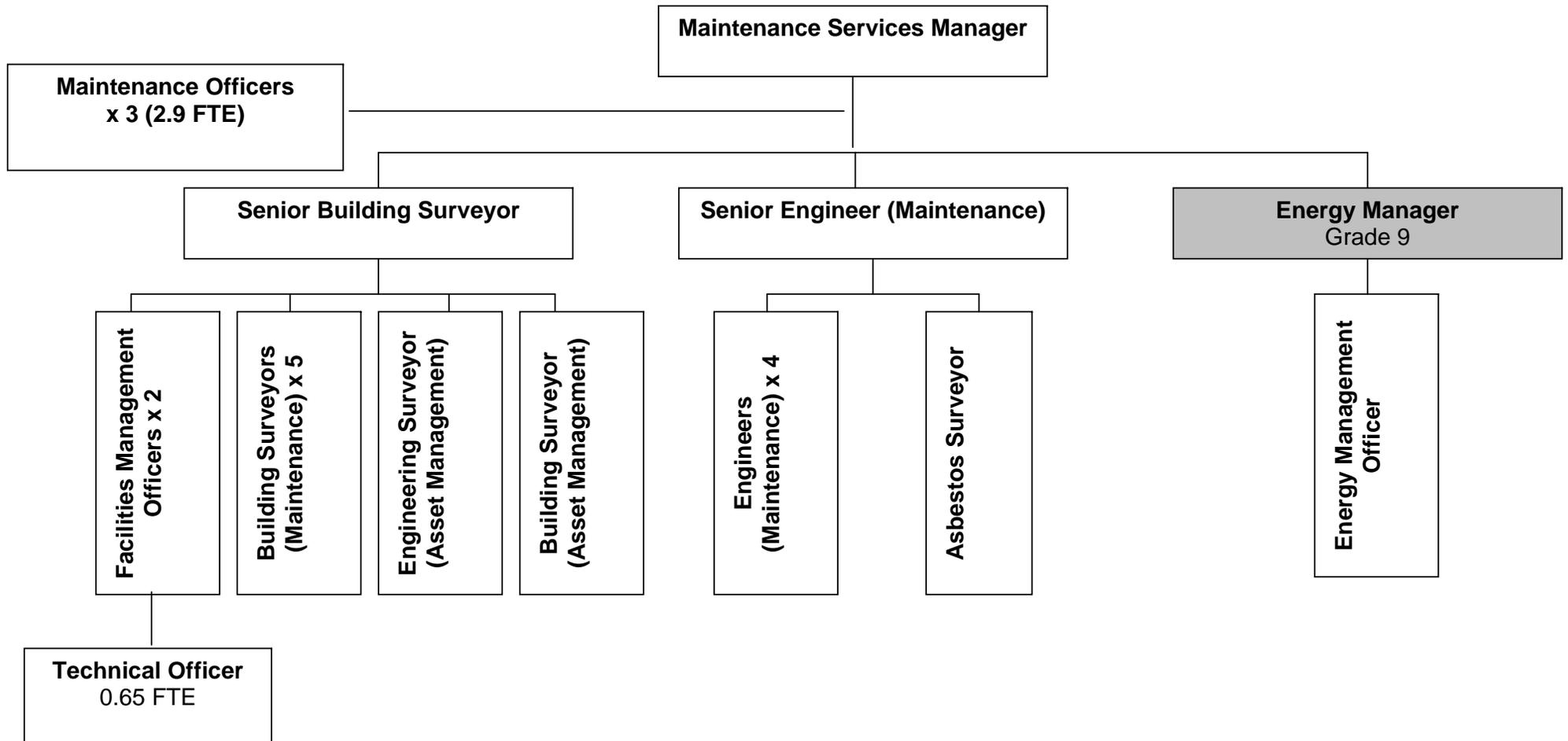
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Date: 20 October 2008

#### **Background Papers used in the preparation of this report:**

- Report to Cabinet on 23 March 2007, titled "Climate Change Action Plan and Greening the Workplace"
- Decision taken by the Corporate Services Cabinet Member on 10 August 2004, titled "Energy Management Officer"

Construction Division

Maintenance Services Group



<b><u>Job Title:</u></b> Energy Manager	<b><u>Service:</u></b> Asset Management and Culture
<b><u>Post Number:</u></b>	<b><u>Division:</u></b> Construction
<b><u>Grade: 9</u></b>	<b><u>Business Unit/Section:</u></b> Maintenance Services

**Overall Purpose of Job:**

To lead, improve and coordinate all aspects of the energy performance of the councils buildings (strategic and operational) including legislative compliance, delivery of reductions in CO<sub>2</sub> emissions and all utility energy use together with achievement of wider sustainable construction techniques and building management. This also includes assessing and evaluating direct and embodied emissions and energy usage.

**Main Responsibilities:**

- 1 Establish council-wide and building specific policies to deliver reductions in CO<sub>2</sub> emissions, all utility energy usage and achievement of wider sustainable construction techniques in respect of new construction, alteration, maintenance and operation of the council's buildings. Fulfil specialist technical lead role, providing advice and recommendations to achieve policy objectives, ensuring all aspects of policy, advice and recommendations are fully justified in terms of both environmental and/or cost benefit.
- 2 Identify and implement all actions required to ensure compliance with all relevant CO<sub>2</sub>/energy related legislation, significantly but not exclusively including the Energy White Paper, the Energy Bill 2007-2008 and the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007 in respect of the sale, letting, construction and operation of council buildings. This will include the evaluation, commissioning and programme management of approved energy assessors and/or conducting all aspects energy assessments in order to produce the relevant certificates together with maintaining a general awareness of existing and future legislation and best practice.
- 3 Prepare, justify and programme manage delivery of a rolling 3 year programme of initiatives and construction/engineering work in order to achieve reductions in CO<sub>2</sub> emissions and all utility energy usage. Budgetary responsibility for typical £75k annual capital budget and responsibility to identify and maximise external funding for CO<sub>2</sub> reduction work.
- 4 Analyse all utility energy usage at all council buildings including the development and use of a database. Identify, recommend and implement consequent targeting and corrective actions as and when required. Devise, check and approve data input processes (including maximisation of benefit from 'realtime' energy monitoring) together with monitoring reports and other data produced from database to ensure accuracy and adequacy. Devise, implement and review arrangements for the effective production and dissemination of reports and data (absolute and

- benchmarked) in order to achieve council-wide awareness of energy usage and scope for reductions together with supporting and informing the councils performance management framework.
- 5** Implement optimum efficiency of plant operating controls and times using Building Management System. Investigate and implement opportunities for rolling out Building Management system throughout all appropriate buildings.
  - 6** Commission and review 'energy management surveys' to all council buildings and/or conduct 'energy management surveys' together with interpretation and production of associated reports in order to identify specific opportunities to deliver reductions in CO<sub>2</sub> emissions, all utility energy usage and achievement of wider sustainable construction techniques and building management including detailed justification in terms of both environmental and/or cost benefit. Negotiate with building/service managers and directors in order to gain 'buy-in' to required changes to achieve CO<sub>2</sub> emission and all utility energy usage reductions.
  - 7** Commission and/or undertake investigations into the feasibility/efficiency of existing and proposed building, engineering and specialist installations such as heating, passive ventilation and air conditioning/handling, combined heat and power, glazing/shading, thermal capacity/insulation of building envelope, biomass boilers, ground source and heat pumps, solar/photovoltaics, wind generation, low energy fittings, controls and building management systems. Interpretation and production of associated reports identifying justified recommendations for the previously mentioned building, engineering and specialist installations including briefing and preparation of feasibility drawings and documents, specifications, design drawings, contract documents together with negotiating contract prices and seeking quotations/tenders from contractors/suppliers. Arrange and supervise all aspects of implementation of works.
  - 8** Lead on the research, development and application of 'Whole Life Costing' techniques in support of the building design process to ensure that optimum design solutions are adopted for future construction projects.
  - 9** Lead council-wide CO<sub>2</sub> emissions/energy awareness and reduction campaigns, including leading and integrating energy performance of building and sustainability issues (e.g. good housekeeping) into mainstream operations and service delivery significantly via the organisation, training and support of building users/managers and an 'Energy Warden' network including consideration of issues such as transport, waste management and recycling. Contribution wider community CO<sub>2</sub> emissions/energy awareness and reduction campaigns.
  - 10** Commissioning and provision of training and development activities to technical and professional construction staff within the council, including line management of Energy Performance of Buildings Support Officer.
  - 11** Represent the council at all levels in respect of energy performance of buildings, together with achieving and maintaining accreditation of the Energy Efficiency Accreditation Scheme for the council.
  - 12** Contribute to procurement arrangements for fuel/utility supplies, including auditing and identifying the most appropriate tariffs for each building.

#### **Knowledge, Skill and Experience Required:**

- Degree/BTEC Higher award in energy management, environmental studies, engineering or construction or similar related subject
- Membership of a relevant professional institution
- Good written and oral communication skills
- Strong problem solving, analytical and technical skills related to energy, environmental, engineering or construction
- Excellent presentation skills
- Extensive IT skills including presentation tools, databases, spreadsheets and specialist energy related software
- Awareness and experience of working within a legislative/regulatory environment
- Experience of a maintenance/design/construction with particular regard to energy management/environmental design
- Specialist knowledge of all factors contributing to carbon emissions
- Experience of undertaking building/services surveys and building management issues
- Organisation/people management experience
- Negotiation skills
- Project management skills in a services/construction client environment
- Capability to think and act both strategically and operationally
- Be able to fulfil the role, and balance the conflicting demands, of a detailed breadth of specialist roles within the Energy Management function – i.e. be able to design and consider issues relating to mechanical installations (i.e. a biomass boiler) together with those of electrical installations (i.e. renewal of light fittings and controls) when considering cost and environmental benefit whilst also balancing the operational impact on any building. Other specialist roles will include people management, high understanding of technology issues, building construction issues, stakeholder management.
- Confidence and credibility to present ideas to different audiences
- Knowledge of procurement issues and arrangements

#### **Creativity and Innovation:**

- Prioritisation of energy related works – including defining criteria/framework within which to operate
- Designing and procuring services from third parties i.e. survey, training, certification etc., including defining appropriate contract terms
- Proposing and approving formats for reports etc
- Target setting and awareness raising to reduce CO<sub>2</sub> emissions – designing campaigns and appropriate media including structure/format of presentations, action plans and review meetings
- Determine and justify policy for energy management and sustainable construction

- Appraise plant, material and techniques taking into account practicality in use and whole life cost considerations in respect of achieving reductions in CO<sub>2</sub> emissions and sustainable construction and recommend appropriate solutions – particularly where 'standard' or well established solutions are not evident
- Develop systems/use of database to monitor energy usage and costs and identifying potential savings
- Interpretation and application of legislation, regulations, policy and procedures

#### **Decision Making:**

- Makes recommendations on ways to reduce CO<sub>2</sub> emissions, all utility usage and wider sustainable construction techniques, based on specialist technical knowledge to achieve policy objectives
- Decides on utility energy usage targets at all council buildings, and recommends corrective action to achieve those targets
- Recommending appropriate energy/water supply arrangements and analysing bill/tariff data
- Technical standards of own work and those reporting to post
- Content of briefs, specifications, drawings, reports, awareness raising/training media
- Assessing acceptability of performance of contractors and consultants
- Choice/evaluation of contractors and consultants
- Certifying payments etc for goods, services and works
- Negotiating/agreeing charging structures etc for energy supplies
- Choice/evaluation of building, engineering and specialist installations
- Decisions concerning own safety and that of subordinate staff in undertaking specialist activities of building surveying and similar associated functions, risk assessments and measures appropriate to manage and reduce risk situations.
- Decisions on the prioritisation of technical work and allocation of funds to meet needs.
- The correct interpretation and application of regulations, statutes and codes of practice related to engineering, building and energy use.
- Allocating, directing, approving and monitoring the work of subordinate staff.

#### **Contacts and Relationships:**

- Periodic contact with Councillors to influence, persuade and advise in respect of the energy performance of buildings including renewable energy technology
- Frequent contact with manufacturers, contractors and consultants in order to develop, identify, arrange and implement appropriate solutions, including instructing and directing
- Frequent contact with central government departments, professional bodies and specialist advisory groups in order to fact-find and identify best practice
- Frequent contact with utility suppliers to identify and negotiate appropriate charging structures

- Frequent contact with building managers and headteachers to advise, train and provide support and negotiate 'buy-in' and changes to building operations
- Frequent contact with council officers at all levels to provide advice and guidance, motivate, train and co-ordinate delivery of works on a 1-2-1 basis and to groups of nominally 50-100 people
- Frequent contact with external organisations (businesses, community groups etc) and members of the public to provide advice and guidance
- Frequent contact with person reporting to post, discharging line management duties

**Responsibility for Resources: (to include approximate value, sole or shared responsibility and for what percentage of their working hours away from their designated base)**

- Responsibility for specialist equipment and tools when required, ensuring their suitability for safe utilisation – maximum expected value per item not exceeding £4000.00. 50% away from designated base. Sole responsibility.
- Responsibility for the management of delegated financial resources to meet maintenance and/or energy management needs – maximum budget value £75,000.00 per annum.
- Responsibility for IT Facilities and ensuring the accuracy and suitability of energy use and associated records held in IT files.
- Responsible for portable IT equipment (palm top surveying devices etc) allocated to the care of the post-holder to enable efficient progress of the job function. Maximum value £1000.00. 50% away from designated base. Sole responsibility.
- Responsible for the appropriate use and care of personal protective equipment issued for the safe discharge of the job function. Maximum value £125.00. 50% away from designated base. Sole responsibility.
- Responsible for a council issue mobile telephone. Maximum value £75.00. 50% away from designated base. Sole responsibility.

### **WORK ENVIRONMENT**

**Work Demands:**

- The work cannot follow an established routine due to the varied and sometimes reactive nature of the post. Accordingly the post has significant autonomy in structuring the working day requiring high levels of self discipline and time management skills.
- The work will involve working to demanding deadlines imposed by external factors that will often be conflicting. An example of this is the progression of a piece of work within a defined budget cycle, taking account of the development control process/timescales, supplier availability and site availability/constraints together with accommodating the needs of building users – all of which will be undertaken concurrently with other projects, organisational and operational deadlines.

#### **Physical Demands:**

- Required to be physically fit with the ability to climb ladders etc and work safely at heights and in confined spaces and other hazardous environments, lifting access covers, hatches etc.
- Required to drive between Council and other sites.

#### **Working Conditions:**

- 50% office based.
- 50% accessing construction sites with typical site risks including plant and machinery, noise, dust and dirt, trip hazards, falls from height etc, often in inclement weather, requiring driving between sites.
- Working at heights and in confined spaces often presenting 'hostile' environments.
- Occasional work outside of normal working hours to attend meetings etc.

#### **Work Context:**

- Risk of falls and other risks associated with construction sites etc, see above.
- Risk of working in hazardous environments, contaminated with asbestos, gases, Legionella etc., presenting a potential risk to personal health.
- Risk of electric shock from working on live electrical equipment and circuits.
- Conflicting demands of people management, strategy and technical operations/implementation worktypes.

#### **Position in Organisation:**

Indicate how many staff the post is directly accountable for:

1

**Does the postholder manage the posts Yes**

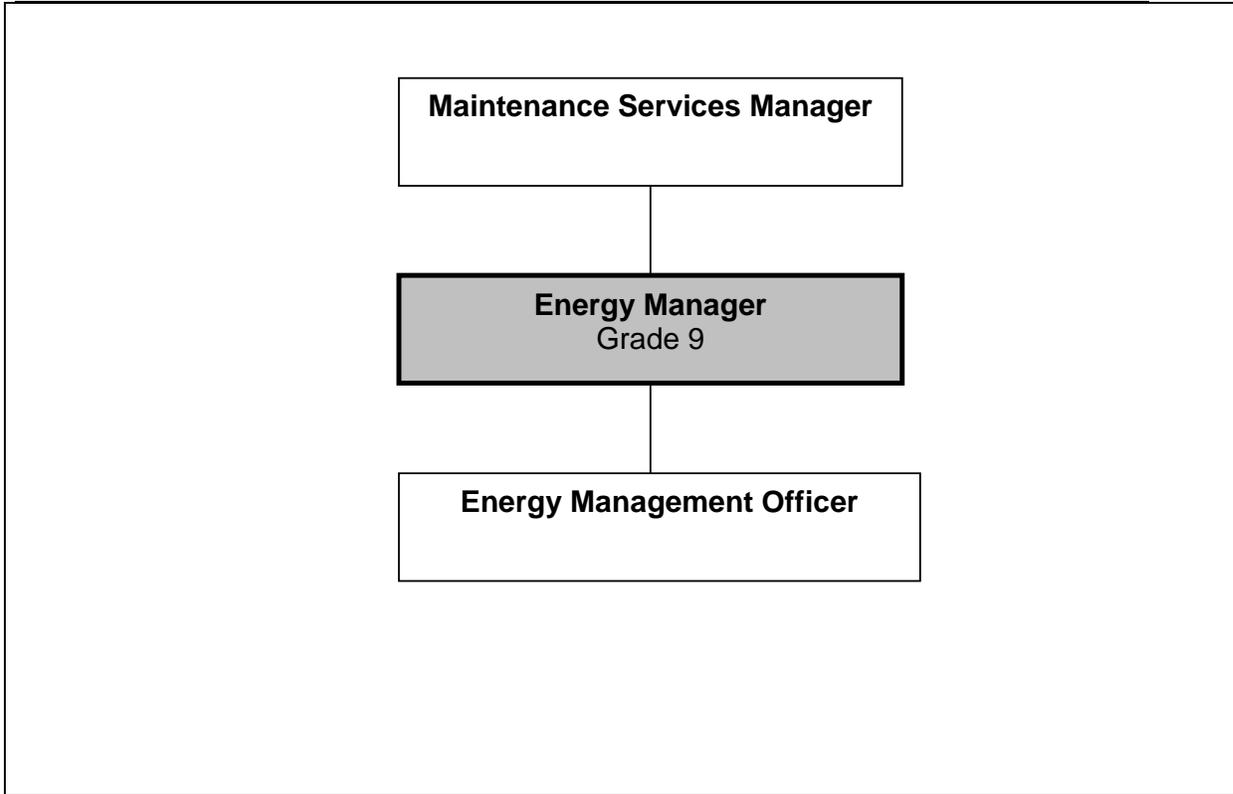
**OR**

Does the postholder supervise the posts N/A

Are posts in more than one location? No

Is the supervision/management shared with another post in the structure? No

Please indicate which post(s) \_\_\_\_\_



**Note:**

**Post holders will be expected to be flexible in undertaking the duties and responsibilities attached to their post and may be asked to perform other duties, which reasonably correspond to the general character of the post and are commensurate with its level of responsibility. This job description is provided for guidance only and does not form part of the contract of employment.**

Date of Job Description .....

Date copy sent to Post holder .....