MORRISONS WOODHEADS, SPALDING

PROPOSED ENERGY FROM WASTE INSTALLATION

SUSTAINABILITY STATEMENT

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Executive Summary

The proposed energy from waste installation at the Woodheads meat processing plant in Spalding will assist the South Holland District Council in its Sustainable Development aims by reducing carbon emissions and waste generated in the development.

The proposed installation will burn residue tallow generated in the processing plant, generating steam to create generate electricity. This will replace a portion of the electricity demand that is met by grid electricity. The waste heat from the process will also be used in the building.

Morrisons has been recognised as the leading supermarket for carbon reduction:

- It was the first UK supermarket to achieve the Carbon Trust Standard for year-on-year emission reductions.
- 'Most Sustainable Retailer of the Year 2013', Retail Industry Awards.
- 'Renewable Energy Project of the Year 2013', Energy Awards
- Morrisons was third place (the highest supermarket) in the FTSE 350 Carbon Strategy Index 2010.

This report also presents a breakdown of sustainable factors for the development, which outlines the design measures in place to address:

- Energy
- Reduce pollution
- Open space and diversity
- Sustainable construction
- Sustainable transport

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1 Introduction

This Sustainability Statement has been issued to accompany the planning application for a proposed energy from waste installation for the Woodheads meat processing plant owned by WM Morrison Supermarkets in Spalding.

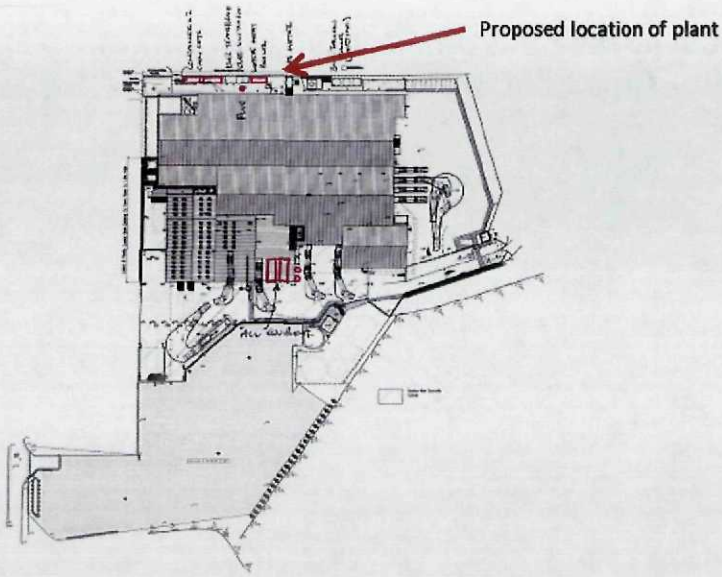


Figure 1.a Site plan for the proposed Morrisons energy from waste installation.

The local planning authority is South Holland District Council. The council has an adopted Local Plan (2006), which identifies the overarching objectives for spatial planning within the Borough and provides a framework for development.

POLICY SG1
- General Sustainable Development

Planning permission for development will be granted where the Council is satisfied that the proposal is consistent with the principles of sustainable development, and where:

1) the quality of life for residents is unimpaired or enhanced;
2) reasonable measures have been taken to conserve energy and natural resources; and
3) South Holland's essential character and main environmental assets are not damaged. In doing so it will be acknowledged that certain renewable energy sources can only be harnessed where the resource occurs.

Morrisons has a consistent approach to reducing energy and carbon emissions from its operations. According to this approach, the aim is to **avoid, reduce** and **replace** emissions through **passive design** and **energy efficiency** and **renewable energy**.

The energy from waste plant will act to offset part of the energy demand of the building and processes – see Section 3 for further details.

POLICY SG13
- Pollution and Contamination

Planning permission will only be permitted for development proposals which:

1) do not cause unacceptable levels of pollution of the surrounding area by noise, light, toxic or offensive odour, airborne pollutants or by the release of waste products;
2) provide, as necessary, appropriate treatment of land to clean up pollution and contamination.

A separate Air Quality Report has been commissioned as part of the planning application. Please refer to this document for further detail.

In addition to local policy, European, national and regional policy, guidance and legislation have been reviewed for this Sustainability Statement. For reference, the following documents have been reviewed:

The Climate Change Act 2008

The Climate Change Act sets binding greenhouse gas emissions targets for the UK including an 80% reduction overall in six greenhouse gases by 2050.

The Energy Act 2011

The Energy Act has three principal objectives as follows:

- Tackling barriers to investment in energy efficiency;
- Enhancing energy security; and
- Enabling investment in low carbon energy supplies.

The National Planning Policy Framework (2012)

An overarching principle of the NPPF is that development that is sustainable should go ahead without delays. A presumption in favour of sustainable development is set out at paragraph 14. Specifically in relation to decision-making, this is taken to mean:

- "approving development proposals that accord with the development plan without delay; and
- Where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:
- any adverse impact of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
- Specific policies in this Framework indicate development should be restricted."

Other aspects of Morrisons Corporate Sustainability Policy are described in Section 2

Section 3 sets out a checklist for sustainable design, demonstrating how policies SG1 and 13 have been addressed.

2 Morrisons Corporate Sustainability

2.1 Energy & Carbon

Morrisons has shown leadership in its corporate approach to reducing carbon emissions. This has been recognised in the following ways:

- Morrisons was the first UK supermarket to achieve the Carbon Trust Standard (Figure 2.a.iii) for year-on-year emission reductions and has received its second reaccreditation in early 2012/13.
- Morrisons was third place (the highest supermarket) in the FTSE 350 Carbon Strategy Index 2010.
- Morrisons was winner of the Large End-User of the Year Award at the RAC Cooling Industry Awards 2010 (Figure 2.a.ii) because of its strategy on CO_2 and leakage.

Morrisons has a target of a 30% absolute reduction in emissions between 2005 and 2020. It was the first supermarket to bind itself to an absolute reduction despite plans for expanding its business. This target builds on a 24.2% reduction already achieved by Morrisons in carbon emissions between 2005 and 2014.

The chief contributor to carbon reductions by Morrisons over the last five years has been its programme of refrigeration improvement, which has led to a 43% drop in direct refrigerant emissions. Morrisons has invested over £100 million in new and replacement systems.

Other recent carbon saving improvements by Morrisons have included:

- Voltage optimisation rolled out to 190 stores, reducing the electricity usage of each store by 8%.
- 12,200 tonnes CO_2 saved from improving the control of ventilation in existing stores.
- 11,400 tonnes CO_2 saved from installing low energy LED lighting in chilled display cabinets.







(i) (ii) (iii)

Figure 2.a The *Heat Harvester* (i) retro-fitted to refrigeration systems in existing stores, the Cooling Industry Awards 2010 (ii) and the Carbon Trust Standard achieved by Morrisons (iii).

2.2 Water

Morrisons recognises that water resources are limited and that mains water consumption has a significant environmental impact. It therefore includes the following measures in its new store developments:

- Low flow push taps.
- Automatic metering of water consumption which will identify excessive consumption (e.g. due to leaks).

These and other measures led to Morrisons achieving a 19% reduction in mains water consumption between 2005 and 2009. In 2012,

Morrisons set themselves the target to reduce operational water consumption by 20% by 2020. The major challenge in this target is to absorb the growth in estate, and tackle consumption levels where water use is high. The main area of focus this year has been on improving internal systems to establish accurate water consumption baseline data for 2012 to set yearly reduction milestones to achieve the overarching target.

2.3 Waste

Morrisons is working to minimise the environmental impact of its own waste and that generated by its customers, and has achieved the following:

- 98% of waste from stores is recycled.
- 11.5% reduction in packaging since 2012.
- Manufacturing sites are officially zero waste to landfill.
- The *Great Taste Less Waste* campaign (Figure 2.b.i; www.morrisons.co.uk/GreatTasteLessWaste), which gives storage advice on fresh produce (Figure 2.b.ii), information on the difference between "best before" and "use by" dates, and recipe ideas for food leftovers.



(i) (ii)

Figure 2.b *Great Taste Less Waste* campaign (i) and *Best Kept* stickers for fresh produce (ii).

One of Morrisons' priorities over the last year has been to establish processes to centrally consolidate information on waste arising in their own manufacturing facilities. Each site now has a waste prevention, management and reduction programme and Morrisons are starting to gain greater oversight of their manufacturing business as a whole so that they apply best practice across the estate and where waste is produced it is then utilised further for recovery or recycling.

Better segregation of waste plastics and cardboard allows for more products to go into specific waste streams. For example, the Flaxby processing site has recently installed a dedicated purpose-built baler and compactor area to enable better segregation of materials and reduced costs for disposal. Morrisons have been working closely with local recycling facilities to ensure that general waste is sorted at dedicated waste sites to optimise their use into other products rather than sending the mixed general waste to landfill sites. After they have reduced the amount of waste at its sites, wherever possible

Morrisons compact the waste, reducing the amount of trips taken by local companies collecting, this reduces costs and the carbon footprint.

2.4 Other

Morrisons has a large number of other policies in place to increase sustainability. It is the only major UK food retailer with in-house manufacturing and processing facilities, which give it greater opportunities for carbon reduction and other environmental improvements. It also works actively with suppliers, customers and community organisations.

Morrisons supports schools to encourage students to grow fruit and vegetables in its "Let's grow" campaign (Figure 2.c). This support has been taken up by 26,500 schools and over £12m worth of equipment has been supplied to over 5m pupils across the UK. and The scheme has won a number of accolades and was rated the "Best Green Educational Project" in the 2010 global Green Awards.

All Morrisons fresh meat, poultry, fresh milk and wheat is British. For more details on Morrisons sustainability achievements see its corporate social responsibility reports (http://www.morrisons-corporate.com/Global/corporate/MorrisonsCRReview2013-14_NEW.pdf).



Figure 2.c Winner of the 2013 Retail Industry Awards – Most Sustainable Retailer of the Year

3 Sustainability Checklist

3.1 Energy Strategy

The low carbon approach leading to the proposed energy from waste installation will follow the Morrisons Carbon Hierarchy, which emphasises firstly the avoidance and reduction of carbon emissions through passive design and efficiency measures, then the replacement of emissions through low and zero carbon technology.

The proposed energy from waste will burn residue tallow generated in the factory, generating steam to create generate electricity. This will replace a portion of the electricity demand that is met by grid electricity. The waste heat from the process will also be used in the building. Tallow is an animal fat obtained by rendering animal carcasses and waste from the food industry

Concerns related to biomass competing with land for food crops for energy generation are not relevant to the supply of fuelstock for the Woodhead Spalding energy from waste plant, since the material will be entirely residue from the food production process.

3.2 Reduce Pollution

Prior to the waste gases being exhausted from the plant, the gases pass through a filter which cleans the outgoing gases before leaving the chimney. The flue will be of sufficient height so as to disperse the exhaust pollutants over a greater area and thereby reduce the concentration of the pollutants to the levels required by governmental environmental policy and environmental regulation.

3.3 Open Space and Biodiversity

The new plant will be located in the existing goods in service yard, so will not have an impact on existing open space and local biodiversity. Appropriate measures will be taken during the installation process to protect any existing habitats.

3.4 Sustainable Construction

Environmental impacts during installation are to be minimised by monitoring, sorting and recycling installation waste, and being considerate of the local surroundings.

3.5 Transport

There will be no impact on transportation associated with the new installation.